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Chronic mania

Family history, prior course, clinical picture and social consequences

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Background Mania with chronic course has been overlooked in the recent literature. Our aim was clinically to characterise and validate this form of mania.

Method We evaluated 155 people with DSM–III–R mania and assessed their family history, temperament, symptomatology and course. We used a semi-structured interview for mood disorders, as well as the Comprehensive Psychopathological Rating Scale and the Scale for the Assessment of Positive Symptoms.

Results Twenty (13%) had a chronic course arising from a background of hyperthymic temperament and recurrent mania, with a deteriorative pattern. Clinically, they were characterised by a significantly high rate of almost constant euphoria, grandiose delusions and related delusions, but had relatively low rates of sleep disturbance, psychomotor agitation and hypersexuality.

Conclusion Even with current therapies a significant number of people with bipolar disorders have a deteriorative outcome associated with the gradual disappearance of acute mania with an increase in megalomanic delusions, alienation from loved ones and decreased likelihood of medical and psychiatric care.

Descriptions of chronic mania go back to the later 19th century, when it was considered the second most frequent cause of admission to asylums (Clouston, 1892). Although chronic depression is now a well-established clinical condition (Akiskal & Cassano, 1997), descriptions of chronic mania are rare in the current psychiatric literature (Hare, 1981). We evaluated the familial, demographic, symptomatologic and course characteristics of a large sample of people with mania in order to delineate those characteristics associated with a chronic course.

METHOD

The study was conducted at the Institute of Psychiatry (Italy), which provides the only acute psychiatric in-patient facility in the Pisa area. It is situated within a charity hospital serving a population largely of middle or low socio-economic status.

Population

The study included 155 consecutive in-patients (74 (47.7%) male, 81 (52.3%) female) with a diagnosis of DSM–III–R mania (American Psychiatric Association, 1987), admitted over a three-year period (from 1992 to 1995). Their mean age at index evaluation was 37.9 years (s.d.=13, range 16–69). Referrals came, in approximately equal proportions, from general practitioners, psychiatrists and other medical specialists.

The subjects were considered to have 'primary' mood disorders, after excluding those with pre-existing organic mental disorders, disorders of psychoactive substance use and schizophrenia. We also excluded people with established neurological diagnoses (for example, Parkinson's disease, multiple sclerosis, brain tumour), as well as those with pre-existing serious or disabling medical conditions.

Diagnostic procedures

Individuals were assessed by third-year psychiatric residents with special training in mood disorders (A.P., L.R. and C.Q.); they administered the Semistructured Interview for Depression (SID; Cassano *et al*, 1989). This instrument systematically collects demographic, anamnestic and clinical information; explores the presence of DSM–III–R criteria for major depressive episodes and mania; collects data on history of previous hypomanic episodes; explores temperamental characteristics (hyperthymic or depressive) and collects first-degree family history for mood and specific anxiety disorders, schizophrenia and drug and alcohol misuse. All information is gathered from the individual and at least one close relative (usually parents or siblings). Additionally, all available clinical records were carefully examined. Family history data are assessed using Research Diagnostic Criteria (RDC; Andreasen *et al*, 1977). Both the subject and any significant others were asked about the habitual temperamental attributes of the subject (during periods free from affective episodes). Our operational criteria for depressive and hyperthymic temperaments were the University of Tennessee (Akiskal *et al*, 1979) modification of the Schneiderian descriptions (Schneider, 1959). Depressive temperament requires the presence of at least five of the following attributes:

(a) gloomy, pessimistic, humourless, incapable of fun;

(b) quiet, passive or indecisive;

(c) sceptical, hypercritical or complaining;

(d) brooding and given to worry;

(e) conscientious or self-disciplining;

(f) self-critical, self-reproaching or self-derogatory

(g) preoccupied with inadequacy, failure and negative events to the point of morbid enjoyment of one's own failure.

For hyperthymic temperament, at least five of the following attributes are required:

(a) irritable, cheerful, over-optimistic or exuberant;

(b) naive, over-confident, self-assured, boastful, bombastic or grandiose;

(c) full of plans, imprudent, carried away by restless impulses;

(d) over-talkative;

(e) warm, company-seeking or extroverted;

(f) over-involved and meddlesome;

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(g) uninhibited, stimulus-seeking or promiscuous.

An interrater reliability estimate of $\kappa=0.84$ ($n=20$) was obtained on the temperamental measures.

The SID, developed as part of the Pisa–Memphis (now San Diego) collaborative study on affective disorders, has been used with over 1500 people at the time of writing. Its overall utility and reliability for the diagnostic assessment of people and their temperaments has been documented elsewhere (Musetti *et al*, 1989; Perugi *et al*, 1990).

Assessment of symptomatology

Psychiatrists completed the Comprehensive Psychopathological Rating Scale (CPRS; Asberg *et al*, 1978) with the aim of investigating general psychopathological characteristics, and the Scale for the Assessment of Positive Symptoms (SAPS; Andreasen, 1984) for the evaluation of psychotic phenomena such as hallucinations, delusions, behavioural anomalies and formal thought disorders. As we were interested in qualitative differences between the two course patterns of mania, we used these scales in a categorical fashion (presence or absence of the item in question).

Statistics

Our hypothesis was that the fundamental features of chronic mania would be similar to those of acute mania. In order to define the specific characteristics associated with chronic mania, the subjects were divided into two groups; less than two years' duration of the index manic episode, and more than two years. We sought to demonstrate that chronic mania, despite social deterioration, would arise from a predominantly recurrent manic course with hyperpthymic–hypomanic inter-episodic features (i.e. a non-schizophrenic premorbid adjustment), and a family history of mood disorders, rather than schizophrenia; it would also be dominated by chronic grandiose delusions.

Comparative analyses were conducted using Student's *t*-test for the dimensional variables, and χ^2 analysis and Fisher's exact test for categorical analysis. We used two-tailed levels of significance with $P<0.05$.

RESULTS

Of the 155 people with mania only 20 (12.9%) showed a chronic course. Most people showed a duration of 0–4 months for a manic episode, with a progressive decline that ended sharply at six months (Fig. 1). For episodes lasting over six months, the distribution is nearly flat over 23 years.

Demographic data

The mean index age was comparable in people with acute and chronic mania: 37.3 (s.d.=12.6) *v.* 42.2 (s.d.=10.9) years, respectively ($t=1.59$, P=NS). Females represented 70.0% ($n=14$) of the people with chronic course and 49.6% ($n=67$) of those with acute course ($\chi^2=2.90$, d.f.=1, $P=0.09$). Most of the people in both groups were single (50% of those with chronic mania *v.* 44.4% of those with acute mania). Married people made up 42.2% of the individuals with acute course, compared with 15% of those with chronic course; 25% of the latter were divorced, compared with 9.6% of those people with acute mania ($\chi^2=8.63$, d.f.=4, $P=0.07$). Typical work activities in both groups were housewife, labourer or unemployed. The most common level of education was 'junior high school' in both groups. Most subjects in both groups lived in urban zones. The most significant difference between the two groups was that a higher proportion of those with chronic mania lived alone (45.0 *v.* 11.1%, $\chi^2=15.84$, d.f.=3, $P=0.001$).

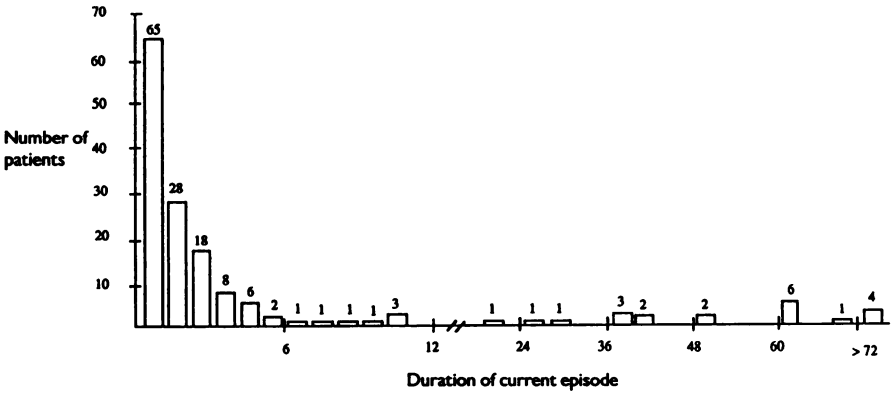


Fig. 1 Duration of current episode: frequency distribution in 155 people with mania.

Clinical and course characteristics

Mean age at onset of mood disorder and at first treatment were similar in the two groups, as well as at first hospitalisation, as was the polarity of the first episode. The mean number of depressive episodes was statistically higher in people with acute mania, while the number of manic, mixed or hypomanic episodes was similar in the two groups. The mean number of hospitalisations was higher for people with chronic mania than for those with a duration of less than two years.

Congruent and incongruent psychotic features were significantly more represented in people with chronic mania. Stressors before index admission and mean number of suicide attempts were similar in the two groups. Suicide attempts at the index episode were rare and were found only in individuals with an acute course. The frequencies of rapid cycling and seasonal course were also low or zero. About 15% of people with acute mania (but none with a chronic course) showed a depressive type premorbid temperament; in contrast, hyperthymic temperament was more represented in the chronic group (although this last difference did not reach statistical significance because of the small sample size). No significant differences between the two groups emerged in the history of spontaneous or treatment-emergent hypomania (see Table 1).

Family history

First-degree family history of major depression and bipolar disorder was present in a similar percentage of both groups. This was also the case for schizophrenia, alcohol misuse, obsessive–compulsive disorder and panic disorder. Nearly half of both groups had a family history of mood disorder, but a family history of schizophrenia was extremely rare.

Symptomatology

On the CPRS, people with chronic mania had significantly higher ratings on three items: observed elated mood (100 *v.* 84.1%, $\chi^2=3.69$, d.f.=1, $P<0.05$), grandiose ideas (100 *v.* 79.4%, $\chi^2=5.02$, d.f.=1,

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Table I Clinical features and first-degree family history in chronic *v.* acute mania

	Chronic mania (n=20)	Acute mania (n=135)	t or χ^2 (d.f.=1)	P
Age at onset, mean (s.d.)	25.0 (7.2)	25.9 (9.2)	0.38	NS
Age first treatment, mean (s.d.)	25.8 (7.5)	27.0 (9.6)	0.50	NS
Age first hospitalisation, mean (s.d.)	31.0 (12.4)	29.1 (11.8)	0.61	NS
Hospitalisations, mean (s.d.)	5.5 (5.3)	3.2 (3.9)	2.38	0.019
Episodes, mean (s.d.)				
Depression	1.2 (1.8)	3.1 (3.9)	2.16	0.032
Mania	3.6 (4.6)	3.5 (3.9)	0.13	NS
Mixed	0.2 (0.5)	0.5 (1.6)	0.99	NS
Hypomania	0.6 (2.2)	0.8 (2.4)	0.43	NS
Duration of current episode (months), mean (s.d.)	58.0 (24.5)	1.5 (2.6)	–	–
First episode polarity, *n* (%)				
Depression	9 (45.0)	79 (58.5)		
Mania	10 (50.0)	40 (29.6)		
Mixed	1 (5.0)	16 (11.8)	3.55 (d.f.=2)	NS
Psychotic features, *n* (%)				
Congruous	18 (90.0)	70 (51.8)	10.33	0.001
Incongruous	14 (70.0)	55 (40.7)	6.04	0.014
Stressors, *n* (%)	1 (5.0)	14 (10.4)	0.57	NS
Suicide attempt, current episode, *n* (%)	0 (0.0)	3 (2.2)	0.45	NS
Rapid cycling, *n* (%)	0 (0.0)	3 (2.2)	0.45	NS
Seasonal course, *n* (%)	0 (0.0)	3 (2.2)	0.45	NS
Hyperthymic temperament, *n* (%)	14 (70.0)	73 (54.1)	1.80	NS
Depressive temperament, *n* (%)	0 (0.0)	22 (16.3)	3.80	0.051
Hypomania, *n* (%)	4 (20.0)	36 (26.7)	1.04	NS
Pharmacologic hypomania, *n* (%)	4 (21.0)	48 (35.6)	1.57	NS
First-degree family history, *n* (%)				
Major depression	4 (20.0)	35 (25.9)	0.32	NS
Bipolar disorder	7 (35.0)	27 (20.0)	2.29	NS
Schizophrenia	1 (5.0)	2 (1.5)	1.14	NS
Panic disorder	0 (0.0)	3 (2.2)	0.45	NS
Obsessive–compulsive disorder	1 (5.0)	1 (0.7)	2.48	NS
Generalised anxiety disorder	0 (0.0)	2 (1.5)	0.30	NS
Alcohol misuse	1 (5.0)	9 (6.7)	0.08	NS

$P<0.03$), and 'other delusions' (30 *v.* 12.1%, $\chi^2=4.48$, d.f.=1, $P<0.03$). By contrast, people with acute mania had significantly higher rates of the following signs and symptoms: tension (49.2 *v.* 15%, $\chi^2=8.24$, d.f.=1, $P<0.004$), reduction in sleep (81.7 *v.* 55%, $\chi^2=3.96$, d.f.=1, $P<0.05$), increased sexual desire (43.5 *v.* 15%, $\chi^2=5.89$, d.f.=1, $P<0.02$), muscular tension (32.6 *v.* 10%, $\chi^2=4.25$, d.f.=1, $P<0.04$), psychomotor agitation (90.1 *v.* 75%, $\chi^2=3.82$, d.f.=1, $P<0.05$) and pressure of speech (defined by Andreasen (1984) as "increase in the amount of spontaneous speech") (90.1 *v.* 75%, $\chi^2=3.82$, d.f.=1, $P<0.05$). All other items in the CPRS, including hostility, morbid jealousy, persecutory delusions, distractability and disorientation, were similar in the two groups.

On symptomatological aspects evaluated by SAPS, those with chronic mania differed from those with acute mania by the presence of auditory hallucinations (25 *v.* 9.9%, $\chi^2=3.75$, d.f.=1, $P<0.05$), voices commenting (5 *v.* 0%, $\chi^2=6.59$, d.f.=1, $P<0.01$), delusions of grandiosity (90 *v.* 65.6% $\chi^2=6.15$, d.f.=1, $P<0.01$), anomalies of clothing and appearance (55 *v.* 29%, $\chi^2=5.35$, d.f.=1, $P<0.02$), aggressive behaviour (29 *v.* 10%, $\chi^2=3.75$, d.f.=1, $P<0.05$), incoherence (30 *v.* 9.9%, $\chi^2=6.36$, d.f.=1, $P<0.01$) and circumstantiality (defined by Andreasen (1984) as "pattern of speech that is very indirect and delayed in reaching its goal ideas") (5 *v.* 0%, $\chi^2=6.59$, d.f.=1, $P<0.01$). Other forms of formal thought disturbances considered characteristic of schizophrenia, for example, derailment, tangentiality and illogicality, were infrequent in both groups (<10%).

Case report

A 63-year-old widow was brought to our hospital under duress by her son, who was a physician. He reported that she had grossly neglected her diabetes mellitus, a condition that had developed several years after her bipolar disorder. On admission she was seriously ill because of severe weight loss, but she stated that she was 'perfectly well' and that she did not suffer from diabetes. Her son reported

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that his mother had always been a very active, extroverted and socially over-involved woman, who was constantly interfering with other people's business. Her formal psychiatric history began at age 43, after the death of her husband. She developed a profound anxious–agitated depression resulting in hospitalisation; she was given amitriptyline 150 mg/day and lorazepam 3 mg/day. Eventually she became severely agitated with aggressive mania that was treated with neuroleptics. Her subsequent course was one of predominantly manic cycles, and by age 50 she had settled into chronic mania with euphoria, grandiosity and poor insight. She was so unmanageable socially that her son and daughter had to leave home. The daughter suffered from recurrent major depression, and the subject's sister had been treated for manic–depressive illness. At index admission (except for a brief period of irritation about the circumstances of hospitalisation) she maintained a euphoric mood associated with the delusion that she could cure everybody's problems and illnesses. Her compliance in hospital was nil, and she refused blood and urinary examinations; she also refused insulin and was given an oral antidiabetic agent. She was started on carbamazepine and haloperidol, and sent home to be supervised by court-enforced psychiatric home visits.

CLINICAL IMPLICATIONS

- Despite state-of-the-art treatments, 13% of hospitalised people with mania pursue a chronic course.
- Euphoric mood, grandiose delusion and other psychotic features with relative lack of neurovegetative and excitatory symptoms characterise the clinical picture of chronic mania.
- Premorbid characteristics, prior affective episodes and family history of mood disorder validate the fact that these patients differ from those with paranoid schizophrenia.

LIMITATIONS

- Retrospective evaluation of the course of mania.
- Relatively small size of the sample group with chronic mania.
- Both groups were evaluated in a phase of exacerbation of their illness in the hospital, which may have masked other possible symptomatological differences between the two groups.

DISCUSSION

Methodological issues

Our data are limited by non-blind retrospective data collection in people impaired by a severe mood disorder. We tried to overcome this limitation by interviewing family members and/or partners of the individuals, using standardised instruments. Another limitation is that with cross-sectional evaluation of symptomatology at index hospital admission, some of the differences between the people with acute and chronic mania may have been obliterated. The fact that all those with chronic mania were hospitalised suggests that they were in an exacerbated phase of their disease. Finally, 13% prevalence of chronic mania might be an underestimate, because some of the young people with acute mania could eventually develop chronicity.

Prevalence, family history and course

One in eight people with mania showed established chronicity. Although it has been described in detail by many authors earlier this century, the condition seems neglected at present. People suffering from chronic mania very rarely seek medical help; and the few who are seen clinically are likely to be misdiagnosed as having paranoid schizophrenia, because of the chronic symptomatology and high prevalence of psychotic manifestations.

The prototypical duration of most of the manic episodes observed was four months, with few exceeding six months. By contrast, the duration of episodes in people with chronic course is flatly distributed over many years. This suggests that when manic symptomatology persists for more than six months, there is a high probability of chronic evolution.

When those in the chronic group are compared with people who present a manic episode of shorter duration, substantial differences in familial, demographic, and clinical characteristics do not emerge. This indicates that the two types of disorders belong to the same nosographic area. Index age, age at onset, polarity of the first episode, stressors, hypomania and pharmacological hypomania all overlap between the two groups; the same is true of first-degree family history of mood and other mental disorders. This last observation indicates the important role of family history in differential diagnosis between manic or mixed episodes with incongruent psychotic manifestations *v.* schizophrenic-spectrum disorders, which might be difficult if based exclusively on cross-sectional symptomatology. The fact that the prior course of the chronic group is one of recurrent manic (and, to some extent, depressive) episodes further supports the affective origin of their illness. Lastly, their temperament is hyperthymic, which is at variance with a preschizophrenic adjustment.

Psychopathology

Despite these fundamental similarities between acute and chronic forms of mania, several symptomatological differences emerged, as hypothesised. The hallmark of acute mania is excitement features such as reduced sleep, agitation, pressure of speech,

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tension and hypersexuality. By contrast, chronic mania is, on one hand, characterised by the relative absence of these phenomena, and, on the other, by the presence of euphoric, grandiose and psychotic features. As in chronic depression (Akiskal & Cassano, 1997), it would appear that psychomotor and vegetative signs gradually recede. Our data demonstrate that, in chronic mania, mood is eventually set at an elevated tone, and thought content focuses on a few stable delusional ideas, often megalomanic and sometimes bizarre. These individuals appear incoherent and even 'demented' (Deron, 1928), and these features are probably accentuated by social isolation.

In chronic mania, unlike schizophrenia, flat or inappropriate affect is not present, but the affective tone is rigidly anchored to an expansive mood characteristically syntonic with thought content; the derailment of thought characteristic of schizophrenia is typically absent.

It has been suggested that a rapid-cycling course should be considered as a mediating factor in the deteriorative course of bipolar disorder (Vocisano *et al*, 1996). This was not the case in the present study. Our data suggest that a number of factors eventually lead a proportion of people with recurrent mania into a down-hill course. People with chronic mania are commonly divorced and live alone. This could indicate a more severe impairment in interpersonal and familial functioning, which, in turn, may further accentuate chronicity. People who are deprived of adequate social support are less amenable to medical care. Such factors (as illustrated in the case report) account for the low likelihood of receiving proper nutrition and hygiene, and provide another explanation for the overall deteriorative course in chronic mania (Hare, 1981).

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