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Psychologically Stressful Events in the Precipitation of Manic Episodes

By A. AMBELAS

SUMMARY The case notes of all 67 manic patients admitted to the psychiatric wing of a District General Hospital over a period of two years were screened for evidence of independent life events during a four week period prior to admission. The nature of such events and of the underlying stresses was examined and the data obtained were compared with data from a control group of acute surgical admissions. Four times as many manic patients had an independent life event closely preceding their admission. It is concluded that stress in the form of loss or threat is a common precipitant of mania. Some surprising findings are focused upon and discussed.

Suggestions that exogenous factors can play a part in the precipitation of mania can be found in the earliest works of the Kraepelinian era of psychiatry (Meynert, 1890; Westphal, 1911).

Most commonly somatic and psychoreactive factors were taken together and concussion held the most prominent position, although Westphal and Schneider (1919) mention shock and anxiety as precipitants. However, all these references were brief and based on impressions rather than facts.

French authors focused on bereavement more specifically and over the last 35 years 'deuil maniaque' (maniacal grief) became an acceptable term in the French literature. In 1957 Racamier and Blanchard, reviewing the existing literature, concluded that 'in the majority of cases, "maniacal grief" follows the death of a loved person. The specific precipitant of mania, which sets in after a latency period of hours, days or even weeks, is the loss of essential affective support'.

In more recent times Italian workers also recognised mania precipitated by bereavement (Borgna, 1964; Scotti and Cerletti-Scotti, 1969). In fact the Scottis attempted a classification of states of overactivity following bereavement, and distinguished:

(a) 'Maniform' anxiety states
(b) Oneiroid states with psychomotor excitement
(c) 'Maniform' excitement in schizophrenics
and (d) Classical mania

before going into detailed descriptions of the course of events in three cases of the fourth variety.

The English literature during this time does not mention the question, although Parkes (1964) recognises mania as a complication of grief. Winokur *et al* (1969), in their monograph on manic-depressive illness, dispose of the question of reactive mania inconclusively in less than one page, while McCabe (1975) writing on psychogenic psychoses recognises among his cases psychogenic schizophrenia and psychogenic depression and refers to a third variety he calls 'psychogenic excitement', but mania is never mentioned. Brown and Birley studied the precipitants of schizophrenic (1968) and of depressive (1970) illnesses, but again mania was omitted from consideration. Only Stern (1944) in complete isolation and opposition concluded that mania was a reactive illness.

Blankenburg in 1964 and Tölle and Fritz in 1971 produced numerical data. Both studies looked retrospectively at precipitating factors

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and distinguished between somatic and 'psychoreactive' factors. Their studies are uncontrolled, and the authors themselves recognise and discuss the methodological problems they encountered and the weaknesses of their work.

Finally, while the present study was being undertaken, Leff *et al* (1976) discovered, as an offshoot of a binational epidemiological study of mania, independent events occurring soon before an attack in 28 per cent of their cases.

The present study looks at events which precede manic episodes, leaving aside the question of psychogenicity or reactivity, which is usually a clinical inference from experiences significant individually to the particular patient. In this way the study loses in sensitivity but gains in objectivity and a choice had to be made.

Material and Controls

All 67 patients admitted to Walsgrave Hospital, Coventry, and given a diagnosis of 'mania', 'hypomania' or 'manic-depressive illness, manic phase' during the first two years of this new psychiatric unit were included. Whenever the patient had been admitted more than once during this period, the first admission was taken as the index one. The first 60 serially admitted acute surgical patients matching the sample for age and sex constituted the control group. Acute surgical admissions were preferred for two reasons:

(a) Definite acute onset in the surgical cases, which rendered the timing of preceding events more accurate, and

(b) Definite positive pathology: whenever the operation did not reveal pathology the case was not included, e.g. appendicectomies without appendicitis.

Method

The case notes of the 67 psychiatric patients were examined and cases positive for the presence of events were identified. These patients were interviewed personally so that the presence of an event, its emotional quality and its independence were ascertained beyond doubt.

(a) *Diagnosis*

The diagnoses had already been made by the responsible consultants. As a double precaution the notes were screened against Feighner's diagnostic criteria for research purposes which are as follows:

'For the diagnosis of mania A, B and C are necessary.

A. Euphoria or irritability

B. At least three of the following:
   (1) Hyperactivity (including motor, social and sexual hyperactivity)
   (2) Pressure of talk
   (3) Flight of ideas
   (4) Grandiosity (which may be delusional)
   (5) Decreased duration of sleep
   (6) Distractibility

C. A psychiatric illness lasting at least two weeks, with no pre-existing psychiatric condition' (Feighner *et al*, 1972).

This did not result in any cases being rejected.

(b) *Exclusions*

It was decided to exclude from consideration as positive those cases where the following circumstances were obscuring the picture:

(1) Cases presenting with rapid succession of manic and depressive episodes without a reasonably long interval of normality, as it becomes impossible to establish the onset of the phases and the relationship of the events in time.

(2) Cases with a history extending over more than 15 years, *and* with more than 10 episodes; here it could be argued that any antecedent events could be purely fortuitous occurrences without any bearing on the course of the illness.

(3) Case notes containing insufficient information.

(4) Cases were excluded if on a previous occasion a non-affective diagnosis had been made.

(5) Cases could not be considered if they did not fit the limitations set out regarding the events themselves (see below).

(c) *Events*

A stressful event is defined following the Brown and Birley (1970) example as 'an event of such character as to be considered as potentially emotionally disturbing to a majority of

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TABLE I

List of events considered as stressful

No.	Event	No.	Event
1.	Death of child	25.	Marital separation not due to arguments
2.	Death of husband/wife	26.	Move to another country
3.	Being sent to gaol	27.	Son enlists or drafted in forces
4.	Death of first degree relative	28.	New person moves into home (e.g. relative, lodger)
5.	Serious financial difficulties (bailiffs, etc)	29.	Retirement
6.	Miscarriage or stillbirth	30.	Change in work hours or conditions: (over-time, second job, new boss, re-organization)
7.	Court appearance for serious offence	31.	Cease going out with steady boyfriend/girl-friend (after at least 3 months)
8.	Business failure	32.	Change in line of work
9.	Marital separation due to arguments	33.	Move to another city
10.	Unwanted pregnancy	34.	Marital reconciliation
11.	Divorced	35.	Child leaves home (e.g. college)
12.	Fired	36.	Wife becomes pregnant
13.	Death of close friend	37.	Birth of child (for mother)
14.	Serious illness of first degree relative	38.	Change school, college or university
15.	Unemployed for one month	39.	Birth or adoption of child (for father)
16.	Involved in law suit	40.	Begin full or part-time education
17.	Fail important exam or course	41.	Promotion
18.	Losing or being robbed of personally valuable object	42.	Move within same city
19.	Demotion	43.	Marriage
20.	Taking a large loan (more than half annual salary)	44.	Finish full-time education
21.	Break engagement	45.	Become engaged
22.	Child marries without approval	46.	Child engaged
23.	Separation from significant person (e.g. close friend)	47.	Wanted pregnancy
24.	Prepare for important exam	48.	Child marries (with approval)

people on common sense grounds'. In order to be considered, such an event should be 'independent' of the illness, i.e. not influenced by the patient's possibly abnormal behaviour due to an, as yet, undiagnosed illness. For the purposes of this work, the event should have occurred during the four weeks preceding admission or should have been continuously operating throughout this period. A list of life-change producing events was used, taken from Paykel *et al* (1976) but abbreviated. Some of the items originally included were here omitted because either they were considered weak statistical data, or were felt to be inappropriate questions for acute surgical patients.

The check list used is shown in Table I. The author realized that the study had the following methodological weaknesses:

(1) Use of case notes to discover events in the manic group may underestimate their actual occurrence.

(2) A group of surgical patients probably has a higher level of events preceding onset than the general population.

(3) The event selection criteria forced an omission of cases that would satisfy the most stringent criteria for selection as psychogenic (see Note 3 under Table II).

Fortunately these factors would tend to narrow the difference between the groups and disprove, rather than confirm, the starting hypothesis that stressful life events occur before manic illness.

Results

Fourteen of the patients considered satisfied the criteria set forward for positiveness relating to the existence of events and their timing, and did not need to be excluded for any of the reasons given above. In comparison, only 4 of the surgical controls reported stressful events from the check list occurring during the four

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TABLE II

Stressful events in the precipitation of manic episodes
Overview

Cases	Sex	Age	Events	Type of event and stress: Pleasant	Unpleasant	Loss	Threat	Type of illness
(1) Pat H.	Female	40	(1) Death of friend (2) *Death of mother	—	+	+	—	Mania only
(2) Dorothy B.	Female	42	Death of father	—	+	+	—	1st episode
(3) Nora McG.	Female	66	Death of mother	—	+	+	—	Bipolar
(4) Henry A.	Male	30	Death of father	—	+	+	—	1st episode
(5) Ella T.	Female	64	Death of last surviving sister	—	+	+	—	1st episode
(6) Paul G.	Male	31	Breakdown 2 days prior to exam on which promotion depended	—	+	—	+	1st episode
(7) Janet B.	Female	39	Son went to boarding school	—	+	+	—	Bipolar
(8) Kath F.	Female	28	Son in car accident and husband loses job	—	+		+	1st episode
(9) Reg K.	Male	61	Decision reached for him to go to London and live with other son	—	—	?+	+	Bipolar
(10) Richard S.	Male	47	(1) Birth of child (2) Birth of child (3) Theft of coin collection (4) *Marriage of daughter	+	—	?+	—	Mania only
(11) Stephen H.	Male	61	Loss of job. Took new job, very unhappy	—	+	+	+	Bipolar
(12) Albert A.	Male	37	Informed about wife's pregnancy	+	—	—	+	Bipolar
(13) S. J. (Indian)	Male	30	(1) Emigration (2) *Birth of 2nd female child	—	+	+	—	Mania only
(14) Rosemary W.	Female	22	Breakdown of engagement to first ever boyfriend	—	+	+	—	1st episode

* Key admission

Note (1): The 'independent' character of the events in cases 10, 12, 14 was ascertained through personal interviews with patients and when necessary relatives.
In case 9 the move was decided because the son playing host was moving to another city; in case 11 the loss of job resulted from the employing firm going into liquidation, and in case 14 the ex-fiancé of our patient informed us that he had met somebody else who was physically more attractive and he never had any problems with our patient.

Note (2): In case 13 the patient explained that the birth of the female child was unpleasant, in fact it was a disaster.

Note (3): *Examples of cases not included*

(15) Michael G.	Male	67	This old man of sub-average intelligence, single, who had never had any relationships with women and who was living with a family as a lodger, became ill the day following the first adolescent-type party given by the fourteen-year-old daughter of the family, of whom he was very fond. He had bought her a pony and taught her how to ride. The first thing he did was to go to the riding-school and start breaking things up there. (Reason for non-inclusion: event not in the check-list).
(16) Margaret B.	Female	21	Orphan since age 10, went on a spending spree four days after the death of an elderly gentleman ex-neighbour she had become friendly with and used to visit and help look after for the last four years. (Reason for non-inclusion: man not first degree relative).

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week period prior to their admission. This difference is significant at the 1 per cent level ($\chi^2 = 9.09$, df = 1, $P < 0.01$). In absolute numbers it means that more than four times as many manic patients had a stressful life event preceding their illness (28 per cent vs 6 per cent). This is even more significant if one considers that the controls were personally interviewed and no event was likely to have been overlooked, which was always a possibility with the manic patients where case note screening was the method for data collection.

The sexes were equally represented and no age group was immune. The mean age was 43.6 years; the mean age of the controls was 41.8 years.

Family history of definite or probable mental illness in first and second degree relatives was obtained in one third of the cases. The range of diagnoses included 2 of schizophrenia, 2 suicides and 2 definite and 2 probable manic depressive illnesses.

Clinical picture

Nearly half the positive cases were first admissions. In fact nearly half the first admission cases had their onset of illness preceded by some event from the list. The accepted clinical features of a manic phase were used as selection criteria in this study and hence do not merit further elaboration, except to stress the fact that these symptoms occurred with the expected frequency. Overactivity, pressure of talk and flight of ideas were present in all cases; irritability was present in all but one, and delusions of grandeur in 40 per cent. The onset was invariably acute. Recovery from the illness was preceded by a brief period of depression in half the patients. This was so in the 3 cases of recurrent manic episodes without definite depressive episodes between. Unfortunately this small number forbids the critical evaluation of this observation.

Events and stresses

The independent events can be divided, according to the work of Brown and Birley, into pleasant and unpleasant; the stress underlying them can then be examined and classified according to its nature. Table II summarizes the events, their 'pleasantness' and the associated stress types. It can be seen that the unpleasant ones prevailed by a ratio of 4 to 1, and whenever a pleasant event was found an element of threat or loss could be strongly suspected. The stresses could be fitted into two categories, 'loss type' or 'threat type'; the 'loss type' stresses were present twice as often. A bereavement was found in 5 out of 14 cases. Table III shows the relationship in time between the occurrence of an event and the admission (admission dates being preferred to onset dates as harder data) separately for the bereavements and the non-bereavement events.

TABLE III
Number of admissions per week

	Time between event and admission (weeks)				
	4	3	2	1	0
Bereavements	*0*	*1*	*2*	*2*	*0*
Other events	*0*	*2*	*1*	*1*	*5*

Discussion

(1) In a high proportion (28 per cent) of patients, it was possible to identify an independent event which was potentially psychologically stressful. This figure is significantly higher than the one found among the control group where similar stresses were apparent in only 6.6 per cent. The figure is identical with the 28 per cent which Leff *et al* (1976) gave for precipitating events in their epidemiological survey of manic illnesses. The difference between controls and patients is significant at the 1 per cent level.

This figure is felt to be an underestimate since the deeply rooted ideas as to the genetic and biochemical aetiology of mania militate against doctors asking the relevant questions. In fact Tölle and Fritz had also noticed that when over the last 2 years of the 10 year period covered by their study, the work acquired a prospective

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quality, 'psychoreactive' factors were identified more frequently.

(2) In 5 of our cases (1 in every 3) bereavement was the stress factor, thus indicating a high prevalence of this particular event. However, it is possible that as it is the one event least likely to be missed in the history it assumes undue prominence. The finding that non-bereavement events tend to cluster more closely to the admission date (see Table III) could be accounted for either by the well-established existence of an affectively blunt period in the process of mourning, immediately following the event, or by a higher and longer tolerance from the part of the community in the face of odd behaviour exhibited by a recently bereaved person, resulting in a delay before pressing for admission.

(3) The surprising number of first episodes among the positive cases (7 out of 14) may be accounted for in either of two ways. One is that the environmental stress has a major pathoplastic role, possibly in predisposed individuals, the other is that the result is an artefact resulting from better history-taking during a first admission than in a later one, where the familiarity of the patient results in a brief description of the mental state replacing a comprehensive review. A third theoretical possibility would be that in later episodes the events and stresses need not be of the gross quality studied here, and so might go undetected, or might not qualify for inclusion in the study. A process of conditioning might have to be assumed if this were the case. Stern, making a similar observation in 1944 commented, 'melancholia and mania are reactive and not constitutional. But, once an attack has taken place, the liability of the patient to further attacks of either is so increased that these can be caused by trivial misfortune'.

(4) In virtually all of the cases reported, the stressful event is one of loss or threat, but it is not easy to explain why such stresses should operate as precipitants for mania. Hypotheses include the concept of a 'manic defence' propounded mainly by Melanie Klein. She describes a particular type of organization of defence mechanisms (splitting, denial, projective identification, idealization), postulated as protecting the individual from the devastating effects of depression and anxiety when the slower-acting alternative mechanism of reparation could not effectively and quickly repair the damage caused by the event. Perhaps such a mechanism could take over the ego completely and present itself as an illness. The observation made that the onset of manic illness is very close to the events would add further support to such a hypothesis. Outside psychoanalytic theory, the manic illness can be seen as a set of forms of behaviour or symptoms which can be released by a variety of stresses. Just as depression has been considered by some as a posture, manic symptoms could be considered similarly.

What conclusions can we draw from the facts presented? First, the traditional view that mania is never reactive or psychogenic is challenged. Secondly, further research is needed, ideally on first admissions, if possible prospective in design, and supported by biological and personality studies of the patients. The hypothesis to be tested would be that patients whose manic episodes are stress-precipitated constitute an identifiable group. This would not only be of intrinsic interest but might have far-reaching implications for the management of such patients. The notion that the manic episode is the easiest to control among the psychoses may have to be replaced by the anxiety that we have not yet started treating the illness itself. That again might force us to pay more attention to what has always been the poor relation in the family of the psychoses.

References

BLANKENBURG, W. (1964) Lebensgeschichtliche Faktoren bei manischen Psychosen. *Nervenarzt*, **35**, 536–9.

BORGNA, E. (1964) La provocazione psicoreattiva delle ciclotimie nei suoi aspetti psicopatologici clinici e teoretici. *Giornale di Psichiatria e Neuropatologia*, **92**, 795–814.

BROWN, G. W. & BIRLEY, J. L. T. (1968) Crises and life changes and the onset of schizophrenia. *Journal of Health and Social Behaviour*, **9**, 203–14.

—— —— (1970) Social precipitants of severe psychiatric disorders, in *Psychiatric Epidemiology* (Eds. E. H. Hare and J. K. Wing). London: Oxford University Press.

FEIGHNER, J. P., ROBINS, E., GUZE, S. B., WOODRUFF, R. A. J., WINOKUR, G. and MUNOZ, R. (1972) Diagnostic criteria for use in psychiatric research. *Archives of General Psychiatry*, **26**, 57–63.

https://doi.org/10.1192/bjp.135.1.15 Published online by Cambridge University Press

LEFF, J. P., FISCHER, M. & BERTELSEN, A. (1976) A cross-national epidemiological study of mania. *British Journal of Psychiatry*, **129**, 428–37.

MCCABE, M. S. (1975) Reactive psychoses. *Acta Psychiatrica Scandinavica*, Supplement 259, 1–133.

MEYNERT, T. H. (1890) *Klinische Vorlesungen über Psychiatrie*. Wien: W. Braumüller.

PARKES, C. M. (1964) Recent bereavement as a cause of mental illness. *British Journal of Psychiatry*, **110**, 198–204.

PAYKEL, E. S., MCGUINESS, B. & GOMEZ, J. (1976) An Anglo-American comparison of the scaling of life events. *British Journal of Medical Psychology*, **49**, 237–48.

RACAMIER, P. C. & BLANCHARD, M. (1957) De l'angoisse à la manie. *L'Evolution Psychiatrique*, III, 555-87.

SCHNEIDER, K. (1919) Uber reaktive Manie und Angstmanie. *Monatsschrift für Psychiatrie und Neurologie*, **46**, 176–80.

SCOTTI, F. & CERLETTI-SCOTTI, A. (1969) Il lutto maniacale. *Rivista Sperimentale di Freniatria e Medicina Legale delle Alienazioni Mentali*, **93**, 110–30.

STERN, E. S. (1944) The psychopathology of manic-depressive disorder and involutional melancholia. *British Journal of Medical Psychology*, **20**, 20–32.

TÖLLE, R. & FRITZ, H. (1971) Zur Auslösung von Manien. *Psychiatria Clinica*, (Basle), **4**, 12–18.

WESTPHAL, A. (1911) Manie: in O. BINSWANGER und E. SIEMERLING—*Lehrbuch der Psychiatrie*, 3 Aufl. 89–100, Jena, Gustav Fischer.

WINOKUR, G., CLAYTON, P. J. & REICH, T. (1969) *Manic Depressive Illness*. St Louis: C. V. Mosby.

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