# Recent Bereavement as a Cause of Mental Illness

# By C. MURRAY PARKES

Two hundred years ago "griefe" was officially regarded as a cause of death. It is doubtful if the Registrar-General would accept such a diagnosis today but the loss of a loved person continues to be seen as a cause of a wide variety of physical and mental ailments.

Apart from reports of isolated cases which cover practically the whole range of medical diagnosis, bereavement has been reported as a precipitating factor in ulcerative colitis and rheumatoid arthritis (Lindemann, 1945, 1950), asthma (McDermott and Cobb, 1939) and leukaemias (Greene at al., 1954, 1956, 1958); also in a variety of psychiatric conditions which include anxiety states and hysteria (Anderson, 1949), phobic and obsessive compulsive conditions (Stern and Larivière, 1957; Roth, 1959), depression (Travis, 1933), and mania (Bonnafous-Sérieux and Ey, 1938; MacCurdy, 1925). If the psychoanalytic theory of depression is correct, then all depressive illnesses are a species of mourning and it is to be expected that such illnesses will be particularly common following bereavement.

Departing from the more traditional psychiatric diagnoses, several authors have described specific syndromes as being variants of normal grief. These were first systematically described by Lindemann (1944), who divided them into delayed reactions and distorted reactions. The former are said to occur after a delay which may last from a few weeks to a few years and sometimes take the form of Anniversary Reactions (Hilgard and Newman, 1959; Brewster, 1952). Distorted reactions are usually prolonged and the depressive affect of grief may be diminished (Deutsch, 1937; Lewin, 1951; Stern and Larivière, 1957) or increased in the syndrome called by Anderson "Chronic Grief" (Anderson, 1949; Wretmark, 1959).

In all of these studies lack of controls or of statistical means of determining whether the bereavement was a cause of the illness or could have been expected to occur by chance make it difficult to find out how frequently such reactions occur, or even whether the bereavement was really responsible for the subsequent illness.

The purpose of this investigation is to examine the incidence of recent bereavement in the pre-illness histories of patients admitted to a psychiatric clinic and to determine whether, and among what patients, this exceeds the incidence of bereavement which could have been expected to occur by chance. A more detailed study of the symptoms of bereaved psychiatric patients and their relationship to grief will be reported in a later paper.

#### Метнор

This study is based on data obtained from the case notes of the 3,245 patients admitted to the Bethlem Royal and Maudsley Hospitals during the years 1949-51. Examination of the detailed summaries of each case which are made on a patient's discharge led to the identification of 94 cases whose presenting illness had come on either during the last illness (7 cases) or within six months following the death of a parent, spouse, sibling or child (87 cases). In every case a record was made of the age, sex, psychiatrist's diagnosis on discharge, kinship to the deceased and amount of social interaction with the deceased. Similar details of the age, sex and diagnostic composition of the hospital population were obtained from the Triennial Statistical Report for 1949-51 (Blacker and Gore, 1955).

The number of patients in the hospital who could have been expected to lose a parent or spouse during the six months preceding the onset of their illness was calculated as described in the Appendix. It was not possible to calculate "expected" numbers for loss of a sibling or child.

#### RESULTS

#### 1. Incidence

The 94 bereaved patients included in the study comprise 2.9 per cent. of the total admissions during 1949-51.

### 2. Kinship to the Deceased

The illness of 31 patients (6 men and 25 women) followed the death of a spouse, 23 (10 men and 13 women) had lost a father, 24 (10 men and 14 women) had lost a mother, 12 (5 men and 7 women) a sibling and 4 women (no men) a child.

The table (from which 4 cases are excluded because their symptoms came on during the last illness but before the death of the relative) shows the number who had lost a parent or spouse; these are compared with the number who could have been expected to have lost one of these kin assuming that the bereavement rates of the population from which the hospital admissions were drawn was the same as that of the general population. It will be seen that the number admitted following death of a spouse was six times greater than expected ( $\chi^2$  19·2, 1 d.f., p<0·001), whereas the number admitted following death of a parent did not differ greatly from expectation.

Whilst it is probable that loss of a spouse was more reliably reported in the notes than was loss of a parent, it is unlikely that this would account for the magnitude of the differences observed.

### 3. Sex and Age of Patients

The sex and age distribution of the bereaved patients is shown in Figure 1.

Sixty-nine per cent. (65 out of 94) of the bereaved patients were women compared with 57 per cent. (1,783 out of 3,151) of the non-bereaved patients, a difference which is statistically significant ( $\chi^2$  5.9, 1 d.f., p<0.02).

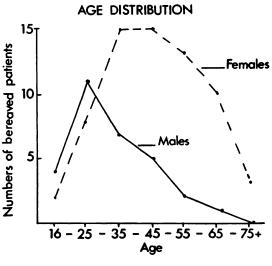


Fig. 1

The number of male and female patients is very similar until the age of 35 after which male patients fall off sharply whilst the number of female patients continues to rise and only begins to fall off after the age of 55. The mean age of the male bereaved patients (38 years) was 11 years younger than that of the female bereaved patients (49 years).

When the age distribution of the bereaved patients was compared with that of the non-bereaved patients (see Fig. 2) it was clear that

TABLE
Comparison of Observed and Expected Numbers of Bereaved Patients Admitted 1949–51 (4 Anticipatory Reactions Excluded)

			Male Patients		Female Patients		All Patients	
			Observed	Expected	Observed	Expected	Observed	Expected
Losing a father		• • • • • • • • • • • • • • • • • • • •	10	1.8	13	7.0	23	15.1
Losing a mother			10	10.6	11	13.2	21	23.8
Losing a spouse	• •		6	1.5	24	3.4	30	4.9
Total		••	26	20.3	48	23.6	74	43.8

### AGE DISTRIBUTION OF BEREAVED AND NON-BEREAVED PATIENTS

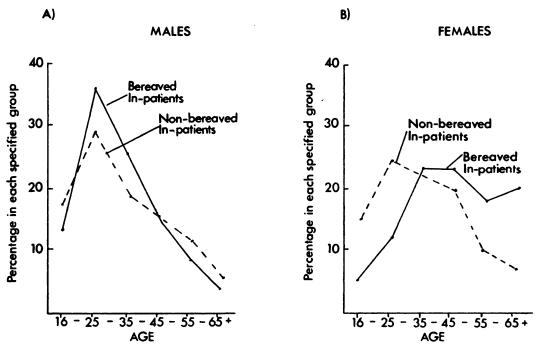


Fig. 2

for males the distribution was the same. Female bereaved patients, however, were relatively few before the age of 45 but much more common after that age. As expected, the mean age of the male bereaved patients was the same as that of the male non-bereaved patients, but the female bereaved patients were, on average, 10 years older than their non-bereaved counterparts. In fact nearly half (45) of all the bereaved patients were women over the age of 40.

These findings are not altogether surprising when we consider that in a third of these patients loss of spouse was the cause of bereavement. Not only does the probability of losing a spouse increase with age, but men tend to marry later and die earlier than women, so that wives are more likely to lose their husbands than husbands to lose their wives. A closer study of the "expected" number of bereaved patients shows that in fact the age distribution could be explained in this way. Over the age of 45 the expected incidence of recent loss of a spouse

is 4.4 times greater than it is under that age. The "observed" incidence was found to be little different, 5.4 times greater over the age of 45. The sex distribution, however, is less easily explained. Whilst the "expected" incidence of loss of a husband was 1.8 times greater than loss of a wife, the "observed" incidence was 4 times greater (see Table).

To sum up, the group of bereaved patients studied contain a preponderance of women over the age of 40. The age distribution can be explained in terms of the population at risk, but this accounts for only half the excess of female patients.

## 4. Clinician's Diagnosis of Bereaved Patients

Figure 3 shows the proportion of bereaved patients in each diagnostic category compared with the proportion of non-bereaved patients admitted during the same triennium. "Affective disorders" (I.C.D. classification numbers 301, 302, 310 and 314) comprised 65 per cent. of

### CLINICIANS DIAGNOSIS OF BEREAVED AND NON-BEREAVED PATIENTS COMPARED

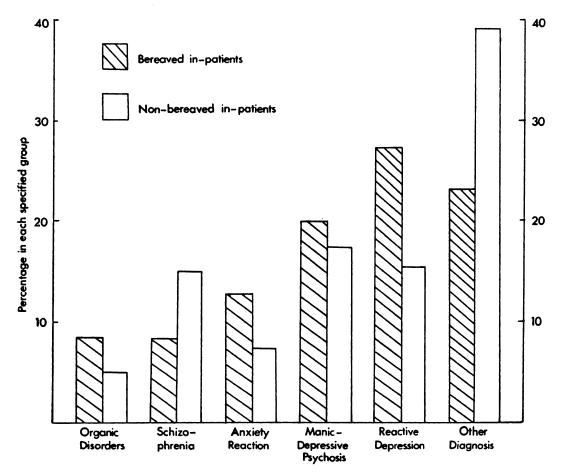


Fig. 3

the bereaved group and 47 per cent. of the nonbereaved ( $\chi^2$  11.98, 1 d.f., p<0.01); the greatest difference for a single diagnosis came in the group diagnosed "Reactive or Neurotic Depression" (I.C.D. 314), namely 28 per cent. of the bereaved group and 15 per cent. of the non-bereaved ( $\chi^2$  10.19, 1 d.f., p<0.01). Other differences are not statistically significant.

## DISCUSSION AND CONCLUSIONS

Whilst there are certain obvious objections to the assumption that the death rates of parents and spouses of the population from which Maudsley Hospital patients are drawn are likely to be the same as those of the general population, these objections do not throw serious doubt on the validity of the findings. Thus Maudsley in-patients contain a slightly higher proportion of patients from social classes I and II than does the general population but, since these classes die at an older age than other classes, this tends to reduce rather than to increase the number of bereaved patients expected. Furthermore, the figures for observed numbers of bereavements depend on the number of those recorded in the discharge

summaries and some cases are undoubtedly missed, particularly where loss of siblings or of children is concerned. It may be that there is a special tendency to admit bereaved patients in preference to non-bereaved psychiatric patients but in fact there was no significant difference in the number of widows among out-patients and in-patients admitted to the Joint Hospitals during the period of the investigation so that it seems most unlikely that this would explain the sixfold difference between the "expected" and "observed" number of recently bereaved widows and widowers.

It is concluded that loss of a spouse is a cause of the mental illness of many of the bereaved patients in this series, although it does not follow that bereavement was necessarily the only cause. It is not possible, from the information presented here, to say whether loss of a parent, sibling or child is also such a cause.

The number of women over 40 among the bereaved patients resembles the preponderance of middle-aged women remarked upon by Wretmark in his study of 28 Swedish psychiatric patients whose symptoms bore "an immediate time relationship to the loss of a relative" (1959). From the evidence presented above it seems that the age distribution could be explained in terms of the population at risk, but that this would not account for the number of women found (Wretmark was surprised to find only two men among his bereaved patients).

Another respect in which Wretmark's findings resemble those of the present study lies in the large proportion of patients whose illness followed the loss of a husband (10/28). This, coupled with the fact that over half the patients in the present study who developed a mental illness following the loss of a parent had been living with that parent for more than a year before the death, suggests that the amount of social interaction between individuals is an important factor in determining how one will react to the death of the other. As Waller has said (1951), in Western civilization there is great emotional interdependence between different members of the family unit and "one of the prices we pay for intimate response in families is painful adjustment to separation".

Whilst the evidence suggests that affective

disorders, and particularly "Reactive Depressions", are likely to follow bereavement, the fact that 72 per cent. of bereaved patients received other diagnoses indicates either that bereavement can cause a variety of clinical conditions or that the traditional modes of psychiatric diagnosis are not adequate to categorize appropriately the "Loss Reaction". Perhaps both these explanations are true. The problem will be examined in another paper in which the symptomatology of bereaved patients is discussed.

In considering the significance of the figure of 2.9 per cent. for the incidence of mental illness following bereavement it is important to bear in mind that (a) this study was limited to illnesses coming on within six months of the loss (some "delayed" reactions may have been missed), (b) only losses by death of certain specified kin were taken into account, and (c) the hospitals at which the study was carried out admit only a small number of patients over 65 and only a small number with psychosomatic conditions. It is not surprising, therefore, that at a war neurosis unit during 1944-47 Anderson (1949) found that 9 per cent. of patients seen had "grief reactions". A study covering a wider age range of psychiatric patients and including other types of loss might give yet higher figures.

#### SUMMARY

- 1. Among 3,245 patients admitted to a psychiatric unit during 1949-51 there were at least 94 (2.9 per cent.) whose presenting illness had come on within six months of the death of a parent, spouse, sibling or child.
- 2. The number of patients whose illness followed the loss of a spouse was six times greater than expected and suggests that the bereavement was a causative factor in the development of the illness. The relationship between mental illness and the loss of other kin was not established.
- 3. Among the bereaved patients there was a preponderance of women over 40. Whilst the age distribution could be explained in terms of the population at risk the sex distribution could not; it seems that women are more

inclined than men to develop mental illnesses following bereavement.

4. The incidence of affective disorders, and particularly reactive and neurotic depressions, was significantly greater among bereaved than non-bereaved patients. Nevertheless only 28 per cent. of bereaved patients were diagnosed "Neurotic or Reactive Depression" and further investigation is required to determine the specificity of the reaction to bereavement.

#### ACKNOWLEDGMENTS

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### APPENDIX

CALCULATION OF "EXPECTED" DEATH

The purpose of the calculation was to estimate the number of patients admitted to the Joint Hospitals during 1949-51 who could have been expected to have lost a spouse or parent during the six months preceding the onset of the key illness. In order to do this it was necessary first to calculate the number of patients admitted during this period who had had a spouse or parent living six months before the onset of the presenting illness. It was then possible to estimate from Register-General's mortality tables the number of these parents and spouses who would have been expected to die during the next six months.

The calculation was carried out in three stages:

### Estimation of Number of Patients Admitted During 1949-51 who had had a Parent or Spouse Living Six Months Before the Onset of the Present illness

This had to be calculated separately for father, mother and spouse, according to their age six months before the onset of the illness. A random sample of 513 case notes of patients admitted during 1949-51 was examined and the ages of parents or spouses living six months before the onset of the illness was tabulated in five-year age groups. In this way 6 tables were obtained, namely for the fathers, mothers and spouses of male and female patients respectively.

Since the total numbers of male and female patients was known it was possible to calculate from this sample a "constructed" population having the same proportions of parents or spouses living six months before the onset of the illness. It was always possible to ascertain whether the patient had a spouse living at this time but of the existence of the father there was some doubt in 13 per cent. of cases and it was not known if the mother was alive in 8 per cent. A correction was therefore made to the calculations entailing the assumption that "not knowns" had the same age distribution as the rest of the population studied.

### 2. Estimation of Bereavement Rates in 5-Year Age Groups

Bereavement rates were calculated by dividing the population at risk by the number of deaths. Thus in order to estimate the bereavement rate of husbands, Registrar-General's figures for the number of married women in each five-year age group who died in England and Wales during 1949\* were divided into the number of married women in each five-year age group in the population. Similar calculations of the death rate of married men were used to estimate the bereavement rate of wives and both married and widowed men and women were taken into account when losses of mothers and fathers were being calculated. In each case it was necessary to make a small correction since death notification forms are not always correctly filled in. "Not knowns" were therefore assumed to have the same distribution as the rest of the population at risk. Finally the bereavement rate per

\* The date of onset of the illness was variable but since death rates do not vary greatly from year to year 1949 was taken as typical.

year was divided by two so that the final figures represented rates per six months period for each five-year age group.

3. Estimation of the Expected Number of Specified Bereavements in the Hospital Population

Since the bereavement rates to be expected in each five-year age group of the normal population were now known it only remained to multiply these figures by the

numbers of persons at risk in our constructed population (as calculated in Stage 1) in order to determine the number of deaths in each five-year age group to be expected during the six months preceding the onset of the illness. By summing the expected numbers in all age groups one figure was derived from each table which represented the number of patients who could have been expected to have lost a relative of the type dealt with. This figure could then be compared with the number of losses of a similar type which were actually found in the hospital population (see Table).

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