

Parental Death During Childhood and Adult Depression: A Critical Review of the Literature

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Parental death during childhood is widely viewed as an event so traumatic as to produce not only immediate grief and despondency but also a predisposition to react with depression when faced with loss or rejection in adult life. Empirical evidence relating to the relationship between parental death and depression is provided by more than 20 controlled studies conducted during the past 2 decades. A critical review of these studies is presented, and it is concluded that parental death during childhood has not been established as a factor of etiologic significance in adult depression or any subtype of adult depression studied to date.

In the half century following publication of Freud's "Mourning and Melancholia" (1917/1950), depression came to be widely viewed as a reaction to a perceived loss that reactivates depressive feelings associated with the loss of a parent or other loved object in childhood (Redlich & Freedman, 1966). The view was strengthened during the past decade by Bowlby (1969), who carefully described the immediate reaction of the young child to maternal separation and suggested that death of the mother during early childhood creates an enduring nucleus of depressed affect which may surface later in life when an individual is faced with loss or rejection. Recent primate behavior studies also suggest a relationship between the death of a parent during childhood and adult depression. For example, Young, Soumi, Harlow, and McKinney (1973) noted similarities between humans and other primates in initial response to maternal separation and demonstrated that rhesus monkeys separated from their mothers during the first year of life reacted to separation from peers during adulthood by displaying the same withdrawn, "depressed" behavior that they had shown when originally sepa-

rated from the mother. Thus, from perspectives as disparate as psychoanalysis and primate behavior study, the theory has been advanced that persons who experience the early death of a parent (primarily mother) are predisposed to depression when faced with a real or symbolic loss in adult life.

Empirical studies of the relationship between early parental death and psychiatric illness were first undertaken more than 40 years ago. However, none of the studies published prior to 1958 dealt specifically with depression, and all were subject to severe methodological criticism. In his review of the literature, Gregory (1958) concluded that existing studies of parental death and psychiatric illness were characterized by (a) comparisons between unlike samples, (b) unrepresentative samples due to selection, (c) chance errors in sampling, and (d) fallacies in deduction.

During the past 20 years a number of more refined studies have been published in which the incidence of early parent death in a sample of depressed patients was compared with that in a sample of nondepressed subjects. Such a comparison seems simple enough, but both Dennehy (1966) and Granville-Grossman (1968) noted that several factors that influence early adult mortality have not been controlled in many studies of childhood bereavement and depression. For

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example, the probability that an individual experienced the early death of a parent is strongly influenced by his age, the age of his parents at his birth, and the social class of his family of origin. The effect of age is demonstrated by the fact that the probability of losing a parent through death prior to age 18 decreased from 16.3% in 1920 to 4.4% in 1963 (according to United States Social Security Administration estimates; cited in Dennehy, 1966). As the following review will demonstrate, the failure of many investigators to control factors such as age and social class has introduced confusion into the literature of the past 2 decades.

The first of a series of controlled parental bereavement—adult depression studies in the British literature was published by Felix Brown in 1961. Brown reported the incidence of parental death prior to age 15 as 41% in a group of 216 depressed outpatients, as compared with 19.6% in a group of 267 medical patients and 12% in the general population as estimated from the 1921 British census figures on orphanhood. Both maternal and paternal deaths were excessive among depressed patients. The excess of maternal deaths was unrelated to the age of the child (under 15) at the time of bereavement, but in the case of paternal deaths, the excess among depressed patients was most striking when bereavement occurred between 10 and 14 years of age and minimal when bereavement occurred during the first 4 years of life. These findings held for patients of both sexes. Results were interpreted, without benefit of inferential statistics, as suggesting a causal relationship between parental death during childhood (late childhood in the case of the father) and adult depression.

Brown expanded his data somewhat in 1966 and noted that his original study had been criticized on several grounds. Most important, he had failed to control for possible differences between groups on factors such as parental age and social class, and his criteria for a diagnosis of depression had been imprecise. Depression was defined as the presence of "unpleasant affect, not transitory, without schizophrenia and without organic brain disease" (Brown, 1961, p. 755).

Beck, Sethi, and Tuthill (1963) attempted

to address the major methodological flaws in Brown's (1961) study by comparing the incidence of early parent death in a group of psychiatric patients who obtained high scores on a standardized self-rating scale of depressive symptomatology with the incidence in a group of patients who obtained low scores, and by attempting to control for demographic differences between the groups in analyzing data. The investigators chose to compare depressed and nondepressed psychiatric patients, since they concluded that Brown's study may have demonstrated an association between early parent death and psychiatric disorders in general, rather than depression in particular. The incidence of parental death prior to age 16 was found to be 27% in the group of patients who scored high on the depression scale as compared with 12% in those who obtained low scores. The difference was highly significant ($p < .01$). However, the patients who scored high on depression were also older than their nondepressed counterparts and, as one would expect, age (among several other demographic variables) was found to be related to incidence of early bereavement. The authors attempted to partial out the effects of age by comparing high and low depressed subjects within age groups and found that the significance of the depression—parental death relationship persisted at a rather modest level when age effects were thus controlled. However, the effects of the other variables related to the incidence of bereavement (e.g., social class) were not controlled.

Also, the investigators found no relationship between age at bereavement (under 16) and depression, thus death of a parent in the 15th year of life was as closely associated with depression as death in the 1st year. They also found the incidence of early bereavement in patients with a psychiatric diagnosis of depressive illness to be no higher than that in other groups of psychiatric patients. It is also noteworthy that Sethi, one of the co-authors of the study, published a paper the following year (Sethi, 1964) that did not deal primarily with childhood bereavement, but presented data reflecting a 15.6% incidence of parental death prior to age 16 among patients who obtained a high score on a de-

pression inventory compared with 16.3% in patients who obtained a low score.

Pitts, Meyer, Brooks, and Winokur (1965) criticized Brown's failure to equate depressed patients with controls on factors such as age and social class and were skeptical concerning Beck's (1963) attempt to deal with these extraneous variables. Pitts and his colleagues in St. Louis, Missouri, compared the incidence of parental death prior to age 15 in a group of 366 patients hospitalized with a confirmed diagnosis of affective disorder with the incidence in a group of 180 medical inpatients matched on age, sex, social class, and marital status. The groups did not differ on incidence of either maternal or paternal death prior to age 15 or during any 5-year interval in the first 15 years of life. On the other hand, the groups differed dramatically on the incidence of "probable psychiatric disorder" (diagnosed on the basis of a nonblind retrospective psychiatric evaluation of the parent from reports of the subject) in both the mother (28.7% in depressives vs. 3.8% in controls) and the father (25.7% in depressives vs. 3.9% in controls). The parental disorder was likely to be depression in the mother and depression or alcoholism in the father. The authors concluded that early parental death is one environmental factor that plays no independent role in the genesis of depression.

Of course this conclusion is opposite to that reached by Felix Brown, and the difference is not easily reconciled. Brown (1966) noted that the incidence of bereavement among depressives cited by Pitts et al. was quite low compared with the incidence that he had reported in London, and he suggested the difference was likely due to "Missouri's healthy climate or the skill with which orphanhood is managed there" (p. 1038).

Subsequent to the Pitts et al. study, Forrest, Fraser, and Priest (1965) reported the incidence of parental death prior to age 15 as 35.1% (comparable to the incidence reported by Brown) in 158 patients considered depressed, compared with 17.2% in 58 general hospital patients. The incidence of both early maternal and paternal death was significantly ($p < .05$) higher among the depressed patients. However, the two groups differed on

both age and sex (e.g., 17% of the depressives were male, as compared with 40% of the controls) and while controls were simply selected from a general hospital ward, depressives were selected from wards that housed the most severely ill patients and those "with the most social and medical handicaps" (p. 250).

Munro (1966) examined the incidence of parental death prior to age 16, as well as other variables relating to the parent-child relationships of depressed and nondepressed subjects. As in the Pitts et al. (1965) and Forrest et al. (1965) comparisons, general hospital patients were employed as controls. Unlike the Forrest et al. comparison, however, depressed and control subjects were similar with regard to age, social class, and several other variables. The incidence of childhood parental death in a group of 153 depressed inpatients was 21.6%, and among the 163 controls, the incidence was 20.2%. Groups did not differ with regard to maternal or paternal death or the age at which bereavement occurred. Munro concluded that adult depression is unrelated to the occurrence of parental death during childhood.

Munro's study, as well as most other studies preceding it, was criticized by Dennehy (1966), who argued that general hospital patients are not adequate control subjects in studies of childhood bereavement. In support of the argument, she cited a number of studies demonstrating that a sizable proportion of medical-surgical patients suffer from non-organic psychiatric disorders, including depression. The literature cited by Dennehy was extensive and her argument is difficult to counter, although it is not critical in the case of Munro's study, since he had screened persons with a history of affective disorder from his control group. The argument also detracts little from the negative findings of Pitts et al. (1965), since as noted previously their findings differed from those of Brown not because of an excessive rate of bereavement among controls, but because the rate of bereavement among depressives was low relative to that cited by Brown.

Having presented a sound methodological argument against the use of nonpsychiatric patient controls, Dennehy proceeded to con-

duct three studies aimed at establishing rates of bereavement among normals according to age and social class. All three studies were conducted in London, and in each case the estimates of normal bereavement rates obtained were significantly higher than those derived by Brown from 1921 British census figures. However, Dennehy argued that all three of her studies must have been conducted in unrepresentative groups, since they had yielded overinflated, incorrect estimates of orphanhood rates among normals.

Dennehy then conducted another study in which bereavement rates were obtained among 1,020 psychiatric patients in three London hospitals. Obtained rates for depressives were then compared with rates in the normal population, as estimated from the 1921 census figures and, not surprisingly, were found to be in excess of those rates. Specifically, it was demonstrated that an excess of male depressives had lost their mothers, and an excess of female depressives had lost their fathers before 15 years of age; excess loss of both mother and father between 10 and 15 years of age was also noted for patients of both sexes. However, if one compares data obtained from depressed patients with that obtained from normals in one of the three population studies reported by Dennehy in the same article, rather than with that derived from the 1921 census, one finds no evidence of increased parental death among depressed patients.

Dennehy's choice of a comparison group has not been criticized in the literature. In fact, her article is generally regarded as one of the best pieces of evidence for a relationship between early parent death and adult depression (Heinicke, 1973). The only discussion of the three "erroneous" studies is contained in an article by Hill and Price (1967), who speculated that Dennehy's normal population studies may have been accurate, reflecting excessive normal orphanhood rates resulting from various social factors in some areas of London. If the argument is correct, then the incidence of bereavement in depressed patients drawn from those areas by Dennehy (1966) and by Brown (1961), former colleagues at London's Royal Free Hospital, would be found higher than that

calculated for normals in all of Britain, but the excess would have nothing to do with depression. It is recognized that in addition to the census controls, Brown employed a second control group composed of patients seen by general practitioners in Hampstead. However, the early bereavement rates reported among the Hampstead controls were considerably higher than those calculated for all of Britain, double in the case of maternal deaths in midchildhood; the age distributions of depressed patients and Hampstead controls were dissimilar; and the comparability of depressed patients and Hampstead controls with regard to social class is unknown and perhaps suspect.

Data gathered by Brown was also used by Hopkinson and Reed (1966) for comparison purposes. Those authors assessed the incidence of parental death prior to age 15 in 216 manic-depressive inpatients subdivided by age and sex. Since they found in their sample approximately the same mean age (not age distribution) and sex ratio that Brown had reported, they concluded:

It would appear then that the major differentiating factor between the groups, apart from the geographic one, is the fact that the present group is composed of manic-depressives, whereas his group suffered from deliberately undifferentiated depressive illnesses. (p. 460)

On the basis of this reasoning, Hopkinson and Reed then compared the maternal and paternal death rates in their sample with those reported by Brown for his two groups of controls and his sample of depressed patients and found their sample rates similar to Brown's control rates and, of course, significantly lower than rates in his depressed patients. The authors concluded that early parent death is not of etiologic significance in manic-depressive psychosis and suggested that the difference between their findings and those of Brown provides support for the view that there is an etiologic difference between manic-depressive psychosis and undifferentiated depressive illness. Again, if the rate of orphanhood is higher in areas of London than in the rest of Britain, as Dennehy's (1966) population studies suggest, then Hopkinson and Reed simply demonstrated that their manic-

depressive patients (in Manchester) had experienced no excess of early parental death.

The Hopkinson and Reed study and the Forrest et al. (1965) study are frequently quoted as suggesting that early environmental events are of less significance in manic-depressive illness than in other depressive disorders. The evidence on this point provided in the Forrest et al. data was that none of 11 manic-depressive patients had experienced the early death of a parent, whereas 10 of 58 (17.2%) control subjects had suffered bereavement.

Several investigators have examined the hypothesis that early parent death may predispose to reactive depression rather than to endogenous depression (manic-depressive patients would be included in the latter category). Forrest et al. (1965) found no support for the hypothesis. Gay and Tonge (1967) examined the incidence of childhood bereavement in 494 psychiatric patients from six diagnostic categories, two of which were endogenous and reactive depression. The authors presented various intergroup, nonparametric comparisons involving the six diagnostic categories (collapsed at times to form new categories such as psychogenic illness vs. others), type of parental loss, age of child at time of loss, sex of child, and sex of lost parent. Of the many possible comparisons, several that were modestly significant were reported, and the reader is left with the impression that persons with reactive depression experienced more childhood bereavement than did those with endogenous depression. However, the incidence of bereavement in the endogenous depression group was not reported. Also, no attempt was made to control for age and social class effects in any comparison; in fact, age and sex distributions were not reported. In another study addressed to the same point, Gregory (1966) collected data relating to early parent death from 1,000 psychiatric patients. After adjustments for age and sex, no differences were found between diagnostic categories, including "affective psychoses" (endogenous) and "neurotic depressive reaction" (reactive).

Hill and Price (1967) expressed a desire to compare the incidence of parental bereavement in a composite group of both endoge-

nous and reactive depressive patients with that in a "control group as closely matched as possible" (p. 743). They then proceeded to compare the incidence of orphanhood in a group of 1,059 nondepressed psychiatric patients in London with that in a group of 1,483 depressed patients described as "appreciably older." An excess of paternal deaths prior to age 15 was found among the depressives, but as one would expect, the incidence of early paternal mortality was found to be closely related to age. Rather than directly partial out the effects of age, the authors compared the incidence of paternal bereavement in depressed and nondepressed patients born in the same decade. They argued that the excess number of early paternal deaths experienced by depressed patients was not due to age, since within certain decades of birth, depressed patients were also found to have experienced a higher incidence of paternal bereavement than nondepressed patients, although the excess was 1.5% or less in two of the four decades examined.

A study by Abrahams and Whitlock (1969) compared the incidence of childhood bereavement in 152 depressive patients with that in 152 general hospital outpatients and their relatives. The two groups were matched on age, sex, and marital and social status. No differences were found between the groups with regard to early parent death.

Birtchnell (1970) compared the incidence of parental death prior to 20 years of age in a group of 231 depressed inpatients with that in an age-matched group of 214 nondepressed inpatients. The groups were found to be similar. However, the author then divided the sample of depressed patients into those moderately and those severely depressed and found the incidence of parental death during childhood excessive in the latter group, particularly that resulting from death of the mother. Of course, age matching had involved depressives; controls, severely depressed, and moderately depressed patients were not matched.

In a later study Birtchnell (1972) compared the incidence of early parental death in 6,795 patients drawn from a psychiatric case register in northeastern Scotland with that in a sample of 3,425 persons drawn from the

rolls of general practices in the same geographic area. Among the psychiatric patients, 2,699 persons with a diagnosis of depressive disorder were identified, more than 70% of whom were female. Since the incidence of parental death was found closely related to age, Birtchnell calculated the incidence of bereavement among control subjects with the same decade of birth distribution as the depressives. Among females, the incidence of maternal death before age 10 was 4.2% in the depressed sample compared with 3.1% in the controls; the incidence of paternal death before 10 was 6.7% in the depressives and 5.2% in the controls. Because of the large sample sizes, both of these differences were statistically significant.

It should be noted that depressed and control subjects were not precisely matched for age and the two groups were not equated on social class. The author acknowledged that the incidence of early bereavement varies with parental social class but argued that the factor could be "safely ignored" (p. 203), since his previous research had shown no significant variation in the parental social class distribution of different diagnostic groups. It is unknown, however, whether the parental social class of depressed subjects was equivalent to that of the normal controls with whom they were compared.

In a more recent study, Jacobson, Fasman, and DiMascio (1975) found no excess of early parental death among inpatient and outpatient depressed women when compared with normal controls. In the same year, Crook and Raskin (1975) reported a nearly identical incidence of early parental death in a group of 230 depressed inpatients and a group of 285 normal subjects matched on age and sex. In the latter study, the incidence of early parent death was also essentially the same in severely depressed and moderately depressed subjects.

An article frequently cited as supporting a relationship between parental death and depression was published in 1977 by Brown, Harris, and Copeland. The authors argued that it is important in studies of depression and parental loss to exclude depressed persons from the control group "and the failure of previous research to do this is probably one

reason for many negative results" (p. 6). In support of their argument, they reported that 76 of 458 women identified in a random sample of women living in the Camberwell area of London suffered from "recognizable clinical syndromes, almost entirely of an affective kind" (p. 2) and that the incidence of maternal loss before age 11 was significantly higher among those 76 "cases" than among the remaining 382 community residents. However, in the critical test of their hypothesis, the authors found that the incidence of early maternal loss in a third group of 114 patients with a confirmed diagnosis of primary depression did not differ significantly from that in either the total community sample or the community sample with the "cases" excluded. They then argued that

this apparent inconsistency between the results for patients and cases is explained by the fact that loss of mother before 11 not only increases the chances of developing psychiatric disorder but is also correlated with other factors that tend to *lower* chances of contacting a psychiatrist, and therefore patients would be expected to have a somewhat lower proportion with early loss of mother than cases in the general community. . . . [Thus] we can reasonably conclude that the findings concerning the aetiological role of loss of mother before eleven are broadly consistent for cases and for patients. (p. 6)

The authors further suggested that early maternal loss probably does not cause depression directly, but acts as a "vulnerability factor" by increasing the chance of developing depression when a severe event or major difficulty occurs in later life. They reasoned that if this were the case, depressed patients who had experienced early maternal loss would be more likely to also have experienced a severe event or major difficulty in the months preceding onset of depression than would those patients who had not experienced early loss. A comparison within the patient sample revealed no significant difference in the incidence of severe events or difficulties between women who had experienced early maternal loss and those who had not. Nevertheless, the investigators concluded that the results of the comparison conformed "exactly" to their prediction, and "therefore, as we have already shown in the general population, loss of mother before 11 acted as a vulnerability

factor for patients" (p. 7). Tennant and Bebbington (1978) have argued that "this conclusion can only be supported at the cost of ignoring two signal failures to reject null hypotheses" (p. 570), and have criticized the study on a number of points, including the method of "case" identification.

It is not possible in the community data published by Brown et al. (1977) to distinguish between maternal loss resulting from death and that resulting from separation. However, in a more recent article, Brown and Harris (1978) reported that parental death had been experienced by nearly 80% of the women in the community who experienced maternal loss before age 11. Among patients, Brown et al. specifically examined parental death as a "symptom formation" factor. They found that the incidence of early parent death was higher among psychotic than neurotic patients, particularly among the most severely ill psychotics. However, as expected, psychotic patients were older than neurotics, with a mean age of 45 as compared with 29.5. The investigators did not directly partial out the effects of age but provided a table demonstrating that within each of three age groups, the proportion of psychotic patients who experienced loss through death was higher than the proportion of neurotic patients. The limited value of such a table is further diminished, since the figures presented for loss through death included the death of a child or husband during adult life, and these two factors accounted for more than one third of the deaths experienced by the (older) psychotic patients. The authors also presented a table demonstrating that psychotic patients were more likely than neurotics to have experienced the death of a parent or sibling before the age of 11, but in that table, age of patient was not controlled and thus the finding would be expected in any group.

Finally, Roy (1978) attempted to confirm the conclusion of Brown and his colleagues (Brown & Harris, 1978; Brown et al., 1977) that maternal loss before age 11 is associated with depression. Eighty-four women referred for treatment of depressive neurosis were matched on age, marital status, and social class with a like number of women admitted

to a gynecological unit for sterilization or other procedures. The incidence of parental loss originally reported in each group was in error and was subsequently corrected (Roy, 1979). The correct incidence of parental loss among both patients and controls was approximately twice that reported by Brown et al.; however, the incidence of parental death was much lower and was virtually identical among depressed patients and control subjects.

Conclusion

The conclusion to which the foregoing review leads is clear; that is, there is no sound base of empirical data to support the theorized relationship between parental death during childhood and adult depression or any subtype of adult depression. Studies that have demonstrated a higher incidence of childhood bereavement among depressed patients (or a subtype of depressed patients) than among nondepressed subjects have, without exception, been methodologically flawed. On the other hand, a number of studies reporting a similar incidence of early parent death in depressed and normal subjects have been reasonably well controlled. Of course, establishment of parental death as an etiologic factor in depression would require not only demonstration of a higher incidence of parental bereavement among depressives but also evidence that the increased incidence did not result from factors associated with increased depression among their parents. If a genetic factor were of primary etiologic significance in depression, one would expect an increased incidence of parental death resulting from factors such as accidental death and suicide.

It is important to note that this review focused specifically on parental death. We do not purport to comment on the relationship between depression and other events of early life, such as parental separation or discord within the home.

We do not conclude from the review that parental death during childhood and adult depression are unrelated, but we suggest that the overwhelming etiologic significance attached to the event by many writers is unwarranted.

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