EARLY CHILD PARENT SEPARATION AND RISK FOR CHILDHOOD PSYCHOPATHOLOGY*

T.N. SRINIVASAN¹
K.J. RAMAN²

SUMMARY

Prolonged separation from parents has been shown to be significantly related to psychiatric morbidity in children. The relative role of mother and father in the socio-emotional development of the child has been variously contested. A controlled retrospective study on children with well defined hysterical, emotional and conduct disorder was done for experiences of separation from parents between 6 months and 5 years of age. Relative risk estimation showed that there is a significantly increased risk for psychopathology in children who experienced prolonged separations of more than 3 months duration from either father, or both parents together or have multiple such separations. This risk is more in boys than girls. Surrogate care did not seem to be protective in prolonged separation and no single cause for separation emerged as significantly related to increased risk. The relevance of this finding is discussed in the context of the Indian family situation.

Introduction

The study of etiopathogenesis of psychiatric morbidity had a major advancement with the psychoanalytical concept of Psychosexual development, which implicated a pathogenetic effect to adverse infantile and childhood experiences in relation to parental figures. The attachment theory of Bowlby indicates a strong relationship between the disruption of child-parent attachment bonds, especially maternal deprivation, and to the capacity of the child to make affectional bonds later and to neurotic and conduct problems. From the earlier focus on the influence of maternal deprivation a shift in understanding child-parent attachments occurred towards paternal deprivation. Absence of the father was argued to have a profound influence on the socio-emotional development of the child (Lamb 1982).

There were however researchers who opposed the relationship of parental absence with psychopathology (Munro 1969). But evidence has accrued over the years through several studies which have shown that prolonged absence of the parental figures during the early crucial period of infant and child development is related to later development of psychiatric morbidity. Adverse effects on animal behaviour has been noted in parent-separated monkeys (Hinde & Spencer-Booth 1978, Mineka and Suomi 1978). Several studies on adult psychiatric population (Brown 1961, Hilgard et al. 1963, Bagadia et al. 1976, Adams et al. 1982) and on children with neurotic conduct and emotional disorders (Wray & McLaren 1967, Howells 1969, Rutter 1977, Haslam 1978, Black 1979, Bowlby 1977) have shown a significantly high experience of prolonged separation from either parent during childhood.

---

* A reanalysis of the study done for M.D. Thesis, Bangalore University, 1985.
1. Assistant Professor of Psychiatry, Sri Ramachandra Medical College & Research Institute, Porur, Madras - 602 104. Formerly Junior Resident in Psychiatry, NIMHANS, Bangalore - 560 029.
2. Statistician, Schizophrenia Research Foundation (India) Madras - 600 012.
The issue whether the separation by itself is the psychotoxic factor or other factors associated with separation, like marital disharmony and parental illness, are the pathogenetic factors, has received considerable attention. Child's antisocial disorder has been shown to be related to the family discord and disharmony that led to the separation rather than the parental separation that ensued (Rutter 1977). Surrogate care received by the child during the parental absence has been shown to be of benefit to the child (Howells 1969). Poor surrogate care (Bowlby 1977) and multiple inadequate surrogate cares (Rutter 1977) are related to development of conduct disorder in parent-separated children.

It is possible that in India, where the joint family system and dependency of children on parents is a cultural norm the effects of parental deprivation would be quite different (Wig et al. 1969). In our patriarchal society, where the father, as a leader, is all responsible towards the family, the loss of father is a highly traumatic event to the child. The mother for obvious economic and socio cultural reasons is a poor father substitute whereas in mother loss the substitute care by the father or surrogate is less stressful (Bagadia et al. 1976). This study was conducted to test the relevance of parental deprivation in the Indian setting with the following aims.

1. To study the separation experiences in children having psychiatric problems.
2. To estimate the risk for psychopathology in children experiencing prolonged, parental separation and to study relative effects of separation from mother or father or both.
3. To study whether the causes for separation or surrogate care available influence the risk.

Material and Methods

The study group consisted of 50 consecutive cases in the age group 5 – 15 years of both sexes attending the child guidance clinic of NIMHANS, Bangalore who were residents of Bangalore, clinically diagnosed after detailed evaluation as having one of the following ICD-9 categories: Hysterical neurosis, Emotional disorder specific to childhood and adolescence, Disorders of conduct not elsewhere classified.

50 controls matched for age, sex, religion, economic status and residence were selected from a school after screening them for psychopathology with the child's behaviour questionnaire form B for completion by teachers (Rutter 1966). The controls were also evaluated to exclude those with mental retardation, developmental delay, and psychosis.

The parents or the guardians available were interviewed in detail to elicit experiences of separation of child from either or both parents which occurred when the child was between the ages 6 months and 5 years. The cause for separation and substitute care provided to the child were also recorded.

Definition of Separation Experience

For the purpose of this study a separation experience was defined as an episode when either or both parents and the child were physically separated and living apart for a continuous period of 1 month or more due to any cause.

Separation for more than 3 months was considered as "prolonged separation" (Spitz & Wolff, quoted by Howells 1969).
Estimation of Risk

In a case control study like this, direct estimate of relative risk was not possible. Hence odds ratio (O.R.), an indirect estimate of risk was used. The confidence interval estimation (C.I.E.) was done at 95% confidence level (Greenberg & Ibrahim 1985)

Results

A significantly higher percentage of children in the case group (76%) experienced separation compared to normal children (42%) (Table 1). The risk estimate shows that separation experience increases the risk for psychopathology by 4.37 times.

Table 1
Separation as a Risk Factor

| Group         | No. of Children | %    | Odds Ratio |
|---------------|-----------------|------|------------|
| Case (N₁ = 50)| 38              | 76%  | 4.37       |
| Control (N₂ = 50) | 21            | 42%  | 1.00       |

Where the duration of separation was considered (Table 2) there was no difference between the cases and controls when the separations were of less than 3 months duration. When prolonged separation of more than 3 months were considered the case group had a significantly greater number of such experiences (54%) as compared to controls (14%). Estimation of risk showed that prolonged separations increased risk for later illness by 9.32 times as compared to 1.89 times when the separation were of shorter duration.

Miettinen's formula for confidence interval estimation was applied using Mantel – Haenzel summary Odds Ratio (ORₗₘ) and combined chi-square (X²MH) (See Table 2). The 95% confidence interval lay between 2.08 and 8.34 thereby indicating that the differences in risk for psychopathology between the prolonged separation group and the shorter separation group is statistically strong.

Considering the sex of the child in the prolonged separated group more male children (77.78%) had such separation (Table 3) than girls (22.22%). The risk for a male child who has a prolonged experience is seen to be 9.1 times more than that for a girl.

Table 3
Child's sex as a risk factor in prolonged separation

| Sex   | Prolonged Separation | %    | Odds Ratio |
|-------|----------------------|------|------------|
| Male  | 21                   | 77.78% | 9.10      |
| Female| 6                    | 22.22% | 1.00      |

Analysing the type of parental separation (Table 4) it is seen that the cases experienced more separations from father or both parents or multiple separations compared to controls (father separation: 57.89% Vs 42.11%, both parents: 85.71%
Psychiatric illness and marital disharmony in parents were seen as causes for separation only for the case group (Table 6). Job of the parents was seen to be the most common cause for separation from the child in the case group. The differences between the two groups however was not significant.

Most of the children of both the study and control group who had separated from their parents had received care from the parent present and a few from grand parents and other relatives (Table 7) only one child in the study group was brought up in an orphanage.

Table 4
Type of parental absence

| Parental Absence | Case (N = 50) | Control (N = 50) | Total |
|------------------|--------------|-----------------|-------|
|                   | No. | %   | No. | %   |       |
| Mother            | 3   | 50.0% | 3   | 50.0% | 6     |
| Father            | 22  | 57.89%| 16  | 41.11%| 38    |
| Both              | 6   | 85.71%| 1   | 14.29%| 7     |
| Multiple          | 7   | 87.5% | 1   | 12.5% | 8     |
| Nil               | 12  | 29.27%| 29  | 70.73%| 41    |

$X^2 = 12.48; df 4; P < 0.02$

Table 5
Prolonged separation and type of parental absence

| Parental Absence | Prolonged Separation | Odds Ratio |
|------------------|----------------------|------------|
|                  | No. | %   |       |
| Mother           | 2   | 7.41%| 1.00  |
| Father           | 15  | 55.55%| 4.93  |
| Both             | 5   | 18.52%| 5.44  |
| Multiple*        | 5   | 18.52%| -     |

* Not comparable with control group.

Vs 14.29% multiple separation: 87.5% Vs 12.5%). These differences were statistically significant at .02 level. There was no difference between the two groups as regards separation from mother.

In the study group children with prolonged separation, separation from the father seemed to be most common type of experience (55.55%) (Table 5), followed by other types of separation. Multiple prolonged separation experiences were not experienced by the control group at all and hence was not comparable with them. The estimation of risk for psychopathology shows that prolonged separation from mother does not increase the risk, whereas separation from father increases the risk by 4.93 times and this risk raises to 5.44 times for the child who had prolonged separation from both parents.

Table 6
Causes for separation

| Causes for Separation | Case* | Control |
|-----------------------|-------|---------|
|                       | No.   | %       | No.  | %    |
| Death                 | 5     | 13.2%   | 3    | 14.2%|
| Job                   | 13    | 34.2%   | 8    | 38.1%|
| Parental Illness      | 6     | 15.8%   | 0    | 0.0% |
| Marital disharmony    | 2     | 5.3%    | 0    | 0.0% |
| Others                | 12    | 31.5%   | 10   | 47.6%|
| Total                 | 38    | 21      |      |      |

* No significant difference

Table 7
Surrogate Care

| Surrogate Care | Case* | Control |
|----------------|-------|---------|
|                | No.   | %       | No.  | %    |
| Other parent   | 30    | 78.9%   | 20   | 95.2%|
| Grand parent   | 5     | 13.2%   | 0    | 0.0% |
| Relatives      | 2     | 5.3%    | 1    | 4.8% |
| Institution &  |       |         |      |      |
| Others         | 1     | 2.6%    | 0    | 0.0% |
| Total          | 38    | 21      |      |      |

* No significant difference
Discussion

The studies on child–parent separation experiences have shown diverse findings due to several factors playing a role in studying such experiences. One of them being the definition of “separation experience” itself. There has been a confusion between the terms “separation” and “deprivation” (Howells 1969), the former meant physical loss whereas the latter meant loss of “parenting”. Another major issue is the application of appropriate statistical techniques to analyse the data collected. Several other factors that need attention (Gregory 1958, Black 1979, Tenant 1980) in child–parent separation studies are:

i) defining vulnerable age in the child,
ii) defining the duration of separation which is most traumatic,
iii) specifying the reason for separation,
iv) consideration of psychiatric illness in parents,
v) surrogate care available during parental absence.

The present study has taken into consideration all these factors. The separation experience has been duly defined and the prolonged separation which is considered as most traumatic has been defined as a separation lasting more than 3 months (Spitz and Wolff, 1966 quoted by Howells, 1969). The vulnerable age defined in this study is between 6 months and 5 years. Infants form attachment to both their parents by the middle first year of life (Lamb 1982). Hence disruption of attachment with parents would have significance only after 6 months of age. The upper age limit defined is 5 years as most protagonists of danger of separation regard children below 5 years as the most vulnerable group (Howells 1969).

The concept of relative risk which estimates the risk of development of pathology in a group exposed to a factor as compared to an unexposed group of individuals is very relevant to this type of study. Besides estimating the risk, the confidence interval with which the risk estimates reflect true difference has been further established by confidence interval estimation (C.I.E.) at 95% level. Such a detailed analysis of risk estimate has not been done before in studies on parental separation.

One of the significant results emerging from this study is that prolonged absence of the father or both parents together during the sensitive periods of child development increase the risk for psychopathology. Absence of mother, however, is seen to be not significant. This finding is consonant with views expressed by several authors (Howells 1969, Lamb 1982). They have pointed out the importance of father presence for proper socioemotional development of the child. Howells said that disregard to the role of the father in the development of the child has been fostered by psychoanalysts who emphasised the role of mother and considered the father as a “late-comer” in child life. Lamb pointed out that fathers stimulate infants providing models of appropriate behaviour and become significant attachment figures especially to male children. This study also showed that prolonged separation affects boys more than girls.

It lends support to the statement that loss of child–parent relationship can lead to an increased probability of unhappinesses, neurotic symptoms and behavioural disorder (Chacko 1964).

Working parents in the family lead to most separation experiences in both groups, and parental psychiatric illness and marital disharmony as causes for sep-
EARLY CHILD PARENT SEPARATION

Separation occurred in the case group only. There was however no difference in the surrogate care received by the study or control group. The care provided by the mother during prolonged father absence has not had any protective effect which concurs with the view expressed by Bagadia et al. (1976) that mother in the Indian family is a poor surrogate in the absence of the father.

The conclusion drawn from this study that fathers have a major role in child's development, lends support to Margaret Mead's statement (quoted by Rutter 1977) that the campaign on the evils of mother-child separation is just another attempt by men to shackle women to the home.

Acknowledgements

I am very grateful to the guidance of Prof. S.M. Channabasavanna and Dr. H.S. Narayanam, NIMHANS, Bangalore and help from Dr. Shivaprapaksh and Dr. Shoba, CGC, NIMHANS, Bangalore and Mr. D.K. Subbukrishna, Department of Bio-statistics, NIMHANS in conducting this study.

References

ADAM, K.S., LOHRENZ, J.G., and HARPER, D., (1982). Parental loss and family stability in attempted suicide. Archives of General Psychiatry, 39, 1081-1085.

BAGADIA, V.N., PRADHAN, P.V., SHAH, L.P., (1976). Parental loss and mental illness. Indian Journal of Psychiatry, 18, 59-66.

BLACK, D. (1979). The bereaved child. Journal of child Psychology and Psychiatry, 20, 287-292.

BOWLBY, J. (1973). The making and breaking of affectional bonds. Aetiology and Psychopathology in the light of attachment theory. British Journal of Psychiatry, 122, 1376-1400.

BROWN, F. (1961), Depression and childhood bereavement, Journal of mental science 107, 754-777.

CHACKO, R. (1964) Psychiatric problems in children, Indian Journal of Psychiatry, 6, 147-152.

GREENBERG, R.S., IBRAHIM, M.A., (1985). The case control studies. In: Oxford textbook of public health. Vol.3, (Eds) Holland, W.W., Detels. R., and Knox, G., New York, Oxford University press, 123-143.

GREGORY, I. (1958), Studies of parental deprivation in Psychiatric patients, American Journal of Psychiatry, 115, 432-442.

HASLAM, M.T. (1978), Separation experiences and other emotional trauma in childhood and their relationship to subsequent adolescent breakdown, International Journal of Social Psychiatry, 24, 295-303.

HILGARD, J.R., NEWMAN, M.F., (1963), Early parental deprivation as a factor in the etiology of Schizophrenia and Alcoholism, American Journal of Orthopsychiatry, 33, 409-420.

HINDE, R.A., SPENCER-BOOTH, Y. (1971). Effects of brief separation from mother on Rhesus monkeys, Science, 173, 111-118.

HINDE, R.A., SPENCER-BOOTH, Y. (1971). Effects of brief separation from mother on Rhesus monkeys, Science, 173, 111-118.

HILGARD, J.R., NEWMAN, M.F., (1963), Early parental deprivation as a factor in the etiology of Schizophrenia and Alcoholism, American Journal of Orthopsychiatry, 33, 409-420.

HINDE, R.A., SPENCER-BOOTH, Y. (1971). Effects of brief separation from mother on Rhesus monkeys, Science, 173, 111-118.

HINDE, R.A., SPENCER-BOOTH, Y. (1971). Effects of brief separation from mother on Rhesus monkeys, Science, 173, 111-118.

HINDE, R.A., SPENCER-BOOTH, Y. (1971). Effects of brief separation from mother on Rhesus monkeys, Science, 173, 111-118.
TENNANT, C. (1980). Parental death and adult depression: Review of literature and critics, *Psychological Medicine*. 10, 289-299.

WIG, N.N., VERMA, H.C., SHAH, D.K. (1969), Parental deprivation and mental illness, *Indian Journal of Psychiatry*. 11, 1-6.

WRAY, S.R., MCLAREN, E. (1977). Parent-child separation as a determinant of Psychopathology in children: A Jamaican study, *Psychological abstracts*. 58, No. 11860.