Depression in mothers of young children[1]

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The association between depression in mothers and behaviour difficulties in their young children has important implications in considering prevention and treatment of these problems. A number of studies have suggested that rates of depression in mothers with pre-school children are high. Brown *et al.* (1974) looked at factors associated with depression in a group of women in Camberwell. They found that chronic or acute stresses were likely to produce depression in women who were vulnerable, and isolated four vulnerability factors. These were loss of own mother before the age of 11; lack of a confiding relationship with husband or boyfriend; not going out to work; and having three or more children under 14 years. Rates of depression were highest in working-class women with a child under 6 years (42%) because they had more stress in their lives and also a high loading on all the vulnerability factors apart from whether they were in employment.

High rates of maternal 'distress' – a rating based on similar information to that of the clinical rating made in the Camberwell study – are reported by Moss & Plewis (1977) from the Thomas Coram Foundation. In a survey of mothers with preschool children living in three London areas, 52% of the mothers had had a moderate to severe problem over the previous 12 months. Apart from the well-known increase of psychiatric illness in women a few months after childbirth, there is evidence that this rise is still apparent up to two years after the birth (Kendell *et al.* 1976).

The group of mothers described in this paper was not randomly chosen. They were the mothers of 3-year-old children identified in a survey of behaviour and language problems. For this reason the findings cannot be generalized to all women with a preschool child, but they do suggest that the interaction between problems in mother and child is important and indicate where further research could be focused. The method of this survey will be outlined briefly and the factors associated with the presence of depression in the mother and with a good or poor outcome will then be described.

In 1972–73 a one in four random sample of all 3-year-old children living in the London borough of Waltham Forest was selected from the Waltham Forest Family Register. The register was run by a MRC unit and contained the names and addresses of all families living in the borough with a child under 5 years (Richman & Tupling 1974). The selected families were visited at home by a trained interviewer who obtained information about the 3-year-olds' health, development and behaviour, and various demographic and social factors. Part of the interview consisted of a behaviour-screening questionnaire (BSQ) in which 12 items of behaviour are scored 0, 1, or 2 according to the severity or frequency of the behaviour shown by the child.

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A score of 10 or more on this screening questionnaire is known to distinguish between children attending a psychiatric clinic and children in the general population (Richman & Graham 1971). All children scoring 10 or more in our survey (14%) were considered at risk of having a behaviour problem; they were matched by sex and social class with the next suitable child scoring less than 10 on the BSQ. Out of 705 indigenous families, 99 pairs of problem and control children were selected and it is the mothers of these children, plus a small number of children with language delay (205 in all) who form the subjects of this paper (Figure 1) (Richman *et al.* 1975).

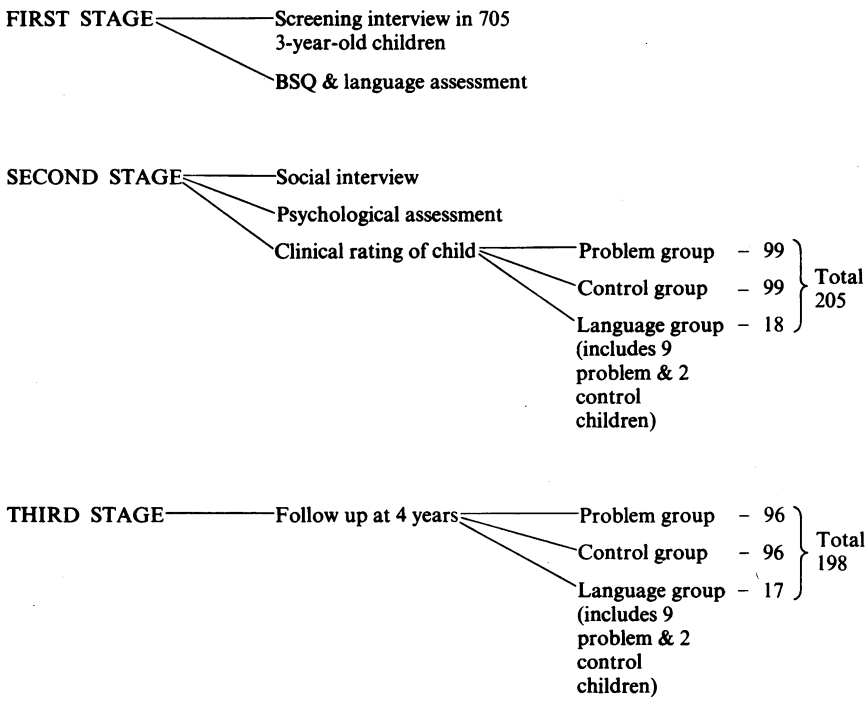

Figure 1. Summary of stages and procedures involved in survey (Richman *et al.* 1975)

In a second interview, information was collected on the marital relationship, parental mental and physical health, social relationships and support. A psychiatric rating of the mothers' and fathers' health over the previous year was made using clinical criteria based on symptoms such as change in mood, inability to enjoy life, loss of appetite, weight loss, sleep disturbance, impaired concentration, inability to carry out usual activities and symptoms of anxiety.

Table 1 shows the relationship between a psychiatric rating of a problem in the mother and the presence of a behaviour problem in the child. As depressive symptoms were prominent in all cases, they have been called depressive disturbances. The psychiatric ratings were supported by the scores on the malaise inventory, which was completed by the mother independently. This consists of a series of questions on health and psychiatric symptoms and is a modified form of the Cornell Medical Index which distinguishes between groups with and without psychiatric disturbance. The mean scores on the malaise inventory for the five clinical ratings of severity from no problem to severe problem were 3.0, 4.3, 7.1, 9.3, and 12.7 respectively and the percentage scoring 8+ on the malaise inventory were 1.2, 7.9, 47.4, 71.4 and 100.

The possible effects of the mother's depression on the child was shown by an increased fear of losing control with the child in depressed women and more frequent thoughts of leaving the

Table 1. Relationship between mother's psychiatric status and severity of behaviour problem in child

	Depression in mother				
	Absent		Present		
Rating of child	No.	%	No.	%	Total
No problem	77	77	23	23	100
Mild problem	34	63	20	37	54
Marked problem	24	47	27	53	51
Total	135		70		205

$x^2 = 13.74$, d.f. $= 2$, $P < 0.01$

home. Only 3 of the mothers (one in the mild and 2 in the moderate group) had been to an inpatient or outpatient facility in the past year, but 48.9% of the mild and 77.3% of the moderate to severe had been to their general practitioner for psychiatric reasons, compared with 5.8% of the well group. The high rate of depression in these mothers is striking and suggests that the rate of depression might be generally high in mothers of young children. Assuming that the control group is representative of families in which the child does not have a behaviour problem it could be estimated that in this group of 705, at least 30% of the mothers had been significantly depressed over the previous year.

It has already been stressed that this was not a random group of mothers, but it is of interest to look at factors associated with psychiatric disturbance in this group of women with a 3-year-old child. The importance of family relationships is shown by the significant association between a poor marital relationship and maternal depression (Table 2). Maternal depression

Table 2. Association between marital rating and psychiatric status of mother

	Marital rating						
	Good		Average		Poor		
Depression in mother	No.	%	No.	%	No.	%	Total
None	37	86	67	68	31	52	135
Present	6	14	31	32	29	48	66
Total	43		98		60		201

$x^2 = 26.9$, d.f. $= 2$, $P < 0.001$

was not significantly associated with the extent of social support from kin or friends, with whether the mother was working or not, or with social class. However, certain social factors were of importance. A stress score was obtained by adding together all the serious stresses that the family had experienced in the previous year, e.g. a death, inadequate housing, redundancy. Where there was both a depressed mother and a child with a behaviour problem the family were more likely to have had three or more serious stresses over the previous year (Table 3).

There were more council tenants in the depressed group of mothers. This reflects the fact that a high proportion of council property was in the form of flats in low rise and high rise buildings, and there was a higher rate of behaviour problems in the children living in tower blocks compared with the total population (Table 4). Although the numbers are small, it is of interest that when council tenants and owner occupiers are looked at separately, there are more depressed mothers in flats (Table 5). Depression is particularly high in mothers living on the fourth floor or above, compared with other council tenants (Table 6).

Table 3. Relation between stress, material depression and child's behaviour problems

	Owner occupied housing (total 81 children)●			Council & unfurnished housing (total 104 children)■		
		Total stress score 3+			Total stress score 3+	
	No.	No.	%	No.	No.	%
Behaviour problem and maternal depression	15	7	47	29	18	62
No behaviour problem, no maternal depression	37	6	16	38	8	21

● $P<0.05$
■ $P<0.001$

Table 4. Prevalence of behaviour problems in different types of housing

Type of housing	No. of families	Scoring 10+ on BSQ	
		No.	%
Owner occupied	318	40	12.6
Council – all	236	47	19.4
Council – in tower block	60	18	30.0
Renting furnished	8	2	25.0
Renting unfurnished	124	10	8.1
Other	19	2	10.6
Total	705	101	14.3

Tower block *v.* others: $x^2=10.05$, d.f. $=1$, $P<0.001$
Council *v.* owner occupied: $x^2=5.3$, d.f. $=1$, $P<0.05$
Tower block *v.* other council: $x^2=5.13$, d.f. $=1$, $P<0.05$

Table 5. Mental state of mother by type of housing

Type of housing	No. of mothers	With depression	
		No.	%
Owner occupied house	80	18	22.5
Owner occupied flat	5	3	60.0
Council house	21	5	23.8
Council flat/maisonette	60	33	55.0

Flats *v.* houses: $x^2=18.37$, d.f. $=1$, $P<0.001$

Table 6. Mental state of mother by floor in council housing

Floor level	No. of mothers	With depression	
		No.	%
0–3	55	19	34.5
4+	26	19	73.1

$x^2=10.56$, d.f. $=1$, $P<0.001$

All the families were revisited one year later on the child's fourth birthday and the interviews repeated. It was not possible to reinterview 5 families (Figure 1). Similar factors were found to be associated with depression in the mothers as in the previous year, and there were significant differences between these factors in those who still had depression and those who had improved (Table 7). Improvement was not related to the severity of the disturbance in the previous year nor to having received treatment, since apart from sedatives prescribed to the mother, very little treatment had been given. A vulnerability score was derived by summing the

Table 7. Family and social factors and changes in clinical rating of mothers rated as depressed when child was 3 years old

	Mothers' clinical rating after one year				
	No depression (total 21)		Still depressed (total 51)		
	No.	%	No.	%	Significance
Behaviour problem in 4-year-old	7	33	30	59	$P<0.05$
Marital disharmony	7	33	30	59	$P<0.05$
Stress score 3+	5	24	24	47	$P<0.05$
Council tenant	9	43	31	61	Not significant
Flat dweller	10	48	25	49	Not significant
Mother had marked problem one year ago	6	28	23	45	Not significant

Table 8. Change in mothers' clinical rating after one year in relation to vulnerability score

Mothers' clinical rating		Vulnerability score 3+		Vulnerability score −3	
	No.	No.	%	No.	%
Improved	21	5	24	16	76
Not improved	51	30	59	21	41

$P<0.01$

presence of the following items: poor marriage, behaviour problem in the child, living in a council house or in a flat, stress score of three or more, five or more children. Table 8 shows that with a vulnerability score of three or more, the chances of depression improving are significantly lower than in those with a vulnerability score of less than three.

The complex interaction between the child's behaviour, family relationships and social factors, which is apparent in this group, suggests that focussing on only one aspect may not always be effective if there are a number of problems in the family. Effective intervention may require taking into account several aspects of disturbed functioning. On the other hand, improvement in one family member may shift the balance of strain so that the whole family is less vulnerable.

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