Controlled comparison of three interventions for mother and toddler problems: preliminary communication[1]

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Summary: This paper summarizes the preliminary thinking, the hypotheses and design and some preliminary results of a large community-based intervention project which is currently underway in the North East of England.

Introduction

A vital influence in our early thinking was the work of Brown and his colleagues (Brown & Harris 1978). In this well known study, Brown set out to unravel the complex social origins of depression. There was a high prevalence of depression in those women who had a child under six years of age. This association was found only in working class women. It was those working class mothers who had various social adversities and who lacked satisfactory relationships and supports who broke down, so it seemed to us to follow from this that preventive efforts should aim at reinforcing the mother's social relationships.

Richman *et al.* (1982) found a very high level of depression and anxiety (24.4%) in a total population of mothers of preschool children, but this was even higher (37.7%) in those whose children had behavioural disorders. The disturbed children's families also showed signs of less harmonious family relationships. At follow up at 8 years old there was a clear indication that mothers who were depressed and anxious when their children were aged 3 years tended to have more disturbed children (with both antisocial and neurotic disorders) later on.

Thus not only is depression common and linked in ways that tempt the therapeutic enthusiast, but it is associated with longstanding problems in the child. This led us to set up a secondary prevention study in which we compared the effectiveness of three approaches: family therapy, mothers' groups and intensive health visiting.

Table 1 shows, in summary, the basic hypotheses of our study. It can be seen that we aim not only to test the effectiveness of various psychological treatments, but also to describe the natural history of the problems independent of treatment.

Method

A major issue to be tackled was case identification. Since the problems being dealt with were often mild and longstanding and since the mothers were particularly likely to be immobilized by low morale and young children, it was felt that reliance could not be placed on their regularly consulting their family doctors. It was therefore decided to carry out a full population screen. For this a multiple criterion screen was used; it gathers information on the mother's mental state by means of the General Health Questionnaire (GHQ; Goldberg 1978), the behaviour of the toddler by means of the Behaviour Checklist (BCL; Richman 1977) and an independent questionnaire completed by the health visitor (HVQ; Stretch *et al.* in preparation). The aim was to tap the spectrum of problems that we hoped to tackle in our treatment programmes.

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Table 1. Summary of hypotheses

(1)	The three regimens differ from each other and from the control in reducing 'disturbance'
(2)	There are other social and biological predictors of outcome, for example level of initial disturbance, sex of the child or initial state of marriage
(3)	These other predictors influence the effects of the various treatments on the various types of disturbance
(4)	Independent of treatment, 'high-risk' families have a poorer outcome than 'low-risk' families

We needed to measure those aspects of behaviour that we hoped to influence with treatment. On the assumption that we were dealing with an interrelated network of adversities such as mother's emotional problems, toddler behaviour problems, marital problems, employment and neighbourhood support, and both mother and child's cognitive development, a wide spread of measures was used to tap these life areas. Measures were also developed of those phenomena, for example employment, which might influence outcome independent of which specific treatment was given.

It was thought advisable to include treatments which contrasted with each other in important ways. The three treatments were thus designed to enhance, respectively, support within the family and the improvement of family relationships – the family therapy regimen; network support within the community – mothers' groups; and professional support – the intensive health visitor approach.

Family therapy has become extremely popular in recent years. Our task was to develop a technique that could be adequately described and that could be transplanted from the clinic base to the community. In our clinic work we have developed the McMaster technique of family therapy because of the clear set of principles on which it was based (Goodyer *et al.* 1982). In the project, the family therapy is carried out by social work staff. It starts with a befriending process in which the social worker visits the home (M Koziarski *et al.*, in preparation). From this, the therapist moves towards assessment, which is carried out according to a clear set of principles with the whole family seen together. From the assessment, treatment aims are developed and treatment is entered into with the family's agreement. Treatment may continue for up to 10 meetings. It should be emphasized that all treatment, barring exceptional circumstances, takes place in the home.

The mothers' groups are set up in local health clinics. The mothers and toddlers are taken in separate groups which eventually combine. The whole session lasts some two hours and takes place on a weekly basis for a total of 10 weeks. The mothers' group is led by a social worker. The accent in these groups is on the stimulation of social interaction and discussion of shared problems. In the toddler group the aim is to provide an enjoyable socializing experience. Toys are provided and imaginative and social play are encouraged. Problems such as separation and anxiety and aggression are contained and used therapeutically. In the final stage of each group, the mothers, toddlers and professional staff all meet up to compare notes.

The major figure in prevention in the primary care field is the health visitor. The role of the health visitor has its roots in the nineteenth century, although it has of course changed considerably over the years as patterns of health and disease have changed. In our project, we have attempted to delineate a specific role for the health visitor as a counsellor and adviser to mothers and toddlers. The health visitor visits the home of her designated clients and in the context of a developing relationship with the mother will specify areas where there are problems; up to 15 visits, sometimes more, are made. The approach is described more fully by Brown *et al.* (1984).

Each of the three interventions are in the form of brief, problem-solving approaches. Their impact, however, is designed to be quite different in that the intervention is mediated respectively, through, family, peer group and mother-child.

The efficacy of any psychological intervention is likely to stand or fall on the quality of training and supervision. For each of the interventions there has been a programme of special training over and above the generic skills of the professionals who are undertaking the treatment.

The design of the study is outlined in Figure 1. At its core is a stratification of the case material based on the GHQ, BCL, and HVQ scores as recorded at screening. Within this stratification, cases are randomly allocated to the three treatment groups and control. After follow up, the effectiveness of the different approaches for different problems will be assessed by comparing change scores on the measures made.

Results: Identification of psychiatric disorder in mothers

These results are based mainly on the standard psychiatric interview (Goldberg *et al.* 1970) and overall assessment carried out on all the cases by two of the authors (ARN and ID). In this a psychiatric diagnosis and an estimate of severity in both mother and child were made. The following findings are based on analysis of 102 screen-positives who were interviewed. This was a sample of a total of 153 screen-positives from screen questionnaires returned by 302 mothers in the first of four screenings of the local population. Since questionnaires had been sent to 336 mothers, this was a response rate of 90%. The sample was not entirely random and estimates made must be regarded as approximate. Thirty screen-negatives were also fully interviewed, thus allowing us to make prevalence estimates of disorder in the community. The prevalence of disorder naturally depended on the level of severity chosen. The results for three levels of severity are shown in Table 2.

It will be seen that the rates of severe depression are in fact quite low whereas the overall rates for minor and major disorders approach those reported by Brown & Harris (1978). How often were the more severe disorders being recognized by existing services?

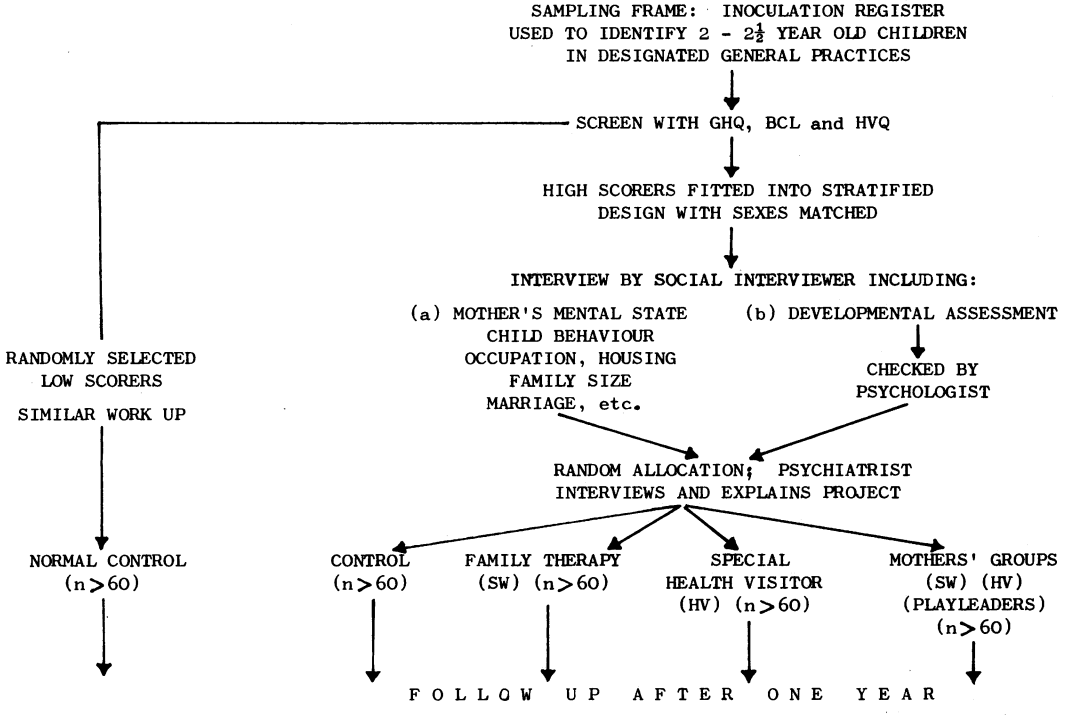

Figure 1. Summary of research design. (SW = social worker; HV = health visitor)

Table 2. Prevalence of psychiatric disorder (estimates from screen-positive and negative groups)

	All disorder	Depression only
Women judged to require outpatient management	4.5%	2.5%
Women judged to require primary care treatment	10.9%	6.5%
Women judged to require advice or surveillance only	25.3%	10.2%

Examination of the referral patterns of the 9 cases judged to require outpatient management revealed that 2 had been referred to a psychiatrist; however one had refused to go and the other had refused all treatment once she got there! Two were in regular attendance with their GP, but a further 2 had ceased attending because the treatment given had disagreed with them. One mother consulted the doctor for the children but her own mental state was concealed (this was common with milder disorders). One very isolated girl was being supported by her health visitor, while the final case had parenting difficulties which were causing the authorities concern, but not the mother.

Discussion

Many of the disorders seem to be quite mild when compared with cases seen in psychiatric clinics. Nevertheless there were associations with the toddler problems which suggested at least that they do lead to significant impairment of mothering capacity and on this basis they merit concern. Our decision to go straight to the community rather than wait for mothers to be referred seems amply justified since it is unlikely that more than a biased proportion of the cases, even severe ones, would present for referral. It seems likely that many of the mothers suffer from low morale and the demoralization which has been identified by Frank (1973) as the common thread in psychiatric problems that is most susceptible to psychological therapies.

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