# Work of the clinical psychologist in general practice: preliminary communication<sup>1</sup>

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Summary: A randomized, controlled trial to assess the value of a health centre-based clinical psychology service is described. Outcome is measured by means of (1) psychosocial rating scales; (2) drug costs; and (3) the costs of relevant hospital referrals. At the end of the first year, the six general practitioners had admitted 239 patients to the trial and of these 81 had been followed up for 34 weeks after entry. This preliminary report reviews the data obtained from these patients. The main finding is a tendency, which reaches statistical significance at some points, for those patients with access to a clinical psychologist to improve more rapidly on the psychosocial measures than the controls.

### Introduction

Papers concerned with the work of the clinical psychologist in general practice have been appearing for about ten years. Early papers suggesting that clinical psychology might have a role to play were published by Broadhurst (1972) and Kincey (1974). These were followed by descriptive reports of work by psychologists, such as those by McAllister & Philip (1975) and Johnston (1978). Subsequently, Ives (1979) and Koch (1979) published studies which contained some non-experimental evaluation of their services. Earll & Kincey (1982) have reported the first controlled, evaluated study, which has demonstrated a short-term reduction in the prescription of psychotropic drugs in patients treated by the psychologist, as compared with the control group which received conventional general practice management.

The present study is designed to test the hypothesis that a wide range of general practice patients could benefit from a health centre-based clinical psychology service and that some contribution towards the cost of such a service could be found from savings in drugs and hospital referrals. It is the first evaluated, controlled project to be initiated from within general practice using the general practitioner as the assessor. It is also the first to look at a clinical psychology service in terms of possible economic benefits, although Professor I M Marks and his colleagues (1979) from the Institute of Psychiatry are undertaking a sophisticated cost-benefit study of the work of the nurse therapist in general practice.

## Methods

All six general practitioners in one group practice are participating in the study; the original four were joined by two more after the first six months. The criterion for entry into the study is that, in the opinion of the GP, the patient may possibly benefit from intervention by a clinical psychologist. A brief explanation of the study is then made to the patient, whose agreement to participate is sought. If this is obtained, initial assessment forms are completed by the patient and the GP, and agreement is reached on the nature of the problem requiring treatment and the outcome to be achieved. The severity of the problem, its effect on the patient and, if possible, its effect on another member of the household are then rated on a nine-point scale from 0= no problem to 8= very severe or disturbing.

Randomization into subject and control categories is then carried out. The subject patients are offered an appointment with one of the three clinical psychologists working part-time in the service. Control patients have the benefit of all other services available in the practice or, if appropriate, hospital referral.

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The outcome measures used are as follows:

(1) Psychosocial outcome: The nine-point scales described above are completed by the patient and GP and, if feasible, another member of the household at 14, 22, and 34 weeks after entry for both subject and control groups. These are then compared with the initial ratings. A proportion of patients are referred to another GP who acts as blind assessor to check the reliability of the initial GP's rating. The scales used were designed for this study with the assistance of Professor A M Mathews of St George's Hospital, as no existing instruments were suitable for the wide range of problems to be studied. Wherever possible the psychologists are administering established scales to check cross-validity.

(2) Changes in prescribing cost: All prescriptions dispensed by two local chemists are returned by the Prescription Pricing Authority. In a pilot study these amounted to 92% of the total issued (the remaining 8% were dispensed outside the district). Prescriptions are costed for each patient in the study according to the following categories: (A) Drugs affecting the central nervous system, including psychotropic drugs, the use of which might be most directly affected by alternative psychological treatments. (B) Gastrointestinal, nutritional, haematopoietic and skin preparations, where a smaller effect might be noticed. (C) Other drugs, which are used to monitor overall changes in prescribing. The one-month pilot study has already indicated the relative sizes of these categories (Table 1).

Table 1. Cost of drugs, by category, prescribed during one-month pilot study

	Category A £	Category B £	Category C £
GP 1	295	446	357
GP 2	306	436	352
GP 3	272	278	224
GP 4	218	272	206

(3) Hospital referral costs: These are calculated for periods of 10 weeks and 34 weeks after entering the study. With the assistance of the district finance officer, patient service costs for new and follow-up psychology and psychiatry attendances are recorded. Other hospital referrals and patients on waiting lists are noted but not costed.

#### Results

A total of 239 patients have been entered into the study during the first year. Data on 81 of these who have completed the 34-week follow up have been analysed in more detail. (The main analysis including the analysis of drug and hospital costs will not be possible until the summer of 1982.)

Data on the prevailing psychological morbidity within the study practice were provided by the administration of a twelve-item modification of the Goldberg General Health Questionnaire (Goldberg 1972) to all patients attending five consecutive surgery sessions. The results are shown in Figure 1. The pattern of referral of patients to the study is shown in Figure 2.

The patient problems have been classified using a method adapted from Kincey (1974). His five basic categories have been used, and depression (6) and neuropsychological (7) have been added. More detailed analysis will be attempted later using second and third order categories. The percentages of patients falling into each category are shown in Table 2.

The age and sex distribution of the 81 patients who have reached 34-week follow up is shown in Tables 3 and 4, together with comparisons from related studies. Insofar as the figures are comparable, these data demonstrate a considerable similarity between the three studies. It is probable that the larger number of patients aged over 60 in the Johnston (1978) study reflects an older general population.

	At entry $(n=239)$	34 weeks follow up $(n=81)$
(1) Anxiety/stress	53.1%	51.9%
(2) Habit disorders	14.6%	16.0%
(3) Educational/occupational	2.9%	2.4%
(4) Interpersonal: sex/marriage	13.3%	12.3%
(5) Adjustment to physical illness	5.0%	2.4%
(6) Depression	10.0%	13.5%
(7) Neuropsychological	0.8%	1.2%

Table 2. Percentage of patients according to problem category (adapted from Kincey 1974)

Table 3. Comparative age distribution

Present study	y (n=81)		Johnston 197	78 (n=116	)
Age (years)	No.	%	Age (years)	No.	%
Up to 10	7	8.6	Up to 14	13	11.2
10-39	50	61.7	15-39	55	47.4
40-59	22	27.1	40-59	28	24.1
60+	2	2.4	60+	20	17.2

Earll & Kincey 1982: n=42 and mean age 37.1 years

Table 4. Comparative sex distribution

	Present study	Johnston 1978	Earll & Kincey 1982
Male	22 (27.1%)	28 (24.1%)	12 (28.5%)
Female	59 (72.8%)	88 (75.8%)	30 (71.4%)
Total	81	116	42

The results in terms of the psychosocial outcome in the 81 patients already analysed up to 34 weeks are shown in Figures 3, 4 and 5. Ratings of severity of the problem (Figure 3) indicate a tendency towards a prediction of greater improvement for the group with access to the clinical psychologist, but at no point does the difference reach significance by the normal deviate test. Results of the effect on the patient (Figure 4) do reach significance (P < 0.05) at 14 weeks for ratings by the GP and at 22 weeks for ratings by both the GP and the patient. The differences between the study and control groups with regard to the effect on a household member (Figure 5) also reach significance (P < 0.05) at the 14 and 22 week stages. An attempt was made to produce a GP rating of the effect on a household member: this produced no significant results and is not presented because there is evidence that the data on this scale are unreliable.

#### Discussion

It appears from these preliminary results that, on the measures used, some short-term benefit can be gained from a clinical psychology service in a health centre. Later analysis by problem group and sub-group is expected to indicate in which areas the most significant results can be obtained.

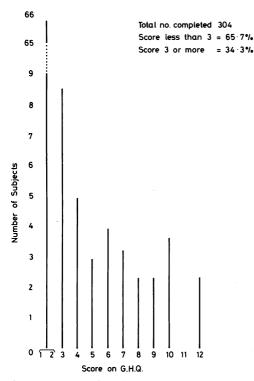


Figure 1. Results of modified Goldberg General Health Questionnaire (Goldberg 1972, modified by Marks *et al.* 1979). Threshold of morbidity using this instrument is taken to be 3 or more. The figure of 34.3% above this threshold is in accordance with similar studies of surgery attenders

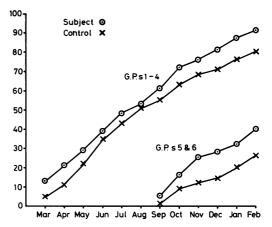


Figure 2. Cumulative totals of patients in Year 1. Two more general practitioners joined the original four after six months

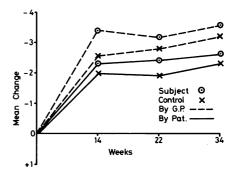


Figure 3. Change in rating of severity of problem

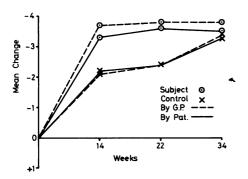


Figure 4. Change in rating of effect on patient

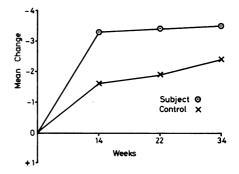


Figure 5. Change in rating of effect on household member

Using a similar entry procedure, but different outcome measurements, Earll & Kincey (1982) also show a significant short-term effect (on the number of prescriptions for psychotropic drugs), but lament the lack of long-term effect demonstrable at their six-month follow up interview. Other workers have also taken the view that only long-term maintained differences are of real importance.

The majority of problems treated in general practice are, however, short-term and associated with psychosocial transitions (Royal College of General Practitioners 1981). For these problems the speed of improvement, as indicated by our results, may be considered worthwhile in itself and a proper goal for a primary care clinical psychology service.

The results are also compatible with gains in the more chronic, but less prevalent, problems. The longer-term follow up, which is being undertaken, may identify differences between the two groups.

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