A re-evaluation of the clinical psychologist in general practice

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SUMMARY. Recent evaluations have questioned the early claims that psychologists make a valuable clinical contribution in general practice. In particular, it has been suggested that the promising outcomes have been the result of a 'worst year' phenomenon and that psychologists only slightly accelerate clinical improvement. This paper describes a small but relatively comprehensive evaluation of the work of a clinical psychologist. Analyses of economic and clinical data on 22 patients referred by the general practitioner indicated that the psychologist made a distinctive clinical contribution by improving personal coping strategies and reducing distress among patients with more chronic problems who did not show any such changes during a waiting list period. It is concluded that the recent negative evaluations of the clinical psychologist in general practice may have been misleading and premature.

Introduction

THE initial wave of research on the effectiveness of psychologists in general practice yielded consistently positive results, with an average clinical improvement in symptoms of psychological distress among adults of around 70%.[1,2] However, these studies were acknowledged to be experimentally flawed, and the second wave of more rigorous studies has yielded much less convincing evidence for the effectiveness of the psychologist.[3-5] Among the most important of these findings has been that clients are referred during their 'worst year',[5] so that the effect of the psychologist's work during this period is exaggerated by a natural history of crisis resolution. More recent studies that have controlled for this phenomenon have produced only short-term[3] or accelerated[4] benefits attendant upon seeing a psychologist.

Subsequent discussion has in turn questioned the validity of these conclusions. It has been suggested that the measurement of clinical outcome was too general to be useful[6] and that the clients were an unrepresentative or biased sample[7] receiving treatment of unknown type or quality.[8] In short, it seems that evaluations to date have used over-simplified measures with contrived client groups to gauge the effectiveness of unspecified interventions. This is clearly an unsatisfactory position from which to judge the effectiveness of clinical psychology in general practice, far less is it grounds upon which to advocate different roles for the psychologist.

As most authors have concluded, there remains a need for systematic and rigorous analyses of the clinical contribution of the psychologist. Among the recurring suggestions are that valid instruments should be used to measure the specific and relevant effects of psychological interventions with representative clients within experimental research designs.[6-8] The present study is an attempt to pursue these suggestions with a small sample of clients, by analysing both clinical and economic measures.

Method

Study design

Evaluations were based on consecutive general practitioner referrals to a clinical psychologist over a one-year period. The interrupted time series research design,[9] entailed repeated assessments before and after therapy, thus allowing clients to serve as their own controls. Comparison of the periods when patients were on a waiting list and when receiving treatment from the psychologist permitted an estimate of the relative effectiveness of the psychologists' intervention against the effects of the natural history of presenting problems. Further details and a rationale for the design have already been published.[10]

Sample

During the one-year period four general practitioners in the study practice referred 30 clients to the psychologist; four did not attend, three dropped out before starting therapy and one was regarded as unsuitable for therapy by the psychologist. The remaining 22 clients completed therapy.

The most common problems mentioned in the referral were anxiety and phobias (19 patients), followed by depression (eight patients). A number of other problems were present, including obsessional compulsive disorders and sexual dysfunction (some referrals specified more than one problem). The mean age of clients was 38.2 years (standard deviation 9.8, range 21 to 59 years). There were 15 females and seven males, most of whom fell into the skilled social class of the Registrar General's classification, with an even distribution on both sides of this category. Clients estimated the mean duration of their presenting problem as 6.1 years (SD 6.8, range four months to 22 years) and the mean number of consultations with their general practitioner over the year preceding the first appointment as 6.3 (SD 3.9).

Therapy

Between one and three appointments were allowed for initial assessments, followed by six to 18 appointments for therapy. A detailed account of the therapy process has been provided,[11] including measurement of the therapist's skills, therapeutic approach and interpersonal effectiveness. This process evaluation indicated that the therapy was broadly behavioural, was practised at a satisfactory level of proficiency, and that the psychologist was perceived as high on interpersonal effectiveness.

Various therapeutic techniques were used as appropriate and details of these can be found in a practice manual for behavioural psychotherapy in primary care.[12] Briefly, relaxation technique involved instructions to alternately tense and relax different muscle groups in coordination with regular breathing, imagery and positive thinking. An audiotape was provided to assist patients to practise. Graded exposure *in vivo* entailed agreeing a hierarchy of feared things with the client, then gradually helping him or her to face up to these situations with decreasing amounts of therapist support. Cognitive restructuring included a range of thought challenging and altering techniques where, for example, irrational beliefs about some catastrophic consequence

were modified by systematic dialogue and reality testing of these beliefs. Responsive prevention was used for compulsive rituals and consisted of graded exposure or 'flooding' to stimuli which elicit ritual while refraining from ritualizing, with decreasing amounts of therapist presence. Sex therapy was based on Master and Johnson techniques, such as 'sensate focus', 'stop-start' and 'squeeze'. In general, emphasis was placed on developing the clients' coping skills by enhancing understanding and control over their problems.

Clinical evaluation

For the clinical evaluation, all clients were sent questionnaires at the time of referral and again at the first appointment. The mean waiting list period was 1.7 months (SD 1.2). Clients were then seen weekly or fortnightly for 30-minute appointments in the general practitioner's surgery. After three months of therapy and 12 months from the time of referral the same questionnaires were repeated.

Three self-report questionnaires measured 'stress', 'coping' and 'strain', together with ratings made by the referring general practitioner. The stress questionnaire assessed the clients' recent life events, including difficulties at home and at work.[13] The coping responses questionnaire[14] gauged coping strategies in three areas: active cognitive (for example, trying to see the positive side of the situation), active behavioural (for example, taking some positive action) and avoidance (for example, keeping ones feelings to oneself). Personal distress or strain was measured by the short form of the general health questionnaire.[15] The referring general practitioner rated each client in terms of whether a satisfactory outcome had been achieved and whether the client needed further treatment,[4] and the clients rated themselves on these items.

Economic evaluation

The evaluation of economic factors was based on the same sample of 22 clients, but the data were gathered retrospectively from the clinical case notes for six-month periods before and after therapy. In keeping with the clinical evaluation, data were also collected from the first three months of therapy.

The cost of prescribed medication was recorded, together with the number and the cost of hospital referrals.[4] Three classes of prescription were distinguished: psychotropics and other central nervous system drugs; drugs for nutritional, blood and skin disorders; all other drugs. In addition the number of visits to the general practitioner's surgery, number of home visits made by the general practitioner and miscellaneous costs (for example, physiotherapy, cervical smear tests) were recorded.[3]

The results were analysed using Student's t-test.

Results

Clinical evaluation

During the waiting list period (that is, from the time of referral to first appointment) measures of stress, coping and strain for the 22 clients did not change significantly (Table 1). However, after three months of behaviour therapy there was a significant increase in their use of active cognitive coping skills and a significant decrease in their level of strain ($P<0.05$). The number of clients scoring as 'psychiatric cases' on the general health questionnaire (that is, scoring at least two extreme negatives) was five at referral and six at the first appointment. After therapy the number of psychiatric cases had fallen to two, while at the one year follow-up none of the clients scored as cases. In keeping with these positive results there was also a trend towards more active behavioural coping and for less of the maladaptive avoidance coping technique following therapy. As Table 1 shows, these findings were maintained at the one year follow-up assessment.

Table 1. Scores obtained on the measures of 'stress', 'coping' and 'strain' for the 22 clients.

	Mean (SD) score			
	At referral	At first appointment	After 3 mths therapy	One year follow up
Schedule of recent events ('stress')	3.1 (2.5)	4.6 (5.5)	4.5 (5.8)	—[a]
Coping responses questionnaire ('coping'):				
Active cognitive	1.4 (0.8)	1.7 (0.8)	2.1 (0.8)	2.5 (1.1)
Active behavioural	1.5 (1.0)	1.5 (0.7)	1.8 (0.7)	2.2 (1.1)
Avoidance	1.5 (0.9)	1.5 (0.6)	1.2 (0.6)	1.4 (0.5)
General health questionnaire ('strain')	20.6 (8.6)	16.4 (9.4)	9.7 (7.2)	8.8 (4.9)

SD = standard deviation.
[a] Schedule of recent events not administered at follow up.

The stress data in Table 1 do not indicate a transient episode which might account for the clinical improvements. However, a re-analysis of the data for the eight clients with the most chronic problems (mean duration 12.3 years, SD 6.6) in rela-

Table 2. Scores obtained on the measures of 'stress', 'coping' and 'strain' for clients with the least chronic problems (n = 8) and with the most chronic problems (n = 8).

	Mean (SD) score					
	Least chronic group			Most chronic group		
Responses	At referral	At first appointment	After 3 mths therapy	At referral	At first appointment	After 3 mths therapy
Schedule of recent events ('stress')	3.6 (2.7)	2.4 (2.8)	2.6 (1.1)	2.7 (2.8)	2.9 (2.9)	3.1 (1.2)
Coping responses questionnaire ('coping'):						
Active cognitive	1.8 (0.9)	1.9 (0.7)	2.0 (0.9)	1.5 (0.8)	1.4 (0.7)	2.1 (0.8)
Active behavioural	1.6 (0.9)	1.7 (0.8)	1.8 (0.7)	1.8 (1.1)	1.6 (0.9)	2.1 (0.9)
Avoidance	1.6 (0.8)	1.6 (0.8)	1.3 (0.8)	1.3 (1.0)	1.6 (0.7)	1.2 (0.6)
General health questionnaire ('strain')	20.4 (5.6)	15.3 (8.8)	8.7 (9.9)	21.4 (10.3)	17.5 (10.9)	9.4 (10.5)

tion to the eight with the least chronic problems (mean duration 2.0 years, SD 1.3) revealed a trend for stressful life events to decrease over time for the least chronic group of clients and to increase for the most chronic group (Table 2). At the same time both groups achieved comparable reductions in strain, but the most chronic group of clients had the more marked improvements in their coping skills.

Returning to the whole sample, the referring general practitioners thought that a satisfactory outcome had been achieved with 74% of their clients but that 15% of them required further treatment (answered 'can't decide' for 11%). Self-ratings on the same items by the clients yielded figures of 69% and 13% respectively (18% 'can't decide').

Economic evaluation

The results of the economic analyses for the 22 clients indicated that there was a steady increase in all drug costs over the 15 month period, that is during the six months before, three months during and six months after therapy (Table 3). This suggests that the greater use of concurrent medication may have produced the favourable clinical results. However, sub-analysis of the 11 clients who most improved their coping skills after therapy versus the other 11 indicated that the reverse was a more plausible interpretation. Table 3 shows that costs of psychotropic and other central nervous system (CNS) drugs declined with psychological therapy for the improved copers, whereas the dramatic increase in costs for the remaining clients accounted for the overall group trend.

Table 3. Breakdown of the economic analyses for improved copers ($n = 11$) and the remainder ($n = 11$).

	Before therapy	During therapy	After therapy
Referrals and visits (mean (SD) number)			
Hospital referrals			
Improved copers	0.4 (0.5)	0.9 (0.8)	0.5 (0.5)
Others	0.2 (0.4)	1.3 (1.1)	1.4 (1.4)
Visits to GP surgery			
Improved copers	2.1 (1.6)	1.1 (1.4)	1.0 (1.1)
Others	3.6 (2.1)	4.4 (5.5)	5.0 (3.7)
Home visits by GP			
Improved copers	0 (0)	0 (0)	0 (0)
Others	0 (0)	0.5 (1.5)	0.4 (0.9)
Costs (mean (SD) £)			
Psychotropic and other CNS drugs			
Improved copers	0.9 (1.2)	0 (0)	0 (0)
Others	1.9 (3.8)	4.8 (12.9)	5.7 (9.1)
Nutritional, blood and skin drugs			
Improved copers	0.3 (0.5)	0.4 (1.0)	0.4 (1.0)
Others	0 (0)	0.1 (0.3)	0.5 (1.0)
Other drugs			
Improved copers	0.6 (1.1)	1.6 (3.6)	3.3 (3.9)
Others	0 (0)	0.1 (0.3)	0.5 (1.0)
Hospital referrals			
Improved copers	2.1 (2.8)	4.4 (5.5)	2.8 (2.9)
Others	1.0 (2.2)	7.0 (6.1)	7.5 (7.5)
Miscellaneous[a]			
Improved copers	5.8 (6.0)	4.3 (6.8)	1.5 (4.2)
Others	0.9 (3.0)	4.5 (7.3)	4.3 (14.2)

[a] For example, physiotherapy, cervical smears.

SD standard deviation. CNS = central nervous system.

Statistical analysis of these data yielded significant reductions in costs before and after therapy for the improved copers in terms of psychotropic and CNS drugs, costs of hospital referrals and number of visits to the general practitioner's surgery. A between-groups comparison indicated that the improved copers were significantly less expensive than the remainder of the patients in terms of psychotropic and CNS drugs, number of hospital referrals and cost of hospital referrals, number of visits to the general practitioner's surgery and miscellaneous costs. However, the costs for all other drugs were significantly higher in the improved coping group ($P<0.05$).

Discussion

The results from this small study question the main conclusions reached in earlier controlled evaluations of the clinical psychologist in general practice.[3-5] In particular it appears that for clients referred to a routine NHS service, as opposed to a special study, there was little sign of a transient life stress phenomenon. Although transient, 'worst year' episodes may have been an important part of the improvements in relatively less chronic cases, in the more chronic sub-sample the psychologist did provide a definite and beneficial intervention. Robson and colleagues[4] reported significant improvements in their control group (that is, those receiving the usual general practitioner management of problems) over a similar period to the present study and they attributed this to short-term life transitions. It is likely that their clients were experiencing relatively mild psychosocial difficulties comparable with our group with less chronic problems. In contrast, clients with more chronic problems in the present study had relatively severe problems which only appeared to resolve with specialist help. In short, a natural history of crisis and resolution may well be an accurate overall depiction of the psychosocial problems presenting in general practice,[5] but may not apply to those clients who are referred on a routine basis to a clinical psychologist.[6,16,17]

This interpretation of the results is borne out by the significant increase in the patients' coping skills following behaviour therapy, but not during the waiting list period. In terms of the behavioural model, beneficial changes in stress and strain are most effectively and enduringly promoted by increasing adaptive coping skills.[13,18,19]

There are two points to make at this stage. Eirst, there appears to be a specific and predictable therapeutic impact of behavioural therapy that is qualitatively different from a general acceleration[4] or 'worst year'[5] effect. This is indicated by the clients' improved active cognitive and active behavioural coping and from their reduced strain. Secondly, as the point above illustrates, this approach to measurement corrects the tendency to oversimplify the effects of therapy, rightly criticized by some commentators.[6-8] One is reminded of the early debate on psychotherapy outcome, when the crude percent improved index led to the erroneous and misleading conclusion that psychotherapy was no better than spontaneous remission. As illustrated in our evaluation of economic factors, group mean scores can obscure important individual differences, particularly when these are based on simple measures of change. Analysis of these differences suggests that when a psychologist is successful in improving a client's coping strategies there is a significant reduction in many economic measures. Comparison with those clients whose coping skills did not improve indicates that this result is not attributable to practice trends in prescribing, for example.

In conclusion, although this was a small scale study, it suggests that the psychologist may after all have an important

clinical role to play, since the severity of some of the presenting problems may mean that simply educating general practitioners in psychotherapy is not a viable option for treating patients with chronic psychological problems.[5] It appears that clients improved in different ways according to the chronicity of their problem. For those with more chronic problems, the specialist clinical treatment developed their personal coping skills, what is generally referred to in psychology as 'self-help'. For the group with less chronic problems there was less evidence of improvements in coping but a comparable reduction in stress. The most obvious explanation for this is that the therapist provided social support and/or that stress decreased for reasons which were unrelated to therapy. The implication is that psychologists should focus their therapeutic efforts on chronic cases, offering support and education to general practitioners in their work with those with shorter-term psychosocial difficulties.

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