

Evaluation of psychological treatment in primary care

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SUMMARY. *As clinical psychology services to primary care have grown considerably in recent years, several papers have examined the impact of such services. Benefits to patients following contact with the psychologist have been described, but the few studies which have used control groups have not shown long-lasting effects. However, assessing the global effects of psychological treatment creates several methodological problems, and many of the studies have serious shortcomings in their use of sampling procedures and dependent measures. Clear results are unlikely to emerge from such studies because psychological treatment is not a single entity but encompasses a number of interventions for different types of problem. A more differentiated approach to evaluation is needed to assess the effectiveness of psychological treatment services in primary care.*

Introduction

SINCE the appearance of the first report¹ describing the work of a clinical psychologist in a health centre, resources allocated to this have grown considerably. A recent study² showed that 27% of psychology posts in England included some involvement with general practice, a larger proportion than for specialties such as general medicine or geriatrics. The involvement usually centres around the provision of individual psychological assessment and treatment in the general practice setting. Several studies, mostly descriptive, have attempted to assess the impact of such a service, but to date only two controlled investigations have been reported.^{3,4} The results of the studies, particularly Earll and Kinsey's, have generally been seen as disappointing because no significant lasting changes were shown to result from psychological intervention.

Some authors have expressed reservations about the rapid expansion of psychology services into primary care in the absence of better evidence about the effectiveness of treatment in this setting.^{5,6} Alternative roles for psychologists in general practice have been advocated, with the emphasis on consultation, education, liaison, research and prevention. Yet, there are many problems in developing alternative roles and little evidence that they can be successfully implemented.⁷

There have been repeated calls for more and better research to justify the allocation of resources for providing psychological treatment in general practice but the continuing lack of convincing results casts doubt over the future of psychology in primary care. However, to date little attention has been devoted to examining the basic methodology of studies assessing psychological treatment in primary care. This paper presents a critical examination of the sampling procedures and dependent

measures used in the most frequently cited evaluative studies of individual psychological treatment.

Sampling

The same basic design was employed in the studies using control groups to investigate the impact of psychological services in primary care.^{3,4} Patients were entered in the studies after being referred by their general practitioner, and then randomly allocated to experimental or control groups. This design represents a natural continuation from earlier uncontrolled studies⁸ describing changes following referral of patients to the psychologist. However, it differs from that normally used in evaluating treatment techniques in that it produces a sample of referrals rather than a sample of treatment cases. Referrals were not screened for suitability before entry and patients dropping out before completing treatment were not excluded from analysis.

Earll and Kinsey³ pointed out that their study may have been biased against obtaining positive results by the inclusion in the treatment group of several patients who were assessed as unsuitable for psychological intervention and therefore not taken on for treatment. They also suggested that more detailed screening might have produced stronger treatment effects. These comments understate the case; evidence is now available that the proportion of patients referred to a clinical psychology service who complete treatment can be as low as 45%.⁹ Under the stringent screening usually employed in a treatment trial, even more of the referral cohort might be excluded. For example in Marks' evaluation of nurse therapy in primary care¹⁰ drop-out or failure to meet entry criteria led to only 92 of 254 referred patients entering the trial. Further drop-out during treatment and the 12-month follow-up period left only 66 subjects, barely a quarter of the original group. The experimental group of Robson and colleagues⁴ had a similar proportion of subjects receiving three or more hours of contact with the psychologist, while the rest of the group were either seen more briefly or not at all, and presumably many more would have been excluded from analysis if a sampling strategy similar to that used by Marks had been employed.

The conclusion is that assessment of the effectiveness of psychological treatment in general practice requires more appropriate sampling than has been used to date; the effects of psychological treatment will not be apparent from examining outcome for patients who have been referred but receive little or no treatment.

Dependent measures

Even if the experimental group is restricted to treatment cases it will still be quite a mixed group because psychological treatment is not a single entity. In primary care clinics, just as in hospital outpatient departments, the caseload of a psychologist invariably consists of a variety of problems to which a range of interventions are applied. Studies evaluating the impact of psychologists in primary care have tended to take account of this heterogeneity by looking for general effects, employing global dependent measures. The types of measures used most frequently are cost criteria and outcome ratings.

Cost measures

If savings could be demonstrated on such measures as prescriptions and consultation rates as a consequence of psychological treatment, this would be a powerful argument for expanding psychological services to primary care. Further, this kind of information can usually be obtained fairly easily from routine records, and may be collected retrospectively.

The number of consultations and use of medication have been shown to fall significantly after psychological treatment, for patients^{8,11} and members of their families.¹² However, high use of primary care resources by patients with psychosocial problems may be short term in any case.¹³ The controlled trials of psychological intervention have produced equivocal results. After a seven-month period, the patients in Earll and Kinsey's³ treatment group were not prescribed significantly less psychotropic and other medication, nor did they visit their general practitioners less often or receive less hospital outpatient treatment. On the other hand, Robson and colleagues⁴ demonstrated significantly lower consultation rates and prescription costs over six months and one year, suggesting that 28% of a psychologist's salary costs could be recouped from savings in drug costs alone.

It is possible that better results still could be obtained with a pure treatment group and more extensive cost-benefit analysis. However, measuring cost-effectiveness is not the same as measuring effectiveness, unless the aim of intervention by psychologists is specifically to minimize service costs. This is a legitimate and important objective in some cases and psychologists have experimented with ways of reducing medication usage^{14,15} and the number of consultations.¹⁶ Nevertheless, not all patients referred to psychologists are high consumers of primary care services and, even among those who are, the treatment may not be aimed at reducing this high use of services.

Clearly it is inappropriate to evaluate an intervention with criteria which are of only indirect relevance to its aim, or are not applicable at all. Such measures as consultation rates and medication use, while interesting to study, are not suitable general criteria of the effectiveness of psychological treatment.

Rating scales

Ratings of outcome have been widely used in studies of psychological treatment in primary care, in particular therapist^{8,11,17} and general practitioner^{4,18} ratings of improvement. Clark¹⁹ employed a measure combining patient and therapist estimates of improvement while Espie and White²⁰ compared ratings made by patient, therapist and general practitioner. Success rates in different studies are difficult to compare because each study has used a slightly different rating scale.

The validity of such ratings as indices of clinical improvement in a mixed treatment group has never been demonstrated satisfactorily. Simple improvement ratings may give a false impression when the initial severity of problems is not uniform. For instance, one patient may present with minor affective symptoms following a life crisis which disappear after a psychological assessment interview. This improvement may be less significant clinically than an 85% reduction in symptom severity in a patient with a major depressive disorder who is discharged after 10 sessions of therapy. Yet rating scale measures of improvement could give the impression that improvement was as great if not greater in the former case.

Using severity ratings repeatedly⁴ is a better measure of outcome but there are still problems of validity and reliability. The therapist's own ratings may be biased and cannot be used in controlled studies. Ratings by each patient are likely to be less reliable than those made by a single judge. General practitioner ratings are preferable to either of these, except that he or she cannot judge clinical state at a particular point in time unless the patient

is seen for review. If the patient is reviewed it is probably best to use a completely independent assessor and/or more specialized measures of clinical state. For instance, in one uncontrolled trial of an anxiety management package in primary care an independent psychiatrist was used to rate progress.²¹ On the other hand, the reliability and validity of even this method may not be as good when the psychological problems of the subject group are more varied. Certainly, while information about reliability and validity is lacking, little confidence can be attached to results obtained using global ratings, which are probably of most value in exploratory research when other outcome measures are difficult to use.

An alternative to global outcome evaluation

As we have discussed, the measures used most frequently to evaluate the impact of psychological intervention in primary care are of doubtful validity. Other generalized measures of psychological distress^{22,23} are available and have also been used occasionally. However, it can be argued that any generalized measure is not wholly satisfactory for demonstrating the specific effects of the various interventions which come under the heading of psychological treatment in primary care.

Unfortunately, sub-categorization of patients or interventions so that more specific measures of improvement can be used is also subject to difficulties, such as the small size of sub-groups. For example, Robson and colleagues⁴ sub-classified their 429 patients using seven problem categories of which only four contained enough subjects for further analysis. Furthermore, the categories used (for example, anxiety/stress problem, interpersonal problem) would almost certainly require further subdivision in order to detect clinical changes with any precision.

It is evident then that evaluating outcome for a mixed group of patients poses difficult methodological problems. The most successful study of this kind has been a trial of nurse therapy in primary care.^{10,24} This study employed the outcome ratings of a blind psychiatric assessor in conjunction with several other measures and involved careful selection of patients for suitability. While it would be useful to have a study of comparable quality assessing the overall impact of psychological treatment in primary care, it can be argued that such a study is not really necessary. It is possible to compare interventions even though they have not been evaluated within the same trial; for instance, it is fairly evident from the general literature that psychological methods for treating agoraphobia are successful in a larger proportion of cases than methods of getting people to stop smoking. Many of the psychological treatment techniques have already been extensively evaluated. Treatment trials have been carried out in primary care settings for even the more recently developed approaches such as cognitive therapy for depression.²⁵⁻²⁷

It is beyond the scope of this paper to assess how far each different intervention has progressed towards demonstrating its value in primary care, but such a review would be of considerably more value than any global evaluation of psychological treatment, however well-constructed. The global trials in recent years represent attempts by psychologists to communicate the benefits of their techniques to general practitioners. Unfortunately, this approach tends to over-simplify and a more conventional approach to treatment evaluation is preferable. In 1979, Gelder²⁸ proposed conducting basic research to identify the critical components of specific treatment methods before evaluating the final treatment package in the primary care setting and gave exposure-based treatment for agoraphobia as an example of a method which had been developed in this way. The focus on global evaluation has caused this work, and a great deal more, to be

overlooked by many commentators such as Spector,⁷ who remarked on the apparent shortage of evidence that psychological treatment in primary care is effective. Rather it seems that there is a great deal of evidence, which badly needs to be summarized.

Conclusion

In this article our intention has been to point out the limitations of a global approach to evaluating the impact of psychological treatment. This approach poses difficult methodological problems, which the trials of treatment in primary care have failed to resolve to date. The results of these studies thus cannot give an accurate picture of the value of psychological treatment services in general practice. While it is difficult to measure treatment effects precisely for a referral cohort, trials of specific intervention techniques with appropriate sub-groups of patients can be more accurate. Fortunately, there have been several such traditionally designed trials of psychological treatments in general practice which have produced encouraging results, and it is regrettable that a good review of such work does not yet exist to clarify which techniques are of value and which are not.

Examination of a referral cohort may reveal little about treatment effectiveness but can throw light on problems such as referral of patients who drop out or who are unlikely to benefit from treatment. These problems do not only occur in primary care clinics, nor are they peculiar to psychological services. For instance, a study of general practitioner referrals to a psychiatric outpatient clinic found that referral was often determined by non-clinical factors and often seemed more a question of disposing of the patient than of securing effective treatment.²⁹ However, as psychologists and psychiatrists work more closely with general practitioners, such problems become more apparent and opportunities arise to investigate and to try and resolve them. Recently, there has been greater recognition of the need to adopt a more sophisticated and multi-faceted approach to the provision of specialist treatment services in health centres and surgeries.³⁰ However, it would be premature at this stage to conclude that psychological treatment has no major contribution to make to primary care.

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Acknowledgement

We are grateful to Margaret Sneddon for her contribution to this article.

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