Using evidence to improve Psychological Therapies Services

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Abstract
Psychological therapy services offer help to clients with many different sorts of mental health problems using a variety of therapies provided by a range of different professional groups and are supported by a large amount of research evidence. However, applying evidence-based practice in routine clinical settings presents particular challenges. This paper outlines some of the difficulties applying research findings to routine settings and argues for a more inclusive approach to linking evidence with practice. It describes a systematic approach to service evaluation and practice based evidence within a large psychological therapies service. This approach is integrated into the service delivery. It enables clinicians to become engaged in the process of reflecting on evidence in a non-threatening way and allows innovative ways of enhancing reflective practice by linking evidence with practice in routine settings.

Keywords: Evidence-based practice; practice based evidence; psychological therapies; psychotherapy; clinical effectiveness; reflective practice.

Introduction
Psychological therapy services offer help to clients with many different sorts of mental health problems using a variety of therapies provided by a range of different professional groups. As with other health service interventions, providers of psychological therapies are encouraged (and increasingly required) to apply this research evidence in routine service conditions, offering only treatments shown to be effective, so-called evidence-based practice. However, applying evidence-based practice in routine clinical settings presents particular challenges because of limitations in the evidence and because routine settings are often more complex and deal with a wider range of client problems than are typically studied in research clinics. In this article we review the arguments for using evidence-based practice, look at some of the difficulties and describe a complementary approach known as practice-based evidence. We also aim to illustrate how research and evidence can be used to inform practice by giving an example of how practice-based evidence is routinely used in one large NHS psychological therapies service.

The use of evidence-based practice to improve clinical effectiveness is a significant part of the more systematic approach to quality in health care (Department of Health, 1997, 1998; NHS Modernisation Agency, 2003). The basic model is that research (informed by theory) is carried out to determine best practice and the most effective treatments and service models for particular health problems. When sufficient quality research is available, the evidence is reviewed and treatment recommendations made. Special techniques such as meta-analyses are used for systematically reviewing evidence (see, for example, Sackett, Richardson, Rosenberg & Haynes, 1997). Such analyses attempt to reduce any bias that might be present when combining evidence of different quality and based on different sample sizes. The recommendations from systematic reviews are then disseminated into routine practice, for example through evidence-based guidelines, treatment manuals, protocols and evidence-based training. It is a requirement of health care providers to increase the provision of evidence-based practice and to set up systems to ensure access to information on evidence-based practice and implementation of guidelines. The National Institute for Clinical Excellence (NICE) plays a key role in this process by publishing regular treatment guidance. Recent published guidance in mental health includes those for eating disorders, anxiety and depression.

A parallel development to evidence based practice is the move towards more reflective practice where clinicians are expected to reflect on their work and their role within their service context (Sainsbury Centre for Mental Health, 2001). Within
psychological therapies services clinical supervision is well established as the main approach to reflective practice. The assumption is that if clinicians used more evidence-based practice and effectively reflected on their practice, clinical effectiveness would improve. Whilst this process is crucial to improve the quality of services, the dissemination of evidence-based practice into routine practice is a challenge and within psychological therapies it presents particular challenges.

Evidence-based practice in psychological therapies

There is good evidence for the effectiveness of psychotherapies for certain problems and these are summarised in recent evidence-based clinical practice guidelines (Treatment Choice in Psychological Therapies and Counselling, Department of Health, 2001). Among the conclusions from these guidelines are the importance of factors that apply across psychotherapies, such as a good therapeutic relationship. The evidence tends to be clearer with anxiety problems with superior evidence for behaviour therapy for specific phobias; cognitive behavioural therapy (CBT) for panic disorder and generalised anxiety disorders; and behaviour therapy and CBT for obsessive-compulsive disorder. This has made evidence based psychological treatment recommendations for panic (with or without agoraphobia) and generalised anxiety disorder possible in recent NICE guidance. There is also clear evidence for the effectiveness of CBT and Interpersonal Therapy for depression. Some psychotherapies, such as psychodynamic and psychoanalytic psychotherapy, are under-evaluated, making conclusions regarding their effectiveness difficult at this stage. Appropriate brief interventions (eight or fewer sessions) are thought to be appropriate for problems such as specific phobias, uncomplicated panic disorder and adjustment to recent life events whilst more complex problems and poorly motivated clients tend to require more experienced therapists and longer term interventions. The guidelines also make the general point that psychological therapies should be routinely considered as a treatment option when clients with mental health problems are assessed. Improved access to psychological therapies was also highlighted in the National Service Framework for Mental Health (Department of Health, 1999). Improving access implies both reducing waiting times and making psychological therapies available for a wider range of clients and problems.

Despite these recommendations, there are problems with the evidence on which they are based: “…guideline users should be aware that a degree of uncertainty underlies recommendations, because of gaps in scientific evidence, methodological limitations of trials, problems generalising research populations to clinical populations and client heterogeneity” (Department of Health, 2001, page 40). The gaps in the evidence make it difficult to establish clear guidelines on empirically validated psychological therapies.

Evidence-based psychological therapies in routine practice

There is evidence of limited application of evidence-based recommendations to routine practice. In relation to psychotherapy, Barlow (1981, p. 147) stated that, “At present, clinical research has little or no influence on clinical practice”. A recent survey of psychotherapists in the UK showed the relatively low influence of evidence based guidelines and treatment manuals on practice (Lucock, Hall and Nobel, submitted for publication). Factors such as clinical supervision, training, individual case formulations and personal therapy were rated as highly influential. A survey of psychotherapists in the USA (Morrow-Bradley and Elliot, 1986) also found a relatively low utilization of evidence based practice. Hansen, Lambert and Forman (2002) contrast information available from clinical trials with that available from routine services. They report that clinical trials suggest between 57.6% and 67.2% of clients improve within an average of 12.7 sessions, while naturalistic data in routine services suggest that the average number of sessions received in a USA national database of more than 6000 clients was less than five and the rate of improvement was about 20%. This study suggests outcomes would be improved if routine practice would take on board evidence from clinical trials and this is surely the case to some extent.
However, translating research findings and treatment recommendations to routine practice presents a number of difficulties. Poorer outcomes in routine practice may be because clinicians do not follow evidence-based practice guidelines, but they may also be because the clients studied in the trials on which the guidance is based are very different from those treated in routine practice, with multiple problems (comorbidity) and more complicated problems.

Efficacy and effectiveness research

The distinction between efficacy and effectiveness is crucial to understanding these issues. Efficacy is about demonstrating that a particular set of conditions is responsible for any effects of treatment observed with a particular client group, so efficacy studies require a high degree of scientific control. For this reason, efficacy studies such as randomised controlled trials (RCTs) use carefully selected, homogeneous client groups who are randomly assigned to treatments, and the treatments offered are time-limited and based on the treatment manual. This means one can conclude to a relatively high degree of certainty that differences between outcomes are due to differences between the treatments or between the treatment and control groups. Effectiveness is about demonstrating that treatments work under routine service conditions, so clients are not selected to have only single problems and therapists vary the treatment offered depending on the client’s problems. In effectiveness research, it is therefore much more difficult to demonstrate that this particular treatment is what is responsible for any changes in the clients. Efficacy research maximises what is called internal validity to allow clear scientific conclusions to be reached, while effectiveness research maximises so-called external validity, taking account of the complexity of routine practice.

So although efficacy studies are fundamental to psychotherapy research, a cost of such scientific control is poor external validity – the results do not necessarily generalise to routine service conditions where it is not possible or appropriate to exclude more complex clients, standardise treatments and so on. As more clients are excluded, the external validity of the study is decreased. Thase (1999) reported that as many as 5 to 10 potential participants may be screened for every one included in some efficacy studies because of comorbidity or the disorders being insufficiently severe. In a paper that has caused a great deal of interest in the psychotherapy research, Westen and Morrison (2001) looked at RCTs for panic, generalised anxiety disorder (GAD) and depression and found the majority of clients were excluded from participating in the average study. Inclusion rates were 32% for depression, 36% for panic, and 35% for GAD. Clients were excluded for things such as psychosis and organic disorders, but also such factors as suicidality, comorbid substance misuse and other concurrent problems, such as panic, GAD, personality disorders and significant physical problems. They concluded that exclusion criteria for all three disorders often eliminated more troubled and difficult to treat clients, such as clients with borderline features who are more likely to be suicidal and to have substance misuse problems. In routine services such clients tend not to be excluded on the basis that they are too complex and have multiple problems, although it is possible that more exclusion in routine services would be appropriate. Whether or not some clients should be excluded on the grounds that they will not benefit from therapy is an important issue that has not been adequately addressed in research up to now.

There are also criticisms that efficacy research relies too heavily on the diagnostic system (Persons, 1991) at the expense of considering the client as an individual and individual case formulations. Another problem of the relevance of clinical trials to routine practice is that trials are group comparison studies and do not predict individual responses. Within any group study with a significant group effect there will be those clients who do not respond to the intervention, but clinical trials may not help us understand why this is and how best to ensure therapy is more widely effective. In fact, recently published concerns about the negative side effects of SSRI anti depressants show how some individuals can be adversely affected by a treatment that has been found to be effective based on clinical trials (Whittington, Kendall, Fonagy, Cottrell, Cotgrove, and Boddington, 2004).

If evidence based practice were more widely disseminated, it would be in the form of treatment manuals. In the USA there is a debate over the merits of manualised therapies, which are often based on efficacy research, and what are called empirically validated therapies. Many researchers have called for psychotherapy training and
practice to be limited to treatments that have demonstrated efficacy in randomized trials (e.g. Barlow, 1996). These treatments differ significantly from those provided by the majority of therapists. Arguments against the use of manualised treatments include the fact that they are nearly always based on disorders rather than individualised formulations (Eifert, Schulte, Zvolensky et al., 1997), that they fail to inform clinicians about how to treat specific clients effectively because they restrict therapists and clients working together flexibly (Seligman, 1995), and because the evidence from which manuals are developed and evaluated are based on group means and therefore an “average” client. Some of these criticisms may arise from a misunderstanding about the nature of manualised therapies, which in many cases do allow for flexibility to meet the particular needs of clients within a common theory, framework and set of methods. They also underestimate the proven value of conceptualising and developing treatments for particular problems, such as depression, panic disorder, social phobias, post traumatic stress disorder, obsessional compulsive disorder, psychosis and personality disorders, for example in the development of cognitive behaviour therapy. It is, however, important that manualised therapies are not too rigid and prescribed. Persons (1991) advocates a case formulation approach to psychotherapy research enabling more flexible assessment and treatment approaches to be used within a particular psychotherapeutic model and the measurement of individualised outcomes.

Bridging the research practice divide

So the gap between research and practice in psychological therapies is due in part to real differences between the clients in efficacy research and routine practice. There are also differences between the sorts of therapy carried out in efficacy studies and routine practice. One response to this would be to reject the applicability of evidence based practice in psychological therapies (e.g. Marzillier, 2004) but this will lead to persisting with practice that is ineffective or even detrimental and prevents the development of more effective and efficient interventions. For example, critical incident debriefing as a preventative intervention was assumed to be effective but the evidence suggests it could be detrimental to some individuals so it is not recommended in treatment guidelines (Treatment Choice in Psychological Therapies and Counselling, Department of Health, 2001). Instead of a simplistic approach to evidence based practice or a rejection of it, the evidence considered should come from a variety of sources, not just clinical trials, and clinical expertise and flexibility to meet the needs of complex clients should be acknowledged. Sackett, Rosenberg, Gray et al (1996) acknowledge the balance between evidence and clinical expertise: “without clinical expertise, practice risks being tyrannised by evidence, for even excellent external evidence may be inapplicable or inappropriate for an individual client” (page 71). Salkovskis (2002) points out that cognitive behaviour therapy, the most evidence-based of the psychological therapies, has developed as a result of a broader approach to the link between evidence and practice. This approach includes the scientist practitioner model (Barlow, Hayes and Nelson, 1984) and single case methodologies (Hersen and Barlow, 1976). Salkovskis argues that this is best conceptualised as “Empirically Grounded Clinical Interventions” which are supported by a range of evidence. Williams and Garner (2002) argue for consideration of evidence available from other sources such as naturalistic enquiry and case material that helps to understand individual clients.

Important questions are not whether or not we should take account of the evidence, but what sort of evidence we should take account of and how we do so in a way that really does improve effectiveness. We argue that both evidence-based practice from clinical trials and practice-based evidence can inform and improve practice. We will describe an approach to generating and using practice-based evidence in a routine psychological therapies service with the potential to drive effective reflective practice and improve clinical effectiveness.
Practice based evidence in psychological therapies

A complementary approach to the use of evidence-based practice is the generation of good evidence in routine practice – ‘practice based evidence’ (Margison, Barkham, Evans et al 2000; Barkham and Mellor-Clark, 2000). Barkham, Margison, Leach et al (2001) argue that both paradigms are needed to provide good evidence and to help bridge the gap between research and practice. There are various examples of practice based evidence, some that have been established over many years, such as single case approaches (Turpin, 2001) in which data are collected on the client’s progress throughout the intervention. This data, such as number of panic attacks or levels of anxiety and depression, can be fed back to clients and enhance realistic feedback of the progress of therapy. Single case studies have played a significant role in the development of therapies, such as cognitive behaviour therapy for psychosis, which was initially described with a series of single case studies (Chadwick and Birchwood, 1994). Rather than being uncontrolled, single case methodologies allow experimental control and a flexible application to complex individual cases (Hersen and Barlow, 1976). Consistent with this approach is the scientist practitioner approach within clinical psychology (Barlow, Hayes and Nelson, 1984) in which empirical methods of testing predictions and obtaining feedback on progress is gathered, shared with clients and used as a vehicle for therapeutic change. In a broader approach to practice based evidence, Barkham et al (2001) recommend setting up an infrastructure to routinely measure clinical outcome together with other variables that describe the nature of clients and their problems and the interventions (type of therapy, number of sessions, etc.). If such an infrastructure were used widely, large data sets could be generated to look at research questions in routine practice and services could be benchmarked against one another (Barkham et al 2001). There is also evidence that feeding back routinely collected outcome data to clinicians improves outcomes (Lambert, Whipple, Smart et al, 2003). Feeding back results of service audit, research and outcome monitoring are included in the best practice criteria in recent best practice guidance on organising and delivering psychological therapies within the NHS (Department of Health, 2004).

Generating data through practice-based evidence can answer research questions that clinical trials cannot answer. For example, this approach can assess psychotherapy outcomes and processes in routine service settings with a wider range of clients, therapists and therapies. It can also look at why some clients fail to take up therapy, why some drop out during therapy and why some get worse during therapy. We now describe one particular approach to developing a practice based evidence infrastructure and how it can be used to create a culture to facilitate reflective practice using evidence.

The practice-based evidence system

Our service is a multi-professional adult psychological therapies service receiving about 1200 referrals a year (in 2003-2004), serving a population of 320,000 people across the Wakefield Metropolitan District. Therapists include clinical psychologists, a specialist psychotherapy team, counsellors, nurse therapists, cognitive behaviour therapists and an art therapist. A range of therapies has been provided including cognitive behavioural therapy, psychodynamic and psychoanalytic psychotherapies, person-centred approaches and integrative psychotherapies such as cognitive analytical therapy. Initial assessments are carried out to determine suitability for psychological therapy and the most appropriate approach is recommended and provided, including individual, couple and group work.

The service has developed a practice based evidence infrastructure to routinely measure clinical outcome. Clients complete outcome measures at various stages and both clients and therapists rate progress at the end of therapy. The service has used the Clinical Outcomes in Routine Evaluation – Outcome Measure (CORE-OM; Evans, Connell, Barkham, Margison, McGrath, Mellor-Clarke and Audin, 2002) and the Beck Depression Inventory (BDI: Beck et al., 1961) at referral and adds the Inventory of Interpersonal Problems (IIP-32: Barkham, Hardy and Startup, 1996) at assessment, beginning of therapy, discharge and six month follow up. The IIP-32 is a shortened version of the 127-item IIP devised by Horowitz, Rosenberg, Baer, Ureno, and
Villasenor, (1988). These measures are completed by clients and give reliable information about clients' problems in a number of areas. Other measures are used for specific interventions as appropriate, such as group work. This system is integrated into the clinical service by using the data to inform risk assessment and prioritisation. For example, the CORE-OM and BDI both have risk items that can alert the service to clients with particularly urgent problems. Recently the BDI was discontinued due to its prohibitive cost and replaced by a transformed score taken from the CORE-OM with which it correlates very highly (Leach, Lucock, Barkham, et al, in press). Therapists receive feedback on clinical outcomes for their clients every year and at other times on request. This information includes data on progress of individual clients as well as data on groups of clients and the whole service. It is fed back in the form of graphs, with clinically and statistically significant cut offs identifying clients who have improved and those who have not benefited. This system is described in more detail in Lucock, Leach, Iveson, et al (2003) and our experience of the outcome measures is reviewed in Leach, Lucock, Iveson & Noble (2004).

Feeding back the evidence - evidence based reflective practice

It is important to justify the time and resources spent on routine service evaluation by attempting to achieve tangible benefits for the quality and effectiveness of the service. This can only be achieved if the evidence generated is fed back into the service in a way that drives service improvements. A key issue in developing such an evaluation and practice based evidence system is getting staff on board, involving them in the process and creating a non-threatening culture of reflective practice. To achieve this, staff should be involved in all aspects of the process, be clear about their role and receive feedback of results (Lucock, Iveson and Leach 1999). Furthermore, this feedback should be meaningful to clinicians and clinically useful. Without this the approach will be seen as an onerous addition to an already busy working schedule. In our service, in addition to annual feedback on their clients' progress and the overall data for the service, the service has also begun discussing findings with clinicians to make clinical sense of the data. This will lead to clinical and service implications and we have called this approach evidence-based reflective practice. For example, interviews were carried out with clinicians about their views on whether or not clients had a sudden improvement during therapy (Tang and DeRubeis, 1999) and what caused the sudden improvement (see Stiles, Leach, Barkham et al, 2003, and Davies, Leach, Lucock et al, in press). Clinicians within the service are interested in reflecting on clients with characteristics derived from the data such as those who score above a certain threshold on measures, those who drop out of therapy, fail to respond to therapy, improve, or those who receive long term therapy. This enables investigations of research questions such as why clients drop out, why they improve and why they deteriorate rather than simply looking at if and by how much they improve. This process of reflecting on evidence to look at clinically meaningful questions also engages clinicians in the process of reflective practice using evidence. Investigating ‘why’ questions can be done by looking at the available data (for example outcome questionnaire scores, type of problem, type of therapy, number of sessions, alliance measures) and by discussing the issue with clinicians on an individual or group basis. For example, service evaluation projects are planned or have been carried out by trainee clinical psychologists looking at characteristics and outcomes for clients seen for long term therapy, reasons for clients dropping out of therapy and reasons for providing long term therapy, all of which will have implications for improving practice.

Conclusion

The use of evidence-based practice has a crucial role in improving the effectiveness of services and different types of evidence have different purposes. RCTs are required to establish efficacy, while practice based evidence can be used to evaluate the effectiveness of routine services and for benchmarking and audit. Within psychological therapies, limitations with the current evidence restrict the extent to which specific treatments can be recommended for some problems and the complexities of routine practice and individual client needs should be taken account
of. Rather than rejecting or resisting evidence based practice, services have a responsibility to audit their services against treatment guidelines, to evaluate their services and provide evidence of their effectiveness. In addition to this top-down approach, generating bottom-up practice-based evidence can help provide evidence of effectiveness of treatment approaches; it can also generate research questions of interest to practitioners such as factors influencing treatment length, treatment failure and drop out from therapy. The process of collecting practice-based evidence can also help engage clinicians in taking account of evidence to reflect on and develop their practice, enhancing existing approaches to reflective practice such as clinical supervision.

References


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