

Chapter 21

Evidence-Based Practice

*It is not enough to do your best; you first have to know **what** to do and **then** do your best.*

—W. Edwards Deming

Evidence-based practice (EBP) is one of the most important developments in decades for the helping professions—including medicine, nursing, social work, psychology, public health, counseling, and all the other health and human service professions (Briggs & Rzepnicki, 2004; Brownson et al., 2002; Dawes et al., 1999; Dobson & Craig, 1998a, 1998b; Gilgun, 2005; Roberts & Yeager, 2004; Sackett et al., 2000). That is because evidence-based practice holds out the hope for practitioners that we can be at least as successful in helping our clients as the current available information on helping allows us to be. Both the importance and the multidisciplinary nature of EBP can be seen in the Roberts and Yeager (2004) compendium, *Evidence-Based Practice Manual*, a collection of chapters describing the meaning, methods, and examples of EBP.

Evidence-based practice represents both an ideology and a method. The *ideology* springs from the ethical principle that clients deserve to be provided with the most effective interventions possible. The *method* of EBP is the way we go about finding and then implementing those interventions (see, e.g., manuals on EBP methods by Gibbs, 2003; Cournoyer, 2003; and Rubin, 2007; see also <http://www.evidence.brookscoble.com/index.html>). *Evidence-based practice represents the practitioner's commitment to use all means possible to locate the best (most effective) evidence for any given problem at all points of planning and contacts with clients.* This pursuit of the best knowledge includes extensive computer searches, as described in the following (Gibbs & Gambrill, 2002).

Evidence-based practice is an enormous challenge to practitioners because the methods of locating the most effective interventions go beyond, or are more rigorous than, even those of *empirically-based practice*. Thus, for example, where a

From Bloom, M, Fischer, J. & Orme, J. (2009), *Evaluating practice: Guidelines for the accountable professional (6th Ed.)*. Boston: Allyn and Bacon.

practitioner using empirically-based practice might be satisfied with locating two or three controlled studies as evidence of effectiveness (Chambless et al., 1996, 1998), practitioners using EBP will do whatever it takes to locate *all* studies of effectiveness on a particular problem, typically using *reviews* of research on intervention effectiveness, and then critically assessing the studies in those reviews for evidence of validity and utility for practice. The emphasis in EBP is on the comprehensiveness of the search and critical evaluation of the results, all in as close collaboration with clients as possible, including sensitivity to socially and culturally relevant approaches to intervention (Ancis, 2003; Mio & Iwamasa, 2003; Sue & Sue, 2004).

The EBP model has spawned a huge literature, including methods of education and critical thinking for this rigorous form of practice (Crisp, 2004; Gambrill, 2005; Gira et al., 2004; Howard et al., 2003); EBP skill-training manuals (Rubin, 2008; Bisman & Hardcastle, 1999; Cournoyer, 2003; Gibbs, 2003; Weisz & Hawley, 1998); issues and challenges regarding EBP (Norcross et al., 2005; Gibbs & Gambrill, 2002); *principles* of change that work (Castonguay & Beutler, 2006); manuals presenting procedural guidelines for applying intervention techniques (Cormier et al., 2009; Lecroy, 2008; Van Hasselt & Hersen, 1996); evidence-based assessment (Hunsley, Crabb, & Mash, 2004; Mash & Barkley, 2007); evidence for an empirical foundation for the most effective relationship factors (Norcross, 2002; Norcross & Hill, 2004); EBP for groups (Macgowan, 2008); EBP with families (Corcoran 2002, 2003); evidence-based internships (Thomlison & Corcoran, 2008); and methods for intervention planning and assessment (Beutler & Groth-Marnat, 2003; Beutler & Mailik, 2002; Haynes & O'Brien, 2000; Hersen, 2004; Hunsley, Crabb, & Mash, 2004; Lopez & Snyder, 2003; Seligman, 2004; Vance & Pumariega, 2001; Woody et al., 2003).

Most importantly, the EBP movement has produced an outpouring of literature on the most effective procedures for prevention and intervention (Abramovitz, 2006; Antony et al., 2005; Antony & Barlow, 2001; Barlow, 2001a, 2001b; Barrett & Ollendick, 2004; Bellack, 2006; Bloomquist & Schnell, 2002; Carr, 2000; Corcoran, 2003, 2004; Cormier et al., 2009; Dobson & Craig, 1998a, 1998b; Dugus & Robichaud, 2006; Dulmus & Rapp-Paglicci, 2005; D'Zurilla & Nezu, 2006; Emmelkamp and Vedel, 2006; Fisher & O'Donohue, 2006; Fisher, Hayes, & O'Donohue, 2003; Fonagy et al., 2002; Freeman & Power, 2006; Gambrill, 2006; Gullotta & Blau, 2007; Gullotta & Bloom, 2003; Hersen & Bellack, 1999; Hoffman & Otto, 2007; Hoffman & Tompson, 2002; Kazantzis & L'Abate, 2006; Kazdin, 2005; Kazdin & Weisz, 2003; Kendall, 2005; Lambert, 2004; Liddle et al., 2002; Levkoff, 2006; Lyddon & Jones, 2001; MacDonald, 2001; Marlatt & Gorman, 2005; Marlatt and Donovan, 2005; Nathan & Gorman, 2007; O'Donohue & Ferguson, 2003; O'Hare, 2005; Reiser & Thompson, 2005; Roberts & Yeager, 2006; Roberts & Yeager, 2004; Rosqvist, 2005; Roth & Fonagy, 2004; Rygh & Sanderson, 2004; Silverstein et al., 2006; Stout & Hayes, 2004; Thyer & Wodarski, 1998; Wedding et al., 2005; and Wodarski & Thyer, 1998).

Our view of evidence-based practice is that it depends on the successful integration of the two primary types of research: single system designs as the heart

of evaluation-informed practice and experimental and quasi-experimental controlled group designs that form the basis for practitioners' decisions about what procedures are the most effective for a particular case. Indeed, the importance of systematic evaluation with each and every case, once you have selected the best available program, can be seen in one compelling fact: The evidence is clear that even interventions selected on the basis of several randomized, controlled studies cannot be assumed to be effective with each and every client. The research clearly shows that both characteristics of clients (Clarkin & Levy, 2004) and characteristics of practitioners (Beutler et al., 2004) can have profound effects on outcomes. Cultural, socioeconomic, ethnic, and a host of other demographic and interpersonal variables can keep what seems like the perfect intervention from doing what one might expect given the reported results in the literature.

We believe the *evidence*-based practice model and the *evaluation*-informed practice approach, in a sense, complete each other. The one uses a systematic and comprehensive search of the empirical literature to find what works best, the other provides methods for ongoing monitoring, guiding, and evaluating client progress. People and their situations are complex. So many things can go wrong during an intervention, even given the best of relationships, that the evidence-based practitioner always monitors and evaluates progress with every case and situation so as to be able to tell how well the intervention is—or is not—progressing. Thus, to be a well-rounded evidence-based practitioner, we strongly recommend the use of single system designs to allow you, the practitioner, to receive regular feedback on how well your clients are doing and to make changes accordingly. This is particularly so given the recent evidence that routine monitoring and receipt of feedback that is characteristic of evaluation-informed practice can reduce deterioration and improve overall outcome (Faul et al., 2001; Lambert et al., 2002, 2003). In other words, the evidence seems to support the idea that evaluation-informed practice fits the bill as an integral partner of evidence-based practice.

The essence of successful practice is to help resolve client problems and to attain client objectives, without creating problems for others or new problems for the client. Probably the most clear and socially accountable way of determining whether our practice is successful is through systematized, relatively objective evaluation methods that can be replicated (repeated) by others. This is part of the science of practice—professional action that is informed by the best available information, guided by techniques of demonstrated effectiveness, and combined with objective evaluation components, all within the context of professional values.

Yet this focus on the science of evidence-based and evaluation-informed practice is not intended to rule out other crucial aspects of practice. The art and creativity of (and the values and philosophy undergirding) practice that make it humane and caring we believe can be combined with the empirical/scientific orientation to produce what we call the *scientific practitioner*. Here, then, is our definition of the scientific practitioner. Such a practitioner combines the following elements in his or her practice:

1. Using the results of research and evaluation to the extent possible to select intervention techniques and other procedures that have evidence of effectiveness, and use of techniques without such evidence, only with caution; this is the heart of evidence-based practice.
2. Systematic monitoring and evaluation of his or her practice with each and every case, particularly through use of single system designs; this is the heart of evaluation-informed practice.
3. Having the skills and attitudes—the commitment—to keep learning, to keep searching for new and more effective ways to serve consumers.
4. Above all, maintaining a commitment in words and deeds to the ethics and values of the helping professions; a sensitivity, caring, and concern for the well-being, rights, and dignity of clients and consumers.

In other words, the scientific practitioner is a person who is strongly concerned with humane helping that is provided in the most effective manner possible. Each element—the scientific, the ethical, and the practice—clarifies and reinforces each other. None can be minimized in favor of the other without detriment to the whole.

As you can probably guess, we believe that thinking about evaluation during the course of practice will help to sharpen the thinking of practitioners and offer insights that cannot easily be attained in other ways. However, we want to emphasize that if ever occasions arise when the procedures of evaluation interfere with some specific interventive practice, our ethics tell us there is no choice but to put those intervention concerns first. We should do nothing (in the name of research or evaluation) that harms clients or their chances for successful service. Since the primary goal of evaluation is to improve practice, we do not believe in sacrificing the meaning and relevance of practice on the altar of scientific rigor. We believe, however, that occasions involving serious conflicts between practice and evaluation are rare. As we will try to show, in the great majority of situations, evaluation will help us to think clearly and act effectively and humanely on behalf of our clients.

Steps in Evidence-Based Practice

While this book is about evaluation-based practice, the importance of evidence-based practice suggests to us that we should present a brief overview of the actual procedures involved in conducting evidence-based practice. Therefore, we will summarize in this section some of the far more detailed information on conducting evidence-based practice that you can find in skill-training manuals (e.g., Rubin, 2007; Gibbs, 2003; Cournoyer, 2003). We present these procedures as a series of steps.

Before we present these steps, however, we want to recognize with you the enormous challenge to most practitioners presented by this approach, and the large amount of time and stress that can be involved in applying these steps in a

conscientious fashion. We hope you will remember, then, two possibilities in applying evidence-based practice that may help mitigate some of that pressure. First, one possibility is that you begin your pursuit of EBP gradually. You might want to start, sort of in an exploratory way, with just one case to try using evidence-based practice. Assess for yourself the time and effort that applying these evidence-based practice steps takes in that case. This way, you can properly judge the costs and benefits of EBP. (Of course, we hope you will reap a huge amount of benefits in applying evidence-based practice with that first case in that you will see demonstrable, positive changes for your client.) Then, you can gauge just what resources you will need to apply EBP with subsequent cases. We are certain that each application will become easier as you gain experience, as with any new approach, including using single system designs.

The second possibility to keep in mind actually depends on the kinds of services you provide in your organization. In many organizations, the caseloads include similar problems, admittedly with variations among individual clients. This may mean that review of the literature to ascertain what will be useful for evidence-based practice with one client/problem configuration may be generalizable to many of your cases. That is a huge savings in your time and energy in conducting these steps. In fact, as you will see, there inevitably will be client problems and situations where the literature is only minimally helpful, and in which inspiration for the best approach will come from your own experiences and those of your colleagues.

So, keeping those possibilities in mind, following are the steps involved in evidence-based practice.

Step 1. Develop A Question. This is not as easy as it may first appear. The question may be as complicated as, what are the key factors affecting homelessness, or as focused as, what intervention works best with a given problem? For example, we may be working with clients with overwhelming anxiety. We would want to ask questions such as, what are the best methods for assessing anxiety, and what interventions work best with what different types of anxiety? We also want to be aware in seeking answers to our practice questions that characteristics of the client, practitioner, setting, and other environmental variables play an important part in getting the clearest and best answers to our questions. An intervention that cannot be adjusted to account for cultural differences among clients may not be the best answer to your question.

Step 2. Find the Evidence. The heart of evidence-based practice is in the search process, trying to find the best answers to the questions we ask. The largest part of the manuals available on EBP is devoted to this search process. Here, we can only provide a brief summary of search procedures.

There are three ways of finding evidence, all of them connected to the way we use the literature. Further, all of them also are connected to our use of the internet, one of the trademarks of the evidence-based practitioner. The first two methods consist of finding published reviews of the research literature, while the third method involves do-it-yourself reviews.

The first method of finding the evidence is to find a meta-analytic review. *Meta-analyses* are quantitative reviews of the literature. A meta-analysis seeks to find all published (and sometimes unpublished) studies on a topic and synthesizes the results by finding a common metric to report the results of all the studies. That common metric is called an effect size, symbolized by a single statistic, most typically, *d*. The higher the effect size, the greater is assumed to be the impact of the intervention. Because of the importance of the decision for our clients about what is and what is not evidence-based, we recommend that practitioners be especially cautious in making that decision by using larger and less common effect sizes to try to ensure that such a decision is well grounded in the evidence. To that end, we recommend that an effect size of .80 be the minimum one that practitioners use as a guideline for deciding what is evidence-based and what may not be. An effect size of .80 is regarded by many as large (Cohen, 1988), and also is relatively uncommon in the meta-analytic literature (Lipsey & Wilson, 1993). For meta-analyses with effect sizes lower than .80, we recommend that you use extra diligence and caution in applying the results. This is not to say that meta-analyses with effect sizes lower than .80 are not useful. There simply may not be available a meta-analysis with an overall effect size that large. In such situations, meta-analyses with lower effect sizes may be the best evidence available. (For an excellent introduction to both meta-analyses and systematic reviews, described following, see Littel, Corcoran, and Pillai, [2008].)

The second method of finding evidence is to find a published traditional or narrative review of the literature. In their more rigorous forms, these are called *systematic reviews* because they follow a specific protocol in conducting all aspects of the review. These reviews also attempt to collect all available studies, but rather than conducting a *quantitative* analysis, either present only the *results* of several studies or add to that by analyzing the methodologies of those studies. Then, a conclusion about effectiveness is drawn by *logical* (rather than quantitative) means. This is sometimes called the box-score method because the reviewer often just adds up the total of positive studies and negative studies and presents a conclusion.

For these reviews, too, we recommend a great deal of caution in accepting a conclusion about what is evidence-based. We recommend that unless *80 percent* or more of the published studies are positive, caution be used in making a conclusion that a procedure is evidence-based. (That 80 percent is the same percentage we use for accepting a measure as reliable, that is, consistent. The same principle applies here.) For reviews with a lower percentage of positive studies, once again we advise due caution in applying the results.

Here are a couple of hints about using the results of these traditional reviews. First, if the reviewer does not *analyze* the studies but only *describes* the results presented by the original authors of the studies, your confidence in accepting the conclusions should be decreased because there would be no way of knowing from the review whether the methods of the studies affected the results.

Second, if the reviewer only presents the results of the studies with positive outcomes, this may mean he or she has not done a comprehensive search. Thus,

your confidence in the conclusions of that review should be greatly decreased. (Presentation of only positive results is actually a very common practice in book chapters on the effectiveness of different intervention techniques.) Obviously, an incomplete search can be a sign that the reviewer was selectively looking only for results that corroborate the reviewer's opinions.

The third method is to conduct a review of all the available evidence yourself. This method clearly is the most time-consuming and difficult of the three methods. But you will find, unfortunately, that many of the questions you pose in your search for the evidence simply have not been reviewed by others, or that the reviews are out-of-date. We define out-of-date reviews as those roughly three or more years old, an admittedly stringent criterion. This does not mean that older reviews are worthless. All it really means is that over time, things change. Some of those things may be the evidence on the effectiveness of a given procedure. Therefore, all we are saying is that you may have to do some additional work yourself, either by supplementing older reviews with newer findings or by deciding to find all of the evidence yourself, using the older review as a source for references. (From our own experience in attempting to find evidence-based interventions, we know exactly how frustrating this process can be.) The key challenge in conducting your own review is to try to ensure the review is comprehensive enough to incorporate all the literature. To that end, you may have to use different databases and multiple search terms to ensure that all possible search options were pursued.

To help in this type of search and the searches for published reviews, we present in table 21.1 a number of the prime internet sources for conducting such searches.

Although most if not all searches for evidence-based procedures will involve searches on the internet, that does not, by any means, rule out use of other resources. For example, mental health practitioners might choose to turn to the collection of "treatments that work" by Nathan and Gorman (2007). This excellent book contains descriptions and reviews of the research for twenty-five mental health problems where the accumulated evidence points to interventions that appear to be effective. All of the evidence for each treatment is presented on a graded hierarchy of rigor, starting with "Type I Studies" that are rigorous, experimental clinical trials, and ending with "Type VI Studies," such as case studies and opinion papers. While the chapters vary somewhat in the extent of the evidence presented, this book is an excellent starting point for reviewing what others consider to be effective interventions.

Step 3. Analyze the Evidence. As if it is not enough to *find* the evidence, now you have to *analyze* it. For analysis of individual studies, this means having more than just a passing understanding of research design and methodology as well as the commitment to putting in the time to apply your understanding to the analysis of studies. This means knowing about, let's say, the difference between experimental and quasi-experimental designs (hint: it's random assignment); understanding that there is a hierarchy of evidence from which one might make inferences about effectiveness, ranging from experimental designs to uncontrolled case studies (see

Table 21.1 Internet Sites for Evidence-Based Practice Searches

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1. We recommend that two of the first sites you visit are the Campbell Collaboration at <http://www.campbellcollaboration.org> [go to C2 and scroll down for reviews] for complete reviews of the effects of social and behavioral interventions; as of early 2008, this relatively new site had completed five reviews in education, ten in crime and justice and seventeen in social welfare. Go to www.cochrane.org for the Cochrane Collaboration and detailed summaries of systematic reviews of the effects of health care interventions, including many reviews of psychosocial interventions. You can find a complete list of all the Cochrane Collaboration reviews at the top of their page where it says "A-Z."
 2. If you still have connections with your university, such as maintaining your university e-mail address, you may still be able to use their databases at no charge. If that is so, we highly recommend that you locate the database called EBSCOHost. This database contains over twenty databases, including *Academic Search Premier*, which has full text (complete for downloading) articles from over 4,500 journals. For example, one of the data bases in EBSCOHost is *Psychology and Behavioral Sciences Collection* that alone has 575 full text journals available; this database is particularly useful for members of the helping professions (your library may have a different version called *PsycINFO*).
 3. Most readers probably are aware of Google for everyday searches. Google has a specialized feature called Google Scholar that is free and can be used to find research and other publications on many of the topics of interest for evidence-based practice. You can enter just one or two words as your search term (e.g., "meta-analysis and depression") or you may even enter an entire question to ensure broader coverage (e.g., "What are the most effective interventions for depression?").
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Rubin [2007] for an extensive description of this hierarchy and what can be gleaned from each level of evidence); understanding whether the statistics used in a study are appropriate or inappropriate; and so on. This is called research consumerism, and it is one of the reasons all education programs in the helping professions place so much emphasis on research methods classes. How can one be a good consumer of research and hence, evidence-based, if one cannot properly analyze the studies that will guide decisions?

We understand that in the hard reality of everyday work in an organization, we simply are not going to be able to find rigorous empirical research to provide the evidence for all of our questions. Therefore, we recognize that some evidence may be considered weak by some standards. Thus, when we discuss evidence, we simply mean the best evidence that is available, starting with rigorous empirical research, of course, but including other sources when such research is not available. The decision to apply the available evidence is made with the understanding that the decision is the best one that could be made under the circumstances, and that careful evaluation of each case will reveal the wisdom of that choice. (Again, we highly recommend the new book by Rubin [2007] as an excellent introduction to analyzing research for evidence-based practice.)

Step 4. Combine the Evidence with Your Understanding of the Client and Situation. Although the process of arriving at an evidence-based practice decision is complex, it becomes even more interesting when we consider how to adapt

it to the current client/problem/situation configuration. If all the evidence that is accumulated is based on a population that is different from the client with whom you are working, then you will have to find the best way to adapt what you found in the literature to the context in which you are working. The number of such contextual variables that could affect your decision are numerous, including ethnic and cultural differences, income level and income security, housing, family situation, and so on. We suggest that you take each piece of the evidence from your information search, and ask: How specifically will this fit with my client? What can I do to make it more suitable to my client? (Clarkin & Levy [2004] and Beutler et al. [2004] go into detail about making suitable adaptations from the research literature to your own specific case, especially with regard to the effects of different client and practitioner characteristics.) For example, using interventions originally used with preschoolers may be modified to assume more cognitive sophistication in elementary school students; dealing with views of unmarried mothers as suitable caretakers of their children may differ by ethnicity; different cultures may permit more or less child tending by older siblings. Your conceptual mapping of the situation will have to take into consideration these kinds of perspectives.

Step 5. Application to Practice. In a sense, this might be the easiest part of evidence-based practice. Once the decision is made to implement the material you have identified as evidence-based, all that is left to do is to implement that material. Of course, a practitioner might find that he or she does not have sufficient knowledge to immediately implement that material; therefore, a period of familiarization will be necessary. This can be greatly eased by maintaining in one's possession some of the books described previously that present the intervention techniques that have been found to be effective in proceduralized manuals (e.g., Cormier et al., 2009; Lecroy, 2008; Van Hasselt & Hersen, 1996).

Step 6. Monitor and Evaluate Results. Even with interventions that have the soundest base of evidence, evaluation of the application in practice is necessary. Perfect results are never guaranteed, and that is how and why evaluation-informed practice is so crucial to evidence-based practice. We, as practitioners, must always be accountable for our efforts. And the primary way we demonstrate that accountability, once an evidence-based decision is implemented, is through our systematic and careful monitoring and evaluation of that application.

Integrating Evaluation-Informed and Evidence-Based Practice: The PRAISES Model

Although we have argued that it is critically important to integrate evaluation and practice, it still remains for us to provide examples of precisely how that integration might occur. We have described evidence-based practice as using the best evidence at *all* points of planning and contact with the clients. And it is exactly these points that have to be operationalized clearly in order for you to understand not only how evaluation-informed and evidence-based practice can be integrated,

but identifying every point in the overall intervention process—from first contact to follow-up—where they *can* and *should* be integrated.

To that end, we present in figure 21.1, the PRAISES Model, a framework for integrating evaluation-informed and evidence-based practice (Fischer, 1986). We understand that at first glance this framework can be somewhat intimidating, as it may look more like a General Motors wiring diagram than a flowchart for use by helping professionals. But we want to assure you, on the basis of well over two decades of teaching using the PRAISES Model, that this framework is very useful and quite adaptable. Here's why: A careful look at the flowchart will show that the flowchart actually is a compilation of virtually all the steps many practitioners go through anyway, but in this case, they are systematized in a flowchart that is intended to add a more structured approach to those steps.

Indeed, to that end, the PRAISES Model is an attempt to integrate, structure, and systematize the process of evidence-based practice, while highlighting the interrelationships among interventive practices and evaluation in the overall process. Let's just briefly describe some of the characteristics of this framework and the ways in which they illustrate and enhance evidence-based practice.

1. *Empirically-based.* To the extent possible, this framework attempts to enhance development of the empirical base for evidence-based practice. As we have pointed out, the empirical base of evidence-based practice has two meanings. The first is the use of the results of classical evaluation research to guide selection of interventions that have demonstrated effectiveness. The second meaning is in the careful and systematic evaluation of the effects of our interventions. This framework highlights the points of planning and contact with the clients where evaluation-informed and evidence-based decisions need to be made. In other words, every time the practitioner plans to see the client, he or she should have a handle on what the empirical evidence says about that contact (e.g., the very first interview; the very last interview or the termination contact).

2. *Integrative.* The PRAISES Model flowchart attempts to integrate all practice and evaluation activities. This is the basis for our earlier assertions that good practice incorporates good evaluation. There are no distinctions made between evaluation and practice in the flowchart. Only the different activities required at each step are described.

3. *Eclectic.* This framework is based on the assumption that the knowledge base of practice in the helping professions is both pluralistic and eclectic. It is pluralistic in the sense that knowledge is derived from many sources. It is eclectic in that only the best available knowledge is derived from those sources. Eclecticism refers to the use of clear, precise, systematic criteria to select knowledge. In particular, this relates to the empirical base of evidence-based practice in that, whenever possible, evidence-based practice is comprised of a variety of procedures and techniques selected largely on the basis of evidence of effectiveness and applied with people and situations where the evidence indicates that such application has a good chance of producing a successful outcome. Of course, it is not always possible to achieve this ideal with each and every problem/situation. But as an

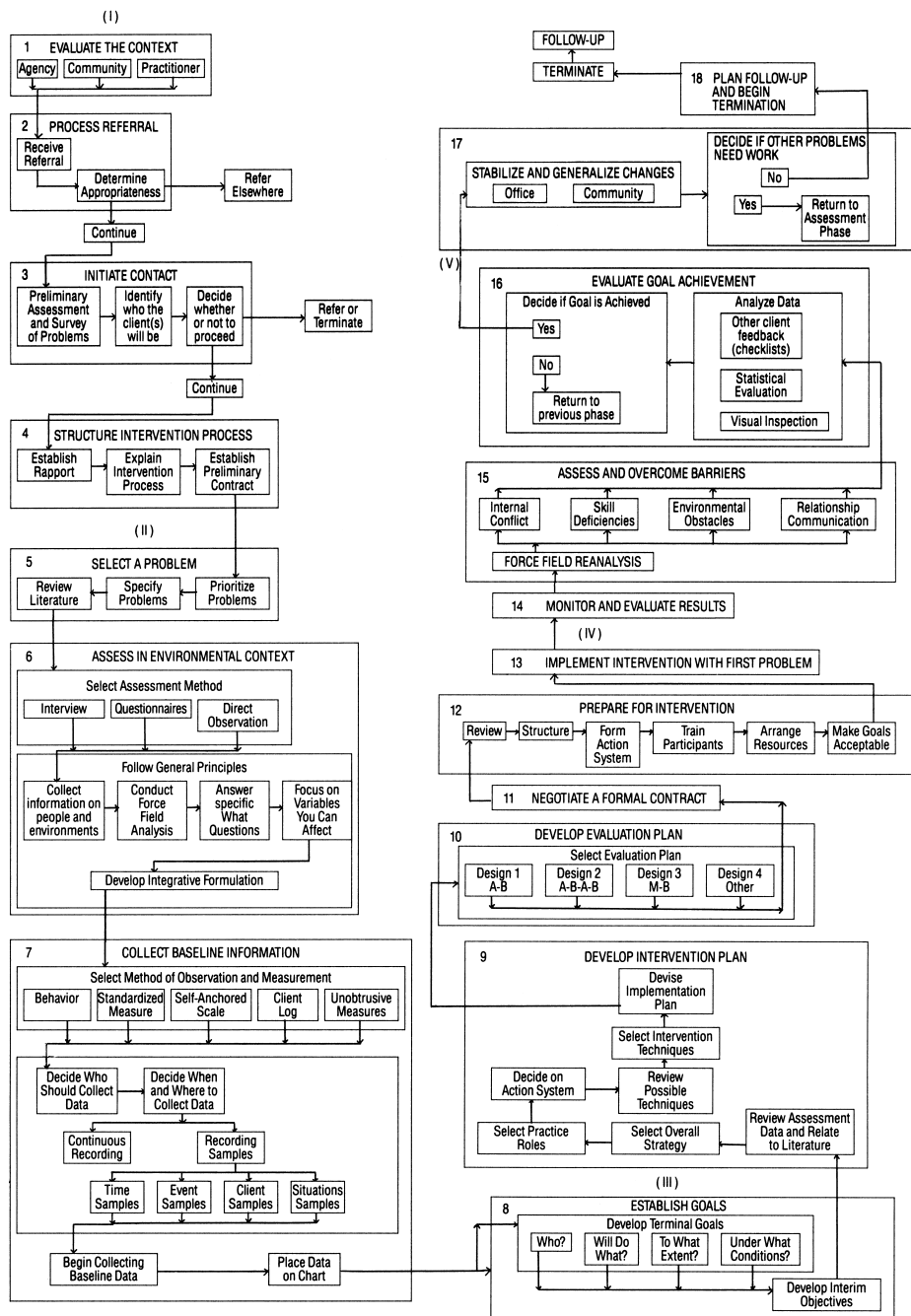


Fig. 21.1 The PRAISES model: Integrating Evaluation-Informed and Evidence-Based Practice

organizing principle of evidence-based practice, it seems like a worthwhile goal to shoot for. More concretely, this framework is intended to apply whatever the theoretical orientation, methods, or approach of the user are.

4. *Systematic.* This framework is an attempt to systematize practice. This means clearly identifying the various phases of practice and organizing them in a step-by-step sequence. In fact, one of the most important characteristics of practice is being systematic: in how goals are defined, in how intervention techniques are selected, in how outcome is monitored, and so on. It also appears to make sense to try to organize the diverse activities of practice into a logical sequence that runs from initial contact to termination and follow-up.

Although we describe the process of practice in the flowchart as a sequence of steps within phases, we do not intend to prescribe a rigid, lock-step approach to practice. For example, depending on the problem or situation, the length of time for any step could vary considerably, the steps could overlap, or a particular step might even not occur at all. Indeed, despite the fact that a number of steps are described, the essence of professional practice using this framework must be flexibility: That is, selecting what is done on the basis of a specific client/problem/situation configuration. This attempt to organize that process is intended to bring some order and structure into the subtleties and contradictions of real-life practice. Importantly, this framework has been found to be a very useful device for newer practitioners, providing them with an anchor as they learn how to engage in evidence-based practice.

5. *Accountable.* This framework is an attempt to add to our professional accountability as practitioners. It brings the entire process of practice out into the open for scrutiny by others. It points out and builds into practice the necessity for carefully evaluating results with every case, and this is the very *heart* of accountability.

6. *Way of Thinking.* The PRAISES Model is intended, perhaps more than anything else, to illustrate and enhance a way of thinking about practice: systematic, data-based, outcome-oriented, structured, flexible depending on the needs of the client, evidence-based, informed by ongoing evaluation, and up-to-date with the relevant literature. All of this is grounded in the ethics and values—the scientific humanism—that underlie the philosophy and practices of the helping professions.

The PRAISES Model is comprised of five major phases and eighteen steps, each of which is divided into component parts. The term PRAISES is an acronym for the five phases. Following is a summary of the phases, and the eighteen steps.

PHASE I. *Pre-Intervention*

1. Evaluate the context
2. Process the referral
3. Initiate contact
4. Structure

PHASE II. Assessment

5. Select problem
6. Conduct assessment
7. Collect baseline information
8. Establish goals

PHASE III. Intervention

9. Develop intervention plan
10. Develop evaluation plan
11. Negotiate contract
12. Prepare for intervention
13. Implement intervention

PHASE IV. Systematic Evaluation

14. Monitor and evaluate results
15. Assess and overcome barriers
16. Evaluate goal achievement

PHASE V. Stabilize

17. Stabilize and generalize changes
18. Plan and implement termination and follow-up

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