Chapter 1
Introduction and Overview

Evidence-based practice [EBP] is a major influence on medical and mental health practice, research, and policy. In less than 25 years, it has become a central part of clinical training, research, and practice in all the mental health professions. Some authors have called it a "paradigm shift" in practice (Edmond, Megivern, Williams, Richman, & Howard, 2006; Pollio, 2015). EBP is also quite prominent in the social work professional literature. Several new journals have been started to share knowledge about EBP, including one in social work focused exclusively on evidence-based social work practice. The Council on Social Work Education, which accredits all BSW and MSW programs in the United States, has required education on "research-informed practice and practice-informed research" in both its 2008 and 2015 Educational Policy and Accreditation Standards.

Despite this growing influence and expansion of EBP, there is continuing confusion across professions about just what EBP is and how best to implement it (Carter Mastro, Vose, Rivera & Larson, 2017; Drisko, 2017; Grady et al., 2018; Wike et al., in press). In fact, Rubin and Parrish (2007) found a wide range of views about the nature and practice of EBP in a national survey of social work faculty. In national surveys of practitioners, both Grady et al. (2018) and Simmons (2013) found that a large majority of social workers understood EBP as providing treatments that had agency or payer approval, which is quite different than the actual definition of EBP. Terminology, emphasis, and application in practice vary from author to author, practitioner to practitioner, and researcher to researcher, leaving many social workers at a loss regarding how to define and ultimately practice using the principles of EBP. EBP is a complex social movement with several important dimensions. To begin this book, let's start with some definitions and some background to set the stage for a more detailed exploration of EBP in clinical social work.

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What Is Evidence-Based Practice?

Greenhalgh (2010) offers one quite technical definition of evidence-based medicine (EBM) as “the use of mathematical estimates of the risk of benefit and harm, derived from high quality research on population samples, to inform clinical decision-making in the diagnosis, investigation, and management of individual patients” (p. 1). That is, a key feature of EBM and EBP is the use of research results drawn from entire populations to guide service planning for individuals. It is the application of large-scale research results in everyday clinical practice. This definition connects EBM and EBP to its origins and emphasizes research results. But it leaves undefined just how to make the best use of these research results in clinical practice. This book will address both what EBP is and how it influences the work and education of clinical social workers.

EBP has had such a profound impact on the medical and mental health professions that it is can also be viewed as a social and economic movement: an effort by a group of people to make a social or economic change. The extent of this social movement is so widespread that both the definition of EBP and its application can become confusing. Shlonsky and Gibbs (2004, p. 137) correctly pointed out that “EBP is in danger of becoming a catchphrase for anything that is done with clients that can somehow be linked to an empirical study….” First and foremost, as used in clinical social work circles, *EBP refers to a practice decision-making process.* The goal here is to include the integration of the “best research evidence” in everyday client services (Sackett, Strauss, Richardson, Rosenberg, Haynes, 2000, p. x). Second, in addition to the core practice decision-making process, EBP is also used to specify methods and objectives for research studies. In this second instance, the goal is to set standards for the kinds of evidence considered good enough for application in the practice decision-making process. Third, EBP is used in policy and administratively to require the use of specific treatments by clinicians based on the quality of the research evidence that supports their benefit to clients. In this third instance, the administrative goal is both to reduce costs and promote quality care. Beyond issues of just what constitutes “good enough” evidence, and how to make the best use of research evidence in clinical practice, the client’s role in treatment planning and issues of professional autonomy and professional standards are also raised in EBP discussions. Understanding EBP in its many applications can be confusing. To begin, let us look at how EBM and EBP originated. This will clarify the core features of EBP and provide definitions for further exploration.

The Foundations and History of EBP

Some scholars locate the origins of evidence-based medicine (EBM) and EBP in the very early efforts of physicians to identify the specific symptoms of medical disorders. Indeed, Park argues that the work of Persian healer Avicenna (Ibn Sinã) introduced the ideas of quantification and experimentation into medicine as early as 1025. Later, in France and England in the 1700s, physicians observed and counted numbers of patients with specific symptoms. Compiling data across many patients, these physicians began to reliably link clusters of symptoms with distinct medical disorders. By using such observational research, the characteristics of certain medical disorders were empirically identified. These early European efforts allowed for more accurate diagnosis of disorders and began what is today the science of epidemiology. Being able to diagnose disorders accurately was a pivotal conceptual and empirical step in providing more specific and effective treatments. Indeed, accurately identifying the problem to be treated is vital to today's EBP clinical practice decision-making process.

What is now called EBM and EBP today is grounded in the pioneering work of Scottish physician Archibald Cochrane. His life story clearly illustrates why having some knowledge of what works to treat specific disorders is so important for practice. Dr. Cochrane volunteered to fight in the Spanish Civil War and later served as a captain in the British army in Crete during World War II. He was captured and became a prisoner of war in 1941. Cochrane became the medical officer in charge of prisoners in Hildburghausen, Elsterhorst, and Wittenberg an der Elbe prisoner of war camps in Germany. He provided services to large numbers of Allied prisoners living in very difficult and traumatic conditions. Cochrane (1972, p. 5) writes of a clinical question about tuberculosis that illustrates his interest in distinguishing treatments that help from those that may injure:

> At Elsterhost all the POWs with tuberculosis (most of whom were far advanced) of all nationalities, were herded together behind the wire. Conditions were in many ways not too bad. Through Red Cross parcels we had sufficient food; we were able to "screen" patients and do sputum "smears" but radiographs [X-rays] were very limited. We could give our patients bed rest, pneumothorax, and pneumoperitoneum...
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> ...I had considerable freedom of clinical choice of therapy: my trouble was that I did not know which [therapy] to use and when. I would gladly have sacrificed my freedom for a little knowledge. I had never heard then of "randomised controlled trials," but I knew there was no real evidence that anything we had to offer had any effect on tuberculosis, and I was afraid that I shortened the lives of some of my friends by unnecessary intervention…

Not knowing what treatments "work" made selecting treatments almost an arbitrary process. All professionals seek to use their knowledge and practice wisdom to help their clients improve and grow. Including research knowledge as routine part of clinical practice should improve results for individual clients. It also helps clinicians be more confident in their own decision-making and practice actions.

While Cochrane strongly advocated for the use of the scientific knowledge in making treatment choices, he was also a practitioner with empathy and a heart. Cochrane describes another case showing how important both human caring and accurate diagnosis can be:

> Another event at Elsterhorst had a marked effect on me. The Germans dumped a young Soviet prisoner in my ward late one night. The ward was full, so I put him in my room as he was moribund [near death] and screaming and I did not want to wake the ward. I examined him.

> He had obvious gross bilateral cavitation and a severe pleural rub. I thought the latter was the cause of the pain and the screaming. I had no morphia, just aspirin, which had no effect.
>
> I felt desperate. I knew very little Russian then and there was no one in the ward who did. I finally instinctively sat down on the bed and took him in my arms, and the screaming stopped almost at once. He died peacefully in my arms a few hours later. It was not the pleurisy that caused the screaming but loneliness. It was a wonderful education about the care of the dying. I was ashamed of my misdiagnosis and kept the story secret. (Cochrane with Blythe, 1989, p. 82)

Clinical expertise must always guide good clinical practice. Understanding the client fully and accurately is not replaced or given low priority in current practice models of EBM and EBP.

In 1972 Dr. Cochrane, who became a distinguished professor of Tuberculosis and Chest Diseases in Wales, published an influential book that started the contemporary evidence-based approach in medicine. His book *Effectiveness and Efficiency: Random Reflections on Health Services* argued for the use of experimentally based research in both clinical practice and in policy making. Cochrane argued that because health-care resources would always be limited, they should be used to provide those treatments and services which had been shown to be effective through rigorously designed research. He promoted the use of research results to distinguish (1) treatments that are effective, from (2) treatments that are harmful and ineffective and from (3) treatments that are benign but ineffective. He heavily emphasized the importance of drawing evidence from experimental studies also called randomized controlled trials (RCTs) because these provide compelling information about the causes of changes made by treatments. A central idea of the EBP process, namely, the integration of the best available research knowledge to help decide what treatment is likely to be the most effective, was introduced. Knowledge based on experimental research or RCTs was also clearly prioritized.

Cochrane's writing points out the significance of accurate and thorough assessment, coupled with the clinician's attention to realistically available resources, and using the best available research knowledge. Note that several different types of professional expertise are combined with the knowledge provided by quality research. Current approaches to EBP still draw on these core ideas, but add to them actively engaging with, and actively collaborating with, clients to include their views and their willingness to participate in a proposed treatment plan. Current approaches to EBM/EBP also heavily emphasize clinical expertise as combining and integrating all these components of assessment and treatment.

The Overall Goals of EBP

Cochrane (1972) sought (1) to increase the number of truly helpful treatments, (2) to reduce the use of harmless treatments that did not help the target disorder, and (3) to eliminate harmful treatments that did not lead to improvement but caused other harm. This overall goal remains a fundamental macro- or policy-level focus of EBP and EBM today. The goal of reducing harm may seem more applicable to medical practice than to clinical social work practice. Yet there are costs (harms) in the effort, expense, and time taken by ineffective and potentially harmful treatments. Further, in some circumstances, risk of death and bodily harm are real issues for mental health patients. Where clients are asked to undertake treatments that may exacerbate risk (such as risk of suicide for people who improve from severe depressions), the same concerns apply to clinical social work practice. For all health and mental health professionals, reducing harmful treatments, and increasing helpful treatments, remains a very appropriate and critical goal.

Cochrane thought that EBM/EBP should lead *both* to improved outcomes for individual clients and more efficient use of available monies, resources, and services. That is, the EBP model should allow for more efficient and effective use of health-care resources at the policy level while leading to the most effective treatment options for individual clients. Gains in both improved client outcomes and in making optimal use of health-care resources result.

Of course, these gains should appear in the aggregate, but evidence-based policy decisions may not automatically improve services for any given individual. In the United States, some policy-level decisions may exclude certain patients from coverage and specific types of treatment, differentiating policy- and patient-level results. Such difficult policy and economic choices have also been made in other Western countries. Because EBP has both micro- or client-level application and macro- or policy-level implications, it is always important to be clear about how EBP is being viewed in any given article or report.

Defining the EBM/EBP Practice Decision-Making Process

While we have emphasized the impact of Dr. Archie Cochrane in originally promoting the concepts behind EBM, many authors credit other, more contemporary, physicians as the originators of EBM and EBP. Indeed, the "McMaster Group" (1981), led by Dr. David Sackett, promoted the incorporation of research knowledge into medical practice in the 1980s. Another member of the McMaster group, Dr. Gordon Guyatt (Guyatt, Rennie, Meade, & Cook, 2008, p. xx), states that the first published use of the term "evidence-based medicine" was in an article of his in 1991. The McMaster Group promoted and systematized the process of EBM in a series of articles published in the 1990s. These Canadian physicians advocated for the EBM practice decision-making process that gave form to Cochrane's pioneering ideas. Their work made EBM an international social movement.

Sackett, Rosenberg, Muir Gray, Haynes, and Richardson (1996) offered an early and still widely cited definition of EBM:

> Evidence based medicine is the conscientious, explicit, and judicious use of current best evidence in making decisions about the care of individual patients. The practice of evidence based medicine means integrating individual clinical expertise with the best available external clinical evidence from systematic research. (pp. 71–72)

Following Cochrane, their initial emphasis was on actively including research knowledge in the practice decision-making process. Some social workers “remain loyal to the definition and intention of the term as conceive by its originators” (Soydan & Palinkas, 2014, p. 1). While including research knowledge in practice, decision-making *is* the defining feature of EBM and EBP, and a great strength, its everyday application, has proved neither simple nor straightforward. Practice requires balancing research results with the values, preferences, and situational factors impacting each unique client and the expertise of the clinician.

Indeed, this early definition of EBM had some serious limitations when applied to real-world clinical practice. Haynes, Devereaux, and Guyatt (2002, p. 38) note that the early definitions of EBM and EBP “de-emphasized traditional determinants of clinical decisions” and “overstated the role of research in clinical decision making.” They do not mean to imply that research knowledge is unimportant, only that *it is one part of several* that shape practice decision-making. To make EBP more useful in practice, current definitions are simpler and more balanced: emphasizing that “research alone is not an adequate guide to action” (Haynes et al., 2002, p. 38).

The current definition by the same group of Canadian physicians is that EBM is “the integration of best research evidence with clinical expertise and patient values” (Sackett et al., 2000, p. x). Here research findings are one part of a multi-part process that also includes the client’s current clinical circumstances and the client’s personal preferences and views, all weighed and integrated through professional clinical expertise. No one part has priority over the others.

This contemporary definition has also been applied in social work definitions of EBP by Rubin and Bellamy (2012), Gibbs and Gambrill (2002), the National Association of Social Workers [NASW] (n.d.), as well as Mullen and Shlonsky (2004) and in numerous published articles. NASW (n.d., para 5) states that “EBP is a process in which the practitioner combines well-researched interventions with clinical experience, ethics, client preferences, and culture to guide and inform the delivery of treatments and services.” Rubin and Bellamy (2012, p. 7) state that “EBP is a process for making practice decisions in which practitioners integrate the best research evidence available with their professional expertise and with client attributes, values, preferences and circumstances.” This more inclusive definition of the EBP practice decision-making process will be used throughout this book. Yet, as we will see, EBP may be defined differently for purposes other than practice decision-making. These different perspectives on EBP may not involve such balanced consideration of research knowledge with professional expertise and client preferences.

What Makes Up the EBM/EBP Practice Decision-Making Model?

Haynes et al. (2002) state that the contemporary EBP practice decision-making model has four parts. These are (1) the current clinical circumstances of the client, (2) the best relevant research evidence, (3) the client’s values and preferences, and

Fig. 1.1 The four components of the evidence-based practice model (Adapted from Haynes et al. 2002)

(4) the clinical expertise of the professional clinician. They emphasize that the professional expertise of the clinician is the "glue" that combines and integrates all the elements of the EBP process. Clinical expertise is the cement that holds the other parts of the model together. Note, too, that the client has ongoing, active input into the clinical decision-making process. (Would we really expect a client to engage in a treatment plan they thought was irrelevant or offensive to their values?) Research evidence is indeed one key ingredient, but it is not privileged over other factors. Clinical practice decision-making is an active, multidimensional process. Figure 1.1 graphically illustrates the four parts of EBP and how clinical expertise is the overarching and integrating component of the model.

Gilgun (2005) states that just what is meant by patient values has neither been well conceptualized nor well examined in current EBP models. This is an area of great interest to social workers that deserves further study. Religious and cultural values, individual beliefs and concerns, and personal principles and attitudes would all appear to be aspects of client values. In addition, past experiences with health-care providers and systems, as well as other people with power and authority, may shape client preferences and actions. Socially structured differences and oppression may profoundly influence and individual's comfort, use, trust, and openness in health and mental health-care delivery. Immigrants and others may simply be unfamiliar with Western models of mental health care. All these factors may impact on a client's decision to seek, to stick with, and to actively participate in mental health services.

Clinical expertise "encompasses a number of competencies that promote positive therapeutic outcomes" (American Psychological Association, 2006, p. 276). All graduate-level clinical practitioners should possess these basic professional competencies. These core competencies include the ability to conduct a clinical assessment, make diagnoses, systematically formulate cases, and develop treatment plans, each with a clear rationale and justification. They also include the ability to implement treatments, to monitor progress, and to evaluate practice outcomes. Clinical expertise has a strong interpersonal component, requiring that clinicians can form therapeutic alliances, self-reflect, and understand the impact of individual, cultural, and contextual differences on treatment (Huey, Tilley, Jones, & Smith, 2014). Such contextual differences also include practical and resource limitations that influence practice decision-making.

Despite this clear statement, Gilgun (2005) argues that clinical expertise warrants better conceptualization and further study. We may know what clinical expertise is, in general, but may lack knowledge of its important specific details.

Clinical expertise is required to assess the client's clinical state and circumstances. It is also required in facilitating the client's sharing of their preferences and values. Both processes may take place in stressful circumstances and under time pressure. Both clinical and research expertise is needed to find, appraise, and link research evidence with the client's particular circumstances. EBP, as a practice decision-making process, is made up of several components. It is important that clinical social workers have a clear understanding of EBP *as a practice decision-making process*.

Not only are there several definitions of EBM and EBP in print, there are also other efforts to link research and clinical practice. As we discuss next, these efforts are not quite the same as EBP but may share a focus on integrating research results into practice and policy. These similar but distinct approaches, and their terminology, often appear when clinicians apply the EBP model in practice. It is important to distinguish EBP from other uses of research evidence to inform practice and policy.

How the EBP Practice Decision-Making Process Differs from "Empirically Supported Treatments" and "Best Practices"

Clinicians may read about "research supported treatments" [RSTs], "empirically supported treatments" [ESTs], or "evidence-based interventions" [EBIs] or "best practices." These have some aims in common with EBP but focus on *treatments models* and their supporting evidence. They are not directly about *how* to include research knowledge in practice but rather they address what research support exists in the literature regarding different treatments. Unfortunately, these terms have varying definitions and sometimes apply a very different logic. For example, "research supported treatments," "empirically supported treatments," or "evidence-based treatments" are *usually* based on ideas from the Division 12 (Clinical Psychology) of the American Psychological Association [APA]. This APA task force argued that treatments can be rated based on the quality and extent of their research support. Specifically, treatments supported by two or more carefully completed experiments, or ten or more single systems design studies, can be called "empirically supported treatments [ESTs] or "research supported treatments [RSTs]." They also required the use of a treatment manual and that persons other than the originator of the treatment under study complete some of the outcome research (Chambless & Hollon, 1998). When this model is applied, the *treatments* that demonstrate statistically significant improvement using these research methods may be called "RSTs" or "ESTs." Note that Truijens, Zühlke-van Hulzen, and Vanheule (2019) find that use of a treatment manual did not improve outcomes over treatments that were not manualized.

The emphasis in RSTs is on showing that specific *treatments* have demonstrated effectiveness. Note, however, that this terminology and model focus on rating specific treatments for specific populations or targeted issues, rather than on how to make decisions for treating a specific client. RSTs are helpful at the policy planning level or possibly as a starting point in making clinical decisions but are not based on the EBP practice decision-making model. “Empirically based interventions” (ESIs) usually apply a similar approach to rating programs or specific interventions. Unfortunately, the terminology is applied inconsistently and is not based on a single set of standards. The label “best practices” is sometimes applied to treatments or interventions using the RST approach and criteria, but it is also used inconsistently in the literature and lacks a single consensus definition. The terminology can be confusing, so a clear understanding of what EBP is and, is not, can be a valuable guide. Critical thinking is vital to doing EBP well.

EBP in Social Work

In social work, EBP arose as the single-case evaluation effort declined in prominence. In the 1980s and early 1990s, many social workers advocated the use of single subject or single system research designs to evaluate and document the outcome of social work practice efforts and improve accountability. This movement was called the “Empirically Based Practice” movement although its focus and methods were quite different from today’s EBP (Okpych & Yu, 2014). The goal of this effort was to improve clinician and agency accountability (Campbell, 1992). Specifically, empirically based practice sought to demonstrate that social work services were effective on a case-by-case basis (Kazi & Wilson, 1996; Sheldon, 1983). Monitoring and evaluation should always be part of good clinical practice, yet the single-case study approach contrasts with EBM and EBP models that focus instead on large-scale, population-level, research results.

Although single-case practice evaluation is a useful method, the limitation of the effort was that single-case research designs do not always show conclusively that the treatment or program *caused* any benefit or harm that occurred (Kazdin, 2010, 2016). Single-subject evaluation can document whether or not a client has improved, but a single application cannot generally demonstrate that the treatment, rather than other factors, caused this change. Importantly for the profession, the empirically based practice effort of the 1980s affirmed that evaluation is a key part of professional practice. It also supported the need for social workers to use several different qualitative and quantitative evaluation methods.

As EBM gained prominence in the late 1990s, social work began to adopt the contemporary EBP model as a more rigorous way to guide treatment decision-making before treatment starts. Single-case evaluation is still an extremely valuable method for monitoring and evaluating treatment impact on a specific case. In the twenty-first century, the older empirically based practice movement, focusing solely on single-case evaluation, was replaced in prominence by EBP, and a new emphasis on using large-scale, population-based research results. In practice, EBP focuses on using research to inform the selection of assessments and/or treatments before they are started; the single-case evaluation movement instead focused on assessing individual client improvement. Yet some social work researchers now argue for combining EBP with single-case evaluation measures (Gibbs, 2002).

The shift toward incorporating EBP into social work practice become still more evident when in 2001 the Council on Social Work Education [CSWE] accreditation standards required content on “empirically based knowledge, including evidence-based interventions” be taught and assessed in all accredited BSW and MSW programs. In both its 2008 and 2015 accreditation standards, CSWE required that “research-informed practice” and “practice-informed research” must both be taught in conjunction with critical thinking and clear attention to diverse client views. This slightly different from “evidence-based practice” language was used to allow social work programs some flexibility in how they characterize and implement content on including research in treatment decision-making. One approach programs may use will be to focus on EBP, but this is not the only way programs can meet this educational accreditation standard. Since an accredited degree is crucial to obtaining licensure to practice, clinical social workers matriculating from accredited programs should be knowledgeable about the intersection of research and practice. This foundation includes valuable knowledge, values, and skills for contemporary clinical social work practice.

Today’s emphasis on EBP often makes clinical social workers question if there was any research evidence that their efforts were beneficial in prior years. The answer is that there is an extensive research foundation for clinical practice in social work and in the allied mental health fields. It has been developed over more than 100 years. This research base takes many different forms and asks a wider range of questions than does the EBP model. What EBP brings is a specific focus on population-based research using experimental methods.

Wasn’t There Any Previous Evidence that Treatments Worked?

Clinical social work practitioners have many questions about their clients and their practice efforts. Are the assessment methods we use accurate? Do they address both psychological and social needs? How can we individualize treatments to best meet the needs, identities, values, and “style” of each client? What are the markers of progress toward larger outcomes we can use to guide our efforts? Do clients make meaningful change? Do these changes last? Do some people get worse even with treatment? How can we better help people who drop out or never really engage? Overall, mental health practitioners are curious people who ask many questions, who can tolerate partial answers and ambiguity, and who use many types of evidence to answer these complex questions in changing circumstances. Practitioners want to know about a variety of complex issues.

Over the past 25 years, calls for greater professional accountability, concerns about rising health-care costs, and efforts to improve treatment outcomes have all come together to force mental health professionals to better demonstrate that what they do "works." In 1999 the US Surgeon General David Satcher published a comprehensive review of mental health concerns and treatments. The report was based on a review of "more than 3,000 research articles and other materials, including first-person accounts from individuals who have experienced mental disorders" (US Department of Health and Human Services, 1999). The report clearly stated that mental health is a fundamental part of overall health and that mental health disorders are "real" and significant health issues. This careful review of research supported two major findings: (1) that the "efficacy of mental health treatments is well documented" and (2) "that a range of treatments exists for most mental disorders" (Abstract). From these key findings, "the single, explicit recommendation of the report is to seek help if you have a mental health problem or think you have symptoms of a mental disorder" (Chap. 8). The US government, after an extensive professional review, found strong research support for the effectiveness of mental health treatments and encouraged their use.

That mental health services are generally effective was not a new finding in 1999. Since the 1930s many research studies have demonstrated that psychotherapy is generally effective across theoretical orientations and intervention techniques (Bergin & Garfield, 1971, 1978, 1986, 1994; Chorpita et al., 2011; Lambert, 2004; Wampold, 2001, 2010). Of course, this does not mean that all treatments "work," or work for a specific client or that there are no harmful, or unethical, or culturally insensitive interventions. Yet there is a massive body of evidence, based on multiple research methods, that indicates psychotherapy works (American Psychological Association, 2013; Huey et al., 2014).

In the 1970s a research technique called meta-analysis was developed to aggregate and compare the experimental outcomes of different therapies for a single disorder such as depression or anxiety. (We will explore meta-analysis in depth in Chap. 8.) A growing number of meta-analyses demonstrate that, in general, the effects of therapy are as good, or better, than is found for most medical procedures (Wampold, 2001, 2010). This is especially impressive when one considers that the outcomes of therapy and mental health services address not only specific symptoms but also intrapersonal quality of life, personal identities, interpersonal functioning, and engagement in community social roles and in school or job performance. Further, psychotherapy produces enduring outcomes that are likely to continue after the end of formal treatment (Grant, Huh, Perivoliotis, Solar, & Beck, 2012; Lambert & Ogles, 2004). Mental health services may be costly to provide, but they have also been found to reduce both medical and hospital costs in some cases (Miller & Hendrie, 2008; The President's New Freedom Commission on Mental Health, 2003).

While the Surgeon General and the US Department of Health and Human Services were studying mental health services, EBP emerged as a growing influence on mental health practice and policy. Since the late 1990s, discussion of the delivery of mental health services has become strongly linked to EBP, with almost all public and private payers advocating for its implementation. Indeed, the rise in influence of EBP has occurred hand in hand with important efforts to reduce health and mental health-care costs while maintaining or improving service quality.

To look in detail at how EBP is linked to research, clinical practice, and policy, a recent example may be informative. The complex interplay of the quality of research methods, applications to practice, and policy issues are reflected in a very public discussion about how to treat depression.

An Example: Is Medication Useful for Treating Depression?

A series of articles and letters illustrate several issues about evidence-based practice and doing clinical practice in the era of EBP-managed care. Specifically, a meta-analytic summary of studies on depression was published in a prestigious medical journal (Fournier et al., 2010). The authors are well-qualified mental health professionals from several high-profile medical research centers. They aggregated the results of several large-scale, high-quality, experimental studies on depression. Their work largely conformed to the standards of EBM and EBP research. Their article reported that medications are not helpful for treating depression unless one is severely depressed. For mild to moderate depression, study results show medication is no more effective than is psychotherapy, placebo, or the passage of time. This was a very controversial finding.

In heated response, a newspaper column questioned the new study's methods and findings and further claimed that it included too few studies and too few medications to draw such a firm conclusion (Friedman, January 11, 2010). The author of this newspaper column is a well-qualified professor of psychiatry from another high-profile medical center. The column's author also stated that the real test of an effective antidepressant is not just that it relieves symptoms but that it should keep depression from returning. Later reoccurrence of depression is known to become more likely with each depressive episode, but this was not a measure of outcome in the original summary article. This summary of evidence, the critics claimed, both lacked rigor and did not target some issues important to patients.

Other letters expanded on these themes, with another psychiatrist (who was the past president of a psychiatric organization) noting that depression responds to psychotherapy and always warrants a thorough diagnostic assessment (Freedman, January 11, 2010). Another letter from a prominent psychiatrist and researcher stated that mild to moderate depressions were often not diagnosed or treated and again noted that psychotherapy was often underutilized by general practitioners who more commonly treated all severities of depression with medications (Price, January 11, 2010). Yet another letter from a psychologist (and former president of a state psychological association) noted that this exchange of views pitted "competent researchers against clinicians" (Brush, January 11, 2010). He added that "the best clinicians practice flexibility in approach, depending on the needs of their patients."

This set of exchanges among professionals shows that many points of view exist regarding how to include research in clinical practice. Simple conclusions about best practices must be viewed critically as partial or tentative. The ongoing issues include: Does useful evidence exist on the topic I need to know about? Does the research address the specific kinds of outcomes I and my client seek? Is the research comprehensive and valid? Were the study participants like my client in terms of age, gender, race and other social identities? Does the research point to a single best treatment? Are other treatments available which were not fully studied but which may be helpful to my client? How does my client understand the best treatments reported in the literature? Are there cultural or practical factors that may make this treatment a poor fit for this client in this situation? Are these practices ethical? Can I deliver this treatment or are there other nearby services that can provide it? Are there any ethical issues in working with managed care payers? EBP has many dimensions, and, while a very helpful part of practice, it does not replace careful and ethical practitioner decision-making.

Behind the "evidence" are differences in perspective about the quality and comprehensiveness of research on treatment outcomes and differences on approaches to practice (Goodheart, Kazdin, & Sternberg, 2006; Mace, Moorey, & Roberts, 2001; Petr, 2009; Trinder, 2000). Legitimate and long-standing differences exist on the quality of available research and the methods by which summary conclusions are drawn. Further, some scholars note that the "active ingredients" of many treatments are unknown or not well specified or that some treatments do not actually qualify as legitimate psychological interventions (Wampold, 2010). It may be that simple summaries of treatments omit attention to vital factors that help make the treatments "work" or not.

Still, some authors claim that using any treatment lacking a strong evidence base is unethical, a form of malpractice (Myers & Thyer, 1997). Yet it may also be unethical or inappropriate to use treatments found effective for majority populations on people of different cultural backgrounds or values (Zayas, Drake, & Jonson-Reid, 2011). Unique clients come with multiple needs and offer imperfect information (Morales & Norcross, 2010). The complexity and ambiguity of real-world mental health cases do not always allow for simple answers. Client values, preferences, and actions vary widely. Professional expertise and critical thinking are always required when doing EBP.

On the political front, there is an "image management" issue as researchers are represented as knowledgeable and competent, having clear-cut answers contrasted with practitioners who are represented as uncertain or imprecise and therefore incompetent. Public perceptions may be actively shaped and manipulated as a part of the health-care debate. Yet to frame professional mental health practitioners as incompetent in contrast to knowing researchers is a false and unhelpful dichotomy. EBP is a key part of the health-care industry where administrative control and cost management matter along with quality care. But to devalue practitioners may only undercut public perceptions of health-care professionals and may perhaps reduce service utilization by people in need. Accessible, high-quality care must be an overall goal for mental health researchers and providers alike. Fewer labels and accusations, and more engaged discussion, are a more appropriate course for professionals to undertake.

EBP: A Movement in Crisis?

Greenhalgh, Howick, and Maskrey (2014) point out that the EBM/EBP movement has had several unintended consequences. First, they argue that the "evidence-based" "quality mark" has been misappropriated and distorted by vested interests (p. 2). That is, the economic influence of drug and medical device manufacturers has led to the expansion of "disease" to include baldness and other limited risks as they set the EBM/EBP research agenda. The influence of these economic powers is also coupled with unusual or "surrogate" measures of disease in tests of treatment outcomes that may not be the best or most realistic measures of effectiveness (p. 2). Second, they point out that statistically significant results may not necessarily link to noticeable clinical improvement. In large populations, small differences may prove to be statistically significant, but client-level improvement may not necessarily follow. For example, lung cancer screening is recommended for older people who have been long-term smokers, even if they have quit for several years. Screening is correctly advertised to reduce lung cancer deaths by 20%. But these people have a 98% chance of living for the next 7 years without screening: 20 of 1000 will die from lung cancer. With screening, a person has a 98.4% chance of living for the next 7 years: 16 out of 1000 unscreened individuals will die from lung cancer. (A calculator for specific risk results by age, gender, and years of smoking is found at http://nomograms.mskcc.org/Lung/Screening.aspx.) This is indeed a 20% improvement but a very small change in terms of the total number of people positively affected. Here we see that statistically significant results do not always translate into meaningful changes in outcomes for specific individuals.

Third, Greenhalgh et al. (2014) note that there has been a flood treatment "guideline" based on research evidence. They argue that the volume of available research evidence has become unmanageable. They cite Allen and Harkins' (2005) study of one hospital's daily intakes, covering 18 patients with 44 diagnoses and 3679 pages of national guidelines (an estimated 122 hours of reading) relevant to their immediate care. Doing EBM/EBP can present a crushing time burden. Fourth, Greenhalgh et al. (2014) point out that treatment rules and guidelines "poorly map" to the complexity of comorbid and multi-morbid client conditions. That is, guidelines may be very useful for a single, clearly defined, health concern but often fail to provide guidance for the multiple, simultaneous, client concerns frequent in clinical practice. Fifth and finally, they note that "inflexible rules and technology driven prompts may produce care that is management driven rather than patient centered" (p. 2). Economic interests and practice guidelines may interfere with informed, client-based decision-making. As a result, these authors advocate "for a return to the movement's founding principles–to individualise evidence and share decisions through meaningful conversations in the context of a humanistic and professional clinician-patient relationship" (p. 5).

In social work, still another serious limitation of the available EBP research hampers practice. Contemporary outcome research on psychotherapy and social services has not included sufficient numbers of people of color and other diverse groups to demonstrate differential effectiveness (Hamel et al., 2016). While large-scale studies often include minorities, there is a greater need for research results focusing specifically on diverse populations (Lee, Fitzpatrick, & Baik, 2013; Redwood & Gill, 2013). Further, many research summaries do not describe the populations from which the results were drawn beyond sample sizes and sometimes percentages of males and females. This lack of detail about social identity and social supports potentially limits the relevance of outcome research for clinical practice with diverse populations. This limitation has been known for many years (Miranda, Nakamura, & Bernal, 2003) and has begun to be addressed by several professional organizations, but clinically useful results remain very limited (Morales & Norcross, 2010). EBP is a complex social movement with many assets but also with some serious developmental and implementation concerns.

Summary

EBP provides a model for integrating the results of population-level research into individual practice decision-making along with client values and preferences and clinical expertise. It seeks to improve positive outcomes and reduce harmful or ineffective treatments. It should help clinical social workers be more confident in their recommendations and for clients to have greater confidence in the intervention they are starting.

The contemporary EBP model emphasizes professional expertise as integrating knowledge of the clients' situation and needs with the best available research evidence as well as the client's values and preferences. The expertise of the clinician is also integrated into this process. Research evidence is one key part of the model, but not all there is to it. There are other efforts that seek to identify effective treatments that are like EBP but are not identical it. One of these efforts is the empirically supported treatment or research-supported treatment model developed in psychology. Other kinds of evaluation efforts focus on outcome evaluation for single clients rather than populations. Differences in terminology are very important but can be confusing.

Clinical social workers need to be knowledgeable about EBP, including understanding what it is and what it is not. In collaboration with their clients, they need to thoughtfully use the EBP process to plan for effective interventions. This process will involve including the client's values and preferences, as well as taking into account the client's social environment. Social work's person-in-environment perspective needs to be paired with carefully reading the literature to understand the terminology and key ideas applied by researchers, administrators, and policy planners. In doing so, clinical social workers must remain careful and critical consumers of articles and books on EBP, as well as on ESTs and RSTs.

From its foundations in the ideas of Dr. Archie Cochrane, EBM and EBP link research and practice at both policy and practice levels. Yet the information needs, and interests, of clients, clinical practitioners, researchers, and policy makers may not always be the same. We will examine three different perspectives on EBP in the next chapter.

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