What’s New About Evidence-Based Assessment?

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A clear consensus has emerged around the world concerning the desirability and even the urgency of basing health care delivery systems on evidence. Among behavioral health care providers such as psychologists, evidence-based practice (EBP) has been focused largely on interventions. Psychologists have long emphasized a scientifically based psychometric approach to the development of assessment procedures. Nevertheless, the era of evidence-based assessment highlights 2 somewhat different issues. First, sophisticated assessment is closely integrated with our emerging conceptions of psychopathology, rather than standing separate from these conceptions. Second, broad-based ongoing outcomes assessment systems are increasingly required for EBP on the part of governments and health care policymakers. This article summarizes these developments and looks to the future.

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Health care policymakers and governments around the world have decided that health care practices, including behavioral health care practices should be based on evidence. This idea has spawned the evidence-based practice (EBP) movement, which encompasses both assessment and interventions at all appropriate levels including prevention. To accomplish this goal, health care systems in their various strategic guises have expended considerable resources in time and money. The incontrovertible logic of basing health care interventions on the best evidence available would certainly account for the rapid and deep consensus that has developed among health care policymakers on this topic but begs the question, What took so long? In other words, why is more attention now given to providers’ accountability for the effectiveness and efficiency of health care practices?

Contributing Trends

It seems clear that in the past decade, several trends have come together to bring the idea of EBP to the “tipping point” (Gladwell, 2000) of being widely accepted and disseminated. First, our knowledge of the nature of various pathologies, both physical and psychological, has advanced rapidly in recent years. This has led in turn to the development of new and more precisely targeted interventions that directly address the problems at hand. Second, clinical research methodology by which we establish the effectiveness of certain interventions has developed over the past decade to the point at which various recognized threats to internal and external validity are reduced by sophisticated experimental designs, greatly improved data management procedures, and large, often multisite clinical trials that shed light on generalizability. These large clinical trials also reduce “allegiance” effects because numerous therapists with a variety of allegiances to certain theoretical approaches or specific techniques are usually involved. A major part of this improved methodology, of course, is increasingly careful and sophisticated measurement of various aspects of psychopathology, which is the topic of this special series. A third development contributing to EBP is perhaps the most important. Governments around the world, facing widely recognized inadequate health care and spiraling out-of-control costs, have made it clear to all stakeholders that it is in the public’s interest to ensure that the quality of health care improves and that health practices are evidence based (Barlow, 1996, 2004; National Institute of Medicine, 2001).

In the United States, several government agencies have taken up the clarion call for promoting EBP. The mission of the Agency for Healthcare, Research, and Quality is “to improve the quality, safety, efficiency, and effectiveness of health care for all Americans.” The principal recommendation of the final report of the President’s New Freedom Commission on Mental Health is that we “...advance evidence-based practices using dissemination and demonstration projects and create a public–private partnership to guide their implementation (and) improve and expand the workforce providing evidence-based mental health services and supports” (2003, page 25).

The National Committee for Quality Assurance is a private nonprofit organization that accredits health-care-providing organizations in the United States, with the goal of improving the quality of health care. Part of their mission is to set standards for more than 1,300 member companies, mostly health maintenance organizations, serving over 200 million Americans. These standards emphasize published and readily available best practice algorithms or clinical practice guidelines that involve not only recommended interventions that are usually arranged in a stepped-care algorithm but also usually implicit (but not explicit) assessment strategies to arrive at appropriate decisions on interventions for individual patients.

When the focus is on treatment, EBP is a new development that has impacted all health care professions including clinical psychology. However, focus on the quality of interventions has quite
naturally led to a greatly increased emphasis on evaluation of the effectiveness of services with an eye toward improving the outcomes of patients (Hayes, Barlow, & Nelson-Gray, 1999). With the demand for accountability increasing, particularly in public health domains, many organizations, particularly at the state level, are requiring uniform outcomes assessment to better evaluate publicly funded health care services. For example, the state of Massachusetts and its contracted provider for behavioral health have recently (in 2004) issued regulations requiring that all providers administer standardized broad-based outcomes assessments. Recognizing the burden this places on some practitioners, the state has offered to provide some reimbursement and training to facilitate these goals. Nevertheless, this effort has been controversial. Professional organizations in the state of Massachusetts have responded with a number of objections focusing on the quality of measurement, what is being measured, and “case mix” issues. Another objection is that the reimbursement is insufficient and the requirement amounts to an unfunded mandate that results in a drop in reimbursement rates. Of course, across all fields of health care, an unstated but fundamental issue is anxiety on the part of providers and clinics concerning the possibility of being “shown up” as providers of relatively inferior care. Thus, participation in broad-based outcomes assessment schemes is often contingent on anonymity, as eloquently described by Gawande (2004) in the context of care for cystic fibrosis in North America. Resistance by providers in response to these kinds of issues is common where these efforts have been introduced as all stakeholders struggle to overcome the barriers precluding a greater accountability through evidence-based assessment in the form of broad-based outcomes measures. This controversy also underscores the necessity of developing a more empirically grounded consensus on what needs to be assessed and how best to do it.

Before focusing specifically on the advances presented by evidence-based assessment strategies, we should examine some other contexts in which the EBP movement is more advanced. For example, most health care services in advanced nations operate under the single payer framework. In this regard, recent developments in psychological health care in the United Kingdom may provide a glimpse of future directions for psychological care delivery around the world, even in countries in which the organization of health care delivery is quite different, such as the United States.

Approximately 5,200 clinical psychologists work in the National Health Service (NHS) in the United Kingdom (British Psychological Society, 2004). The link between the NHS and the health care training programs from which new practitioners are recruited is very strong. For example, approximately 97% of new clinical psychologists take their first jobs in either the NHS or in affiliated clinical training programs that feed the NHS. As early as 1988, the government of the United Kingdom outlined a policy that reinforced the importance of ensuring high-quality evidence-based services for the population. In 1996, the NHS Executive Review listed a variety of psychological treatments appropriate for children and adults and reviewed evidence supporting these treatments (British Psychological Society, 2004). At that time, this group offered advice through commissioners, providers, employers, and trainers on the necessity of advancing the agenda to provide evidence-based psychological services. In 2001, the NHS developed an ambitious plan that was accompanied by an annual investment of over £3 million to achieve the goal of evidence-based practice. This was seen as including coordinated assessment and intervention in view of the demonstrated effectiveness of psychological treatments in clinical trials, and the growing evidence of the generalizability of these interventions to frontline clinical settings (Barlow, 2004; Barlow, Levitt, & Bufka, 1999). The NHS projected a sizable gap between supply and demand for psychologists in the near term. To address this issue, the British Psychological Society in collaboration with the Department of Health and the Home Office projected the extent of this gap and concluded that the gap would only increase, in view of the predictable numbers of clinical psychologists emerging from existing training programs (British Psychological Society, 2004). They recommended that the annual growth of clinical psychologists should be increased 15% each year over the near term and that compensation should also increase to better reflect new responsibilities assumed by psychologists as leaders in developing and administering these strategies.

The greatest emphasis to date, as alluded to earlier, has been on empirically supported treatments. Assessment strategies are, of course, an implicit part of any intervention strategy, particularly stepped-care strategies, in which periodic assessment of progress determines future treatment sequencing as in most clinical practice guidelines. Perhaps the most exemplary clinical practice guidelines are those put out by the National Institute for Clinical Excellence (NICE), a governmental agency in the United Kingdom that was created to advance EBP in the NHS. Glancing at the guideline recently issued by NICE for eating disorders (2004), which clearly represents the state of the art in these types of endeavors (see Wilson & Shafran, 2005), one can see that on the one hand, assessment is treated somewhat ambiguously in these guidelines. For example, careful assessment and monitoring of the constellations of behaviors comprising the various eating disorders are noted as being necessary to fine-tune treatment as well as to ascertain outcome. On the other hand, there is little guidance on just what this assessment and monitoring entails. Thus, the flurry of activity surrounding EBP in the United Kingdom is sure to highlight the somewhat slower process of developing specific guidelines for evidence-based assessment relative to empirically supported interventions.

Our initial questions were, What is new about evidence-based assessment, and why has it not received the same increased focus as empirically supported interventions? Certainly, psychologists, from whence most psychometrically sound assessment procedures emerge, have focused on data-based evaluation of assessment instruments for decades. Psychometric procedures for developing new questionnaires are well worked out, and even for strategies that might seem less subject to empirical evaluations such as projective tests, there is wide agreement on the importance of developing appropriate psychometric data (although vociferous disagreement is evident on the interpretation of those data (Wood, Nezworski, Garb & Lilienfeld, 2001; Exner, 2001). To answer this question, we must to examine closely the contents of the NICE clinical practice guidelines and the articles in this special series. For these efforts go beyond previous endeavors to develop psychometrically sound assessments of individual personality traits, skills, abilities, or isolated deficits in functioning. Rather these efforts are clearly and intimately tied up with more integrated current conceptions of psychopathology. Thus, I noted above that
one of the major developments contributing to the explosion of interest in EBP has been a deeper understanding of the nature of various pathologies that has led to the development of new and more precisely targeted interventions. Similarly, our assessment procedures, beginning with semistructured diagnostic interviews, have had to be adapted to be multifaceted methods of assessing the variety of disparate phenomena that are an integral part of certain psychopathological syndromes.

For example, Antony and Rowa in their article on anxiety disorders (2005, pp. 256–266 in this issue) identify a variety of different domains requiring attention, including situational cues and avoidance behavior, interoceptive cues, cognitive features, as well as other targets requiring assessment. These different domains may best be assessed in different ways including self-report, direct behavioral recordings, or even psychophysiological assessments. In addition, brief screening instruments to identify potential patients from among the population attending primary care clinics are extremely important, as are diagnostic tools and outcomes measurements that provide an overall picture of the current status of the disorder or pattern of psychopathology with which the patient presented. In their erudite discussion of depression, Joiner, Walker, Pettit, Perez, and Cukrowicz (2005, pp. 267–277 in this issue) mention the necessity of assessing melancholic features, anhedonia, depressed mood, suicidality, and, particularly important in mood disorders, course and chronicity. They note that any assessment of depression requires “intensive and somewhat complex procedures” (page 275). Similarly, Widiger and Samuel (2005, pp. 278–287 in this issue) present a sophisticated sequential and integrated strategy that goes beyond standard conceptions of personality disorders to consider cross-cutting features such as distortions of self-perception and presentation, and so forth. Finally, Snyder, Heyman, and Haynes (2005, pp. 288–307 in this issue) present a complex conceptual framework for couple-based assessment strategies covering a broad range of both individual and relationship characteristics including relationship behaviors, cognitions, and affect.

These are very new approaches to assessment that clearly go far beyond the more traditional strategy of simply administering a battery of standardized tests to individuals presenting for treatment without initial regard for presenting psychopathology (Butcher, Graham, Williams, & Ben-Porath, 1990). Although projective tests have obviously been administered in this way for decades, perhaps the prototypical example is the Minnesota Multiphasic Personality Inventory (MMPI; Butcher et al., 1990), which is designed and normed for general administration without initial consideration of presenting psychopathology. Furthermore, the MMPI is fully “empirical” in the generation of various profiles. Nevertheless, while the goal of the MMPI and similar standardized tests is obviously to identify patterns of psychopathology, these patterns are for the most part idiosyncratic to individual tests and have not been tied in a satisfactory way to either systems of nosology or to systematic treatment recommendations. Rather, this is left to the discretion of the individual clinician and therefore has varied widely. The assessment strategies presented in this series, on the other hand, are designed to be fully integrated with an in-depth consideration of presenting psychopathology, such as anxiety and mood disorders, that reflects our most advanced nosological knowledge. These strategies, in turn, are closely linked to existing treatment options with the expectation that progress will be monitored in each of the crucial domains to the point of outcome, which will then, once again, be placed in the context of dimensions of impairment. These strategies are based on our best evidence at this time of the nature of psychopathology, and there is the strong assumption (not yet fully validated but supported by evidence from other areas of health care) that this approach will facilitate an interactive process that will improve treatment outcome. For example, in the aforementioned description of care for cystic fibrosis, wide variability in outcome from clinic to clinic (grossly measured in survival curves in addition to more sophisticated monitoring of process) prompted individual clinics to forego promises of anonymity and identify the best clinics. Other clinics were then able to emulate their practices. This examination of the utility of assessment in the area of behavioral health care will be an important but time-consuming process and represents another novel and inevitable development of evidence-based assessment.

Ultimately, the assessment strategies that evolve from this empirically based process are likely to look very different from the comprehensive package of assessment instruments and strategies that have emerged from clinical research centers. In those centers, the emphasis is on detailed analysis of each of the important dimensions of psychopathology and their functional relationships. Often patients are brought to the point at which clinical scientists judge that the patients would be unable to fill out one more questionnaire or engage in one more assessment procedure. In front-line clinical settings, however, the focus on optimal assessment requires efficiency and cost-effectiveness. In these settings, we will be looking for the briefest, most feasible, and most user-friendly instrument or strategy with sufficient reliability and validity to get the job done.

Although important steps along these lines have already been taken for certain disorders, such as panic disorder (e.g., Shear et al., 1997), or for more general diagnostic screening and outcomes assessment (Kraus, Seligman & Jordan, in press), much work remains to be done.

Future Directions

Because these strategies are very closely tied to emerging conceptions of psychopathology and treatment, it is likely that in 5 years, a similar set of articles will propose different recommendations. To take one example, there is considerable overlap among the various anxiety and mood disorders. At the diagnostic level, this overlap is most evident in the high rates of current and lifetime comorbidity (e.g., Brown, Campbell, Lehman, Grisham & Mancill, 2001; Kessler et al., 1996). Results from our center indicate that among patients with anxiety and mood disorders, fully 55% present with at least one additional anxiety or depressive disorder at the time of assessment; this rate increases to 76% when additional diagnoses occurring at any time during the patient’s life, including those currently present (i.e., lifetime diagnoses), are considered (Brown et al., 2001). Although there are several possible explanations for these high rates of comorbidity, the best explanation is probably that this comorbidity pattern points to the existence of fundamental core pathological traits such as negative affect. Under this conceptualization, heterogeneity in the expression of symptoms of emotional disorder—for example, individual differences in levels of social anxiety, anhedonia, panic attacks, and so forth—may be trivial variations in the manifestation of a...
broader syndrome. This, of course, would be consistent with theoretical models we have developed that anxiety and mood disorders emerge from shared psychosocial and biological diatheses (Barlow, 2000, 2002).

Looking at this problem more closely, we have specified three fundamental dimensions that seem to characterize all emotional disorders (Barlow, Allen & Choate, 2004). These include distorted affectively laden appraisals and attributions of everyday events, broad-based avoidance of emotional experience, and inappropriate action tendencies associated with dysregulated emotions. We further propose a unified treatment approach for addressing these concerns (Barlow et al., 2004). Time will tell whether this conceptualization is correct; but if it is, then it will suggest the need for a revised set of evidence-based assessment procedures that measure these dimensions of emotional dysregulation. Similar developments are likely in other areas of psychopathology. Furthermore, a sophisticated evidence-based assessment will go beyond monitoring progress and outcomes by specifying the level and prognostic significance of vulnerabilities to prevent onset of relapse. In this way, basic conceptions of psychopathology (or psychological aspects of physical pathology) empirically supported treatments, and evidence-based assessment procedures will be integrally related, with each playing an essential role in the further development of EBP. The excellent articles in this series represent an important step in that direction.

References


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