FROM THE EDITOR
Evidence-Based Practice: Sea Change or the Emperor’s New Clothes?

There are many lenses through which to explore the history of a profession.¹ One is in relation to reactions to new developments originating either outside or within the profession. What will be the reactions of the social work community to evolving developments in evidence-based health care as described in original sources such as Sackett, Richardson, Rosenberg, and Haynes (1997) and Gray (1997)? Evidence-based practice originated in health care as an alternative to authority-based practice (for example basing decisions on uninformed opinions). Origins suggested by Gray (2001) include: (1) the study of variations in service decisions and clinical practice, (2) gaps between practice-related research findings and what was done, (3) economic pressures, (4) the knowledge revolution including the evolution of the systematic review and description of flaws in traditional modes of dissemination such as peer review and texts (e.g., Egger, Smith, & O’Rourke, 2001), and (5) the web revolution which increased accessibility of information and permitted timely, routine updating of systematic reviews. He also notes the appeal of evidence-based practice (EBP) to both clinicians and clients.

EBP offers practitioners and administrators a philosophy that is compatible with obligations described in our professional code of ethics and educational accreditation policies and standards (e.g., for informed consent and to draw on practice and policy-related research findings) as well as an evolving technology for integrating evidentiary, ethical, and practical issues. Related literature highlights the interconnections among evidentiary, ethical, and application concerns in making decisions and suggests specific steps that can be taken (a technology) to decrease gaps among them in all professional venues including practice and policy (e.g., drawing on related research as required in professional codes of ethics), research (e.g., preparing systematic reviews and clearly describing limitations of studies), and professional education (e.g., exploring the value of problem-based learning in developing practitioners who are life-long learners). Trans-

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2001). As Rosenthal (1994) suggests in his description of hyperclaiming (telling others that proposed research is likely to achieve goals that it will not) and causism (implying a causal relationship when none has been established), "bad science makes for bad ethics" (p. 128).

Attempts to make reviews of research more systematic are welcome but often remain approximations. For example, at a symposium organized by Rosen, Proctor, & Howard (2002), a number of reviews were presented (e.g., Staudt, Rhein, & Auslander, 2002). Search procedures were described. Searches focused on literature published in English since (for example) 1980. Such a search procedure omits well-designed unpublished studies (the file drawer problem, see Rosenthal, 1979) as well as studies in the literature that are too different. It potentiated retrievability biases. The biases that such a search may create are so compelling that protocols for Cochrane Collaboration guidelines require review groups to search for research related to a question in all languages, both published and unpublished. No mention was made of use of CONSORT guidelines (Altman et al., 2001) and no effect sizes were given. If we compare such reviews with systematic reviews (e.g., Egger et al., 2001; Oxman & Guyatt, 1993; Cochrane Library Database), they are quite different.

We often find a poor match between questions posed by researchers and use of methods that can critically test them together with hiding limitations and inflated claims of effectiveness. In discussing the origins of EBP, Gray (2001) notes the increasing lack of confidence in data of potential use to clinicians: peer review which he subtitiles feet of clay, flaws in books, editorials, and journal articles. Related reasons include submission bias, publication bias, methodological bias, abstract bias, and framing bias. We often find propagandistic advocacy in place of careful weighing of evidence and reporting of related facts and figures (e.g., Best, 2001; Sarnoff, 2001). We find inflated claims such as Reid’s (2001) statement “these methods are part of a much larger set of interventions of proven efficacy” (p. 278), as if certainty regarding knowledge was possible and as if all the literature alluded to reflected the rigorous standards of systematic reviews. Such claims illustrate the justification approach to knowledge so prominent in the interpersonal helping professions including social work (Gomory & Gammill, 2002). As Haynes, Glazziou, & Straus (2000) suggest “Most of the investigations reported in journals are nondefinitive tests of hypotheses and innovations, only a small portion of which may eventually survive testing well enough to warrant routine clinical application” (p. 1). The limitations of traditional forms of knowledge diffusion were a key reason for the decision to make the Cochrane Library electronic with routine updating by review groups. The limitations of non-electronic formats allowing routine updating are reflected in social work publications. For example there is no mention of an updated Cochrane review (Rose, Bisson, & Wesseley, 2001) concerning the effectiveness of psychological debriefing in the prevention of posttraumatic stress disorder in a recent report by Padgett (2002).
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prescriptive not descriptive of current practices and developmental. As Haynes, Devereaux, and Guyatt (2002) suggest, “it is a guide for thinking about how decisions should be made” (p. 2). It “acknowledges that [clients’] preferences rather than clinicians’ preferences should be considered first whenever it is possible to do so” (p. 2).

Individual clinical expertise refers to “proficiency and judgment that individual [practitioners] acquire through clinical experience and clinical practice” [Sackett et al., 1997, p. 2]. It includes “the more thoughtful identification and compassionate use of individual [clients’] predicaments, rights, and preferences in making clinical decisions about their care” [Sackett, et al., 1997, p. 2]. It is used to identify each client’s unique circumstances and characteristics including their personal values and expectations and their unique risks and benefits of potential interventions and to integrate information from these varied sources (Sackett, Straus, Richardson, Rosenberg, & Haynes, 2000). It includes use of effective relationship skills. Client values refer to “the unique preferences, concerns and expectations each [client] brings to a clinical encounter and which must be integrated into clinical decisions if they are to serve the [client]” (Sackett, et al, 2000, p. 1). Clients are involved as informed participants regarding the evidentiary status of services (e.g., the likelihood that they will do more good than harm). There is candidness and clarity in place of secrecy and obscurity. EBP requires searching for research findings related to important practice and policy decisions and sharing what is found (including nothing) with clients. These characteristics are at odds with authority-based practice (e.g., Chalmers, 1983). It is hoped that professionals who consider research findings related to important decisions and who inform clients about them, will provide better, more ethical care than those who rely on opinions (e.g., Gray, 2001).

Although misleading in the incorrect assumption that EBP means only that decisions made are based on evidence of their effectiveness, use of the term does call attention to the fact that available evidence may not be used or the current state of ignorance shared with clients. Steps include the following:

1. Converting information needs related to practice decisions into answerable questions
2. Tracking down, with maximum efficiency, the best evidence with which to answer them
3. Critically appraising that evidence for its validity, impact (size of effect), and applicability (usefulness in practice)
4. Applying the results of this appraisal to practice and policy decisions. This involves deciding whether evidence found (if any) applies to the decision at hand (e.g., Is a client similar to those studied?) and considering client values and preferences in making decisions as well as other applicability concerns
5. Evaluating our effectiveness and efficiency in carrying out steps and seeking ways to improve them in the future (Sackett et al., 2000, pp. 3-4).

Gray (2001) also emphasizes the importance of arranging for retrievability of rel-
obligations to draw on services found to be effective and to distribute scarce resources wisely (e.g., Gray, 1997). Ethical issues related to research, practice, and professional education are closely intertwined. For example poor quality reviews of research related to practice and policy questions may result in bogus “practice guidelines” which result in poor quality services for clients (e.g., Chalmers, 1995). Students may be misinformed about the evidentiary status of practice and policy claims and so harm rather than help clients or forgo opportunities to maximize the likelihood of achieving hoped-for outcomes.

A striking characteristic of EBP and related developments is the extent to which clients are involved in many different ways (e.g., Broclain, Hill, Oliver, & Wensing, 2002; Entwistle & O’Donnell, 2001; Entwistle, Sheldon, Sowden, & Watt, 1998; Entwistle, Renfrew, Yearley, Forrester, & Lamont, 1998). One is reflected in the attention given to individual differences in making decisions. For example Sackett and his co-authors (1997) emphasized the importance of comparing the values and preferences of clients with recommended services and their likely consequences (p. 170). Haynes and colleagues (2002) emphasized that “personalizing the evidence to fit a specific [clients’] circumstances is a key area for development in evidence-based medicine” (p. 4). A second is helping clients to develop critical appraisal skills (e.g., Critical Appraisal Skills Program, CASP). A third is encouraging client involvement in the design and critique of practice and policy related research (e.g., Hanley, Truesdale, King, Elbourne, & Chalmers, 2001). As Hilda Bastian, a consumer advocate, suggested, “researchers cannot assume that their own values and priorities apply to others who do not share their world” (cited in Chalmers, 1995, p. 1318). A fourth is attending to outcomes clients value.

A fifth is involving them as informed participants who share in making decisions (O’Conner et al., 2002). In their description of “evidence-informed patient choice,” Entwistle and her colleagues (1998) suggest use of a form requiring professionals to inform clients about the evidentiary status of recommended services including the possibility that a method has never been rigorously tested in relation to hoped-for outcomes and that other methods have been so tested and found to be effective. This form also requires descriptions of the track record of success in using the method successfully with people like the client of both the agency to which the client is referred and the staff member in the agency whom the client will see. The term “evidence-based patient choice” emphasizes the importance of involving clients as autonomous participants who themselves carry out the required integration of information from diverse sources in making decisions (e.g., Edwards & Elwyn, 2001).

A sixth way in which clients are involved is recognizing their unique knowledge in relation to application concerns. In their discussion of practice guidelines, Sackett and his colleagues (2000) highlight the importance of considering two distinct components of practice guidelines: (1) their evidentiary base and (2) application concerns. They emphasize that those who are the experts in deciding whether a guideline is applicable to a given client, practice, agency, or community, “are the clients and providers at the
made about management and policy including a description of an evidence-informed audit cycle. A systemic approach has many advantages including not overlooking any weak link in the system that could pull down the rest (e.g., administrative and supervisory practices, poor quality training programs) and involving all parties as informed participants by encouraging the development of critical appraisal skills among both helpers and clients.

The evidence-based literature in health care describes a wide variety of efforts to address application concerns (e.g., Watt, Entwistle, & Sowden, 1999). These obstacles which may be present as “killer Bs” (Sackett and his colleagues, 2000, p. 181), include incompatible beliefs of individual clients or communities about the value of services or their consequences. Potential barriers may be geographic (a particular service may not be available in a local community), organizational (a policy may prohibit a service), traditional (that’s the way we’ve always done it), authoritarian (you have always done it my way), legal (concerns about litigation), or behavioral (social workers may fail to apply a guideline or clients may fail to implement it). Opportunity costs of implementing a guideline may be a bad bargain in use of resources. EBP describes an evolving technology designed to forward integration of evidentiary, ethical, and application concerns. This is typically ignored in descriptions of EBP in social work (see later discussion).

Maximize the Flow of Knowledge and Information About Its Lack

Evidence-based practice and social care are designed to maximize flow of accurate information concerning the evidentiary status of practice-related claims including information about harming in the name of helping (see earlier discussion of reasons for developing EBP). It encourages a free market knowledge economy in which there is (1) free flow of knowledge and information about the lack of it in order to decrease or reveal uncertainty and maximize the likelihood of achieving hoped-for outcomes, (2) good communication among buyers, sellers, and brokers, (3) a technology for gaining relevant information about the degree of uncertainty about a given decision (e.g., computerized databases), and (4) organizational cultures that support knowledge flow (e.g., Gray, 1998). The involvement of clinicians and clients as informed participants who share in decision making is emphasized; there is no privileged knowledge in the sense of not sharing information about the evidentiary status of recommended assessment, intervention, and evaluation methods. Such sharing poses a direct threat to those who forward bogus claims and carry out pseudoinquiry (efforts that cannot critically test questions raised), perhaps to gain funding and maintain status.

Exploration of ways to diffuse and disseminate accurate information about the degree of uncertainty associated with given decisions is of key interest, and literature on EBP is rich in the variety of efforts described (e.g., Holmes-Rovner, Llewellyn-Thomas, & Elwyn, 2001a; Holmes-Rovner et al., 2001b). Attention is paid to identification of avoidable errors and how to minimize them. Creative steps taken to forward EBP include the Center for Evidence-Based Social Services (CEBSS) based at the University of Exeter under the directorship of Brian Sheldon and funded by the Department of Health.
innovations such as the steps involved in EBP (e.g., Reid, 2002a, 2002b; Rosen & Proctor, 2002).

**Relabel the Old as New**

Perhaps the most common reaction is simply relabeling the old as the new (as EBP). Saying we’ve been doing it (when this is false) is one way to ignore the substance of new ideas while at the same time claiming it. The use of the term “evidence-based” as a kind of “word magic” to refer to business-as-usual can be seen in many publications. Consider the *Social workers desk reference* edited by Roberts and Greene (2002). We find descriptions of services as evidence-based (e.g., Test, 2002) and no mention of critical reviews suggesting the opposite (e.g., Gomory, 1999). In a chapter “Evidence-based approaches to community practice” Thyer (2001b) describes research reports regarding assertive community treatment for chronic mental illness as having “strikingly positive effects” (p. 59). Critical reviews suggesting the opposite are not mentioned (Gomory, 1999).

Some authors equate empirical social work practice with EBP. Thyer (2001a) suggests that “EBP and EVT [empirically validated treatments] actually are variations of the earlier ECP [empirical clinical practice] model of social work, which mandates not only the selection of treatments based on their level of scientific research support but also the ongoing empirical evaluation of outcomes using single-systems and other research designs” (pp. 6-7). Although these both share an interest in integrating practice and research, they are quite different. Overlooking differences decreases the likelihood that we explore promising new developments. EBP describes a unique step-by-step process for drawing on external research findings attending to application and ethical issues. Its proponents have actively pursued creation of tools such as routinely updated electronic databases relevant to practice and policy decisions and exploration of new formats for professional training programs (e.g., problem-based learning) designed to help practitioners carry out this process and to become life-long learners. Far more attention is given in EBP, compared to literature on empirical social work practice, to ethical issues such as informed consent and the importance of considering client values and expectations.

There is greater recognition in the EBP literature of obstacles to EBP such as lack of time, knowledge, and training on the part of practitioners needed to locate research findings relevant to important decisions, let alone conduct studies that contribute to knowledge (e.g., Sackett et al., 2000). Other differences include the greater emphasis in EBP on helping practitioners and clients to acquire critical appraisal skills, the promotion of transparency of what is done to what effect and focus on outcomes clients value. EBP should carry forward and enrich efforts in empirical social work practice to integrate practice and research and honor ethical guidelines.

There is more emphasis in EBP on rigorous critical appraisal of practice and policy-related research as illustrated in enterprises such as the Cochrane and Campbell Collaborations. Gray (2001) suggests that development of the systematic review was one of the origins of EBP. Such appraisals are typically more rigorous, more exhaustive in the search
One of the oddest objections is that EBP stems from behaviorism (Webb, 2001). EBP originated in medicine. There is a shared scientific interest in EBP and behaviorism. And, it is true that in EBP “opinion based judgment is viewed as inferior [more prone to the play of bias] to evidence-based decision making” (Webb, 2001, p. 62, see also Sheldon, 2001.) Webb (2001) asserts that EBP assumes that professionals are rational agents. He suggests that “by underplaying the values and anticipations of social workers at the level of ideas, it [EBP] ignores the process of deliberation and choice involved in their decision making” (p. 67). In fact, EBP highlights challenges of using clinical expertise to integrate information from different sources (e.g., Haynes et al., 2002). The very reasons for the origins of EBP (e.g., new research findings emerge, professionals do not get access to these, as a result their knowledge becomes out-of-date, Sackett et al., 1997), suggest that professionals are not rational agents; that in spite of intentions to provide competent, ethical services informed by practice-related research, they do not do so. Contrary to the claim by Taylor and White (2001), that EBP seeks for and assumes that certainty about knowledge is possible, EBP highlights the uncertainty involved in making decisions and related potential sources of bias and attempts to give helpers and clients the knowledge and skills to handle this honestly and constructively. Consider for example the attention given to helping both clients and helpers acquire critical appraisal skills they can use as “quality filters” to review research findings related to practice questions (e.g., see CASP, Greenhalgh, 2001).

**Select Fragments**

Most authors define EBP narrowly. Rosen & Proctor (2002) state that “although evidence-based practice (EBP) has been described in terms of a number of attributes (Gambrill, 1999b), we use evidence-based practice here primarily to denote that practitioners will select interventions on the basis of their empirically demonstrated links to the desired outcomes” (p. 743) (See also descriptions by Reid, 2001, 2002 in earlier section.) In fact, these attributes are emphasized in original sources that describe the philosophy and related technology of EBP (e.g., Sackett et al., 1997; Gray, 1997). In the Fall issue of LINKS, the Alumni Newsletter of George Warren Brown School of Social Work, we find, “evidence-based practice, basing professional decisions on the best science available, will ensure that knowledge about what has been demonstrated to work will be available to practitioners” (Watts, 2002, p. 4). Such definitions leave out the importance of considering client values and expectations and involving clients as informed participants.

Witkin and Harrison (2001) write that “EBP involves using ‘best available evidence, often interpreted to mean research based “knowledge,” about specific types of practices with particular problems” (p. 293). Vandiver (2002) states that EBP “refers to the process of utilizing a variety of databases [e.g., research reports and systematic case studies] to guide interventions that foster client change” (p. 731). She encourages practitioners to “use both practice guidelines and expert consensus guidelines as a guide to develop specific interventions” (p. 738). Consensus is a notoriously misleading criteria as
tion was made of the attention given to organizational barriers in sources such as Gray (1997, 2001) and Sackett, et al. (2000). Many seem to rely on secondary sources which often misrepresent the vision of EBP and hide the evolving technology described in primary sources.

Simply relabeling current practices, research, and professional education as EBP saves time and effort and bolsters ideological claims of knowledge designed to protect and expand professional turf (Friedson, 1994). It allows authority-based practices to continue and avoids the implications of EBP such as transparency in all professional venues including clear descriptions of decisions involved and criteria for making them, accurate rather than inflated claims of effectiveness, and sharing decision-making power and related uncertainties with clients. Advantages include appearing well informed and up-to-date with little effort, continuing business-as-usual, and one can present as new ideas already described in published literature on EBP. This fails to give credit where credit is due.

The bolder the idea, and EBP is a bold idea, the more time may be needed to understand it and the greater the threat to current beliefs and actions. The idea of integrating practice and research in professional contexts is not new, nor is attention to ethical issues as they relate to evidentiary ones. What is new about EBP and care is the transparent interlinking of evidentiary, ethical, and application concerns in all professional venues (practice and policy, research, and professional education) and seeking ways to facilitate the integration within a developmental, evolving framework attentive to needed technology (e.g., ready access to electronic databases) as well as ethical and philosophical issues (e.g., involving clients as informed participants and honesty regarding our state of ignorance about important practice questions). Evidence-based decision making arose as an alternative to authority-based decision making in which decisions are based on criteria such as consensus, anecdotal experience or tradition. Evidence-based decision making involving informed client choice is not a well trodden path. The greater the difference between our background knowledge and ways of doing things, and the more uninformed we are about how we are influenced by our environments, the more difficult it may be to escape current ways of thinking and acting, authority-based decision making, even if we are motivated to do so. This is especially so when surrounded by professional propaganda that censors well-argued competing views, inflates claims of effectiveness, and lures us into the mistaken belief that we are honoring professional codes of ethics when we regularly violate them (e.g., Lilienfeld, Lynn, & Lohr, 2003).

**Choices and Their Consequences**

Choices about how to respond to available literature on EBP are being made by researchers, staff in professional organizations and accreditation bodies, by agency staff, funding bodies, and by clients. Neither distorting new ideas and attacking the distortions or relabeling practice as usual as EBP (the emperor's new clothes choice), will allow us to consider whether the exciting sea change developments in EBP will help us to help our clients, honor our ethical obligations in the
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Center for Evidence-Based Social Services. www.ex.ac.uk/cebss


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