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EVIDENCE-BASED PRACTICE: WHAT DOES IT MEAN FOR AGING?

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Evidence-based practice (EBP) has become the watchword of human services in recent years. Derived from evidence-based medicine (EBM), EBP has many meanings—and in some cases, no meaning—but generally speaking, it espouses reliance on experimental research in human services practice. The EBM movement took its cue from the work of John Wennberg at Dartmouth Medical School and others, who demonstrated that physicians practicing in different but demographically similar communities treated the same medical conditions differently. They found, for example, significant unexplained variation in tonsillectomy rates in neighboring cities.

Wennberg's influential inference from these data was that physicians were fundamentally uncertain about how to treat their patients. Doctors did not have good science, he reasoned, and therefore they could be swayed by clinically extraneous factors such as medical tradition. Physician uncertainty was seen to have implications for both the quality and the cost of care: At least some physicians were providing less-than-optimal care and spending scarce healthcare dollars to do it. The remedy for the so-called small-area variation problem seemed clear. Physicians, Wennberg argued, needed better science—in particular, probabilistic studies of which interventions will work and which will not. Randomized controlled trials (RCTs) became the gold standard for clinical research and the foundation for a new medical paradigm.

DOES IT WORK?

RCTs can indicate, with as little bias as possible, whether a given intervention is efficacious—that is, whether it works under trial conditions. Why not, then, use these studies to make practice decisions and, by extension, decisions about human services policy? Why wouldn't practitioners do what works and demand the same from others? This logic of EBM has proven very powerful in medicine and now, as EBP, in human services. Although proponents of EBP have found it difficult to change practitioner behavior, they increasingly determine the design of programs and the content of practice guidelines. Decision makers take an EBP approach to which services are financed and which research projects funded. EBP offers human services the science to compete with, for example, pharmacological interventions for access to the public purse.

EBP is ascendant, but serious questions about its usefulness remain. First, RCTs and other experimental studies can tell what is *efficacious*, but not necessarily what is *effective*—that is, what works under the conditions of actual practice. The methodological rigor of controlled studies may undercut their validity as guides to action. For example, most RCTs exclude subjects with comorbidities or other characteristics that might obscure the relationship between dependent and independent variables. This is one reason why, for example, clinical trials so often exclude older people.

Furthermore, the study of efficacy requires standardized interventions and participants who are unaware to which group—experimental or control—they have been assigned. EBP also tends to gloss over the critical distinction between interventions that have been shown not to work and those that have not

yet been shown to work. Consequently, interventions that are easy to research or whose research is well funded may prevail in program and policy decisions even if some other service is truly more effective.

Thoughtful proponents of EBP are concerned with the limitations of experimental research and pursue a more nuanced approach to which research questions require which research methodologies. Some use “EBP” to mean greater use of research generally—quasi-experimental and even case studies—in practice and policymaking. This approach is nothing new, however, and EBP means to make a break with the past. It entails a hierarchy of evidence types, where RCTs remain at the top to trump alternative ways of knowing. In a number of states, for example, reimbursement for mental health services is contingent on RCT evidence that they work.

WHAT CONSTITUTES ‘WORKING’?

Another question about EBP arises because it promises to replace uninformed, tradition-bound human services practice with interventions grounded in science. EBP’s legitimacy derives from its promise to gather and then rely on facts, rather than theories or worse. EBP, however, is itself not scientific from start to finish. The choice of topics to study, the selection of interventions to test and the delineation of successful outcomes—that is, the definition of what it means that something works—are all prescientific; they issue from the thought processes of investigators and funders before scientific method is invoked.

These activities are not trivial. Even in the simplest case, for example, where effective blood pressure medication is assumed to be the one that lowers blood pressure, it is disputed whether blood pressure cuff readings or symptoms of high blood pressure are the more important outcome measure. All the more so, this type of disagreement occurs with the delineation of outcomes in the human services. Is an intervention effective, for example, because it extends life or improves quality of life? If the latter, how should quality of life be defined and measured? Such questions pervade the human services, as they should. The point here is that despite its claims, EBP grapples with them, too, and without recourse to scientific method. The scientific advantage begins only after EBP researchers decide what “working” looks like.

In addition, EBP assumes that a best practice is determined by its fidelity to research findings. In other words, practice is an applied science; thus, there is widespread concern with bridging the gap between science and practice, including holding practitioners accountable through evidence-based guidelines. Other models of practice exist, however, in which the practitioner actively interprets and even generates knowledge. Some scholars call for disciplined inquiry and reflection-in-action on the part of practitioners, acknowledging that practice can be informed by empirical findings but is not reducible to them. Actually, the methodologies most favored by EBP can demonstrate only the probability of effectiveness over aggregate populations, not what will work in any individual case. Furthermore, individual clients might hold values that depart from those represented in a study’s design, including the value of self-determination, even in the face of evidence to the contrary.

The field of aging faces many of the same challenges as other areas of human services: growing demands on diminishing resources and troubling indications that traditional interventions might not be effective. Evidence-based practice promises to conserve resources by identifying what works and enforcing its implementation. EBP offers services in aging the scientific legitimacy to compete with other claimants to financing from the public purse. Frankly, EBP may address the field’s uneasiness about whether practitioners are really making a difference.

EBP is not, however, a panacea; it is not even what it often claims to be—superior in its objectivity or immediately useful in a practice setting. Practitioners must be empirically informed, and much important research needs to be done and reported. However, evidence, especially as EBP defines it, describes only some of what professionals need to know for effective and humane practice with individuals. The ascendancy of the EBP movement must not be allowed to obscure that. ❖

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