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Using the term "evidence-based" in the communication literature

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Defining "evidence-based" is fraught with animated disagreement in healthcare communication [1–5]. This paper argues that failure to resolve the dispute is detrimental to the patient and the field itself in both research and teaching.

Sackett et al. originally defined evidence-based quite generally: combine the best available research evidence with clinical expertize and patient preferences[1]; some included non-research data from expert opinion as evidence. The definition, however, soon morphed into a narrower, more specific definition that would become the most common understanding of the term: the best external evidence derives from randomized and other controlled trials and meta-analyses of trials—always of course integrated with physician and patient input [2,4]. Although achieving widespread adoption (e.g., education, hospitals, federal regulators), considerable backlash came from others who favored the nonspecific definition. This group believed the emphasis on clinical trials provided too narrow a definition [2–5].

In my opinion, the general definition lacks meaning and does not help patients, clinicians, researchers, or teachers. In advocating that we integrate the best available evidence, who could argue with that, who would not use the best evidence? [2] The definition provides no guidance as to what is the best evidence.

The narrower version, on the other hand, does specify the best: clinical trials provide better evidence than other research studies or expert opinion [2]. Clinical trials are superior to other research because they reduce patient and investigator bias which means the data are more likely true and accurate. By providing specific guidance, patients benefit because their clinicians will not misinterpret the strength of evidence on which they base clinical recommendations; for example, a physician, nurse practitioner, or physician assistant would choose to follow recommendations based on a clinical trial rather than, say, expert opinion or a case control study.

The lack of clarity about a definition has further ramifications. The field of healthcare communication itself benefits by using the specific

definition because it can prioritize, to some extent, the type of research evidence it publishes and teaches. In contrast, in not specifying the type of evidence, the general definition can imply to the unwary that all evidence is equal in strength. Thus, the field itself risks misinterpreting and misrepresenting the strength of research support its journal publications, textbooks, and teaching label evidence-based. We do not, in my opinion, want this confusion about the definition to imbed itself in our scholarship and teaching.

Having conducted several non-trial studies myself, this paper does not propose that research other than clinical trials lacks value. For example, the classic Doll-Hill case-control studies pinpointed cigarette smoking as the cause of lung cancer. And qualitative studies often provide the critical subjective dimensions omitted by trial research. Furthermore, non-trial data and consensus opinions often provide the initial bases for hypotheses we then test in controlled interventions. My own clinical trials on patient-centered interviewing and primary care mental health benefitted from just this type of guidance. Finally, clinical trials are not always possible because of cost and manpower reasons; nor are they always the best research design, which depends on the problem being studied. In sum, non-trial studies have inestimable value but, when available, trial data provide better guidance.

So, how to define evidence-based? My argument to this point advocates the narrow definition because it provides specific information about what is best for the patient, research, and teaching.

But, responding to the concern about an isolated focus on clinical trials, a broader solution improves both present definitions: subclassify the term evidence-based by specifying the type of study reported: 1) evidence-based, randomized controlled trial; 2) evidence-based, cohort study; 3) evidence-based, case-control study; 4) evidence-based, case series; 5) evidence-based, qualitative study; 6) evidence-based, expert opinion. That is, if you call something evidence-based, specify the evidence base. This makes the present general definition specific and it drops the contentious isolated focus on trial research. It also makes the

current specific definition more comprehensive by highlighting the value of all levels of research rather than just clinical trials.

Journal and textbook editors as well as educators will achieve the greatest impact by requiring a definition that benefits the patient, advances the field of healthcare communication, and improves teaching.

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