

The Art of Evidence-Based Child Psychiatry

Now that the principles and practice of evidence-based medicine (EBM) have become the cornerstone of clinical practice, there appears to be a mounting backlash both in peer-reviewed articles¹⁻⁴ and in the medical popular press.⁵⁻⁶ A common criticism is that evidence cannot be applied to individual situations since each patient is unique. Related to this is the concern that the systematic search and appraisal of the evidence and its application to individual patients take the “art out of clinical practice”. EBM is often seen as simply a “cookbook approach to solving clinical problems”. In this editorial, I will argue that this criticism is a caricature of both evidence-based medicine and of artistic endeavour and is logically inconsistent. Moreover, I will make the point that the only ethical practice in child psychiatry is one that uses the principles of evidence-based medicine.

For most of its history, child psychiatric practice was based on theories of child development as articulated by Freud, Erikson, Baldwin, and others. Starting with a conception of “normal” child development, there was an attempt to show how deviations from healthy child development became associated with psychopathology and how understanding these deviations could be used to devise treatment strategies. These strategies often involved working with the child alone, with the parent alone, or with some combination (family therapy). Clinical decisions based on theories of child development represented hypothetical accounts used to predict future events, in this case, response to treatment. There was no appreciation that hypothetical accounts need to be empirically tested. This is analogous to the situation in clinical medicine where findings from “normal” physiology were used to develop treatments that could be applied to patients with a particular disease. The paradigm shift associated with evidence-based medicine was the recognition that while theories, or physiologic accounts, are quite useful, their application to disease and disorder need to be systematically and empirically tested in clinical settings. While theories, or even more recent empirical studies, of child development, may be useful and interesting, their relevance to the clinical situation of children with psychiatric disorders is not always apparent or straightforward.

Given the burden of suffering of these disorders and the acute shortage of professionals trained in children’s mental health, it follows that the only ethical practice in child psychiatry is one that employs the principles of the evidence-based paradigm. Prevalence estimates of child psychiatric disorder range between 10–15% of the general population⁷ and often herald a lifetime of associated poor outcomes both in terms of mental health but also in terms of educational and economic status. Given the acute shortage of child psychiatrists and the staggering numbers of children with a disorder,⁸ there is no room for applying non-evidence-based treatments to children in community clinics, a situation which is still all too common. Moreover, families are demanding to know the evidence-base for our clinical decisions. Indeed, the clinical encounter is a type of informed consent and the risks and benefits of making diagnoses and suggesting interventions must be spelled out, if one is committed to practicing ethically. Although the evidence base in child psychiatry is still incomplete, we now have evidence-based treat-

ments for virtually all child psychiatric disorders. As the example on childhood depression from Clinical Evidence illustrates, the situation is so much better today than it was even ten years ago. We can debate the nature of “evidence” in general, we can question whether evidence-based principles can be practiced in real clinical situations and whether it actually makes a difference to patient outcomes. But given the availability of evidence-based treatments, it is now unethical not to use them.

In this context, the concerns expressed about evidence-based child psychiatry become particularly germane. Perhaps the two most common criticisms levelled at EBM are that it “takes the art out of clinical practice” and that “research evidence which is generated on samples or populations of children can never be applied to unique situations”. So often, one hears residents or other child psychiatrists complain that “my patients are always different from those included in studies” or “the results of randomised controlled trials cannot be applied to my patient, who is quite unique”.

This is not only a misconception about EBM, it is also a misconception about artistic activity, and it is logically inconsistent. EBM is not simply the uncritical application of randomised control trials (RCTs), it is not driven by economic constraints and it is not only interested in RCTs and meta-analyses.⁹ It is rather the search for the best available evidence from the world literature and it involves considerable clinical judgment in the assessment of the potential costs and benefits of applying the evidence in the context of a particular patient.¹⁰ An important part of the evidence-based practice is now a clear appreciation of the patient’s and family’s, values, hopes and aspirations and an assessment of whether the use of an evidence-based treatment is feasible in a particular clinical context. That is a far cry from any cookbook application of RCTs.

Saying that the “art of clinical practice is lost” is also a caricature of artistic activity. Reading any biography of a major artist will quickly reveal that these individuals have methodologic expertise in all kinds of different techniques, are very well conversant with the “literature”, and are highly sceptical and critical of what has been produced before. Artists do not rely on intuition, imagination, or opinion any more than health care professionals. In fact, the skills that an artist applies to a specific work have many analogies to what evidence-based practitioners do in a clinical situation. The novelist Vladimir Nabokov, who was also an expert on butterflies, once wrote “there is no art without facts and no science without fancy”.

The statement also contains a logical inconsistency. It is true that in the application of the evidence to an individual patient, one proceeds from the general to the specific. There are always concerns with the external validity of the evidence, that is, the extent to which it might be generalisable to individual situations. When mental health practitioners complain that “general statements about the evidence are non-applicable to a unique patient or family”, they are caught in a contradictory statement. That very statement is, in fact, nothing less than a general statement that they are trying to apply to a unique situation! One cannot have it both ways. It is easy to acknowledge that all unhappy children and families are unhappy in unique ways (Tolstoy said that years ago), the key issue is whether they differ

in important ways that influence response to evidence-based treatments.

The “art of clinical practice” is not intuition, imagination, opinion or fancy. The art of clinical practice is not the *creation* of evidence, it is the *application* of the evidence to the clinical situation. There is now much interest in developing principles that will help clinicians apply the evidence to clinical situations.¹¹ It is certainly important to consider the inclusion and exclusion criteria of the study and whether that is consistent with the patient’s clinical characteristics, the setting in which the study occurred, the relevant outcomes and the strength of treatment effects. But it is also extremely important to be aware of the patient’s values, assumptions, fears and hopes and whether it is feasible to implement the evidence in the setting of that family’s predicament. This leads to an overall assessment of whether the potential benefits of applying an evidence-based treatment outweighs the cost and whether if one chooses not to use an evidence-based treatment, the alternative carries too high a cost in turn.

The art of evidence-based child psychiatry, in fact, is critically concerned with discerning the predicament of the child and the family,¹² eliciting the most relevant clinical question that needs to be addressed and appreciating the hopes and aspirations of the family. The art of evidence-based child psychiatry also involves communicating the best available evidence in a shared decision-making paradigm¹³ where the child and family are also involved in the interpretation of the evidence and its application to their particular situation. Evidence-based interventions might have to be modified to suit the clinical situation and that too, requires an artful approach to clinical practice.

Evidence-based practice is no guarantee of “truth”. Evidence is simply any empirical observation that might account for the

relationship between other variables. The key word here is “might” because assessments of probability and an appreciation of measurement error are the beginning and ending of empirical clinical research. The evidence always changes, as the history of using tricyclics and now selected serotonin reuptake inhibitors in child and adolescent depression so dramatically demonstrates. Our role as clinicians is not to know the truth but rather to learn the error of our ways, and that is an art.

PETER SZATMARI, MD
McMaster University
Canada

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