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Reasoning and evidence as sources of support for evidence-based medicine

The intellectual and institutional efforts identified by the keywords "evidence-based medicine" (EBM) evoke acclaim and criticism. There are critical debates about how EBM defines and evaluates types of evidence; if and when EBM is feasible and effective; and even about what kind of phenomenon EBM really is – a development in clinical science or health politics. There still is room for improved clarity in these debates. In this editorial, we try to make a contribution to that effect by addressing a slightly more abstract question: *What kind of support can be given to argue in favour of EBM? In particular, what is the role of reason and evidence in the EBM debates?*

EBM is many things, some of which are hardly controversial at all. For instance, most will probably in principle support EBM efforts to systematize evidence. A controversial aspect of EBM, however, is its implications for the use of scientific information in clinical practice. Broadly speaking, we may distinguish between *evidence-informed practice* (EIP) and *evidence-determined practice* (EDP). The latter expression is not meaningful in itself, since evidence by definition is descriptive and cannot determine decisions or actions. Rather, what we have in mind is practice determined by evidence plus a norm of the following type: "In any clinical situation X, the medical practitioner should always give the treatment that has been seen to give the best effect, according to the current body of evidence." The exact content of the norm could be discussed, as one for instance might differ on the degree of patient autonomy in the definition of what is "best". The general idea of EDP is clear, though – given a patient and a set of evidence, the medical treatment given should be equal irrespective of who the doctor is, and it should be possible to reconstruct the medical decision as an application of a general rule.

There are practical and ethical arguments in favour of EDP, laying emphasis on the fairness and security for both patients and doctors if all practice is standardized. There are also more theoretical arguments, based in the belief that every correct action is an instance of a general rule. However, such arguments are controversial. Real-world patients are very heterogeneous, and mechanical rule following does not guarantee success or fairness. EDP is an easy target for criticism.

Furthermore, central proponents of EBM seem to argue in favour only of evidence-*informed* practice. For instance, Goodman (1) claims it is unethical to treat a patient without knowing the content of the relevant evidence, because it may lead to preventable harm. Apparently, however, he does not judge it unethical for the doctor and patient to review the available evidence and then decide on something other than the treatment that has been seen to be most effective (or cost-effective). The resulting ideal of *evidence-informed patient-centred practice* (EIPCP) appears quite compatible with current thought in general practice, emphasizing the utility of the doctor's experience-based personal knowledge of his/her individual patients and their biographies, environments, health constitutions, salutogenetic potentials, and life values.

A problem with EIPCP (in contrast with EDP) is that it disregards the time economy of the doctor, and it has been asked to what extent EBM is a cost-effective principle in medical teaching and practice (2). Indeed, the objection seems to undermine any general argument from the unacceptability of preventable harm to the duty to be fully evidence-informed. The doctor may prevent one kind of harm by keeping him/herself fully updated on advances in medical research, but it is an empirical question also whether this intellectual effort is compatible with preventing harm by giving enough time and intellectual attention to seeing and understanding the medical needs of his/her patients or simply avoiding errors due to excessive workload (3).

The time dilemma implies that EIP comes at a cost. One way to meet this cost is by trying to reduce it. There are practical challenges in making methodologically sound reviews and other concise information accessible. Although the exact perception of the problem may vary, we believe there is a tension between methodological ideals such as neutrality on one hand, and commercial interests on the other. The ideas of EBM have been important in facing these challenges.

The other way to meet the cost of EIPCP is to ask for its justification. Consistent with the EBM idea, one may ask: "What is the evidence for the practice of EBM?" (2). EBM critics may then well argue that there is not enough, or not good enough, evidence in favour of EBM. Indeed, it appears quite difficult to

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make a controlled experiment or other methodologically strong studies to determine the "true" effect of implementing EBM teaching and practice. We cannot (or should not) make, say, randomized controlled trials with health policies.

Having discarded the EDP idea (i.e. that evidence can or should determine practice), it should be recognized that evidence on EBM in any case can merely inform and not determine the outcome of the EBM debate. To justify EIPCP, and to justify an emphasis on the evidence dimension in the time dilemma, is also to provide good *reasons* for it.

Again, such reasons are easy to come by in many kinds, including pragmatic, political, ethical, and philosophical ones. In the context of general practice, one may ask when the challenge is to choose between therapeutic alternatives given the diagnosis, and when it is, rather, to find a strategy from undiagnosed health complaints to come to a medical diagnosis or other medical understanding that may help the patient. The political and ethical undertones of this issue are seen in our priorities of patient and disease categories. And finally, the medico-philosophical issue, out of reach for clinical and other sciences, is if and when medical problems "really" are instances of essentially universal diseases, or rather the result of complex relationships at and between the individual, social, and physical levels. There is no unique answer to such questions. Instead we may conclude that there is a legitimate plurality of opinions and perspectives, making the EBM debate more a matter of *what we want* rather than what is right and wrong. EBM and medicine in general being a closely integrated part of human life, our conclusion should not surprise anyone.

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REFERENCES

1. Goodman K. Ethics and Evidence-Based Medicine. Cambridge: Cambridge University Press, 2002, p. 19.
2. Straus S. What's the E for EBM? BMJ 2004;328:535–6.
3. Strand R, Schei E. Gjør kunnskap vondt? Tidskr Nor Lægeforen 2001;121:1502–6.