COMMENTARY


Kirsti Malterud MD PhD
Professor Section for General Practice, Department of Public Health and Primary Health Care, University of Bergen, Norway and Research Unit and Department of General Practice, University of Copenhagen, Panum Institute, Denmark

Clinical knowledge evolves from interpretative action and interaction – matters involving human interaction, mind and experiences. My own attention has so far primarily been drawn to the microlevel of evidence construction in the encounter between doctor and patient. I have previously discussed clinical reasoning as multilayered processes of social interaction and human interpretation of bodily signs, for the purpose of coming to an understanding with the patient about what is wrong and what is to be done (Malterud 2001; Malterud 2002). On this level, the epistemological complexity of understanding and decision making first and foremosts demonstrates the inadequacy of a confined biomedical approach, where only questions and phenomena that can be controlled, measured and counted are regarded as valid.

Integrating fundamentally different sources of knowledge

Because clinical knowledge is not available for inquiry by means of biomedical approaches, it is denied scientific legitimacy, and a gap results between research and practice (Malterud 1995). Proponents of evidence-based medicine (EBM) maintain that the conscientious, explicit and judicious use of current best evidence is not restricted to randomized controlled trials (RCTs) and meta-analysis (Sackett et al. 1997). Yet, the foundation for integrating the available sources of knowledge remains unclear. We still do not know whether convincing information leads to optimal decision making. A recent ethnographic study demonstrated how clinicians rarely access and use explicit evidence from research (Gabbay & le May 2004).

Tonelli demonstrates the intrinsic philosophical problems related to the fact that empirical evidence, experiential evidence and pathophysiologic understanding differ in kind from one another, not (only?) in degree. His proposal of a casuistic understanding of clinical decision making appears appealing, providing a more satisfactory description of optimal medical practice, and calling attention to delineating the relevant topics for clinical decision making itself.

Yet, although Tonelli suggests alternative strategies for integrating evidence, his epistemological analysis is descriptive rather than explanatory. A contextual analysis is necessary for an adequate casuistic understanding. Together with Candib and Code, I have previously described diagnostic activity in medicine as a gendered, power-infused social interaction within a cultural context where the gold standard of medical knowledge is very narrowly set. We proposed responsible and responsive knowing as alternative strategies for knowing. Such strategies would incorporate an awareness of the inherent uncertainty of medical knowledge, raise questions about those to whom the knower is accountable, acknowledge the patient’s experiences, and attend to the potentially oppressive effects of expert knowing (Malterud et al. 2004).

Taking Tonelli’s description as a point of departure, I shall approach an explanatory level which
involves the social and cultural context of clinical knowledge construction. My position is exploratory and provisional, with the ambition only to expand the epistemological discussion of medical evidence. I will not propose answers and solutions.

**Merging EBM with patient-centredness?**

Medical humanism interprets EBM as erasing and ignoring the patient. Looking back in history, Wilson demonstrates how biomedicine is imbued with an ideology where ‘disease’ is regarded as comparable to other ‘natural’ phenomena (Wilson 2000). He describes the logical consequences of a 300-year history of a positivist domination of science, with the hegemony of objectivist research such as RCTs or biochemical research. Based on a review of objectivism and subjectivism, Wilson proposes a medical constructivist paradigm, where ‘objective’ clinical findings and interventions can be incorporated with the recent evidence for the doctor–patient relationship as a major contributor to patient outcomes.

In a similar direction, Bensing draws attention to patient-centred medicine as the apparently opposite of EBM (Bensing 2000). Bensing calls for integration of these paradigms by making EBM more patient-centred (incorporating patient preferences in RCT designs), and making patient-centred medicine more evidence-based (more focused study designs in communication research and more synthesizing meta-analyses).

The ideas of merge represented by Wilson and Bensing apparently accommodate the critique from medical humanism. Yet, their proposals for integration are too simplistic to solve the problems they identify, as knowledge construction is embedded in a larger social and cultural context. According to Mykhalovskiy and Weir, the critique of EBM needs to be redirected beyond the localized setting of individual doctor–patient interaction, in order to understand the significance of the social foundations upon conceptualization and ranking of medical evidence (Mykhalovskiy & Weir 2004).

**The context of culture and institutions**

Let us therefore try to transcend the dichotomies of the epistemological challenges and proceed towards the role of culture and institutions. Lowy draws attention to the pioneering studies of Ludwick Fleck’s vision of medicine in the 1930s (Lowy 1988). Fleck explored the evolution of medical knowledge and the genesis of medical facts, starting with a reflection on his own experience as clinical bacteriologist and immunologist. According to Lowy, Fleck’s most important contributions were related to the influence of patterns of specialization of doctors on the medical knowledge they produced, the impact of popular models of disease on expert ones, and the importance of the circulation of ideas between distinct, and incommensurable ‘thought collectives’ (medical scientists, general practitioners and patients) for the development of innovations in medicine. Similar oppositions can be recognized also in the present era of EBM, where the status of the different stakeholders within and beyond medicine corresponds to the impact of their ideas.

Similar patterns related to the institutionalization of medical practice were established by Michel Foucault (Foucault 1994). Foucault studied the social organization of knowledge, applying his ‘genealogy’ or archeology of knowledge. Genealogy is an approach for digging deep into the historical and cultural foundations of knowledge. Foucault describes how the medical gaze of the professional, taken to be the true source of medical knowledge, has consistently been privileged over the voice of the patient as the rise of modern medicine and ‘the birth of the hospital’ in the 1850s (Foucault 1994). Understanding how medicine is institutionalized can help us recognize issues on evidence validation which are not obviously apparent.

**Studying EBM as a practice of knowledge**

Analyses from political economy frequently study EBM as part of a justificatory regime where the ‘protocol’ is supposed to contribute to rationalization of health care. However, says Mykhalovskiy and Weir, these perspectives do not well address EBM’s specificity as a knowledge relation (Mykhalovskiy & Weir 2004). There is a need to move the social inquiry of EBM beyond concerns about rationalization and the potential erasure of the patient, pointing to new avenues of exploration. These include analysis of clinical epidemiology and clinical reason as the discursive
preconditions of EBM, the role of the patient as a site for the production of evidence, and the textually mediated character of EBM.

Mykhalovskyi and Weir call for a post-modernist critique of EBM, referring to arguments which redirect the medical humanist critique of the unexamined objectivism and scientism within EBM towards a critique of scientific meta-narratives, discourse analysis and related analytic strategies better suited to exploring the social character of formal discourses of knowledge. They suggest that we investigate contemporary forms of governance by studying the specificity, discursive character and effects of EBM as a practice of knowledge, privileging questions about the discursive preconditions of EBM, the relationship of EBM to clinical reasoning, the place of patients in EBM, and the textual mechanics through which EBM operates across time and place (Mykhalovskyi & Weir 2004).

**The discursive character of EBM**

Let us now return to Tonelli’s concerns on the difference between empirical evidence, experiential evidence and pathophysiologic understanding, and the epistemological quest of merging these. A conceptual premise of EBM appears to regard the quality of evidence as the most important difference between these forms of knowledge. A discursive approach would explore the criteria for assigning grade of evidence and their underlying textual arguments.

In a recent publication, presenting a system for grading and the strength of recommendations, Atkins et al. (on behalf of the GRADE Working Group), emphasizes the need for simplicity balanced with the need for full and transparent consideration of all important issues (Atkins et al. 2004). Yet, they admit that these complex judgements involve questions of values. They recommend the balance between benefits and harms to be assessed before considering costs, and they mention the need to modify recommendations to take into consideration differences between advantaged and disadvantaged populations. The system they present, rests on the analysis of study design, study quality, consistency anddirectness. Their conceptual map of evidence types is ranked, with any other evidence than randomized trials and observational studies scoring ‘very low’.

The issue of relevance is not mentioned explicitly as a premise for study quality, except the question of uncertainty about translating the evidence into practice in a specific setting, or uncertainty about baseline risk.

**Towards a broader understanding of evidence?**

Such an analysis could be extended to the social level, looking for institutions or stakeholders for whom such statements about simplicity, transparency, cost/benefit, social class, and study quality hold a high communicative validity, discussing the alternative interpretations of the concepts applied. Similar questions might also be raised for the arguments and concepts applied by Tonelli. Such pursuits would not decrease the level of complexity, but would hopefully open some doors to increased understanding of the nature of clinical evidence. I shall not undertake this extended analysis here, but confine my aim to demonstrate some potentials for increased understanding of evidence construction. However, as academics we should recurrently remind each other that these modes of understanding can never embrace core matters in clinical practice such as suffering and health (Frank 2001).

**References**


