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Haase, Christoffer Bjerre; Brodersen, John; Bülow, Jacob

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THE LACK OF ONTOLOGICAL AWARENESS IN EVIDENCE-BASED MEDICINE ALLOWS OVERDIAGNOSIS

Christoffer Bjerre Haase, John Brodersen, Jacob Bulow. Section of General Practice, University of Copenhagen, Copenhagen, Denmark; Institute of Sports Medicine Copenhagen, Department of Orthopedic Surgery M, Bispebjerg Hospital, Copenhagen, Denmark.

Objectives A problem with the approach of Evidence-based Medicine (EBM) is the current ability to only reduce but not prevent overdiagnosis. Overdiagnosis is broadly defined as ‘making people patients unnecessarily, by identifying problems that were never going to cause harm or by medicalising ordinary life experiences through expanded definitions of diseases’. One aspect of overdiagnosis is overdefinition, such as lowering the threshold for treatment for a risk factor. A current example is the UK’s National Institute for Health and Care Excellence (NICE) updated draft guidance for the diagnosis and management of hypertension in adults. The recommendations in the guidance are not evidence based and will increase over-diagnosis. However, EBM would be insufficient to avoid over-diagnosis even if this NICE guidance followed the principles. The objective of this study is to show why EBM is insufficient to avoid over diagnosis.

Method This study analyse the NICE draft guidance by the principles of following EBM guidance: Users’ Guides to the Medical Literature by (Guyatt et al), Guidance for modifying the definition of diseases: A checklist (Doust et al), and EBM manifesto for better healthcare (Heneghan et al). The principles of these analyses are what the consequences would have been if the NICE guidance had followed these principles. The principles and consequences are then analysed for their epistemological and ontological properties to determine what kind of scientific theory that leads the current EBM.

Results EBM do not sufficiently assess the ontological aspect of a diagnosis. In the case of the NICE guidance, the ontological status of hypertension is primarily as a risk factor. A risk factor of such is a continuum with no clear boundary between normal (health risk small enough to be accepted) and pathological (health risk unacceptably high). Therefore, the diagnosis of hypertension is subject to the problematic sorites paradox. The original puzzle, from 400 BCE, is; how many times can we remove grains from a heap before we no longer have a heap? In this case, when a risk factor is accepted as a disease, we remove grains from a heap? In this case, when a risk factor is accepted as a disease, how low a risk is low enough not to be a disease? EBM does not assess this problem. Instead, the present EBM is dominated by an epistemological approach, which legitimise any risk to become a disease, followed by the consequence of overdiagnosis.

Conclusions Due to lack of ontological awareness and epistemological dominance, the current EBM approach does not sufficiently address overdiagnosis. Increase awareness of ontological aspects is necessary. The NICE guidance for hypertension provides a good basis for a much-needed discussion about what possible ontological solutions could bring us closer to limiting overdiagnosis via EBM.