How to Cope with Uncertainty in Medicine

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Uncertainty is inherent in medical research and practice and has attracted increased attention in recent years, partly as a result of the emergence of relatively new methods such as evidence-based medicine, a shift towards shared-decision making, and concerns with bridging the gap between the generic (big-data-driven medicine) and the individual (patient-centred medicine). Yet our understanding of medical uncertainty – its nature and scope – remains limited, and current strategies for addressing the problem still need to be perfected. One reason for this state of affairs is that uncertainty has generally been, in the words of Simpkin & Schwartzstein (2016), 'suppressed and ignored, consciously and subconsciously'. Both physicians and patients have been accused of furthering a 'culture of medicine that evinces a deep-rooted unwillingness to acknowledge and embrace' uncertainty. More fundamentally, we lack a conceptual framework for understanding and differentiating between the varieties of uncertainty characterizing the medical encounter in a way that is productive for both physicians and patients. Needless to say, the stakes are high: the inability of physicians to present effectively the uncertainty associated with treatment has been associated with problems such as 'defensive medicine', while the maladaptive responses of patients to uncertainty have left them ill-suited to cope with inevitable life events such as death (Gawande 2014).

This paper draws on previously existing theoretical and empirical insights in order to develop an improved framework for allowing physicians and patients to better cope with uncertainty. Its aim is to propose an epistemological picture of uncertainty in medicine that accounts for new shifts in medical practices; to do so we propose two amendments to the existing literature. First, rather than following Smithson (1989, 1993) and Han et al. (2011), who consider uncertainty 'a specific subtype of ignorance', we recast the relationship between these two concepts. We emphasize that uncertainty fundamentally consists in limited knowledge and argue that ignorance is but one component of uncertainty. As part of this rearranged picture, we submit that ignorance should be conceived as a doxastic deficit that is permeated by the ignorant subject's epistemic attitudes and epistemic virtues/vices. Secondly, and based on this correction, we reconsider the place of (reconceived) uncertainty in medicine, both in the doctor-patient interaction and as a subject. We suggest that while some forms of ignorance can be overcome, and scientific and clinical changes can change the content and contours of medical uncertainty, epistemic and existential uncertainty can never be entirely dispelled. 'Tolerating uncertainty' (the title of a recent contribution by Simpkin et al., 2017) or 'coping with it in an adaptive way' (Han et al. 2010) is not entirely sufficient. We need to go even further and embrace uncertainty.

By foregrounding such enduring aspects of uncertainty we aim to provide valuable resources for physicians and patients alike. One conclusion suggested by our analysis is that equipping doctors with the resources to communicate and address epistemic and existential uncertainty is a crucial part of healing and can contribute significantly

to patient well-being. Our paper concludes by detailing how our new picture of uncertainty applies to the case of Attention Deficit Hyperactivity Disorder (ADHD) in children, a disease for which there are no biomarkers, and which can serve as a paradigm case for exploring how uncertainty is inherent in both medical knowledge and ethics, as well as in the cultural values that underpin any social consensus concerning best practices.

References

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