

## From the Editor's desk

By Kamaldeep Bhui

### Uncertainty principles in medicine and mental healthcare

Professionalism and the skilled worker

The medical consultation requires that the doctor listens, takes account of the patient's individual biography, profile of risk and protective factors, the social and economic contexts in which the patient lives, and carefully marshals good practice guidance and research evidence. All of this information is applied to recommend treatments suited for the individual person.<sup>1</sup> This should be a thoughtful, creative, and humanistic form of evidence-based practice, rather than a technical and impersonal industrialisation of healthcare.<sup>2,3</sup> While undertaking this layered and labyrinthine process, there is much uncertainty that must be managed, in terms of the patient's anticipated apprehension about diagnosis and treatment, but also in terms of the evidence base if it does not fully cover the individual circumstances of a particular person's dilemmas.

The assessment of risk is an example of where such expertise and evidence need critical interpretation, especially in order to assess and prevent serious consequences. Worry about risk can make professionals and organisations defensive, and avoid the clinical task, replacing it with impersonal rituals and routines. Thus, in Isabel Menzies Lyth's classic study of nurses, they were regarded as interchangeable, movable between wards, and not permitted to use their initiative and empathy in decision-making, as if their own humanity and personhood did not matter.<sup>4</sup> The President of the Royal College of Psychiatrists Sir Simon Wessely has argued, while commenting on the trainee doctors' proposed strikes in England, that a fundamental problem is that doctors are treated like lost luggage, and that the whole system of training needs to be better balanced for the health of the doctor and the patient.<sup>5</sup>

Doctors seem to be resisting the status of well-treated skilled workers instead of being a profession. Skilled workers make use of checklists and algorithms, following uniform, linear, and sometimes inflexible guidelines to deliver consistent and predictable outcomes, during a fixed time allocation, for all patients. As skilled workers, they have to be well prepared for a finite number of predictable scenarios, which is far from the reality of everyday medical practice ([www.kevinmd.com/blog/2016/03/doctors-just-skilled-workers-heres.html](http://www.kevinmd.com/blog/2016/03/doctors-just-skilled-workers-heres.html)). The skilled worker model sees professionals as uniform in practice, appearance and knowledge, reducing the task to a series of checklists and procedures; the expectation then emerges that patients be uniform in their experience of illness and the range of solutions provided, as if all people with, for example, depression or schizophrenia have identical needs devoid of their personal biographies, personalities, dilemmas, and contexts. Such approaches are intolerant of variation and those with severe and multiple disadvantages, and will fail to address inequalities. Professionalism, alongside being a skilled worker, is absolutely central to the clinical encounter but it is not easily operationalised. A further example of these tensions is the British Medical Association's suggestion that GPs cannot perform their duties in a professional manner in 10-minute appointments, but need at least 15 minutes with each patient.<sup>6</sup> So the organisational management of uncertainty, risk and resources and may work against the individual clinician's real task, to provide the best personalised care, with some personal attention and emotional engagement with the patient's dilemmas.

Suicide prevention

In order to reduce uncertainty, the assessment of suicide risk is often a ritual progression through a series of checklist questions (skilled worker rather than professional). Organisational (provider, state, and profession) defences against uncertainty require such measures, but the task of the doctor and any health professional must include far more than actuarial evaluations. Risk assessment instruments alone appear to not be effective at preventing suicide and may provide false reassurance (see Chan *et al*, pp. 277–283, and linked editorial by Mulder *et al*, pp. 271–272). Tong *et al* (pp. 319–326) find that personality disorders in China are related to suicide outcomes, but are not sufficiently prevalent to inform personal or population-based preventive approaches; the latter point is reinforced by Fountoulakis's critique (pp. 273–274) of the increase in recession-related suicide. Better stratification of interventions is one way to reach socially excluded and high-risk groups; we also need to better understand which interventions are effective for whom and at what time in a person's life. Different sources of social support, for example from friends or parents, seem to be more important at specific points over the life course (Gariépy *et al*, pp. 284–293). Adverse early environments are known to be associated with poorer educational attainment, and in particular neglectful early life starts can lead to criminality and this in itself poses a higher risk of future mental illnesses. Kendler *et al*'s (pp. 294–299) elegant design reveals that adoption of Swedish children may reduce offending behaviour in those at risk, although more research is needed into other consequences, for example, a higher risk of suicide in adoptees.<sup>7,8</sup> Actually, despite recession and rising suicide in the European area, and concerns about English health services not providing safe care at weekends, youth suicides in England and Wales are at the lowest for some time (Redmore *et al*, pp. 327–333) and suicide is relatively uncommon at weekends (Kapur *et al*, pp. 334–339).

Post-traumatic stress

As we grapple with evidence on the most appropriate interventions, the diagnostic status of PTSD is still to be reconciled with emerging evidence (see Rosen's editorial (pp. 275–276) on DSM-5). Professional judgement is made in this context of evolving diagnostic systems, but also where established interventions may not work as well for specific groups of patients, or individuals exposed to particularly adverse experience; ter Heide *et al*'s analysis (pp. 311–318) shows limited efficacy of eye-movement desensitisation for the treatment of traumatic symptoms in Syrian refugees. In other instances, professionals' caution about the limited effectiveness of treatments may be overstated; van Minnen *et al*'s pioneering work (pp. 347–348) shows that patients with trauma-related dissociative symptoms respond to conventional trauma-based interventions. Dücker *et al* (pp. 300–305) reveal that greater country vulnerability to adversity appears to be associated with fewer PTSD-type symptoms rather than more, suggesting that population-level influences interact with individual preparedness, and perhaps country vulnerability offers more practised and effective coping strategies at times of trauma. Consistent with this assertion, Heir *et al* (pp. 306–310) find that perceived life threat is more related to post-traumatic symptoms than actual life threats, invoking an important role for preventive psychological and population-level interventions. Indeed, Leamy *et al* (pp. 340–346) find that the patient's recovery orientation seems to be an important predictor of recovery in general mental health services.

The uncertain future

The concerns about how to manage uncertainty, risk and resources seem to be played out in a constant renegotiation of

the relationship between medicine, society and the state. The trainee doctors' negotiations with the British government regarding contractual terms and conditions might be seen as a consequence of this inexorable process. The profession of medicine and its regulation by society is of wider relevance, as different cultural, economic and political contexts shape the nature of medical practice. The linkages between state and health-care are demonstrated in the efforts of the EU to promote a political economy that supports predictive, preventive and personalised medicine.<sup>9</sup> Heisenberg's uncertainty principle suggests fundamental limitations to the precision of measuring the properties of particles. Similarly, uncertainty and judgement are inherent in healthcare, although we must still battle to provide better knowledge of what works, for whom, but also where and when.

- 1 Sackett DL, Rosenberg WM, Gray JA, Haynes RB, Richardson WS. Evidence based medicine: what it is and what it isn't. *BMJ* 1996; **312**: 71–2.
- 2 Mykhalovskiy E, Weir L. The problem of evidence-based medicine: directions for social science. *Soc Sci Med* 2004; **59**: 1059–69.
- 3 Sprinkle RH. A moral economy of American medicine in the managed-care era. *Theor Med Bioeth* 2001; **22**: 247–68.
- 4 Menzies IEP. A case-study in the functioning of social systems as a defence against anxiety: a report on a study of the nursing service of a general hospital. *Hum Relations* 1960; **13**: 95–121.
- 5 Wessely S. Junior doctors are shuffled around like lost luggage: we must work together to end this war of attrition. *Times* 31 Aug 2016 (<http://www.thetimes.co.uk/article/junior-doctors-are-shuffled-around-like-lost-luggage-hlgvmp8cw>).
- 6 Blackburn P. Doctors set out safe working plan for general practice. *BMA* 29 Aug 2016 (<https://www.bma.org.uk/news/2016/august/doctors-set-out-safe-working-levels-plan-for-general-practice>).
- 7 Slap G, Goodman E, Huang B. Adoption as a risk factor for attempted suicide during adolescence. *Pediatrics* 2001; **108**: E30.
- 8 Petersen L, Sorensen TI, Andersen PK, Mortensen PB, Hawton K. Genetic and familial environmental effects on suicide – an adoption study of siblings. *PLoS One* 2013; **8**: e77973.
- 9 Golubnitschaja O, Kinkorova J, Costigliola V. Predictive, preventive and personalised medicine as the hardcore of 'Horizon 2020': EPMA position paper. *EPMA J* 2014; **5**: 6.