Is the moon there when nobody looks?

The title of this letter is a comment made by Einstein to one of his assistants in relation to the hotly debated interpretation of quantum mechanics. At the heart of this debate is a seemingly simple statement: in the quantum world, objective states do not exist prior to an act of measurement. So, in a sense, the act of measurement is an integral part of phenomenology itself. The problem, though, is what does an act of measurement entail? Put differently, where does an act of measurement start and/or end? In the world of physics, it is still debated as to what an act of measurement is. The deterministic Schrödinger wave equation mysteriously collapses into specific probability numbers once subject to an act of measurement. For people who are puzzled by the relationship between quantum theory and psychiatric disorders, they should look no further than the fact that the identification of the phenomenology of psychiatric disorders is subject to almost the same conceptual difficulties. For example, any serious attempt to identify the aetiology of depression in a society will inevitably require knowledge of prevalence and incidence rates, which in turn require the employment of certain diagnostic criteria that assume the existence of depression as an entity in the first place (a priori). So, in a way, the argument is partly circular. Put differently, depression as a ‘disorder’ cannot claim a separate existence to that of ‘diagnostic processes’ via the use of measuring tools. Therefore, in the process of trying to identify the phenomenology of mental disorders, the question is: ‘What does an act of measurement entail?’ In daily practice, a mental health professional’s act of measurement revolves around the application of widely used international criteria: the ICD and DSM classification systems. But where do these classification systems come from? The answer is that both ICD and DSM systems have been produced by almost a century of amalgamation of clinical experience, consensus, philosophical schools, political influences and even World Wars. Therefore, current diagnostic systems represent historical processes with a particular narrative. The classification system’s historical narrative assumes more relevance to the identification of mental health phenomenology than patients’ personal narratives. Mental health phenomenology would not have existed without this historical narrative of our current diagnostic schemes. No wonder it has proved so difficult to reduce mental health phenomenology into basic blocks that can be reliably identified, considering the hundreds of variables embedded into the historical development of our classification systems.

Every time we measure the phenomenology of mental disorders we end up invoking the whole historical development of our classification systems. There is simply no line of demarcation that can separate phenomenology of mental disorders from that of the measurement process in the course of making a diagnosis. It is customary nowadays to describe the current classification systems as reliable, partly because they permit clinicians to communicate using the same language. I think this is a fallacy. Diagnostic systems are inherently operational, i.e. they are more about the ‘processes’ clinicians follow in order to reach a diagnosis. Therefore, it is inconceivable that two clinicians from two different cultures will end up going through exactly the same steps during the process of making a diagnosis, as this is likely to be influenced by personal experience, semantics, cultural issues and so forth. In my opinion, the diagnostic systems we currently have are inherently more valid than we are willing to accept. It is illogical to say that diagnostic systems are not valid enough because they do not accurately represent what is out there. In reality, they create what is out there. It does not even require a ‘conscious’ observer to do so. We only need to look!
Authors’ reply: Our rationale for investigating suicides in England & Wales jointly was twofold. First, although the male suicide rate has been somewhat higher in Wales than in England in recent years, the difference was not nearly as marked as that for Scotland v. England, as shown in Fig.1. The pattern of change in trends over the past two decades was also more similar for England v. Wales than when compared with Scotland. During the same period, there was little difference in the female suicide rate between England and Wales, while the female rate in Scotland was significantly higher than in the other two countries.

Our second reason was a technical one. At the beginning of our study, we sought advice from the General Register Office for Scotland and the Office for National Statistics about the comparability of their routinely reported suicide data. Because of differences in how suicide data were typically extracted by the two organisations, based on the usual residence and place of death of the deceased, it was concluded that using data from England & Wales combined would give us the best comparison with the Scottish data.

The cultural and ascertainment explanations of higher rates of suicide by drowning in Scotland proposed by Evans are interesting without fault as is evident in the conundrums raised by Hegeman et al’s article. Although the methodology was rigorously applied, even the final list of 11 studies included in the meta-analysis were not entirely comparable, particularly in the area of medical comorbidity, a point highlighted by the authors. Our own clinical experience and findings (possibly shared by other psychiatrists) have been that the elderly do have significant medical comorbidity that affect clinical presentations. In one study, all but one elderly patient had a medical condition and 60% had two medical conditions. The meta-analysis also does not take into account the significant role socioeconomic and cultural factors have in depressive symptom development and progression in the elderly. Socioeconomic issues play an important part given the changes in occupation, lifestyle and other roles in the elderly. This paper also serves to highlight the recently resurfaced distinction between clinimetrics and psychometrics. The relevance and applicability of psychometrically driven research is sometimes difficult to translate for the psychiatrist in clinical settings. Clinicians cannot rely entirely on rating instruments to arrive at a diagnosis and to devise management care plans. Clinicians will sieve through the history and presentations in detail and make global judgements on information presented, a process that goes beyond the one-dimensional nature of checklists and rating scales. Fava et al alluded to the ‘sophisticated thinking that underlies clinical decisions’ and that is a point that deserves consideration even as we review journal articles on research which is largely psychometrically driven to glean benefit for our clinical practice.
Authors’ reply: As highlighted by Mahendran, depression in late-life is often accompanied by medical comorbidity. Owing to the lack of information on medical comorbidity in the studies included in our meta-analysis, we could not evaluate to what extent the differences found could be explained by an overlap in somatic symptoms of depression and medical comorbidity. Of the 11 included studies, only 4 reported on medical comorbidity. As the study sample of Koenig et al consisted of a medical in-patient population, medical comorbidity was present in both younger and older people with depression. Moreover, age-related differences in the phenomenology of depression persisted after adjustment was made for medical comorbidity. In the studies of Brodaty et al, Gournellis et al and Tan et al, the levels of somatic comorbidity were indeed higher in older compared with younger people with depression. We did acknowledge that age-related somatic comorbidity may have caused some overlap with somatic symptoms of depression, explaining part of the age-related differences in the phenomenology of major depression. On the other hand, somatic comorbidity may also have an impact on the phenomenology of late-life depression, apart from the overlap of symptoms. Unfortunately, in our meta-analysis it was impossible to unravel potential mediating effects.

As noted in the introduction section, we agree with Mahendran that sociocultural and psychological factors related to ageing may influence the clinical presentation of depression in late life. In this meta-analysis, however, we aimed to investigate whether age-related differences in the phenomenology of depression exist at all. The question as to which of the biological, psychological or sociocultural factors may cause age-related differences, and how they might modify the phenomenology of depression in late life, needs further examination.

An important issue raised by Mahendran concerns the distinction between clinimetrics and psychometrics. Of course clinicians cannot rely on existing psychometric rating scales alone when making clinical decisions. However, this distinction does not affect the overall results of our meta-analysis. Age-related differences in the clinical manifestation of major depression were investigated to start with. Going one step further, phenomenological differences corresponding to differences in prognosis, treatment and determinants, need to be investigated in future research, all of them important for clinical reasoning. Furthermore, this may not be so much an issue of clinimetrics as opposed to psychometrics, but a consequence of the inadequacy of the categorical DSM-IV classification system, leading to extensive comorbidity and diagnostic heterogeneity which impedes the search for determinants. As depression is a highly heterogeneous disorder, we focused on major depression to enable the search for age-related differences. Moreover, because no commonly used clinimetrically based model exists, we chose to use the most appropriate instrument currently available.
