Correspondence

Risk assessment: dealing with uncertainty

Large et al’s article on the predictive value of risk categorisation in schizophrenia is an elegantly written and sobering analysis on clinical risk assessment practices. Their arguments that risk categorisation approaches are limited and may sometimes do more harm than good are reminders of the limitations of the risk management approach. The imperfect nature of risk categorisation is compellingly demonstrated by application of their hypothetical instrument for risk calculation (HIRC) model, applied to the best data available and in a manner that is, if anything, giving risk categorisation the fairest of road tests. Clinical risk assessments, be they based on clinical expertise, structured clinical assessment or actuarial tools, are limited because of the mathematics of low frequency events.

In Probability and loss: two sides of the risk assessment coin, Large & Nielsseen advance their concerns about the current practice of risk management by examining the loss element of the risk assessment equation and the current limitation of any instrument to allow for multiplication of the sundry risks that may occur in the course of an unfolding episode of mental illness. They also point out, quite correctly, that clinicians are often operating on limited information. Our own experience with poor handover of all the available clinically important information (from referring clinicians, and family, or medical records stored in another facility) reminds us that even if we had the perfect tool, the risk assessment will only be as good as the information used will allow.

These papers will be disconcerting for many clinicians and managers. The changeability of risk and elements of uncertainty in the human interaction of the assessment are other limitations. Added to this is the nature of the task of assessing a person whose illness, personality or state of mind may be constraints to accurate assessment. People may conceal information or their true feelings for a variety of reasons.

These arguments against a risk assessment approach to managing clinical risk are important in ensuring against complacency and provide impetus for continuing development and refinement of our clinical practice. However, we need also to acknowledge that this is a discussion which is inevitably grounded in a number of frameworks other than the statistical. In their articles, Large and Nielsessen have not made reference to the moral, legal, ethical, cultural, political, compassionate and most importantly pragmatic frames of reference that support the argument for continuing to practise a risk assessment approach. Although their approach is welcome in the arena of scientific discussion, it does not wash in the real world. Winston Churchill famously espoused the view that democracy is the worst form of government except all those others that have been tried. So it is with risk assessment in our current time.

The risk management approach when undertaken properly includes participation from a number of stakeholders, including the patient, family, and health professionals, in efforts to reduce or mitigate risk factors that are drawn from larger population studies, from information available in the clinical encounter and from collateral sources. Assessing risk is a task inherent in psychiatric assessment, and its importance lies less in the assignation of a category of risk (high, low) than in the way the risks identified inform a treatment or management plan. The plan will ideally include the set of indicated interventions, delivered within an expected timeframe, that are considered best to manage and reduce the risks. There will always be uncertainty whether any risk will eventuate, even for those thought to have a high level of risk. As Large et al point out, this will leave a larger number of people who are judged as low risk with no intervention (above standard care), some of whom will turn out to have an adverse event.

We are well served if this discussion reminds clinicians, patients and families that we have no perfect powers of prediction and draws the attention of researchers and clinical experts to reach for the next innovation to our methods.

To close, let us quote from P. Bernstein: ‘The essence of risk management lies in maximising the areas where we have some control over the outcome while minimising the areas where we have absolutely no control over the outcome and the linkage between effect and cause is hidden from us.’

What level of risk is acceptable in psychiatry?

The review of risk assessment by Large & Nielsseen is timely as there has been an increasing tendency to rely on structured protocols in the assessment of patients, particularly with regard to future probabilities of violence and self-harm. However, there are a number of aspects which have not been discussed, the most important of these being the concept of acceptable risk.

Politicians and service managers are happy to point to a process of risk assessment, yet they universally abrogate their duty as representatives of the community to define what level of risk is acceptable. Despite the statistical difficulties discussed by Large & Nielsseen, this has been successfully embraced in aviation medicine. Acceptable failure rates in mechanical components have been used to define the risk management for pilot incapacitation. Although this approach was pioneered by cardiologists, aviation medicine is where the approach has been more widely adopted, even though the
definition of base rates of risk in other areas is not as straightforward.  

The acceptance of a defined level of risk has important implications for services. As an example, if a patient is considered as being at risk of suicide, rather that the accepted risk being progressively increased as the bed availability declines, the service should have an obligation to provide a bed for those whose risk is considered greater than the acceptable level.

Other common areas where risk assessments are required are release of potentially violent individuals from hospital or prison, safety in driving, the ability to own a firearm and suitability for employment in areas where inappropriate behaviour would involve significant community risk. When these assessments are made, it is important that there is not only an understanding of their predictive value, but that there should be some idea of the relative and absolute risk considered acceptable by the community. Once this is defined, it automatically follows that an adverse result does not imply error. It is important that the community representatives, including coroners and politicians as well as the media, should be educated about this. Ultimately, a decision about acceptable risk levels must be explicitly made by the community in advance with regard to their cost/benefit ratio. Post hoc assessments of individual decisions are generally unhelpful.

When providing reports involving risk assessment, I always enclose a comment stating that whereas I have made my own evaluation, I would reconsider my assessment on the basis of a defined acceptable level of risk. Finally, I would not agree with Large & Nielssen that risk assessment protocols should not be used. Their importance is not that they produce a usable rating (and I would note that these are strictly ordinal rather than interval scales), but that they do document that appropriate risk factors have been considered in the clinical decisions made.

2 Davies GRW. Psychiatry and fitness for flying: practice, evidence and importance of overcoming the negative perceptions of the career in psychiatry is clearly a difficult task. The occasional patient with a psychiatric problem on the acute ward is often treated with little interest or enthusiasm by the medical or surgical teams. Referral is often made to psychiatry without any attempt to assess or manage the problem by the patient’s team. This lack of enthusiasm definitely filters down to the students.

5 Comparing attitudes to psychiatry in different medical schools before and after the first year of exposure, as well as the length of psychiatric attachment, might be useful. The latter is important because students’ exposure to specialties is often too brief. A 4-week attachment is long enough to observe a recovery from pneumonia, but not usually long enough for a depressive episode that has required hospital admission. Posting students in one psychiatric unit for the whole 6–8 weeks may be better than 1- or 2-week postings to four or five different specialist teams.

6 Students are often discouraged to be hands-on on psychiatric wards. This leads to less engagement than in, say, an accident and emergency (A&E) post where they feel valued as a doctor-to-be.

7 Approach to diagnosis is important; students are often dismayed by the overlap of symptoms across psychiatric disorders and probably even more by psychiatrists appearing to not adhere to specific criteria when making diagnoses. Often, students are told that a patient has a particular diagnosis without explaining why. Trainers could easily remedy this.

8 Furthermore, psychiatrists are fairly vocal about psychiatric disorders being ultimately incurable. Even though many physical disorders such as diabetes, hypertension, asthma and psoriasis are chronic and incurable, the physicians speak more about what they can improve than what they cannot. Focus on improving patients’ quality of life and returning their ability to function is often not as obvious in psychiatry as it is in other specialties. Whereas other specialists gain a sense of achievement from tangible results and high-impact outcomes, psychiatrists deal with less clear-cut, multifactorial aetiology and less measurable outcomes.

9 An issue that students may feel uncomfortable with is that psychiatrists sometimes enforce treatments on patients against their will. This contradicts the notion of the caring profession. Having seen how appreciative patients are of the work of the other specialists, a specialty where patients hate you for acting in their best interests can be very unattractive. The Mental Health Act and the role of mental health review tribunals are often not adequately explained to students, with tribunals...