Thinking About the Assessment of Risk
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Guest Editor

The old joke goes like this: A passerby sees a little boy on a street corner, busily snapping his fingers. The passerby asks him what he’s doing: “Keeping the elephants away.”
“But there aren’t any elephants within miles of here!”
The little boy nods, smiles, and continues snapping his fingers: “See what a good job I’m doing?”

I am not aware of any single definitive list of cognitive errors, although a myriad that affect (and undermine) medical decision-making have been identified. Their pervasiveness and incorrigibility shows how deeply they are rooted in the everyday human cognition; only by constant vigilance can we hope to blunt their effect, for their influence can be demonstrated in day-to-day medical practice.

The intent behind this issue of *Psychiatric Annals* is not to simply provide a checklist or simple “how-to” guide to assessing risk (for whatever complication or outcome we are interested in), but rather to help us dig deeper when thinking about assessment of risk. For this exercise, two areas of risk particularly important in clinical psychiatric practice (risk of completed suicide or of interpersonal violence) are examined, but the same lessons should hold for other kinds of rare but potentially tragic outcomes.

Concern for the potential for completed suicide or interpersonal violence arises frequently in routine clinical work—much more frequently, fortunately, than the acts actually occur; both are (statistically) fairly rare in most populations. And therein lies the problem: How should we think through situations in which a bad outcome is unlikely but potentially devastating? Too often we rely on old clinical saws (“Women attempt suicide, men complete it”) or our own experience even when we know it may be contaminated by anchoring effects, recency bias, stereotyping, or other errors.

One “fix” is to start by reviewing a few basic statistical principles and disciplining ourselves to adhere to them rather than going solely on gut feeling or inadequate heuristics, and then to familiarize ourselves with the relevant research. When we do so, we realize (to our great discomfort) that many of the identified “risk factors” for suicide or interpersonal violence are actually fairly weak predictors. They often intercorrelate, so the presence of many factors doesn’t proportionately strengthen our assessment. We must frequently rely on proxy outcomes such as suicidal ideation or suicide attempt rather than completed suicide, so much of what we look for may not be particularly applicable to the case at hand. The ultimate commission of an act of violence or suicide may depend on contingent factors, such as whether there are barriers that prevent access to a bridge or whether the individual acts under the disinhibiting effects of alcohol consumption. Although we have identified several characteristics that, at a population level, are associated with higher likelihood of a tragic outcome, our predictive ability at the level of the individual remains quite limited. And here another cognitive error comes into play: like the little boy busying himself by chasing away the elephants, when the base rate is low, we are likely to be unduly confident in our abilities—until a rare event actually occurs.

Once we have the information (and the ability to apply it meaningfully), the next step is to do so in an appropriate way. One component of assessing risk is to identify the timeframe for which an assessment is desired. Are we concerned about a relatively short period (the first days to months after a patient is discharged from hospital) or a risk (perhaps of
recurrence of illness) that, although of great importance, may not eventuate for years—if ever? Depending on what the outcome of interest is, determinants of short-term risk may differ substantially from those that seem to exert their influences over longer time frames.

Another consideration is to determine which factors are modifiable and which are not. History (of a prior suicide attempt or commission of a serious assault, for example) may permanently place the patient into a relatively higher (as compared to the general population or some other comparison group) risk category; so might gender. But within those categories, the patient’s level of risk may fluctuate based on social factors (neighborhood, employment status, affiliations) as well as the nature and degree of current symptoms of psychiatric illness.

And this fluctuation over time can be modified. When it is realized that even the highest-risk patients are not constantly at their highest risk, we can identify interventions that can serve to relieve suffering or make important social and environmental changes such that the patients can regress to their own lowest possible level of risk. The process is conceptually straightforward (if not always easy in practice): First, determine what the relevant modifiable factors are and select interventions most likely to have the desired effect on them. Next, ensure that the interventions are properly and efficiently carried out. And finally, reassess and revise the plan as appropriate.

Even patients whose overall statistical risk is not that high in absolute terms can benefit from this approach; in large part, it is simply a matter of everyday treatment judiciously applied. By systematically working to decrease the time the person is at his or her highest risk (eg, by vigorously treating a depressive syndrome), decreasing the frequency of periods of disinhibition (eg, by treating addiction), or decreasing exposure to high-risk situations (eg, by changing neighborhoods or affiliations) we may never know for sure which patients have benefitted. But shifting from a fallible and imperfect high versus low-risk classification strategy to a consistent risk-reduction strategy should be a more effective approach to prevention overall.

REFERENCES


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