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Risk Assessment in Mental Health Care: Values and Costs

George Szmukler, M.D.* and Nikolas Rose, Ph.D.‡

Risk assessment has assumed increasing salience in mental health care in a number of countries. The frequency of serious violent incidents perpetrated by people with a mental illness is an insufficient explanation. Understandings of mental illness and of the role of those charged with their care (or control) play a key role. “Moral outrage”, associated with an implied culpability when certain types of tragedy occur, is very significant. This leads to tensions concerning the role of post-incident inquiries, and contributes to a flawed conception of what such inquiries can offer. At the same time, understanding of probability and prediction is generally very poor, among both professionals and the public. Unrealistic expectations for risk assessment and management in general psychiatric practice carry a variety of significant costs, taking a number forms, to those with a mental illness, to mental health professionals and to services. Especially important are changes in professional practice and accountabilities that are significantly divorced from traditional practice, implications for trust in patient–clinician relationships and the organisations in which mental health professionals work, and practices that often breach the ethical principle of justice (or fairness) and heighten discrimination against people with mental illness. Copyright © 2013 John Wiley & Sons, Ltd.

Reducing uncertainty comes at a cost, whether attempts to do so are successful or not. There is always a trade-off (Smithson, 2010). The main focus of this paper concerns the costs of risk assessment, the trade-offs that are made in mental health care. The discussion is primarily concerned with risk in general adult mental health services.

We shall not be discussing in detail some of the obvious costs, those that can be translated into financial costs – of training staff; the opportunity costs of time taken to carry out risk assessments; of the reduction in time remaining for the treatment of those who are not considered at high risk; or of the costs of dealing with inaccurate or contradictory information. Rather, the focus will be on some less obvious, but pervasive costs – moral costs, negative effects on professional practice (including a cost in a form of social capital, namely trust), and the reinforcement of the social exclusion of, and discrimination against, people with a mental illness.

Before discussing costs, it might be helpful to consider the question of why risk assessment has assumed such salience in contemporary mental health care, even though serious violence from those with a mental illness diagnosis is infrequent.

*Correspondence to: George Szmukler, Professor of Psychiatry and Society, Institute of Psychiatry, King’s College London, De Crespigny Park, London SE5 8AF, U.K. E-mail: george.szmukler@kcl.ac.uk

‡Professor of Sociology, Department of Social Science, Health and Medicine, School of Social Science and Public Policy, King’s College London.

SALIENCE OF “RISK”

To understand this salience, it is essential to look at the social meanings of “risk”, and how this affects expectations of those whose task it is ostensibly to manage it. We are not referring here to notions of the “risk society” as proposed by Beck (1992) and Giddens (1999), which are important but general. Here we are looking at something more specific: why different societies – by which we mean powerful political and social groups, the mass media, and the predominant culture – are more concerned about some risks than others, and apparently irrationally so, if irrationality is to be defined in terms of the likelihood of the occurrence of the hazard.

The traditional approach to risk assessment is to consider the likelihood of a hazard and the severity of the hazard (Royal Society, 1983). Their product (conceptualized as likelihood \times severity) provides a measure of risk. However, it is clear that societal concerns about risk, and the costs that society is prepared to shoulder to reduce that risk, are more complex and do not reduce to the products of such an apparently rational calculation. Needing to be added are factors related to the perception of that risk. Research has shown that of particular significance here are factors such as the dread the hazard evokes or the extent to which the hazard is under the control of the person at risk (Slovic, 2000). Most people’s level of anxiety in relation to an airplane crash compared with a car crash illustrates these factors – though death or serious injury from the latter is much more frequent, car journeys seldom evoke the anxiety that many suffer in air travel.

However, as well described by Wolff (2006), there is a further dimension that needs to be added. There are risks that people regard as meriting huge costs in securing against, even though their likelihood of being personally affected is recognized as very remote. These are risks that evoke what Wolff calls “moral outrage.” Moral outrage derives from what is seen as the cause of the hazard. Such causes include malice (as in terrorist attacks), recklessness, or negligence (as in failures to maintain a railway track) – someone is deemed culpable. As an example of how moral outrage makes a difference, compare two accidents: in the first, a deer running across a road results in a car swerving and crashing through a barrier onto a railway track causing a subsequent derailment and leading to 15 deaths. In the second, a train is derailed as a result of a faulty track, leading to 15 deaths. The second will result in moral outrage, as it will be assumed that the track has not been properly maintained and serviced by the responsible body and will likely result in a public inquiry. The first, most likely, will be met with sympathy.

Moral Outrage and Post-incident Inquiries

Serious violence by people with mental illness commonly evokes moral outrage. Such a response has been especially evident in the UK where mental health services are usually seen as having failed to prevent such acts. This much is evidenced in newspaper reports of such incidents, pressure group demands, and political responses. It is presumably why in the U.K., there are routinely inquiries following homicides, sometimes hugely expensive (in direct costs, in staff opportunity costs and in staff leaving services), ostensibly aimed at “learning the lessons” from what went wrong. However, such inquiries often repeat recommendations from previous ones, including the need for more diligent risk

assessments. Rather than introducing measures to reduce risk, they seem more to do with the allocation of blame, in keeping with the idea of moral outrage. Douglas and Wildavsky (1982), from a social anthropological standpoint, argued that, in contemporary cultures at least, beliefs about risks, about their levels of seriousness, and about what should be done in relation to them, are shaped not by objective assessments of frequency, but by moral concerns, and that the primary function of risk assessment and management is forensic – a means of investigating things that go wrong and allocating blame. In organizing and directing affects and feelings, these risk-related responses to troubling events fulfill a function in supporting and restoring community solidarity in the face of potential breaches.

Along these lines, it has been argued that the “real” function of inquiries is primarily the provision of a plausible narrative formulated by a credible authority that aims to legitimate social institutions and restore public confidence in their effectiveness (Brown, 2000). Without going quite that far, a good case can be made that there is a serious flaw in the idea that one can “learn lessons” from inquiries into rare phenomena such as homicides by people with mental illness, that are, as we shall discuss in detail in the following, essentially unpredictable, or that one can discern “systems failures” when such “failures” (if that is what they are) are rare and disparate in their contexts and characteristics. For example, better communication between professionals or agencies is a common recommendation of inquiries. But given the complexity of clinical care, what to communicate, to whom and when, and what action should be taken as a consequence, are highly individual. Inquiries usually conclude with recommendations proposing new guidelines or protocols. But is it sensible to believe that one can devise protocols appropriate for complex clinical situations based on the exposure of supposed design flaws in some aspect of the healthcare system derived, for example, from a root cause analysis (National Patient Safety Agency, 2010)? It has been persuasively argued (e.g., by Iedema et al., 2006), that this represents a misapplication of a methodology appropriate to the design or application of physical products (like nuclear power stations or medical devices) where the tolerance for production flaws is small. In complex clinical situations where many possible actions might be taken at a particular decision point (such as in the treatment of patients in a psychosocial crisis) “heedfulness” or “vigilance”, a state of thoughtful alertness to an ongoing sequence of possibly relevant events or actions, would seem to be the main requirement. But how can one produce a protocol for “vigilance”?

Given these problems and others, such as the well-documented and apparently almost ineradicable phenomenon of hindsight bias (Guilbault et al., 2004) and the overestimation of the perceived probability of what have been termed compound events (Smithson, 2010; Scurich et al., 2012), the value of post-incident inquiries is open to serious question. In compound events, the greater the number of causally related variables that are enumerated (e.g., enumerating the many risk factors associated with violence), even if most make a negligible or no independent contribution, the greater is most people’s judgment of an event’s likelihood.

The Meaning of Risk to Healthcare Staff

A discussion of social meanings of risk also needs to consider those for healthcare staff. Hawley et al. (2010) examined staff attitudes to risk assessment and estimates of time costs in a mental health trust serving a county in England. Three hundred staff

responded to the survey. There was a large variation in time spent on completing the Trust's risk assessment form. The median time was 18 minutes, with a range of 1–240 minutes, and with psychiatrists spending less time than nurses. This time did not include information-seeking, or discussing and implementing risk management plans. Guidance from the Department of Health (2007) in England states that “a risk management plan is only as good as the time and effort put into communicating its findings to others” (p. 7). Many practitioner readers will appreciate the difficulties in arranging a timely case conference across a number of busy and overstretched teams and agencies.

Hawley et al. (2010) also found large variation in attitudes to the value of risk assessments. For example, in response to the question: “Of all the risk assessment proformas that you complete, what proportion of these do you think act as a basis for your clinical judgments or therapeutic actions?”, 76% of psychiatrists said “half or less”, with just under half of this group endorsing the response “close to none.” Nurses were more positive, those working on in-patient units more so than those in the community. An unpublished Royal College of Psychiatrists online survey on risk assessment in 2007 found similar views. For example, 60% of the 1937 respondents agreed that the “prime purpose of completing a form is defensive, i.e. to protect the organisation”, while just under 50% agreed that the “use of a risk assessment form by a good clinician results in better decision making.” Thus, in the U.K. at least, it appears that a significant proportion of mental health professionals doubt the value of structured risk assessments in their clinical work, although they may recognize that such assessments serve some bureaucratic or defensive functions for organizations. This is perturbing given that risk assessment skills are said to be a competence that all mental health clinicians should possess.

Staff skepticism is probably reinforced by the lack of evidence concerning the effectiveness of risk assessment, and those actions that are presumed to follow, as carried out in general psychiatric practice. While mental health trusts in England have required staff to carry out risk assessments for some years now, there are no published figures from any source concerning changes in the numbers of serious untoward incidents by patients that would offer an “evidence base” for policies of risk assessment in general psychiatric institutions.

Later we shall consider how a risk emphasis may change clinical practice, but first we shall look at the practical limitations of risk assessment in mental health care and the associated cost to patients in unnecessary coercive interventions.

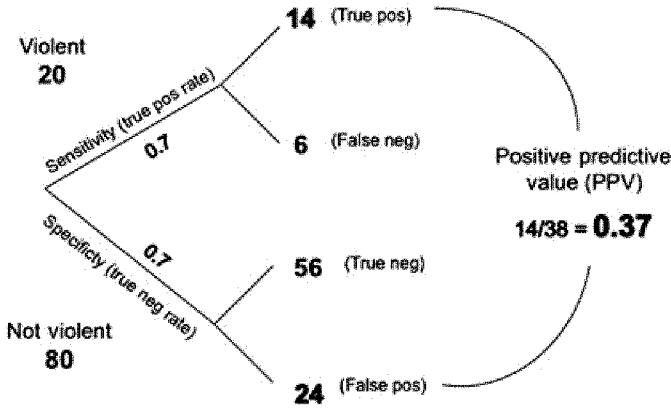
STATISTICAL MATTERS AND THEIR MORAL COSTS

“The Base Rate Problem” and False Positives

It is clear that risk assessment is severely constrained by the frequency of the behaviors it is aimed at predicting – known as the “base-rate problem.” Rare events are difficult to predict.

An understanding of the problem can be readily gained from an examination of a simple probability tree, which may make it easier to understand some of the statistics (Figure 1). This shows how a risk assessment instrument for violence with a performance at the high end of what has been achieved shapes up when the base-rate for

Assumes 20% of patients will be violent in follow-up period



Assumes 1% of patients will be seriously violent

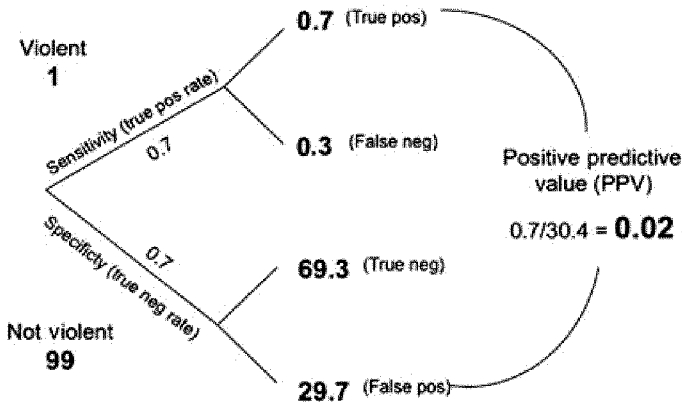


Figure 1. Probability trees showing the effect of the base rate on prediction. In each case the risk assessment instrument has a sensitivity of 0.7 and a specificity of 0.7. pos, positive; neg, negative.

serious violence in the population of interest is 20% – as it might be in some forensic populations – and then when it falls to 1%, as it might be in a general community-based psychiatric population. It will be seen in the example in Figure 1 that the sensitivity (the proportion of violent individuals who score positively on the test) and the specificity (the proportion of non-violent individuals who score negatively on the test) are both 0.7. The problem lies on the specificity arm in relation to the sensitivity arm, so that even if only a small percentage of those who turn out to be non-violent score positively on the test, because the non-violent so greatly outnumber the violent (a hundred-fold in the second example), the proportion of those scoring positive on the test overall is dominated by the non-violent group. Large et al. (2011) offer an excellent overview of base rates of various harms associated with schizophrenia and the disappointingly low positive predictive values (PPV) (i.e., the proportion of individuals who score

positively on the test who indeed turn out to be violent) even with a hypothetical risk assessment instrument with a sensitivity and specificity of 0.8, values never obtained in practice thus far. Buchanan and Leese (2001) reviewed 21 studies where sensitivity and specificity figures could be calculated, and found the means to be 0.52 and 0.68, respectively. We should also remember that instruments are likely to produce better results under closely supervised research conditions than in regular clinical practice, and that in studies in which an instrument is first developed, its predictive accuracy is optimized and is inevitably less when repeated on an independent sample (an example is Monahan et al., 2005).

Recently, there has been a trend to rely on the statistical significance of the area under the curve (AUC) of the receiver operating characteristic (ROC) curve as the main or sole indicator of the predictive accuracy of a risk assessment instrument. We have shown elsewhere that even an AUC at the high end of what has thus far been achieved in this field (0.77) is still associated with sensitivities and specificities in the range shown in Figure 1. For example, for that particular study with an AUC of 0.77 and where the base rate of violence was 7%, taking a point on the curve where the sensitivity was 0.81 and the specificity 0.63, the PPV was 0.14; at the point on the curve where the sensitivity was 0.46 and the specificity was 0.86, the PPV was 0.20 (Szmukler, Everitt & Leese, 2012). It can also readily be seen from the shape of a ROC curve that there is an inverse relationship between the sensitivity and specificity of a test – the better at correctly identifying “true positives” (i.e., showing high sensitivity) the poorer the test will be at correctly identifying those who will not be violent (low specificity), and vice versa. A relatively high PPV can often be achieved by increasing the specificity, but this is at the cost of missing a very large proportion of those who turn out to be violent. This is an example of one kind of trade-off associated with attempts to reduce uncertainty.

In terms of their predictive accuracy, there does not appear to be one risk assessment instrument, or type of instrument, that clearly outperforms the others (Fazel et al., 2012; Singh et al., 2011; Yang et al., 2010). Wherever one might set the sensitivity–specificity cut-off, even with an instrument having, what is in this field an impressive AUC of 0.8, the PPV at the base rates for violence seen in general psychiatric practice will be too low to allow the instrument be of much practical use. It is difficult to see what other type of threshold or classification computation could significantly overcome the base rate problem. From a practitioner’s perspective, when the properties of a risk assessment instrument are reported, it is necessary, in our view, to provide data on how well it would perform in accurately predicting the outcome for an individual in a particular setting and, at the same time, how many adverse outcomes it would miss. An AUC alone is inadequate (Szmukler, Everitt and Leese, 2012).

Following from these statistics, a serious ethical concern emerges, that is, the moral costs when intrusive or coercive interventions are applied to cases where a large proportion are false positives.

“Uncertainty” or “Risk”?

When we consider extremely rare, but also extremely socially preoccupying events such as homicides by people with a psychosis, with a rate in England of around 1 in 10,000 per annum, the PPV even with the very best of risk assessment instruments is negligible. We might wonder whether it is sensible to think in terms of risk at all; another notion, “uncertainty”, may be more appropriate. The economist Frank Knight (1921) distinguished

between risk and uncertainty, arguing that the former was appropriate when a probability could be determined by known empirical factors that were quantifiable, whereas in the case of the latter:

...there is no possibility of forming in any way groups of instances of sufficient homogeneity to make possible a quantitative determination of true probability. . . Business decisions, for example, deal with situations which are far too unique, generally speaking, for any sort of statistical tabulation to have any value for guidance. The conception of an objectively measurable probability or chance is simply inapplicable. The confusion arises from the fact that we do estimate the value or validity or dependability of our opinions and estimates, and such an estimate has the same form as a probability judgment (p. 231).

In the case of a homicide, there is a huge range of unforeseeable interactions that may be significant in an individual case. We are dealing not with physical systems obeying physical laws but with persons who have desires, intentions and vulnerabilities, and who engage in a myriad daily interactions with other persons, known and unknown.

Smithson (2008a), in his discussion of uncertainty, makes a similar distinction between classes of events. He contrasts a young woman's expectation of a legacy, known to be somewhere between \$0 and \$100, with a game of 100 coin tosses in which she will receive \$1 every time it comes up "heads." While we may be uncertain about how much money she will receive from the coin game, we can calculate probabilities of each possible amount. In the case of the expected legacy, on the other hand, there is no good reason to prefer any one amount over any other; this type of uncertainty is unquantifiable; it is "vagueness."

So we conclude that the events that we are most concerned about preventing – acts of serious violence – because of their infrequency are not statistically predictable in a clinically useful way when it comes to an individual patient. However, it is not an easy thing for a professional to live with uncertainty, or for all those others, politicians, members of the public, to do likewise – hence the allure of replacing intractable uncertainty with calculable risk.

RISK ASSESSMENT AND PROFESSIONAL PRACTICE

There is a seductive quality to risk assessment: it appears to bring the future into the present and to make it calculable (Castel, 1991; Hacking, 1990; Rose, 1998). In psychiatry, and in many other areas, the language of risk has replaced that of dangerousness. Dangerousness was seen as a kind of fixed quality located within an individual – hence the search in psychiatry from at least the mid-19th century for methods to identify dangerous individuals (Castel, 1991). The language of risk is different. In principle, at least, it places everyone on a continuum – we could all have our risk assessed and each and any of us might give expression to our riskiness in certain provoking circumstances. Yet risk assessment in psychiatry, largely because of decisions required by the legal system (e.g., concerning civil commitment or discharge from detention), healthcare or social care institution policies, or expectations held by most people in the community, retains its search for those who are inherently "high risk," or who present a risk above a certain threshold. What was conceptualized as a phenomenon that, unlike "dangerousness," was not a fixed quality of an individual, but dependent on the co-presence of many factors, including those external and those subject to change, tends to become, in effect, an objective, calculable, and static measure of risk attached to an individual.

Calculability brings a sense of objectivity and science to the practices of experts. Calculability seems to act to discipline uncertainty and thus to bring it under our control. It also leads to the idea that actions can and should be taken today to prevent adverse events from occurring in the future. Once a potential event has been transformed into a calculable risk, and that risk has been calculated and noted in the records, it must be managed by someone; not to do so becomes seen as negligent.

As risk becomes calculable and objective, there is a decline in trust in older kinds of expertise based on the judgment and experience of individual professionals (Porter, 1996). The development of actuarial instruments, for example, displaces this tacit knowledge and experience, and permits forms of checking (using the knowledge of other experts), such as audits, scales, records and registers, compliance with guidelines, and so on.

As risk thinking gains traction and is applied in mental health care, practices may change. Risk assessment and management become new professional responsibilities. Calculability and the apparent ability to bring the future into the present, and the moral outrage associated with cause (in Wolff's terms) mean that serious violent incidents, especially homicides by patients, can come to be seen as representing a failure of expertise by someone (or an institution) who is accountable and probably culpable. (While in the "pre-risk" era of 'dangerousness,' individuals who failed to assess that dangerousness could be held culpable, in the "risk" era the scope for culpability has increased. The dangerous individual is often only known *post hoc* because they have actually acted dangerously. On the other hand, the high-risk individual should be known *pre hoc*, and thus the risk should have been managed effectively.) As we have discussed earlier, this is a constant theme in inquiries following serious untoward incidents.

Changing forms of accountability, through audit, guidelines, protocols, and so on, can become new means of regulation or governing of mental health professionals (Rose & Miller, 2008). Professional judgment may be reshaped according to new logics, ones that have not been derived from specialized professional modes of thought, but instead from statistical and epidemiological reasoning, endorsed and, to a greater or lesser degree, imposed by political and health authorities with the aim of maintaining public confidence. This requires a reshaping of professional subjectivities and ways of thinking about patients, of acting towards them and of communicating with professionals and agencies about them. For example, it is now commonplace in England for a non-forensic hostel to routinely require a risk assessment in a prescribed form from a mental health professional before offering a place to a patient. Clinical discourse may become "formatted through the gaze of risk" (Rose, 1998). Risk may come to be considered to be a central element of what it is for a professional to do this kind of work; it may seem that it is not possible to be a responsible professional without assessing and managing risk. Thus a language of risk may occupy a significant proportion of the place formerly filled by the clinical language of diagnosis and treatment.

The effect of a risk emphasis on professional practice can be more subtle still (Silver & Miller, 2002). This is particularly the case with actuarial risk assessment, which involves a shift from the analysis of the individual patient as an individual to be understood as such, to a calculus that is based on collecting items of information (now redefined as risk factors). The focus on discrete, specifiable and measurable risk factors more common in those who are violent than those who are not, moves us away from an attempt to understand the individual patient as an agent, with intentions, feelings, desires, preferences, specific needs and so on. Instead, the individual is placed within a category according to how highly they score on an algorithm of factors statistically

related to the probability of committing a violent act. The result may be an attenuation of focus on the individual as a living person acting in relation to the situations that he or she is living in, and giving meaning to; hence a reduced priority may be given to formulating what is likely to be of most therapeutic value to that individual. Feeley and Simon (1992) have argued that such a shift in the case of penology has resulted in a move away from interventions aimed at the diagnosis and reformation of offenders and associated attempts to improve their lives and living conditions, to be replaced by forms of regulation and control. In particular, this “actuarial justice” leads to a focus on the surveillance, incapacitation and often the incarceration, of those placed in high-risk groups. Political pressures often promote such restrictive practices in the interests of public protection, given a very high priority in a culture that constantly overestimates certain types of risk and underestimates others, while those so subjected are usually politically powerless to resist such measures.

We find the same tendency where risk has assumed salience in mental health practice. Items in actuarial-based risk assessment instruments are identified statistically and epidemiologically, and generally divorced from a theory of what makes people violent and what kinds of interventions can reduce the likelihood of incidents. Over the past decade or so, this problem has been increasingly recognized and notable attempts are being made to integrate the risk assessment with interventions for reducing that risk. The main approach has taken the form of instruments that support structured professional judgment. Examples are the Violence Risk Scale (VRS, Wong & Gordon, 2006; Wong et al., 2007) and the Short-term Assessment of Risk and Treatability (START) (Doyle & Logan, 2011; Webster et al., 2006). These instruments comprise dynamic as well as static items, with the expectation that changes in the former can be targeted by specific interventions, which, if successful, will reduce violent recidivism. In the START, for example, dynamic factors (in respect of factors such as relationships, social skills and occupation) can take the form of risks or strengths. An instrument like the START has moved substantially from a purely actuarial tool to one involving a significant degree of reliance on theories of criminal behavior in the choice of items, and also in according substantial weight to clinical judgment in the rating of items and in the relative weightings they should be given. The intervention models, at this admittedly early stage, target a range of factors and generally lack the coherence and the specification of key mechanisms that one finds in a well-developed theory such as the cognitive-behavioral model of panic disorder (Clark, 1986). Perhaps, given the diverse contexts and types of violence, this may not be possible. In any case, from the perspective of general psychiatry, some problems persist. There still remains the inaccuracy in determining who poses enough risk to warrant the application of a rigorous process of risk management; for example, what should determine how far one goes in attempting to obtain detailed accounts from a variety of sources, sometimes contradictory, concerning past behavior? While the START is not as offender-orientated as, for example, the VRS, many items seem still to relate to what have been termed “criminogenic” factors (Andrews & Dowden, 2007); interventions directed at these do not sit very comfortably with the practice values held by most mental health professionals that determine their understanding of what the treatment of mental illness should comprise.

What risk categories and their risk factors do provide, no doubt inadvertently and against the hopes of those who develop these methods, are new markers for discrimination and exclusion. Risk factors for violence (e.g., having a diagnosis of a psychosis or serious mental illness) become stigmata that extend beyond membership of the high-risk group to all who might share such a characteristic or diagnosis. We shall return to this issue later.

RISK AND TRUST

The issue of trust has been much discussed in the context of doctor–patient relations (see, e.g., O’Neill, 2002). For the patient, trust in the clinician mediates the problem of decision-making in the face of vulnerability and uncertainty (Mollering, 2006). An important element in trust is the belief that the person being trusted has the patient’s best interests at heart and no agenda to the contrary. In mental health practice, when patients know that service providers are highly concerned about the risk of violence, trust may be compromised; patients are likely to wonder constantly about whether clinicians’ real agenda is the patients’ interests or those of the community, or perhaps even the clinicians’ own reputation should something go wrong (Brown et al., 2009; Brown & Calnan, 2012). The clinician may also be uncertain as to whether the patient is disclosing fully about matters that he or she thinks may lead the clinician to believe there is a risk of violence. These considerations are critical in mental health care where patients’ vulnerabilities and uncertainties (including doubts about an ability to make social judgments about whom to trust) can be especially acute. There is a further issue – that of the nature of the clinical encounter. Trust is built through communication. But, if much time during the clinical encounter and outside it is spent by clinicians in collecting risk assessment and management data, and completing related paperwork, less time is available for communication – and trust building – with the patient. Difficulties can thus be exacerbated by the technical requirements of risk assessment. Qualitative evidence suggests that, as one might expect, if mental health services come to be seen as untrustworthy and not as serving the interests of patients, many actual or potential patients may opt out of contact with psychiatric services, may reduce their willingness to disclose sensitive information, and may be even less willing to adhere to treatment plans (Brown & Calnan, 2012). In short, the necessary context for effective treatment may be undermined by the obligations of risk assessment. In the background, wherever a risk assessment is made, or in prospect, the patient may perceive the threat that is posed by the clinician’s power to instigate involuntary treatment.

At an institutional level, risk assessment and management thinking may infiltrate through an organization and the bodies to which it is accountable (Power, 2004). This process of “risk colonization” (Rothstein et al., 2006) is evident in mental health services where clinicians who are seen as accountable for the management of the risk posed by their patients find themselves increasingly preoccupied with managing the risk to themselves, perhaps accompanied by a further erosion of trust in their relationships with patients. If they “get it wrong,” they may suffer criticism, opprobrium, or worse, while their healthcare institution may suffer damage, usually of a reputational sort. Clinical supervision may become focused on checking on front-line workers’ risk assessment and management. Managers within a healthcare organization, needing to manage the risk to themselves and the organization, will seek evidence that clinicians are adequately managing risk. Ascending the institutional hierarchy, those to whom senior managers of healthcare organizations are accountable may act similarly and require checks on those managers, usually in the form of reports based on audits, based on forms completed by clinicians and others; and, eventually politicians wishing to instill confidence in the public that tragic incidents involving persons with mental illness are being prevented will attempt to manage the risk to themselves by seeking assurance that risk management arrangements are implemented by the healthcare and accountable organizations for which they

are responsible. This process of risk colonization thus permeates the governance system with scope for amplification through positive feedback loops.

Paradoxically, attempts to strengthen monitoring procedures and the like in organizations can lead to greater ignorance about actual practice. Smithson (2008b) refers to this phenomenon as “Mattera’s Dilemma” (p, 226): the greater an organization’s efforts to regulate the behavior of those employed, the more employees generate ignorance in order to preserve their freedom to act in ways they see as creative or appropriate to their work. Attempts to gain information concerning their compliance with regulations may motivate staff to withhold or to engage in subtle forms of disinformation. Thus an antithetical consequence of a substitution of risk assessment for trust relations may be the creation of an organization pervaded by unreliable information.

RISK ASSESSMENT AND DISCRIMINATION

It was noted earlier that risk factors might inadvertently offer new markers for discrimination and social exclusion. This is exactly the type of discrimination that has led, with little opposition, to what we consider a serious and unacceptable aspect of mental health care clearly evident in England today. We refer to the promulgation of an intense risk assessment focus on all persons in mental health care. Recent Department of Health guidance on best practice in risk assessment states: “The aim is to embed risk management in day-to-day practice, in particular as part of the Care Programme Approach (CPA)” (Department of Health, 2007: 3). But what justification is there for instituting a policy (as has been done in England) for a routine risk assessment for all persons who are in contact with mental health services?

Recent epidemiological studies have shown that people with a psychosis, in the absence of substance abuse or antisocial personality, are not much more likely to be violent than the general population (Coid et al., 2006; Elbogen & Johnson, 2009; Fazel et al., 2009a, 2009b). Van Dorn et al. (2012), whose alternative analysis of the data used by Elbogen and Johnson showed a higher rate of violence than those authors, nevertheless found the rate of violence in the absence of substance abuse to be only modestly raised. Further, there is no evidence that violence is easier to predict in those with mental illness than in others; nor that violence risk is more easily managed or “treated.” The proportion of the total of serious violent offenses in society due to psychosis is small, estimates ranging from 3.2 to 9.9% (Fazel et al., 2009b). Fairness or justice demands that all persons should be treated equally unless there are good reasons for not doing so. There are no such reasons for exceptional treatment in the case of persons in mental health care. There are many people in society (e.g., spouse abusers or drinkers who easily become aggressive), grossly exceeding in number those with a mental disorder, who present an equal or greater risk of violence to others, yet they are not subject to routine risk assessment (nor, like those with a mental illness, are they liable to compulsory treatment or forms of preventive detention on the basis of perceived risk alone, without having committed an offense).

If we are to place faith in risk assessment, and wish to reduce violence in our community, fairness would demand that each of us, whether mentally disordered or not, should be equally liable to be assessed when there is some kind of “trigger” event indicating that such testing is appropriate. Simply being a patient who has been referred to the mental health services is not an acceptable trigger event for a risk assessment. It could be argued that among those who could appropriately be subjected to a risk assessment would be

all those who have been involved in a violent incident of some kind (e.g., persons with injuries seen by general practitioners, accident and emergency departments, units dealing with trauma, or by police), all those who misuse substances (including alcohol), all those who have been involved in a road traffic accident, those who have been the subject of accusations of threatening or aggressive behavior, say by neighbors or in the workplace, and so on. Risk assessment would thus become the business of many agencies – health professionals (not just mental health) in any setting, the police and social agencies (including local authority services, homeless persons units, employment offices, even “Neighborhood Watch” schemes).

We are certainly not advocating such an intrusive approach and doubt that many of us would accept such an approach, even if assessments were able to lead to accurate prediction. Yet our society accepts such a blanket procedure in the case of those with a mental disorder. This double standard exposes the extent to which we discriminate against those with a diagnosis of mental illness, devaluing rights in their case that those without such a diagnosis take for granted.

A second form of discrimination results from the way in which, in contemporary culture, the rights of persons with mental illness are discounted when false negatives are traded off against false positives. The costs of the trade-off are shared unfairly. The major concern of our authorities, our media and many in the general public seems to be with the avoidance of false negatives (that is, where someone offends seriously, but was not predicted to do so by the assessment). The costs of this focus is the large number of false positives, which in this case are thus borne by those persons with mental illness who are unnecessarily detained or treated coercively on the basis of a risk assessment. There is a social cost to this in the lasting damage to the present and future lives of those individuals, but this appears to be unrecognized. Further, there is the moral cost to all of us: the cost of a social injustice.

Langan (2010) has highlighted a third area of discrimination. Unlike screening for diseases in medicine in general, screening in relation to risk in patients with mental illness in general psychiatric practice in the U.K. at least, is usually done without the patient’s knowledge, consent or knowing involvement, and is primarily for the benefit of others. She notes the problems that might arise in attempting to gain the patient’s willing and frank involvement in an assessment of his or her risk to others when set against the “coercive backdrop” in which assessment occurs, and when the clinician’s accountability for risk may prove difficult to reconcile with such honest involvement by the patient. There is virtually no research on psychiatric patients’ perspectives on risk assessment; without this, a proper balancing of potential harms and benefits – one that incorporates the issues that we have highlighted concerning potential damage to the clinical relationship – is impossible.

CONCLUSIONS

Our concern in this paper has been with risk assessment in general psychiatric practice. Langan (2010) offers a succinct summary of the current position:

Despite decades of development and the commitment of significant levels of resources, attempts to develop robust risk assessment tools for use in mental health services have been unsuccessful. Such a position seems, at least to this author, inevitable given the multi-factorial

nature of violence, the discontinuity between prediction at individual and group levels and the low base rates for violence. The challenge to professionals who operate within a socio-political context of intolerance for human error is considerable and the resources needed to address violence extend far beyond what mental health services are able or mandated to do.

We have pointed to some negative impacts of risk assessment that are infrequently discussed in clinical circles. Risk is a complex, socially constructed and moralized notion. Mental health professionals work within a culture that appears to be highly risk-averse. This, at least, is the message from the mass media, and the imperative that drives many of our authorities. But those professionals are asked to do what is impossible – to accurately predict and subsequently to prevent rare episodes of serious violence. Their position is thus highly problematic. How can these seemingly contradictory pressures be brought into some more appropriate alignment? Some new thinking is required.

One answer may lie in processes of public engagement that might cast more light on the risk portfolios that are actually held by those within different groups – that is to say, the ways in which various groups of professionals and members of the public select and value some risks over and above others – a process that may have less to do with the actual likelihood of harm, and more to do with the cultures of those groups themselves (Douglas & Wildavsky, 1983), and hence help to clarify what changes in policy might be possible or impossible. We recognize the difficulty of this undertaking in the light of the social meanings of risk discussed earlier. However, public engagement exercises in other areas show that people may think about risk in ways that are not well understood by scientists or public institutions, and that they may be prepared to accept a higher level of risk than was anticipated, especially when various public benefits are clearly presented (Academy of Medical Sciences, 2010; Marris, 2001). If people were to understand the severe limitations of risk assessment, coupled with the fact that the greatest risk from a mentally ill person is to members of their family or friends, it would not be surprising if they were to opt for mental health services that were accessible and responsive in emergencies as offering a better approach than decisions made on the basis of risk. Yet public engagement has rarely been used in the context of mental health. We argue that the best available approaches to public engagement should be considered, for example, using newly developing participatory methods (Marris & Rose, 2010; Rowe et al., 2008; Rowe & Frewer, 2005).

Risk data have been largely drawn from epidemiological studies. Rather than seeking to derive individual risk estimates from such data, it might be more consistent to ask whether they suggest population-level interventions that may reduce risk, analogous to the strategies of situational crime control that some have advocated on the basis of actuarial studies of crime. Examples might be designing mental health services that patients will wish to engage with, the provision of effective drug and alcohol services, parenting interventions for families of children with conduct disorders, and so on.

At best, clinicians themselves can act to try to prevent serious violence when it can be reasonably predicted from a clinical assessment – perhaps along the lines of the long-established clinical assessment of (the equally problematical) risk of suicide. This takes the form of a set of routine questions – in some respects, resembling a structured professional judgment – that becomes seamlessly woven into the clinical assessment. However, we have to accept that in many cases, perhaps the majority, clinicians will fail to identify cases where serious violence will ensue – that simply cannot be helped where the base rate of such violence is low. Essentially, clinicians may operate with high specificity but very low sensitivity. They are likely to detect prominent signs of risk, such as expressed

thoughts, intentions or threats involving harm to others and a past history of violence. From a clinical point of view, as in the case of the expression of thoughts of suicide, they may be of particular value as indicators of the severity of an underlying illness or of a patient's distress that serve to alert the clinician to the need for urgent and effective treatment. However, in many or most cases, such signs will not be present, or will be no more evident or severe in the few episodes that do lead to serious consequences than in the many that do not.

Importantly, clinicians working in general psychiatry must think about the degree to which they are prepared to allow professional practice to be reshaped by the risk approach. And finally, they owe it to their patients (and to the idea of a just society) that they do not support practices that discriminate unfairly against those with mental illness.

REFERENCES

- Academy of Medical Sciences. (2010). *Exploring the Boundaries: Report on a public dialogue into Animals Containing Human Material*. London: Academy of Medical Sciences.
- Andrews, D. A., & Dowden, C. (2007). The risk–need–responsivity model of assessment and human service in prevention and corrections: Crime-prevention jurisprudence. *Canadian Journal of Criminology and Criminal Justice*, 49, 439–464. DOI: 10.3138/cjccj.49.4.439
- Beck, U. (1992). *Risk society: Towards a new modernity* (M. Ritter, Trans.). London and Thousand Oaks: Sage.
- Brown, A. D. (2000). Making sense of inquiry sensemaking. *Journal of Management Studies*, 37, 45–75.
- Brown, P., & Calnan, M. (2012). *Trusting on the edge: Managing uncertainty and vulnerability in the midst of serious mental health problems*. Bristol: Polity Press.
- Brown, P., Calnan, M., Scrivener, A., & Szmukler, G. (2009). Trust in Mental Health Services: A neglected concept. *Journal of Mental Health*, 18, 449–458. DOI: 10.3109/09638230903111122
- Buchanan, A., & Leese, M. (2001). Detention of people with dangerous severe personality disorders: a systematic review. *Lancet*, 358, 1955–1959. DOI: 10.1016/S0140-6736(01)06962-8
- Castel, R. (1991). In G. Burchell, C. Gordon, & M. Miller (eds.), *The Foucault Effect: Studies in Governmentality* (pp. 281–298). Chicago: University of Chicago.
- Clark, D. M. (1986). A cognitive approach to panic. *Behaviour Research and Therapy*, 24, 461–470. DOI: 10.1016/0005-7967(86)90011-2
- Coid, J., Yang, M., Roberts, A., Ullrich, S., Moran, P., Bebbington, P., ... Singleton, N. (2006). Violence and psychiatric morbidity in a national household population—a report from the British Household Survey. *American Journal of Epidemiology*, 164, 1199–1208. DOI: 10.1093/aje/kwj339
- Department of Health. (2007). *Best Practice in Managing Risk: Principles and evidence for best practice in the assessment and management of risk to self and others in mental health services*. London: TSO.
- Douglas, M., & Wildavsky, A. (1983) *Risk and Culture: An Essay on the Selection of Technical and Environmental Dangers*. California: University of California Press, 1983.
- Douglas, M., & Wildavsky, A. (1982). How Can We Know the Risks We Face? Why Risk Selection Is a Social Process 1. *Risk Analysis*, 2, 49–58. DOI: 10.1111/j.1539-6924.1982.tb01365.x
- Doyle, M., & Logan, C. (2011). Measuring and managing short-term risk: Making the START work in practice. In I. Needham, H. Nijman, T. Palmstierna, R. Almvik, & N. Oud (Eds.), *Proceedings of the 7th European Congress on Violence in Clinical Psychiatry* (pp. 50–56). Dwingeloo, Netherlands: Kavanah.
- Elbogen, E. B., & Johnson, S. C. (2009). The intricate link between violence and mental disorder: results from the National Epidemiologic Survey on Alcohol and Related Conditions. *Archives of General Psychiatry*, 66, 152–161. DOI: 10.1001/archgenpsychiatry.2008.537
- Fazel, S., Gulati, G., Linsell, L., Geddes, J. R., & Grann, M. (2009a). Schizophrenia and violence: systematic review and meta-analysis. *PLoS Medicine*, 6(8), e1000120. DOI: 10.1371/journal.pmed.1000120PMid:19668362
- Fazel, S., Langstrom, N., Hjern, A., Grann, M., & Lichtenstein, P. (2009b). Schizophrenia, substance abuse, and violent crime. *Journal of the American Medical Association*, 301, 2016–2023. DOI: 10.1001/jama.2009.675
- Fazel, S., Singh, J. P., Doll, H., & Grann, M. (2012). Use of risk assessment instruments to predict violence and antisocial behaviour in 73 samples involving 24 827 people: systematic review and meta-analysis. *British Medical Journal*, 345, e4692. DOI: 10.1136/bmj.e4692
- Feeley, M. M., & Simon, J. (1992). The new penology: notes on the emerging strategy of corrections and its implications. *Criminology*, 30, 449–474. DOI: 10.1111/j.1745-9125.1992.tb01112.x

- Giddens, A. (1999). Risk and responsibility. *The Modern Law Review*, 62, 1–10. DOI:10.1111/1468-2230.00188
- Guilbault, R. L., Bryant, F. B., Brockway, J. H., & Posavac, E. J. (2004). A meta-analysis of research on hindsight bias. *Basic and Applied Social Psychology*, 26, 103–117. DOI: 10.1080/01973533.2004.9646399
- Hacking, I. (1990). *The Taming of Chance*. Cambridge: Cambridge University Press.
- Hawley, C. J., Gale, T. M., Sivakumaran, T., & Littlechild, B. (2010). Risk assessment in mental health: Staff attitudes and an estimate of time cost. *Journal of Mental Health*, 19, 88–98. DOI: 10.3109/09638230802523005
- Iedema, R. A. M., Jorm, C., Braithwaite, J., Travaglia, J., & Lum, M. (2006). A root cause analysis of clinical error: confronting the disjunction between formal rules and situated clinical activity. *Social Science & Medicine*, 63, 1201–1212. DOI: 10.1016/j.socscimed.2006.03.035
- Knight, F. H. (1921). *Risk, Uncertainty and Profit*. Boston MA: Houghton Mifflin Company.
- Langan, J. (2010). Challenging assumptions about risk factors and the role of screening for violence risk in the field of mental health. *Health, Risk & Society*, 12, 85–100. DOI: 10.1080/13698571003632429
- Large, M. M., Ryan, C. J., Singh, S. P., Paton, M. B., & Nielsens, O. B. (2011). The predictive value of risk categorization in schizophrenia. *Harvard Review of Psychiatry*, 19, 25–33. DOI: 10.3109/10673229.2011.549770
- Marris, C. (2001). Public views on GMOs: deconstructing the myths. *EMBO Reports*, 21, 545–548. DOI: 10.1093/embo-reports/kve142
- Marris, C., & Rose, N. (2010). Open engagement: exploring public participation in the biosciences. *PLoS Biology*, 8(11): e1000549. DOI: 10.1371/journal.pbio.1000549
- Mollering, G. (2006). *Trust: Reason, Routine, Reflexivity*. Oxford: Elsevier.
- Monahan, J., Steadman, H. J., Robbins, P. C., Appelbaum, P., Banks, S., Grisso, T., ... Silver, E. (2005). An actuarial model of violence risk assessment for persons with mental disorders. *Psychiatric Services*, 56, 810–815. DOI: 10.1176/appi.ps.56.7.810
- National Patient Safety Agency. (2010). *National Framework for Reporting and Learning*. London: National Patient Safety Agency. Retrieved from www.nrls.npsa.nhs.uk (accessed 12 July 2012)
- O'Neill, O. (2002). *Autonomy and trust in bioethics*. Cambridge: Cambridge University Press.
- Porter, T. (1996). *Trust in Numbers: The invention of objectivity*. Princeton: Princeton University Press.
- Power, M. (2004). *The Risk Management of Everything: Rethinking the Politics of Uncertainty*. London: Demos.
- Rose, N. (1998). Governing risky individuals: the role of psychiatry in new regimes of control. *Psychiatry, Psychology and Law*, 5, 177–195. DOI: 10.1080/13218719809524933
- Rose, N., & Miller, P. (2008). *Governing the present*. Cambridge: Polity.
- Rothstein, H., Huber, M., & Gaskell, G. (2006). A theory of risk colonization: The spiralling regulatory logics of societal and institutional risk. *Economy and Society*, 35, 91–112. DOI: 10.1080/03085140500465865
- Rowe, G., & Frewer, L. J. (2005). A typology of public engagement mechanisms. *Science, Technology & Human Values*, 30, 251. DOI: 10.1177/0162243904271724
- Rowe, G., Horlick-Jones, T., Walls, J., Poortinga, W., & Pidgeon, N. F. (2008). Analysis of a normative framework for evaluating public engagement exercises: reliability, validity and limitations. *Public Understanding of Science*, 17, 419. DOI: 10.1177/0963662506075351
- Royal Society. (1983). *Risk assessment: Report of a Royal Society Group*. London: Royal Society.
- Scurich, N., Monahan, J., & John, R. S. (2012). Innumeracy and unpacking: Bridging the nomothetic/idiographic divide in violence risk assessment. *Law and Human Behaviour*, DOI: 10.1037/h0093994
- Silver, E., & Miller, L. L. (2002). A cautionary note on the use of actuarial risk assessment tools for social control. *Crime & Delinquency*, 48, 138–161. DOI: 10.1177/0011128702048001006
- Singh, J. P., Serper, M., Reinharth, J., & Fazel, S. (2011). Structured assessment of violence risk in schizophrenia and other psychiatric disorders: a systematic review of the validity, reliability, and item content of 10 available instruments. *Schizophrenia Bulletin*, 37, 899–912. DOI: 10.1016/j.cpr.2010.11.009
- Slovic, P. (2000). *The perception of risk*. London: Earthscan London. Retrieved from <http://socsci2.ucsd.edu/~aronatas/project/academic/riskslovic.pdf>
- Smithson, M. (2010). Understanding uncertainty. In Bammer G. (Ed.), *Dealing with uncertainties in policing serious crime* (pp. 39–60). Canberra ACT: ANU E Press. Retrieved from http://epress.anu.edu.au/dealing_citation.html
- Smithson, M. (2008a). The many faces and masks of uncertainty. In Bammer G., & Smithson M. (Eds.), *Uncertainty and risk: Multidisciplinary perspectives* (pp. 13–25). London: Earthscan.
- Smithson, M. J. (2008b). Social theories of ignorance. In Procter R. N., & Schieberger L. (Eds.), *Agnotology: The Making and Unmaking of Ignorance* (pp. 209–229). Stanford, California: Stanford University Press.
- Szmukler, G., Everitt, B., & Leese, M. (2012). Risk assessment and ROC curves. *Psychological Medicine*, 42, 895–898. DOI: 10.1017/S003329171100208X
- Van Dom, R., Volavka, J., & Johnson, N. (2012). Mental disorder and violence: is there a relationship beyond substance use? *Social Psychiatry and Psychiatric Epidemiology*, 47, 487–503. DOI: 10.1007/s00127-011-0356-x
- Webster, C. D., Nicholls, T. L., Martin, M. L., Desmarais, S. L., & Brink, J. (2006). Short-Term Assessment of Risk and Treatability (START): The case for a new structured professional judgment scheme. *Behavioral Sciences & the Law*, 24, 747–766. DOI: 10.1002/bsl.737

- Wolff, J. (2006). Risk, fear, blame, shame and the regulation of public safety. *Economics and Philosophy*, 22, 409–427. DOI: 10.1017/S0266267106001040
- Wong, S. C. P., & Gordon, A. (2006). The validity and reliability of the Violence Risk Scale: A treatment-friendly violence risk assessment tool. *Psychology, Public Policy, and Law*, 12, 279. DOI: 10.1037/1076-8971.12.3.279
- Wong, S. C., Gordon, A., & Gu, D. (2007). Assessment and treatment of violence-prone forensic clients: an integrated approach. *British Journal of Psychiatry Suppl*, 49, s66–74. DOI: 10.1192/bjp.190.5.s66
- Yang, M., Wong, S. C. P., & Coid, J. (2010). The efficacy of violence prediction: a meta-analytic comparison of nine risk assessment tools. *Psychological Bulletin*, 136, 740. DOI: 10.1037/a0020473