How Psychiatrists and Judges Assess the Dangerousness of Persons with Mental Illness: An ‘Expertise Bias’

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When assessing dangerousness of mentally ill persons with the objective of making a decision on civil commitment, medical and legal experts use information typically belonging to their professional frame of reference. This is investigated in two studies of the commitment decision. It is hypothesized that an ‘expertise bias’ may explain differences between the medical and the legal expert in defining the dangerousness concept (study 1), and in assessing the seriousness of the danger (study 2). Judges define dangerousness more often as harming others, whereas psychiatrists more often include harm to self in the definition. In assessing the seriousness of the danger, experts tend to be more tolerant with regard to false negatives, as the type of behavior is more familiar to them. The theoretical and practical implications of the results are discussed.

Assessing the dangerousness of mentally ill persons is one of the most important diagnostic tasks of clinicians, because of its judicial implications. Whenever a person is mentally ill and judged to be dangerous to self or others, he or she may be eligible for civil commitment. Over the past decades, in most legal systems, the criterion of dangerousness for coercive hospitalization has gained importance as compared with ‘need for treatment’ (Appelbaum, 1994; Monahan & Shah, 1989). The need for treatment used to be the main ground to advise commitment of psychiatric patients. This evolution of the legislation of commitment has not, however, proceeded without problems. In the Netherlands, for example, it took about 20 years before the bill on commitment was adopted.

The tension between the medical and the legal points of view makes the lawmaking on civil commitment difficult. On the one hand, patients have the right

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The research reported in this paper was part of a research project conducted under the authority of the Dutch ministerial committee for the evaluation of the BOPZ law (the law on civil commitment), at the Netherlands Institute of Mental Health and Addiction: Trimbos Institute. I wish to thank all judges and psychiatrists who cooperated in making this research possible.
of self-determination like all other citizens. On the other hand, mentally ill persons have the right to be treated, even if they do not have the insight that treatment is needed. The evolution of the new law on civil commitment increasingly emphasizes the right of self-determination (Poletiek, 1997; van Ginneken & Poletiek, 1996), leading to a higher weight on the dangerousness criterion. This evolution has raised new problems for the experts involved in the assessment of dangerousness. What constitutes ‘dangerous behavior,’ how should it be measured, and when is the dangerousness serious enough to meet legal criteria?

The Dutch law on civil commitment gives no specific definition of dangerousness, except that it specifies that the danger can be both oriented to others and self. Thus, the legal text, together with the jurisprudence, leaves a considerable margin of freedom in the interpretation of the concept in practice. There seems to be reasonable agreement about dangerous behavior when it is defined as overt aggression towards others or obvious suicidal behavior (Lidz, Mulvey, Appelbaum, & Cleveland, 1989; Slovic & Monahan, 1995). However, the agreement diminishes as other possible definitions are adopted, for example incapacity to care for oneself (Lidz et al., 1989). Moreover, the predictive validity of dangerousness assessments is rather poor (Monahan & Shah, 1989). Experts make a huge number of false positive decisions. This article focuses on how dangerousness is defined and measured by medical and legal experts.

First, the definitions of dangerousness held in practice by the experts involved in the decision on coercive hospitalization are analyzed. Next, the assessment of seriousness of the danger according to the legal standard is assessed. Psychiatrists and judges are questioned. These are the two actors who make decisions about commitment. Although their specific roles in the Dutch system are different in a legal sense (the psychiatrist advises, and the judge decides), in practice, the psychiatrist makes a first decision about temporary commitment (which is formally sanctioned by the highest local civil authority, the mayor), which then can be lengthened or not by a decision of the judge.

Both psychiatric and judicial experts make their decision according to the same legal standards, of which the most important one is the dangerousness criterion. This fact allows for a comparative study of the decision making strategies of both experts on the dangerousness dimension. Such a comparison is pertinent for practice. Indeed, if there are systematic differences in the way legal and psychiatric experts assess dangerousness, this may cause biases in the application of the law.

It is hypothesized that the professional backgrounds of the two experts involved in assessing dangerousness of mentally ill persons will affect their dangerousness judgments. The expertise and experience of medical experts is with persons with mental illness needing treatment. The issue at stake in their judgement is increasing the health or well being of the patients. Conversely, legal experts normally make judgements about healthy people with regard to their behavior towards others. The focus of judges’ judgements is to protect the right of self-determination and security of both the mentally ill persons and others. It is hypothesized that legal experts will regard dangerousness rather as ‘dangerousness with respect to others,’ whereas medical experts are more concerned with ‘dangerousness to the self.’ Thus, it is expected that a legal expert will focus on the danger the behavior represents for society, leaving the consequences of this behavior for the person at his or her own determination. Inversely, the medical expert is expected to be primarily concerned
with a patient’s health and well-being. Consequently, the clinician is expected to also evaluate the danger of the abnormal behavior for the patient, focusing on the need for and the right to treatment (Birnbaum, 1960).

With regard to the assessment of the amount of danger, it is again hypothesized there will be an influence of the specific field of expertise. That is, the two experts have a different frame of reference and a different reference population in mind (Gigerenzer, 1999), which influences their estimation of the danger. The frame of reference of the judge is to adjudicate in conflicts between individuals or between an individual and society. The psychiatric frame of reference is diagnosing and treating patients. The population of persons to be assessed for commitment may be seen as a particular subset of the population of persons each expert normally is concerned with the reference group of cases judged. Thus, the reference group for the judge is the normal dangerous defendants. For the clinician, these are the patients voluntarily accepting treatment and hospitalization. Thus we assume that the assessment of the amount of dangerousness of a mentally ill person is biased by the specific expertise of the experts, defined as their experience with their own frame of reference groups.

In accordance with the foregoing argument, it is predicted that experts will avoid risks when the dangerous behavior is not of the kind they are used to dealing with in their group of reference. Thus, if the patient to be committed is dangerous to others, the legal expert may compare the level of dangerousness to the reference group and decide as if a sentence decision is to be made. The psychiatrist being presented with a patient harming himself or herself, for example a suicidal patient, the level of seriousness is compared with the reference group of voluntary patients. In contrast, the experts will avoid risk when they feel unable to assess the seriousness of behavior for which they do not have a reference. So, a judge will more readily commit suicidal patients, whereas a psychiatrist will more readily commit an aggressive patient. In decision making terms, these predictions may be summarized as follows: The expert will avoid more false negative decisions about the dangerousness of a patient when the specific dangerous behavior does not belong to his or her expertise.

The two aspects of dangerousness assessment discussed above—defining the concept and assessing the amount of danger—are examined in two studies. study 1 investigates the experts’ opinions on the legal interpretation of dangerousness by means of questionnaires. In study 2 the commitment decision based on assessment of the amount of danger is observed in the naturalistic setting.

**STUDY 1**

**Method**

Seven judges and 12 psychiatrists from emergency hospital units participated voluntarily in this study. They received a questionnaire with 24 items describing dangerous situations. They were asked to rate each item on a five-point scale as to whether they believed the situation described involves danger as meant in the law on civil commitment. The ‘1’ response represented ‘situation is absolutely no danger as meant by the law’ and ‘5’ represented ‘situation is danger as meant by the law’.

The items were taken from real cases. That is, they had been used in argumentation of civil commitment cases by both kinds of expert. The items were clustered in
four interpretations of dangerous behavior: (i) direct physical harm to others, (ii) direct physical harm to self (e.g., suicidal behavior), (iii) non-physical harm to others, and (iv) non-physical harm to self. The first type involved assaulting behavior directed at others causing physical injury. The second type involved attempts to commit suicide or self-mutilation resulting in injuries. The third type was behavior causing psychological, social or financial harm to others, or indirect harm to their health. For example, items of this type were ‘spending all the money of one’s family’ and ‘exhausting a family or care giver until he or she gets burned out.’ The fourth type was causing psychological, social or financial harm to oneself or harm to one’s own health. Examples of this type were ‘spending all one’s money at once,’ ‘causing oneself to be fired by one’s employer,’ and ‘neglecting a somatic disease.’

Results

The mean legal-relevancy ratings of dangerous situations, by the psychiatrists and the judges, are displayed in Table 1. As can be seen ‘direct physical harm caused to either self or others’ is interpreted by both experts equally to be in accordance with the concept of dangerousness in a legal sense. Also, direct physical harm is considered to be more in accordance with the legal meaning of dangerousness than non-physical harm \((t(10.86, 18); p < .00)\). However, judges and psychiatrists tend to differ in their judgements with regard to other forms of harmful behavior.

Globally, we predicted that legal experts focus on dangerous behavior towards others, whereas medical experts focus on dangerousness to self. The results show indeed that non-physical harm to others is considered to be more relevant for the commitment decision by legal than by psychiatric experts, although this difference tended to significance only \((t(17) = 1.43, p < .10)\). Inversely, the legal expert tended to rate ‘harm to self’ as less relevant for the legal dangerousness concept, as compared to psychiatrists \((t(17) = -1.42, p < .10)\). Although the differences did not reach the standard significance level, the expected relation between expertise and focus is in the predicted direction, which is visualised in Figure 1.

Discussion

Both experts agree that very serious aggressive behavior (assault) to others and trying to kill or inflict injury to oneself is dangerous in the sense indicated by the law on civil commitment. Thus the prediction about the difference between psychiatrists and judges was not verified for serious, direct, physical aggression. However,
there was some support for the hypothesis when the behavior is not direct physical aggression but psychologically, socially or financially harmful. The results suggest that causing this kind of harm to self is a medical rather than a judicial interpretation of dangerous behavior. Inversely, causing non-physical harm to others is an aspect of dangerousness that is weighted more by judges than by psychiatrists. Thus, some support was found for the idea that the dangerousness definition may be biased by the specific expertise of the decision maker involved in the commitment decision. The legal expert may focus on the right of self-determination and confine his or her definition of dangerousness to those behaviors that affect others. The medical expert may focus on the right to be healthy and define dangerousness accordingly as behavior that may (also) affect the person’s own well-being. However, both experts deviate only when milder and less physical forms of dangerous behavior are involved.

**STUDY 2**

In the second study the ‘quantitative’ assessment of dangerousness is studied. How do experts decide that the danger is serious enough to justify commitment? It was predicted that experts would assess the seriousness of danger of an individual case in comparison with the reference group. In general, the aggressiveness of persons eligible for commitment is less severe than the aggressiveness of normal defendants brought to justice by the prosecutor, because in the legal situation defendants eligible for imprisonment only appear in court after a serious suspicion of aggressiveness towards others. Therefore, assuming that the judge indeed compares each
case to be judged against the background of his or her professional reference group, the judge is predicted to give lower ratings to the seriousness of dangerous behavior of mentally ill persons. Hence, the legal expert is predicted to reject more often cases of aggressive behavior to others than the psychiatrist does.

Analogously, the psychiatrist might rate harming oneself less severely than a non-medical expert would do. It is expected that a substantial proportion of suicidal behavior is actually interpreted by the psychiatrist to be something other than a purposeful attempt to kill oneself (for example, a desperate attempt to ask for help). Hence, the seriousness of the threat of self-directed aggression is expected to be rated lower by the medical expert, for whom this kind of behavior is part of the frame of reference. Therefore, psychiatrists are predicted to reject suicidal cases more often than the judges, for whom suicidal tendencies form a phenomenon with which they are not familiar.

To test this hypothesis, psychiatrists are compared with judges, in their natural settings, with regard to their assessment of the seriousness of dangerous behavior. As discussed above, this decision is made at two points in the process of civil commitment. First, a psychiatrist assesses the patient. Generally, but not always, the patient is seen in an acute state of dysfunction. The psychiatrist decides about temporary (five days at most) coercion in the clinic, when the danger is assessed to be high enough. Within this period, the judge sees the patient. The judge decides about prolonged commitment for two weeks at most. The psychiatrist as well as the judge makes a decision on exactly the same legal ground: the patient's expected dangerousness. It might be argued, however, that the comparison between the assessments by both experts is confused by the fact that the experts see patients at different stages. Medical experts judge patients in an acute situation, whereas legal experts make their judgements on people having been hospitalized for a few days. However, for purposes of this inquiry, the differences between the situations in which the expert assessments are made are not relevant.

Judges who see the patients in the second stage base their assessment of dangerousness on the behavior observed and reported by the psychiatrist at the moment of hospitalization, and not on the basis of his or her behavior in the clinic in the period after hospitalization. Suppose, for example, a patient in a state of confusion is swimming and shouting in the pond of a park, in the winter. Neighbors call the psychiatrist. The patient does not want to go to the mental hospital. The psychiatrist assesses whether the behavior is dangerous enough to justify forced hospitalization. Even if the patient is confused, it is not the acute state that matters for the commitment decision, though this often is the reason in the first place why the psychiatrist is called. Suppose she still advises commitment. Three days later, the judge estimates again the dangerousness of the swimming in the pond behavior, reported by the psychiatrist earlier. The judge estimates again firstly whether this behavior is dangerous in the sense of the law and whether the danger is serious enough to justify an involuntary hospitalization for two or more weeks. Thus the patient being in a crisis situation or in the hospital setting is no ground for the 'sectioning' decision, but it is the (dangerousness of the) particular behavior.

Thus, in principle, the same dangerousness judgement is made (though with possible different outcomes, of course) by both experts on the basis of the same behavior. Nonetheless, the judge does not see those cases in which the hospital has canceled the commitment in the few days following the first hospitalization.
However, these cases are rare, and in addition, they do not affect the comparison of the assessment strategies, because their departure from the hospital precisely raises the average seriousness of the cases ultimately seen by the judge. In conclusion, both experts are supposed to make the same assessment on the basis of the same behavior. This assessment is a decision whether the behavior which was the reason for calling the medical expert is, first, dangerous as meant by the law and, second, whether it is serious enough to justify commitment in order to prevent it in the future.

Method

Thirty-two cases were studied from five psychiatric emergency units in the Netherlands in which a psychiatrist decides upon advising or not advising a temporary commitment on the basis of the criteria mentioned in the Dutch commitment law. Immediately after his or her 24-hour service, the psychiatrist was interviewed about all emergency cases he or she had decided upon in the past 24 hours. For practical and ethical reasons it was not possible to observe the cases directly. For each case, the expert was first asked to give a detailed report of what happened and what he or she had seen.

Next, the interviewer asked some open questions bearing on this case. The questions regarding the dangerousness assessment were the following.

(i) Was there any dangerous behavior?
(ii) Can you describe the behavior?
(iii) Was the danger serious enough to meet the legal dangerousness criterion?

The same procedure was basically followed for 36 court sessions in which a judge decided upon the prolongation of the commitment. Due to ethical restrictions, we could not observe the same patients being judged by the psychiatrists and judges. Directly observing these patients would have required identities to be registered. Since this study was interested mainly in the arguments and strategies of deciding about commitment and the justifications by the experts rather than in the patients themselves, this was not a major problem.

As opposed to the psychiatric cases, the legal sessions were observed directly. After each session, the judge was asked the same questions as the psychiatrists. Before each session, the patient’s lawyer asked the patient whether he or she consented to the researcher being present at the session. The lawyer informed the patients about the topic of the research project.

Results

The frequencies of the types of dangerous behavior mentioned by both experts (Question 1 and 2), and the number of negative commitment decisions (the danger is not serious enough to justify commitment; Question 3) are displayed in Table 2.

The answers to the second question (describe the dangerous behavior) were categorized in the same four categories as used in Study 1. In particular, the difference between dangerous behavior to self and to others was of interest for the analysis. Different categories of dangerousness were, on specific occasions, scored
for cases, due to the fact that experts mentioned more than one type of dangerous behavior for one person. For cases with a positive decision on commitment, it was not clearly determinable which of the types of dangerous behavior displayed by the patient was crucially ‘serious enough’ for a positive commitment decision. For this reason, the analysis concentrates on the cases that were ultimately rejected, that is, the negative commitment decisions.

It is clear that for cases rejected, none of the mentioned types of dangerous behavior reached the seriousness required by the legal criterion, according to the expert. Thus, the assessment strategy of the experts was studied by looking at cases in which dangerous behavior was observed, but nonetheless a negative decision on commitment made due to insufficient seriousness.

In accordance with the predictions, it can be seen that the psychiatrists rejected fewer cases of dangerous behavior to others than the judges (see Table 2). Inversely, the judges tended to reject fewer cases with dangerous behavior-to-self for commitment than the psychiatrists ($\chi^2 = 6.45; \text{df} = 1; p < 0.01$). This pattern is especially clear for direct aggressive behavior to others or to self. It is less clear for harmful behavior. In that case, when only the data about harmful behavior are considered, a tendency in the predicted direction existed, but no significant relation between expertise of the decision maker and decision strategy was found.

**Table 2. Negative commitment decisions for several types of dangerous behavior, by legal and medical experts**

<table>
<thead>
<tr>
<th>Type of dangerous behavior</th>
<th>Psychiatrists ($n = 32$ cases)</th>
<th>Judges ($n = 36$ cases)</th>
</tr>
</thead>
<tbody>
<tr>
<td>To others</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aggressive</td>
<td>1</td>
<td>9</td>
</tr>
<tr>
<td>Harmful to others</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>Total</td>
<td>1</td>
<td>16</td>
</tr>
<tr>
<td>To self</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Suicidal</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Harmful to self</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>Total</td>
<td>7</td>
<td>9</td>
</tr>
</tbody>
</table>

**Discussion**

The results are in line with the hypothesis that the more the behavior belongs to the field of expertise, and can be compared with a reference group, the more tolerantly it will be rated, and, thus, the more negative ‘dangerousness’ decisions will follow. In other words, more risks are taken with regard to the dangerousness of the person when the type of behavior assessed by the expert is familiar to him. However, this result was not found clearly in the cases in which the danger consisted in causing non-physical harm to self and others. Interestingly, this exception is precisely what would be expected on the basis of the result of study 1. In that study, these forms of dangerousness appeared to be disputable as to whether they are legally relevant for the civil commitment decision in the first place. Another result of study 2, which supports this analysis, is that judges seem to estimate the amount of danger insufficient for commitment more often anyway.
When physically aggressive behavior was involved, the findings suggest that the strategies of assessment are in line with prior expectations. The psychiatrist tolerates more false negatives with regard to the behavior he or she knows well enough to interpret, and the judge is more tolerant with regard to aggressive behavior familiar to him or her. In other words, study 2 suggests that the experts can be described as more risk averse when they assess behavior with which they are not used to dealing.

**CONCLUSIONS**

Differences were found between medical and legal experts in deciding about the dangerousness of persons with mental illness, in the context of civil commitment. The focus was on two aspects of this decision: how do the experts define dangerousness as a legal criterion and how do they assess the seriousness of the danger against the legal criterion? In their way of defining the legal concept, no difference was found when dangerousness is restricted to physical aggressive behavior to self or others. All experts considered this behavior as highly pertinent when deciding about commitment. However, forms of harmful behavior other than direct aggression are considered to be less pertinent by both experts. In that case, legal experts tend to exclude more often harming oneself from the legal dangerousness definition, and less often harming others. The reverse was found for the medical experts. This was in accordance with the role-based predictions.

To analyze the way experts assess the seriousness of the dangerous behavior in terms of the legal criterion for commitment, a study was conducted in which the process of this decision and the arguments underlying it were observed. An ‘expertise’ bias was found in the assessment of dangerousness strategy, which seems to be determined by the cognitive frame of reference for the field of expertise of the decision maker. When faced with a kind of behavior the expert is not familiar with, there is a tendency to avoid risk and to decide that the behavior is serious enough to justify commitment. Inversely, when the behavior is familiar to the expert, the tendency is to reject commitment because in the reference situation and in comparison with the cases seen in the past, the expert would not estimate the danger to be as serious as a novice would judge it. So, psychiatrists tend to reject for commitment suicidal cases more often than judges do, whereas judges reject more often aggressivity towards others as insufficiently serious for commitment.

Interestingly, this tendency was mainly found when direct physical aggressiveness (towards self or others) was involved. When the dangerous behavior consisted in harm to self or others, the picture was less clear. What was clear in these cases was that there were more negative commitment decisions. As reflected in study 1, experts tended to consider this kind of dangerous behavior as less relevant for civil commitment anyway.

There are two additional observations about the expertise bias that emerge from the observations. First, judges tended more often to reject proposals for civil commitment because of insufficient dangerousness than psychiatrists. It seemed that the subjective value of the two options (deciding positively versus negatively on commitment) differed between judges and psychiatrists. For the judge, a positive commitment decision is analogous to sentencing someone and depriving him or her of liberty. Some judges were concerned about the negative implications of such
liberty deprivations. Inversely, the positive commitment decision implies that the patient receives the opportunity to be treated, which was felt as a positive outcome by psychiatrists. This may have contributed to the higher proportion of rejections by judges as compared with psychiatrists.

Second, the expertise bias found in the present studies might be seen as a special case of a more general relation between expertise and risk taking behavior (Poletiek & Berndsen, 2000). Indeed, as a decision maker has more expertise in a particular field, that is, as more cases have been seen in the past, a more risky attitude towards false negatives is adopted. In the present context, this means taking the risk that a rejected case turned out to be dangerous. In these studies, more risky decisions (to reject commitment) were taken by the decision maker having more expertise in judging the case at hand.

This general expertise bias implies that more experienced experts who have seen more cases in the past decide more riskily than less experienced experts in the same field. For example young psychiatrists might be expected to take fewer risks than older ones. The study indeed suggests this relation: assistant psychiatrists rarely rejected a commitment proposal. However, this notion could not further be tested because of the small number of assistant psychiatrists participating in the study.

What are the implications of these results for practice? Possible ‘expertise biases’ in the assessment of dangerousness can have serious consequences for commitment decisions. Since the psychiatrist makes a sort of pre-selection of the patients who will be seen by the judge, a possible bias in this pre-selection may result in a group of patients not being seen at all by the judge, even though the judge might find this group liable for commitment on the basis of the legal considerations. For example, on the basis of the findings in this study, one might expect the psychiatrists to include more often patients being aggressive to others in the selection than the judge would, and exclude the self-harming persons.

Summarizing the work presented in this article, although the two experts are supposed to understand one and the same thing by dangerousness, and assess it with the same criterion determined by the law maker, each is influenced by the specific focus of his or her profession and biases the assessment of dangerousness accordingly. This phenomenon, which was called the ‘expertise bias’, needs further investigation, for example in more controlled experimental situations. Future research might describe more precisely the bias suggested in this study. Is there a general tendency by experts to tolerate more false negatives when a dramatic decision has to be taken, than lay persons would do? How does this phenomenon relate to the base rate fallacy, and the representativeness bias (Kahneman & Tversky, 1972, 1973)? Does lack of expertise make one more anxious about making errors and therefore make one avoid risks (see Yates, 1992)?

These questions are interesting for both decision making theory and practice. In the present context, one sees that it may influence the fairness of application of the civil commitment law.

REFERENCES
