

J. T. Smith,¹ M.D. and M. J. English,¹ J.D.

Alternatives in Psychiatric Testimony on Dangerousness

In the District of Columbia, as in many state jurisdictions, psychiatrists are likely to encounter the issue of testifying in a court regarding their "predictions of future dangerousness" in two situations: (a) during the process of involuntary civil commitment or commitment after a finding of not guilty by reason of insanity in a criminal case and (b) upon petition for a conditional or unconditional release after commitment in a criminal case [1-3]. The criteria for civil commitment in the District of Columbia are mental illness and a finding that the mentally ill individual is likely to injure himself or others because of his mental illness [4]. The standard is similar after a finding of not guilty by reason of insanity [5, 6].

The major issue of defining the legal term of dangerousness is not specifically addressed in this paper. Such a definition can be found in Ref 7. For our purposes, dangerousness will be considered as meaning future violent acts toward self or others and thus the term would not include those persons considered dangerous because of grave disability.

For the last 50 years psychiatrists have been giving expert testimony regarding the dangerousness of patients who are about to be committed to or released from mental institutions. During that same 50 years, research studies have inevitably pointed out that psychiatrists cannot actually predict dangerousness, at least not without including substantial false positive results [8-32]. The purpose of this article is to address this dilemma constructively and to propose some alternatives to present practices or to prevent doing nothing at all.

Initially, it should be emphasized that there are potential long-range solutions to this problem that could include such approaches as research that will develop actuarial tables of recidivism to be applied to a given case in a given jurisdiction with a high degree of accuracy or developing sensitive, specific psychological tests to predict dangerousness. We look forward to progress in these areas. But rather than waiting for such sophisticated tools and assuming the present practice of offering conclusional statements regarding the likelihood of future violent acts is factually untenable, we would suggest two approaches that could be remedial. Our first proposal is that the psychiatrist educate himself regarding the court system, especially its rules of evidence, so he can manipulate his testimony in such a way that his actual expertise will be available to the trier of fact. Our second proposal is that the psychiatrist involved in the legal process act to educate the courts regarding the problems the psychiatrist faces when asked to predict dangerousness.

Educating the Psychiatrist

Much controversy surrounds the issue of the role of the psychiatric expert witness. Two points of view have been articulated. The long-standing traditional view presumes

Received for publication 27 Oct. 1977; accepted for publication 2 Dec. 1977.

¹Medical officer, Psychiatry, Division of Forensic Programs; and attorney, Office of the Legal Advisor, respectively; Saint Elizabeth's Hospital, Washington, D.C. 20032.

the expert witness's role to be limited to that of the impartial expert who presents objective information to the court with no attempt to promote a particular point of view. This school wishes no advocacy role, expecting it to be carried out by counsel for the parties. The second more recent school led by Bernard Diamond [33,34] suggests that the psychiatric witness cannot, in a true sense, remain totally impartial and must take on a limited advocacy role in the courtroom. This sense of an advocacy responsibility has generally been related to the substance of the testimony rather than the success of one particular party to the litigation.

In those instances where the psychiatric witness is called on to testify regarding predictions of future dangerousness, the nature of the proceeding itself necessitates that the psychiatric expert witness view himself as an advocate. In those instances where the psychiatric expert witness testifies regarding dangerousness he often represents the particular interests of a treatment facility. Counsel for the facility is usually a state district attorney who is often unfamiliar with mental health issues and is concerned primarily with the protection of society, whereas the facility staff is more directly concerned with individual treatment considerations as well as societal protection. In this posture we believe the expert witness himself must adopt a role of persuasion regarding the necessity of involuntary hospitalization or release from hospitalization. Unfortunately, the necessity for an advocacy role in these proceedings enhances the dilemma of the psychiatric expert witness who is called on to testify regarding the likelihood of future dangerous behavior as a legal prerequisite to institutionalization for psychiatric treatment. Unless the psychiatric community wishes to completely surrender its role in the process of determining who should or should not be institutionalized for treatment, significant efforts must be generated in the direction of discouraging the myth of an accurate ability to predict future violent or suicidal behavior while preserving the positive benefits of psychiatric opinion presented to the legal trier of fact.

One approach to this problem is to learn the legal rules regarding expert testimony so that they can be used as a vehicle to present what the witness wishes while protecting him from being required to make absolute predictions for which he has no special expertise. The purpose of the following discussion is to acquaint the reader with some fundamental aspects of these rules and to discuss the interplay between the intent of the rules and the goals of the psychiatric expert witness.

The rules of evidence in a particular jurisdiction will determine what expert testimony may be heard and in what manner. Of crucial importance in our minds is that the expert witness be aware of the nature of his goal as a witness. His goal should not be to control the judicial determination of the legal issue of dangerousness. Instead it should be to use a testimonial approach that will make more likely a successful presentation of the facts and professional opinions the expert wishes to place before the court. A psychiatrist can tell the court the significance of certain behaviors of a patient. He can also describe to the court the dynamics of mental illness and the potential impact of proposed treatment. All this can be of significant benefit to the court in performing its functions of deciding if an individual presents a danger to himself or others and if that danger is sufficient to justify involuntary hospitalization for psychiatric treatment.

The recently enacted Federal Rules of Evidence, applicable in the courts of the District of Columbia, are an example of the manner in which the rules of evidence provide a solid foundation on which the psychiatric witness can avoid giving conclusional opinions regarding future dangerousness if he feels uncomfortable doing so.²

Initially, it should be noted that no witness is entitled to testify regarding opinions about which he has no special expertise [34]. The initial premise of expertise to predict future behavior, long unchallenged, is now being questioned with more frequency. The

²There may be some situations where the witness will feel capable of making a conclusional statement regarding future behavior, such as danger to self in a case of grave physical disability.

psychiatric expert should thus take great care in limiting his opinion testimony to his area of expertise to preserve his credibility with the courts. Such an attitude is in direct compliance with both the letter and spirit of the law regarding expert opinion testimony.

In developing one's attitude and approach to acting as a psychiatric expert witness, one primary fact should be recognized: the determination of a person's likely future dangerous behavior for purposes of civil commitment or release is a judicial function. The expert is not intended to take on that responsibility. The role of the expert is to provide the court with information that will assist in reaching that legal decision. In fact, it is universally held that no witness may give opinions that address pure questions of law. Although one cannot treat dangerousness as a pure question of law, the legal determination of it as a basis for commitment or release is a uniquely judicial function.

Under traditional evidentiary rules, the role of the psychiatric expert in helping resolve an issue of fact, or more accurately a mixed issue of law and fact, is not purely a determinative but an explanatory role. The language of Rule 702 on testimony by experts of the Federal Rules of Evidence states the issue clearly:

If scientific, technical or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education, may testify thereto in the form of an opinion or otherwise.

This rule simply provides for the admission of expert opinion if it assists the trier of fact to understand or to determine a fact in issue. Thus the expert's testimony should be directed at assisting the court to understand facts more than merely informing the court of what the expert believes its conclusion should be. The expert complies with the rules of evidence if he provides explanations of facts that might be weighed in assessing the likelihood of future dangerousness rather than stating that, in the opinion of the expert, an individual will or will not be dangerous.

The Federal Advisory Committee Notes to Rule 702 suggest two important points the psychiatric expert should consider. First, the Committee observes that the Rule recognizes that an expert on the stand may give a dissertation or exposition of scientific or other principles relevant to the case, leaving the trier of fact to apply them to the facts. The purpose of rules of evidence is to permit the orderly presentation of information that will help the fair resolution of facts in issue in a given case. One important role of the expert witness is to explain to the court the basis of psychiatric judgments regarding mental illness and its impact on behavior rather than to attempt to decide, for the court, what the behavior will be. Indeed, the traditional rule of evidence requires that the expert explain the basis of his opinion testimony.

Second, the Committee notes that conclusional opinions are not indispensable and that the use of expert testimony in nonopinion form should be encouraged when the trier of fact itself can draw the requisite inferences.

Moreover, other legal authorities are replete with admonitions that the expert witness best serves the cause of justice when he provides the trier of facts with information that can help in reaching a conclusion rather than with the conclusion itself. The holding in *Washington v. United States* [35], although dealing with issues of diagnostic labeling, provides an example:

It does not help a jury of laymen to be told of a diagnosis limited to the esoteric and swiftly changing vocabulary of psychiatry. Every technical description ought to be "translated" in terms of "what I mean by this," followed by a down-to-earth concrete explanation in terms which convey meaning to laymen. A psychiatrist who gives a jury a diagnosis, for example, of "psycho-neurotic reaction, obsessive compulsive type" and fails to explain fully what this means, would contribute more to society if he were permitted to stay at his hospital post taking care of patients.

The following example of the testimony of a psychiatric expert highlights the potential for meaningful yet nonconclusional responses to the issue of predicting dangerousness.

- Q. Doctor, in your expert opinion would this patient be dangerous if released into the community at the present time?
- A. As a psychiatrist, I am not qualified as an expert in predicting dangerousness. However, I do have information which may be relevant to that issue.
- Q. Isn't it true that psychiatrists are experts in predicting dangerous behavior on the part of their patients if such behavior is due to mental illness?
- Q. No. Psychiatrists are experts in understanding the symptoms and behavior of patients who are mentally ill, but scientifically controlled studies have shown that their predictions of dangerous behavior are no more reliable and no more valid than the predictions of people untrained in the field of human behavior.
- Q. Doctor, is there some way you can be more responsive to my question?
- A. Well, in spite of the fact that psychiatrists, including myself, have answered that question in the past, in good faith, it is only fair to state that neither I nor most of my colleagues have ever done any controlled scientific studies on the outcome of these predictions.
- Q. Doctor, how long have you been practicing psychiatry and predicting dangerousness?
- A. 20 years.
- Q. And you have never checked the outcome of your predictions?
- A. Only in an informal way. But to determine such things with any degree of accuracy a scientifically controlled study over a period of time would be necessary.
- Q. But, Doctor, you have 20 years of experience in predicting dangerousness. Isn't it true that experience is a good teacher?
- A. Experience is neither a good teacher nor a bad teacher by itself. If you drive a golf ball consistently into a dense fog and never see where it goes there is no way to perfect your stroke. Accurate feedback as well as experience is necessary to improve your stroke or your predictive ability.
- Q. Can you tell us about this patient's potential for repeating his past dangerous acts?
- A. He definitely has a potential for acting out dangerous behavior.
- Q. Can you describe it?
- A. He has a low tolerance for frustration, jumps to conclusions, and often exercises poor judgment. He imagines that people have it in for him and exaggerates and even distorts the meaning of their actions.
- Q. Then he can be dangerous?
- A. Yes, he can, but to predict accurately whether he will be is impossible for anyone as far as I know.

A particular bugaboo for the expert witness is the question that requires a simple yes or no response. As a general rule, a witness is supposed to respond as the form of the question requires. However, the special role of the expert necessitates an exception to this general rule. If the psychiatric expert is asked to respond yes or no to the question Is this individual likely to be dangerous in the future? he should not limit his answer to a yes or no. Instead, he should respond in an explanatory manner that indicates the limitation on his ability to answer and indicates to the trier of fact what information the expert can provide to aid in a determination of the dangerousness issue. To be effective in preventing the onus of reaching such compulsory statements from falling on the expert, he must be aware that the more truthful response suggested above is the legally preferred response.

A final note regarding personalities is appropriate. Often the expert witness may perceive himself as an outsider to the mysterious workings of the legal system. If the expert wishes to maintain his own professional position regarding the content of the testimony he is going to give, he must not permit the system to overwhelm his personal decisions regarding

his testimony. The expert witness will find that in the vast majority of instances his refusal to give conclusional testimony regarding future dangerousness will be sustained by the court, particularly if the expert himself reminds the court of his special role as an expert witness, which requires full explanation and necessary qualification to aid the trier of fact. Of course, in the best of all worlds one would presume that the exact content of the expert's testimony will have been discussed with the attorney presenting the evidence before entering the courtroom and that the attorney himself is prepared to object strenuously to impositions or limitations being placed on the form or content of the testimony. However, if the expert himself is unfamiliar with the applicable ground rules, the likelihood that the attorney will be sensitive to these issues is severely reduced.

Educating the Courts

The process of educating the court may best be achieved by presenting, out of the context of specific litigation, a memorandum or position statement that addresses this issue of predicting dangerousness, with a request for distribution to any of the judiciary who are involved in either the civil or criminal commitment process. Such a memorandum might reach the courts in a number of ways. It could be made available at judicial seminars or sent to the chief judge for circulation to the courts in his jurisdiction. Of course, this proposed process is most appropriate for institutional staff where court contacts are frequent and resources are available to prepare and distribute such material effectively.

The courts should be told what the psychiatrist *cannot* do. He cannot accurately predict how people will behave over an extended time. But the courts should also be told what the psychiatrist *can* do. He can bring before the court the psychodynamics of the patient's previous behavior. He can discuss the patient's emotional needs and his habit patterns of gratification of these needs. He can also talk in lay terms about ego strength and superego development, the influence of cultural factors and social proscriptions, and the effect of environmental controls and structure.

Content of the Memorandum

In accord with the usual form of a legal memorandum, it would first be noted that the question presented to the court is whether the psychiatrist can accurately predict dangerous behavior. The brief answer would be no. The statement should address four things. First: up to the present time psychiatric testimony on dangerousness is not only accepted but even expected by the courts. Second: psychiatric testimony on dangerousness is lacking in validity and reliability. Third: the net effect of this situation is to leave the burden of deciding the disposition of the case on the shoulders of the psychiatrist rather than the court. Fourth, and most important: psychiatrists can offer the court important nonconclusional information that will aid in the judicial determination of the dangerousness issue.

A review of the professional literature would include the findings of Steadman and Keveles [29] in "Operation Baxstrom," which basically showed that but for a Supreme Court decision in their favor nearly 1000 human beings would have spent their lives institutionalized because a few psychiatrists, in their considered opinion, thought they were dangerous and no one asked for proof. It would include the study of Kozol et al [17] who described how a team of at least five mental health professionals including two or more psychiatrists were asked to conduct unusually thorough clinical examinations on institutionalized individuals who had been convicted previously of assaultive crimes and were eligible for release. Based on the examinations, extensive case histories, and the results of psychological tests, the team attempted to predict which individuals would commit assaultive crimes if released. Of 49 patients considered by the evaluating team to be dangerous and therefore not recommended for release, but who nevertheless were released after court

hearings, 65% had not been found to have committed a violent crime within five years of returning to the community. Further, Wenk et al [32] found that of 1630 parolees identified by the California Department of Corrections at the time of release as potentially aggressive (based on a history of psychiatrically predicted aggressive behavior) only 5 were known to have committed violent crimes after release, as compared with 17 of 6082 who were not predicted to be potentially aggressive. Livermore et al [19] proposed the following hypothetical situation:

Assume that one person out of a thousand would kill. Assume also that an exceptionally accurate test is created which differentiates with 95% effectiveness those who will kill from those who will not. If 100,000 people were tested, out of 100 who will kill, 95 will be isolated. Unfortunately, out of the 99,900 who would not kill 4,995 people would also be isolated as potential killers. In these circumstances, it is clear that we could not justify incarcerating the 5,090 people. If in the criminal law it is better letting ten guilty men go free than have one innocent man suffer, how can we say in the civil commitment area that it is better that 54 harmless people be incarcerated lest one dangerous man be free. The 5% error out of 100,000 doesn't account for 4,995 people who would be erroneously identified as potential killers.

Ennis and Litwack [12] comment on an article by Dershowitz, stating that:

It seems that psychiatrists are particularly prone to one type of error over predictions: stating that his research should suggest that for every correct psychiatric prediction of violence there are numerous erroneous predictions, i.e. for every group of inmates presently confined on the basis of psychiatric predictions of violence, there are only a few who would, and many more who would not, actually engage in such conduct if released.

Dershowitz [36] adds that one reason for this overprediction is that a psychiatrist almost never learns about his erroneous predictions of violence—for predictive assailants are generally incarcerated and have little opportunity to prove or disapprove the prediction—but he always learns about his erroneous predictions of nonviolence, often from the newspaper headlines announcing the crime. This higher visibility of erroneous predictions of nonviolence inclines him, whether consciously or unconsciously, to overpredict violent behavior. Monahan [37] states, “of those predicted to be dangerous, between 65% and 95% are false positives. Gulevich and Bourne [15] state that there is no support in the literature for the popularly held notion that the mentally ill are more dangerous as a group than the general population.” In a report by Rapoport et al [38] it was found that of 73 patients who requested court hearings to obtain release from a psychiatric hospital, 26 were released by the court despite the objections of their psychiatrists and 47 were remanded back to the hospital. Twelve of the 47 subsequently escaped. The investigation studied the community adjustment of the 38 nonhospitalized individuals after at least one year. Notably, 44% that the court released and 42% of the escaped patients had made a satisfactory adjustment to the community (they had not been in serious trouble with the law, had not been rehospitalized, and were caring for themselves). Of equal significance, in neither group did any antisocial behavior occur, although a number of the patients who did not adjust were involved in minor accidents or crimes.

After a presentation of such studies the discussion could continue by including in more detail those areas in which the psychiatrist is expertly qualified to testify. His expertise is not so much in question when it comes to testifying about the signs and symptoms of mental illness and how to organize those signs and symptoms to confirm a particular diagnosis. He is prepared to discuss, along with causes, the predisposing factors such as genetic, family, and environmental influences. The psychiatrist is familiar with the required treatment and is able to render a prognosis. Without attempting to predict whether the patient will be dangerous, the psychiatrist can discuss the circumstances under which the patient was dangerous in the past, his level of adjustment in his present circumstances, the degree of impulse control at present, and the circumstances under which he has lost control in the past. The conclusions for such a memorandum of law

would simply state that the question presented as to whether the psychiatrist can predict dangerousness has been answered in the negative without leaving the psychiatrist's testimony useless and that the expert psychiatric witness can be a very useful agent for the court making decisions regarding the disposition of involuntarily committed patients.

Discussion

A number of studies point to the fact that psychiatrists can only predict dangerous behavior by including an inordinate number of false positives. Rather than abandon the role of expert witness in court, two alternatives are suggested:

1. Psychiatrists can be educated regarding the court system, its rules of evidence, and how to present their testimony in nonconclusional terms.
2. Courts can be educated regarding those things the psychiatrist can do and those things he cannot do. He cannot accurately predict dangerousness. He can discuss the psychodynamics of dangerous behavior in understandable lay terms that the court can use to reach its own conclusion and arrive at a disposition in the case.

References

- [1] 24 D.C. Code § 301 (e) (1973).
- [2] *United States v. Ecker*, 543 F. 2d 178 (D.C. Cir. 1976).
- [3] *Hough v. United States*, 271 F.2d 458 (D.C. Cir 1959).
- [4] 21 D.C. Code §§ 501 et seq. (1973).
- [5] 24 D.C. Code § 301(d) (1973).
- [6] *Bolten v. Harris*, 396 F.2d 642 (D.C. Cir 1968).
- [7] Tanay, E., "Dangerousness and Psychiatry," *Current Concepts in Psychiatry*, Vol. 1, No. 1, 1975, pp. 17-26.
- [8] "Task Force Report 8: Clinical Aspects of the Violent Individual," American Psychiatric Association, Washington, D.C., July 1974.
- [9] "Developments in the Law: Civil Commitment of the Mentally Ill," *Harvard Law Review*, Vol. 87, 1974, pp. 1190-1406.
- [10] Diamond, B., "The Psychiatric Prediction of Dangerousness," *University of Pennsylvania Law Review*, Vol. 123, No. 2, 1974, pp. 430-452.
- [11] Ennis, B. J., "Civil Liberties and Mental Illness," *Criminal Law Bulletin*, Vol. 7, 1971, p. 101.
- [12] Ennis, B. J. and Litwack, T. R., "Psychiatry and the Presumption of Expertise: Flipping Coins in the Courtroom," *California Law Review*, Vol. 62, 1974, pp. 693-752.
- [13] Greenberg, D. F., "Involuntary Psychiatric Commitments to Prevent Suicide," *New York University Law Review*, Vol. 49, 1974, pp. 227-269.
- [14] Greenland, C., "Evaluation of Violence and Dangerous Behavior Associated with Mental Illness," *Seminars in Psychiatry*, Vol. 3, Aug. 1971, pp. 345-356.
- [15] Gulevich, G. D. and Bourne, P. G., "Mental Illness and Violence," in *Violence and the Struggle for Existence*, D. N. Daniels et al, Eds., Little, Brown and Co., Boston, 1970, pp. 309-326.
- [16] Halfon, A., David, M., and Steadman, H., "The Baxström Women: A Four Year Follow-Up of Behavior Patterns," *Psychiatric Quarterly*, Vol. 45, No. 4, 1971, pp. 518-527.
- [17] Kozol, H., Boucher, R., and Garofalo, R., "The Diagnosis and Treatment of Dangerousness," *Crime and Delinquency*, Vol. 18, No. 1, 1972, pp. 371-392.
- [18] Laves, R., "The Prediction of 'Dangerousness' as a Criterion for Involuntary Civil Commitment: Constitutional Considerations," *Journal of Psychiatry and the Law*, Vol. 3, Fall 1975, pp. 291-326.
- [19] Livermore, J. M., Malmquist, C. P., and Meehl, P. E., "On the Justifications for Civil Commitment," *University of Pennsylvania Law Review*, Vol. 117, 1968, pp. 75-96.
- [20] Rapoport, J. R., *The Clinical Evolution of the Dangerousness of the Mentally Ill*, Charles C Thomas, Springfield, Ill., 1967.
- [21] Rosen, A., "Detection of Suicidal Patients: An Example of Some Limitations and the Prediction of Infrequent Events," *Journal of Consulting Psychology*, Vol. 18, No. 6, 1954, pp. 397-403.
- [22] Rubin, B., "Prediction of Dangerousness in Mentally Ill Criminals," *Archives of General Psychiatry*, Vol. 27, No. 3, 1972, pp. 397-407.

- [23] Shah, S. A., "Crime and Mental Illness: Some Problems in Defining and Labelling Deviant Behavior," *Mental Hygiene*, Vol. 53, 1969, pp. 21-33.
- [24] Shah, S. A., "Dangerousness and Civil Commitment of the Mentally Ill: Some Public Policy Considerations," *American Journal of Psychiatry*, Vol. 132, No. 5, 1975, pp. 501-505.
- [25] Steadman, H. J., "Follow-up on Baxstrom Patients Return to Hospitals for Criminally Insane," *American Journal of Psychiatry*, Vol. 130, 1973, pp. 317-319.
- [26] Steadman, H. J. and Cocozza, J. J., *Careers of the Criminally Insane*, Lexington Books, Lexington, Mass., 1974.
- [27] Steadman, H. J. and Cocozza, J. J., "The Criminally Insane Patient: Who Gets Out?" *Social Psychiatry*, Vol. 8, 1973, pp. 230-238.
- [28] Steadman, H. J. and Halfon, A., "The Baxstrom Patient: Background and Outcome," *Seminars in Psychiatry*, Vol. 3, 1971, pp. 376-385.
- [29] Steadman, H. J. and Keveles, G., "The Community Adjustment and Criminal Activity of the Baxstrom Patient, 1966-1979," *American Journal of Psychiatry*, Vol. 129, 1972, pp. 304-310.
- [30] Stone, A., "Mental Health and the Law: A System in Transition," DHEW Pub. (ADM) 75-176, Department of Health, Education and Welfare, Washington, D.C., 1975.
- [31] Von Hirsch, A., "Prediction of Criminal Conduct and Preventive Confinement of Convicted Persons," *Buffalo Law Review*, Vol. 21, 1971, pp. 717-758.
- [32] Wenk, E. A., Robinson, J. O., and Sineth, G. W., "Can Violence Be Predicted?" *Crime and Delinquency*, Vol. 18, 1972, pp. 393-402.
- [33] Diamond, B. L., "The Fallacy of the Impartial Expert," *Archives of Criminal Psychodynamics*, Vol. 3, 1959, pp. 221-236.
- [34] *Galloway v. United States*, 319 U.S. 372 (1943).
- [35] *Washington v. United States*, 129 U.S. App. D.C. 29; 390 F.2d 444 (D.C. Cir. 1967).
- [36] Dershowitz, A. M., "The Psychiatrist's Power in Civil Commitment: A Knife that Cuts Both Ways," *Psychology Today*, Feb. 1969, pp. 47-49.
- [37] Monahan, J., "The Prediction of Violence," presented at the Pacific Northwest Conference on Violence and Criminal Justice, Isaquah, Wash., 6-8 Dec. 1973.
- [38] Rapoport, J. R., Lassen, G., and Gruenwald, F., "Evaluation and Follow-Up of State Hospital Patients Who Had Sanity Hearings," *American Journal of Psychiatry*, Vol. 118, 1962, pp. 1079-1086.

Address requests for reprints or additional information to
Joseph T. Smith, M.D.
Division of Forensic Programs
Saint Elizabeth's Hospital
2690-2698 M. L. King Jr. Ave. S.E.
Washington, D.C. 20032