

# Forensic Considerations of Substance-Induced Psychosis

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In forensic psychiatry, one is often called on to examine an accused to determine if he has a mental disorder, thus opening a defense to criminal charges. To this end, the psychiatrist must consider, in the final analysis, whether the accused could meet the test for the insanity defense, taking into account the definitions of legal insanity extant in the jurisdiction. In some jurisdictions, mitigating factors such as intoxication or diminished capacity may lead to reduced convictions. Substance-induced psychosis could represent a more complex clinical scenario. Often, it is not possible to distinguish substance-induced psychosis from a first-episode psychosis in the context of a primary mental disorder due to the very high level of comorbidity. A recent Supreme Court of Canada judgment<sup>1</sup> (*R. v. Bouchard-Lebrun*) held that substance-induced psychosis cannot be considered a disease of the mind in the legal sense when it results from self-induced intoxication.

In this editorial, I will review some notions of substance use and psychosis, particularly in the legal context, and evoke some discussion about differences in perception between tribunals of law and the medical or scientific community. This topic will be discussed in the Canadian context principally, but some of the ideas should be of interest to the general forensic psychiatry community.

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## Psychosis and Violence

It is beyond the scope of this article to provide a comprehensive review of the extensive research into the association of psychosis and violence. There is consensus that there is a positive association that is greater with comorbid conditions.<sup>2,3</sup> Alcohol abuse and dependence alone are risk factors for violent behavior, and several studies provide support for a contribution of substance abuse to lethal violence by individuals with psychosis.<sup>2,3</sup> There are numerous reports of a history of substance abuse in individuals with Capgras syndrome, with symptoms of delusion and misidentification, who have committed severe violence, including homicide.<sup>4–6</sup>

Comorbid alcohol abuse and dependence increase the likelihood of committing homicide substantially for individuals with schizophrenia and moderately for individuals with major depression or bipolar disorder.<sup>2</sup> Schizophrenia with alcoholism increases the odds ratio of committing homicide by about 17 times in men and by more than 80 times in women.<sup>3</sup>

## Clinical Perspectives on Substance-Induced Psychosis

The Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision (DSM-IV-TR)<sup>7</sup> recognizes substance-induced psychotic disorder as a mental disorder and provides specific diagnostic criteria. According to the DSM-IV-TR, a diagnosis of substance-induced psychotic disorder is made only when psychotic symptoms are severe and are above and beyond what would be expected during intoxication or withdrawal. Put very simply, the individual who ingests the substance would not have

anticipated developing a psychosis. This may be a concern when one considers the way the law has dealt with voluntary intoxication.

The main diagnostic feature of substance-induced psychotic disorder is prominent hallucinations or delusions (Criterion A) that are determined by history, physical examination, or laboratory findings to be caused by the effects of a psychoactive substance (Criterion B). Hallucinations that the person realizes are substance-induced are not included here. Psychotic symptoms may begin during intoxication or during withdrawal. A substance-induced psychotic disorder that is induced during substance use can last as long as the drug is used, whereas an episode that is induced during withdrawal may first manifest up to four weeks after a person stops using the substance. The disturbance is not better accounted for by a psychotic disorder that is not substance-induced (Criterion C). Evidence that the symptoms are better accounted for by a psychotic disorder that is not substance-induced might include the following: the symptoms precede the onset of the substance use (or medication use); the symptoms persist for a substantial period of time (e.g., about a month) after the cessation of acute withdrawal or severe intoxication, or are substantially in excess of what would be expected, given the type or amount of the substance used or the duration of use; or there is other evidence that suggests an independent non-substance-induced psychotic disorder (e.g., a history of recurrent non-substance-related episodes). The diagnosis is not made if the psychotic symptoms occur only during delirium (Criterion D).

### **Substance Use and Psychosis Comorbidity**

Chronic substance users have particularly high rates of psychotic symptoms.<sup>8</sup> Substance use as a comorbid condition is the rule rather than the exception in young people with schizophrenia. The prevalence of substance abuse (i.e., alcohol, marijuana, and cocaine) among schizophrenia patients may be as much as five times higher than in the general population. Co-morbid substance abuse has been related to positive psychotic symptoms.<sup>9–11</sup>

The co-morbidity of first-episode psychosis and substance abuse is also regarded as the rule rather than the exception.<sup>12</sup> Reported rates of substance abuse among individuals with first-episode psychosis are high, ranging from 20 to 35 percent.<sup>13–16</sup> The onset of substance abuse often precedes the onset of

psychosis by several years. Substance abuse in the early stage of the illness may increase the severity of hallucinations and unusual thought content and heighten the risk of violence.

### **Legal Perspectives Regarding Intoxication**

The relationship between intoxication and criminal intent is a complex question that leads to the possibility of defenses against particular offenses. The judicial system has generally adopted the view that an individual is capable of forming the intent to use a drug or substance. In most cases, this person is held responsible for his behavior if he has committed a crime in a state of intoxication. Such offenses are also termed Dutch courage, in which a person wants to kill someone and is able to do so because he has drunk alcohol.<sup>17</sup>

The law differentiates between voluntary and involuntary intoxication. Voluntary intoxication refers to drinking with the knowledge that one will become impaired. Involuntary intoxication means unknowingly consuming alcohol or drugs (e.g., “my drink was spiked”) or becoming intoxicated by prescribed medication or because of unawareness of the nature of the substance consumed. Involuntary intoxication is a defense to a general-intent crime, whereas voluntary intoxication is not.

#### *General Versus Specific Intent*

Intoxication can provide a defense to crimes that are of specific intent, but not to those that are of general intent.<sup>17</sup> Specific-intent crimes require a certain mental state (*mens rea*; criminal intent) to break the law: that it was not an accident and that there was intent to do some further act or to achieve some additional consequence in addition to the general intent to do the act. For crimes requiring specific intent, the intent is clearly part of the definition of the crime. General-intent crimes only require an unlawful act and intent to act in such a way; there is no mention that it should include any intent beyond performing the act (*actus reus*) in the definition. General criminal intent can be negated only by an insanity defense.<sup>18</sup> With regard to intoxication, if it was severe enough to raise a reasonable doubt about the capacity of the accused to have formed a specific intent when it applies, the accused may instead be convicted for a lesser included offense requiring only general intent.

In 1995, the Parliament of Canada enacted § 33.1 of the Criminal Code of Canada to ensure that “in-

toxication may never be used as a defense against general intent violent crimes such as sexual assault, assault, or any other interference or threat of interference by a person with the bodily integrity of another person.”<sup>19</sup> In all other cases of general intent offenses, intoxication may be a defense if severe enough to meet the requirements.

### *Intoxication-Induced Insanity*

Intoxication-induced insanity may be claimed as a defense if a person was intoxicated in certain circumstances. This principle still represents the state of the law in Canada. The accused must meet the requirements of a two-stage statutory test for the defense to be successful. The first stage, characterizing the mental state of the accused, involves deciding at trial, on a balance of probabilities, whether the person had a mental disorder in the legal sense at the time of the alleged events. The second stage of the defense concerns the effects of the mental disorder and determining whether, owing to his mental condition, the accused was incapable of knowing that the act or omission was wrong. Therefore, intoxication can meet the legal definition of insanity only if the associated state of mind satisfies the strict legal interpretations of “disease of the mind” and “defect of reason” (i.e., the *M'Naghten* rules).<sup>20</sup> Certain states, including substance-induced psychosis, may satisfy all of these criteria.

### **R. v. Bouchard-Lebrun**

The *Bouchard-Lebrun*<sup>1</sup> judgment in Quebec emphasizes the fact that psychosis, if the result of voluntary intoxication, is not a defense to a criminal offense. On November 30, 2011, the Supreme Court of Canada dismissed the appeal of Tommy Bouchard-Lebrun.

He had assaulted two individuals while he was in a psychotic condition caused by drugs he had taken a few hours earlier and was charged with aggravated assault. He was convicted on the basis that all of the elements of § 33.1 of the Criminal Code of Canada (CCC), which provides that self-induced intoxication cannot be a defense to an offense against the bodily integrity of another person, had been proved beyond a reasonable doubt. He then tried unsuccessfully on appeal to obtain a verdict of not criminally responsible on account of mental disorder under § 16 CCC. The court of appeal concluded that he did not have a mental disorder for the purposes of § 16 CCC

at the time he committed the assault and that § 33.1 CCC applied instead. The appeal was dismissed.

It was not in dispute, however, that Mr. Bouchard-Lebrun had been in a severe psychotic state and that he was incapable of distinguishing right from wrong at the material time of the offense. The only issue in the appeal was whether his psychotic condition resulted from a mental disorder within the meaning of § 16 CCC.

The Supreme Court of Canada concluded in this case that:

A malfunctioning of the mind that results exclusively from self-induced intoxication cannot be considered a disease of the mind in the legal sense, since it is not a product of the individual's inherent psychological makeup. This is true even though medical science may tend to consider such conditions to be diseases of the mind.<sup>1</sup>

### **Montana v. Egelhoff**

A U.S. case can be compared with *Bouchard-Lebrun*. The issue in *Montana v. Egelhoff*<sup>21</sup> was whether voluntary intoxication may negate a requisite mental state for the crime of homicide.

James Egelhoff and two other men had been drinking and partying all night, after picking mushrooms. Police found him drunk in the back seat of a vehicle next to his gun, yelling obscenities, and with an extremely high blood alcohol level. The two victims in the front seat were dead of gunshot wounds to the head.

Mr. Egelhoff was tried for two counts of homicide. The jury was instructed that it could not take into account his intoxication as a factor in determining the existence of the mental state. The jury found him guilty, and he was convicted of premeditated murder.

He appealed his conviction in the Supreme Court of Montana for deliberate homicide because he alleged that a jury instruction forbidding consideration of his voluntary intoxication in determining the existence of the requisite mental state violated his Fourteenth Amendment due process rights. His argument was that his extreme intoxication rendered him physically incapable of the acts.

The judgment was reversed by the Montana Supreme Court, stating that Mr. Egelhoff should be allowed to present evidence of voluntary intoxication. It was stated that although voluntary intoxication cannot negate a mental state, it can be shown to the jury to help them assess whether a defendant

acted with premeditation or if the murder occurred only in the “heat of passion.”<sup>21</sup>

The justices argued that due process demands that a criminal defendant be given a fair opportunity to defend against the state’s accusations and that an important part of that right is the opportunity to present evidence that would relate to the mental state required for the crime.

The court issued the opinion as a plurality and focused its analysis on the statute that specifically disallowed voluntary intoxication to be presented. It ruled that the due process clause of the U.S. Constitution mandates that the appellant be allowed to present such evidence and that no violation of the clause had occurred.

### The Concept of Voluntary Intoxication

It is noteworthy that the rules with respect to cases of voluntary intoxication developed, for the most part, in the context of alcohol intoxication, whereas substance-induced psychosis is more likely to develop with the use of such substances as hallucinogens, PCP, cocaine, amphetamines, cannabis, opioid, or inhalants. This differentiation leads me to discuss briefly the concept of addiction and the current competing models of voluntariness and involuntariness as applied to addictive behavior. On one side, there is the notion that human behavior is the product of individual choice and decision based on perceived benefits and values.<sup>22</sup> In this traditional view, individuals bear responsibilities for the choices made and their ensuing behavior. This model remains to date the most popular one, in line with most self-help programs and court decisions such as *Bouchard-Lebrun*.<sup>1</sup> In contrast, the American Society of Addiction Medicine (ASAM) has put forward a definition that describes addiction as a “primary, chronic disease of brain reward, motivation, memory and related circuitry.”<sup>23</sup> This definition encompasses a significant impairment in executive functioning, as manifested by problems in perception, learning, impulse control, compulsion, and judgment and suggests the avolitional aspect of this condition. This latest model might challenge the notion of what constitutes voluntary intoxication, if it were to become authoritative.

### Conclusions

Where does this leave forensic psychiatrists who are called on to provide an expert opinion on an

accused who committed a crime while he was acting under delusions or was in a severely disorganized mental state in the course of a substance-induced psychotic disorder and did not possess *mens rea*?

Let us first assume that the forensic psychiatrist is asked to evaluate an accused who was under the influence of a substance at the time of committing a crime. One of the first questions that will come to mind is whether the crime in question required a specific intent or fell under the general-intent category. In common law rules, intoxication may be brought up as a defense only for specific-intent offenses, by raising a reasonable doubt as to the accused’s capacity to form the specific intent. Alternatively, a defense of extreme intoxication amounting to automatism and insanity will be available both for offenses requiring a specific intent and those of general intent, with the exclusion brought forth by § 33.1 CCC for general-intent offenses involving an “assault or other interference or threat of interference with the bodily integrity of another.”<sup>19</sup> But one is very unlikely to choose his crime when intoxicated.

In the case of a defense of extreme intoxication, it amounts to establishing that the accused would fall within the criteria for an insanity defense. In Canada, § 16 of the CCC, when successful, leads to a verdict of “not criminally responsible.” For that verdict, it would be necessary to determine whether the accused had a mental disorder or a disease of the mind in the legal sense. The legal system has held that a disorder caused solely by voluntary (self-induced) intoxication would not qualify for § 16. Since *R. v. Stone*,<sup>24</sup> the court has considered the internal cause factor, which involves comparing the accused with a normal person to determine whether the trigger (the substance use, for our purposes) is internal or external. In the case where the trigger is external (that is, a normal person would be equally susceptible to developing the disorder) the court will generally hold that the condition of the accused does not constitute a disease of the mind in the legal sense.

Is this analysis scientifically valid in the case of a substance-induced psychotic disorder? Going back to the definition that stipulates that the diagnosis may be made only when psychotic symptoms are severe and “above and beyond what would be expected during intoxication or withdrawal,”<sup>7</sup> it is not clear that this should be the case.

### Should the Etiology of Psychosis Matter?

Research has shown that psychotic illness may manifest sooner with comorbid substance abuse. As reviewed by Tucker,<sup>25</sup> abuse of substances, in particular alcohol and cannabis, is associated with earlier onset in people with early psychosis. In people with first-episode psychosis, patients with a lifetime history of substance use have earlier onset.<sup>26–28</sup> Psychotic symptoms are twice as common in adolescents and young adults who use cannabis.<sup>29</sup> Arsenault *et al.*<sup>30</sup> reviewed several studies of people who developed psychotic symptoms and used cannabis and concluded that cannabis use doubles the risk of developing schizophrenia in the long term. In individuals with schizophrenia who abused substances, it was later found that half of the cases had an original diagnosis of drug-induced psychosis, potentially delaying treatment for schizophrenia.<sup>31</sup> We are also aware of the very high comorbidity rates with psychosis and substance use.

In the medical field, it would be unusual to compare those individuals who know the foreseeable consequences in the short term of using a substance (e.g., alcohol: reduced cognitive capacities, impaired judgment, violent behavior) to those who are not able to foresee negative consequences because such consequences are not the rule (e.g., using an illicit substance and becoming psychotic or development of a mental disorder). Is it fair to compare people who know what will happen to them if they drink or take drugs to those who cannot foresee the consequences because the consequences occur rarely (i.e., psychosis or development of a mental disorder)?

This article brings forth some arguments to challenge the notion that substance-induced psychosis, when unanticipated, should not be considered a true mental disorder, even in the legal sense. A substance-induced psychotic disorder, often referred to as toxic psychosis, remains a mental disorder that meets DSM criteria and those of other classification systems, even if it is the result of a voluntary intoxication or use of a substance with psychotropic properties. In the end, if the lack of *mens rea* is due to a psychotic process, should the etiology of the psychosis matter? Is the individual not deserving of medical attention and treatment in an appropriate setting, as well as rehabilitative measures to address the substance use disorder? Substance-induced psychosis, in very specific circumstances, should be taken into account as a

factor mitigating personal responsibility, if not criminal responsibility.

The final word remains with the courts. The courts and policy makers are the ultimate decision makers regarding what constitutes a mental disorder in the legal sense. Parliament can modify or enact rules of application to reflect current societal choices and directions. This judgment will remain a matter of debate, and above all, a matter of legislative or societal decision. Our role is to educate the courts and the public and promote a fair vision of the current acceptable scientific knowledge on mental disorder, disordered brain functioning, and behavioral correlates, including the use of substances with a potential to induce a psychotic condition. By doing so, we contribute to a better understanding of the challenges faced by the mentally ill and their needs for support in the community.

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