Abstract

The intent of this presentation is to examine and understand the effects of caffeine-induced disorders in the context of criminal or civil defense intoxication. Prior research has demonstrated that high consumption of caffeine disrupts sleep, mood, and cognitive performance. Caffeine withdrawal symptoms may include headaches and sleeplessness. Individuals who have been diagnosed with psychiatric conditions are susceptible to higher levels of caffeine intoxication. The goal of this presentation is to analyze whether diagnosed mental conditions are susceptible to higher levels of caffeine intoxication. By examining patients with existing psychiatric conditions, this poster sheds light on possible connections and gathers supporting evidence from the Diagnostic and Statistical Manual of Mental Disorders or DSM-5 (Davis, 2011). A few symptoms of caffeine use in psychiatric patients compared to healthy controls. Caffeine intoxication was greater among patients with a psychiatric disorder than healthy controls, even though daily consumption was higher with the control group (see Figure 1). To use a caffeine related defense, legal counsel must verify the individual’s psychiatric history and substance abuse, but most importantly, show how these conditions interact to cause psychotic side effects. The goal is to explore how the combination of caffeine intoxication with an already existing mental condition may cause the lack of capacity to create intent.

Relevant Research

- Research shows that psychostimulants, such as caffeine, can cause sleep disturbances by disrupting the primary neurotransmitters that are involved in sleep regulation. Researchers have found a correlation between substance abuse and sleep (Ara et al., 2016).
- Ogeil and Phillips (2015) examined sleep and mood disturbances associated with the use of stimulants such as caffeine and nicotine. Caffeine was associated with poor sleep quality, increased sleep disturbances, and daytime dysfunction (see Figure 1 below).

Figure 2 (Mermi et al., 2016)

<table>
<thead>
<tr>
<th>PSQI</th>
<th>Patients</th>
<th>Controls</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sleep quality</td>
<td>1.37±0.86</td>
<td>0.83±0.64</td>
<td>7.91</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Sleep latency</td>
<td>1.23±0.03</td>
<td>1.04±0.58</td>
<td>2.12</td>
<td>0.034</td>
</tr>
<tr>
<td>Sleep duration</td>
<td>1.02±1.17</td>
<td>0.57±0.83</td>
<td>4.99</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Habitual sleep efficiency</td>
<td>0.69±0.94</td>
<td>0.36±0.73</td>
<td>3.90</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Sleep disturbance</td>
<td>1.10±0.57</td>
<td>0.97±0.44</td>
<td>2.69</td>
<td>0.004</td>
</tr>
<tr>
<td>Use of sleep meds</td>
<td>1.09±1.34</td>
<td>0.23±0.69</td>
<td>9.78</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Daytime disturbance</td>
<td>0.98±1.06</td>
<td>0.49±0.73</td>
<td>5.14</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Global sleep quality</td>
<td>7.40±4.63</td>
<td>4.51±1.13</td>
<td>8.59</td>
<td>&lt;0.001</td>
</tr>
</tbody>
</table>

- Caffeine intoxication is also a topic of discussion for defense attorneys who make connections and gather supporting evidence from the Diagnostic and Statistical Manual of Mental Disorders or DSM-5 (Davis, 2011). A few symptoms of caffeine intoxication in the DSM-5 are restlessness, nervousness, insomnia, muscle twitching, psychomotor agitation, and other symptoms (American Psychiatric Association, 2013).
- To use a caffeine related defense, legal counsel must verify the individual’s psychiatric history and substance abuse, but most importantly, show how these conditions interact to cause psychotic side effects. The goal is to explore how the combination of caffeine intoxication with an already existing mental condition may cause the lack of capacity to create intent.

Conclusion

The research and cases in this area elucidate the need for cooperation between attorneys and psychologists to understand how excessive use of caffeine and psychiatric comorbidities are relevant in the legal arena.

Case Examples

- Stephen Coffeen case (Florida)
  - Killed his father in 2009
  - Defense claimed that too much Red Bull and sleep deprivation caused a psychotic episode
  - State experts agreed he was legally insane
  - Went to a mental institution instead of prison

- Daniel Noble case (Washington)
  - While driving, hit two people causing serious injuries in 2009
  - Defense argued that caffeine psychosis induced a rare form of bipolar disorder
  - Found legally insane

- Woody Will Smith case (Kentucky)
  - Strangled his wife in 2009
  - Claimed taking excessive amounts of caffeine, arguing that he was afraid that if he slept his wife would flee with their children
  - Argued insanity
  - Found guilty of murder

- Jaqueline Rossi Baurer, B.A. and Kristine M. Jacquin, Ph.D.