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## Week Three Discussions

1. What is the importance of the onset of effects and duration of action in terms of abuse potential and withdrawal symptoms? How do these principles inform our understanding of the relative danger of different classes of sedatives (e.g., barbiturates versus benzodiazepines)?

The onset of effects refers to the time it takes for a drug to take effect after administration, while the duration of action is how long the drug's psychoactive effects last (Susa & Preuss, 2021). Various factors such as the type of drug, method of administration, and rate of absorption affect the onset of effects. Drugs that take effect quickly have a higher abuse potential because there is no time for the brain to counteract it, and thus the effects are felt intensely. On the contrary, drugs that take effect slowly allow the brain to adapt and suppress their effects. In terms of duration of action, drugs that have a shorter duration have a high abuse potential because their effects wear off quickly, causing the users to take more to feel euphoric.

These principles inform us about the dangers of different classes of sedatives such as barbiturates because they act and depress the central nervous system. As a result, any act of abrupt drug cessation causes severe and long-lasting effects. In order to mitigate the life-threatening withdrawal effects of depressants, cross-dependence between barbiturates, benzodiazepines, and alcohol can be utilized. One real-life example of co-dependence is the use of methadone to cure heroin addiction.

2. If opioid-related chronic toxicity were not a problem, would opioid addiction be a societal problem? What do you think of treating a heroin addict with daily doses of another opioid

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(such as methadone)? Would it be appropriate to treat that patient's addiction with heroin? Why or why not?

In today's society, any form of drug addiction is problematic because it is related to crime or violence. Even though opioid-related chronic toxicity was not an issue, opioid addiction would be a societal problem because drugs disrupt families, public health, and safety due to pharmacological violence. Being addicting to any drug affects the functionality of the central nervous system, and thus, the brain capacity to reason well is hijacked.

Some of the drug's effects on the brain are irreversible, and any act of cessation has severe effects on the drug user (Kosten & George, 2002). Consequently, different drugs substitutes are used to treat addiction to dangerous drugs. For example, methadone is used to treat heroin addicts. After all, it is less dangerous. Using methadone to treat heroin addicts is a good strategy because it enables the addicts to perform their daily activities without withdrawal symptoms. Daily doses of the methadone opioid can only be dangerous if abused.

It would not be appropriate to a patient's addiction to heroin because it is more dangerous. Usually, heroin causes a long-term imbalance in the hormonal and neuronal systems (Abuse, 2021). Besides, it causes a high level of tolerance and dependence. As a result, it is not appropriate to use heroin to treat addicts.

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## References

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