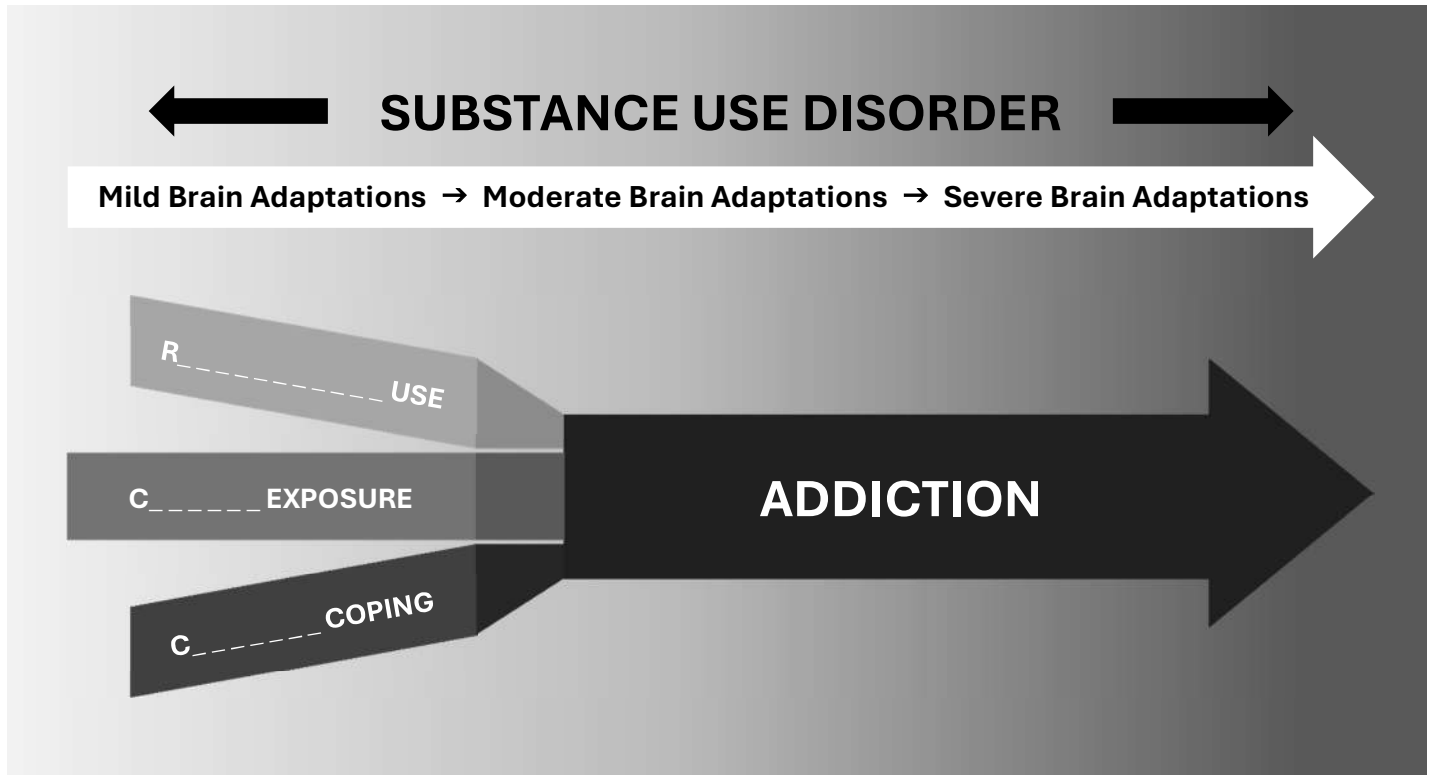


SUPPLEMENTAL LESSON – UNDERSTANDING ADDICTION & THE BRAIN

PART 2

The following graphic illustrates the difference between substance use disorders and addiction.



The entire grey colored box represents the severity of substance use disorders with the light color being mild and dark grey representing severe. The arrow in the middle shows the pathways that lead to a state of addiction. There are 3 main pathways to addiction: r _____ use, c _____ exposure and c _____ coping.

To understand how we get to addiction, first, we need to understand the difference between dependency and addiction. Dependency can occur with many drugs of abuse and people can become dependent on a drug after using it for long periods of time. A person can be physically or psychologically dependent on a drug. This does not necessarily mean they are suffering from addiction. It is also important to understand that the medical field recognizes addiction as a chronic, treatable medical disorder. Now let's look at how they diagnose addiction.

Professionals use specific scoring tools to diagnose addiction. The concepts in these tools reflect the four C's of addiction:

- The first C is c _____. This is a behavior where someone is feeling an intense need to use a drug. This can be a physical craving based on dependence and or a psychological craving.
- The second C is c _____. This is when we see a lack of being able to stop using and or cut back on the use of the drug.
- The third C is c _____. This is where you see that negative problems due to their actions do not curb the person's desire for the substance and they continue to engage in activities that bring negative consequences. These consequences can be to their physical health, mental

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concerns, such as depression, shame, guilt, and social issues from damage to relationships to financial problems, like losing a job, stealing or spending money needed for essentials on the addiction.

- The fourth C is c _ _ _ _ _ . This is where someone loses the ability to regulate substance use or their negative behaviors.

When we see the four C's there is a need for further professional evaluation to determine if this has led to addiction. Refer to part one of this lesson and the checklist used by professionals on how they assess a person for substance use disorder. Understanding this, now let's look at these pathways to addiction in more depth:

In the **recreational use** pathway, people use drugs to get high or experience social engagement. With repeated use, significant changes in the brain take place and over a period of weeks to months, adaptations within the brain lead to a state of addiction.

In the **chronic exposure** pathway, people develop addiction because of too much exposure to the drug. In some circumstances, addiction may result from the use of drugs like opioids which were given for a very legitimate reason, such as after a surgery for pain management. However, with repeated exposure to the drug over a period of weeks to months, adaptations within the brain lead to a state of addiction. The original reason for use in this pathway was not to get high and the user may not have experienced euphoria when using the drugs.

In the **chemical coping** pathway, individuals use drugs to manage mental health distress, such as depression or anxiety. Although the drugs may work initially, they eventually do the opposite and cause more distress over time as the brain “rewires” and adapts over a period of weeks to months leaving the brain in a state of addiction.

The beginning stages for all 3 pathways do represent a form of substance use disorder but do not include the major changes in the brain that are recognized as addiction. These early stages of substance use disorder are excellent opportunities to intervene with loved ones by setting boundaries and establishing consequences. Once someone has entered a state of addiction, their ability to navigate out of it becomes much more challenging because the part of the brain with executive control over decisions is minimally functional and other parts of the brain including the reward center, memory, and emotional processing are significantly “rewired” and out of balance. For this reason, addiction is managed very differently than the early stages of substance use disorder. Generally, treatment is needed at this point for the best chance to achieve long-term recovery.

Addiction is a medical disorder driven by a disease process.

This also helps us understand the need for quality treatment. The “bio, psycho, social, spiritual” model of treatment is a whole-person response. This model deals with biological, (medical), psychological (mental health), social (relationships, work), and spiritual (having a purpose, having something bigger than themselves to help them through the process of recovery). Interestingly, research indicates that the vast majority of people seeking treatment want treatment to address the spiritual component, regardless of their personal beliefs.