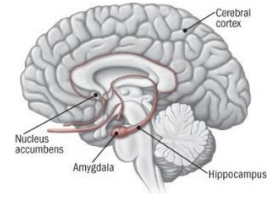


The Addicted Brain



Presented by: Tim Hilton

This presentation attempts to explain, in layman terms, the confusing behaviors, characteristics and destructive persistence of addicts. While simplified explanations of the effects of drugs and alcohol on the brain are included, this presentation explains the disease as a concept and is not intended to be a biology, anatomy or pathology lesson. The presenter calls on a combination of personal experiences, over a decade of professional experience in the drug and alcohol treatment field as well as countless hours of research, to formulate an understandable look into the dilemma of addiction.

How does it begin?

- All people seek the solution to the simple equation:
“Pain + ? = relief.”
- Addicts attempt to resolve this equation by using drugs and alcohol.

When does the addict choose to stop using?

- What begins as a source of ease and comfort, deteriorates into a cycle of diminishing returns.
- Addicts make the decision to stop using when drugs/alcohol no longer provide a solution to the equation.

Why do addicts frequently fail in their attempts to stop using?

- Addicts experience pain differently than a “normal” person
- Because they experience pain differently, the addict requires a more complex and substantial solution to resolve the “Pain + ? = relief” equation.
- While the addict may choose (or desire) to stop, these attempts will be unsuccessful unless a suitable solution to the equation is presented and implemented.

How do Addicts experience pain differently?

- Addiction stems from a dysregulation in the neurotransmitter pathways.
- Dysregulation of the neurotransmitter pathways result in diminished function of the natural human coping system.
- Addicts function in a near continuous state of restlessness, irritability and discontent. Life feels very difficult.

Why do addicts crave drugs and alcohol so intensely?

- Use of drugs and Alcohol causes an over-regulation of the neurotransmitter pathways.
- Chronic over-regulation of the neurotransmitter pathways creates a dysfunction in the brains pleasure/reward system.
- The addicts brain is re-programed to believe drugs/alcohol are more important than food and water.

Why do addicts seem to have little or no regard for the welfare of others?

- Chronic use of drugs and alcohol impair function in the limbic system (including the Amygdala).
- The limbic system is responsible for emotional processing.

- Addicts lose the ability to properly experience or process emotions.
- Without the ability to experience emotions normally addicts lose the ability to empathize or relate to the emotions of others.

Why do addicts make such poor decisions?

- Dysregulation in the neurotransmitter pathways result in diminished levels of Dopamine in the frontal lobe.
- Decreased levels of Dopamine in the frontal lobe can result in the decline of memory, attention and problem-solving skills.
- The addict is unaware of their reduction of reasoning skills.

Can addicts recover?

- Addiction is an incurable disease; however, recovery is possible.
- Detoxification is usually the first step towards recovery.
- New coping skills must be learned and reinforced.