



Substance Use Disorder: What, Why and How

Understanding the Opioid Crisis: What's at the Heart of the Matter?

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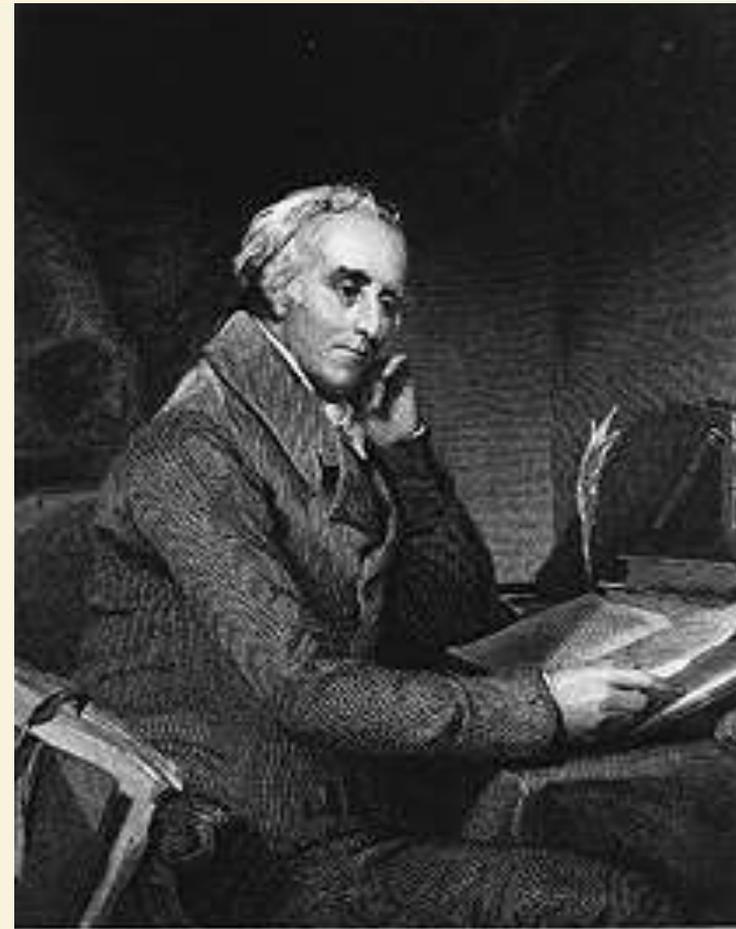
Questions

- **What is opioid use disorder?**
- **Why are opioids such a problem?**
- **How do people develop opioid use disorder?**

What is Opioid Use Disorder (OUD)?

Medical Inquiries and Observations, Upon the Diseases of the Mind, Benjamin Rush 1812

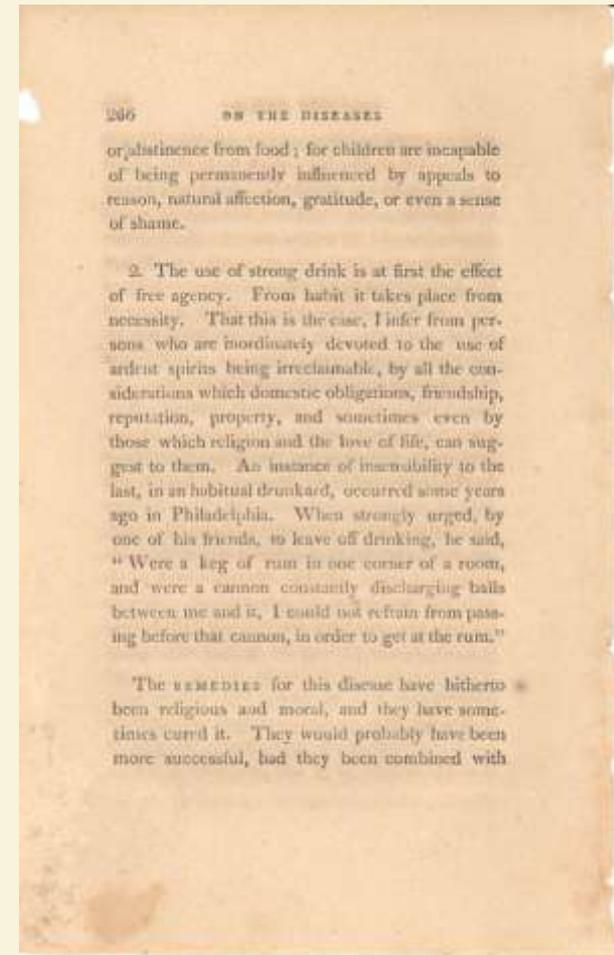
The use of strong drink is at first the effect of free agency. From habit it takes place from necessity. This is the case, I infer, from persons who are inordinately devoted to the use of ardent spirits being irreclaimable by all the considerations which domestic obligations, friendship, reputation, property, and sometimes even by those which religion and the love of life, can suggest to them...



Engraving of Benjamin Rush, M.D., by Thomas S. Arthur, 1812. The name "BENJAMIN RUSH, M.D." is printed at the bottom of the image.

Medical Inquiries and Observations, Upon the Diseases of the Mind, Benjamin Rush 1812

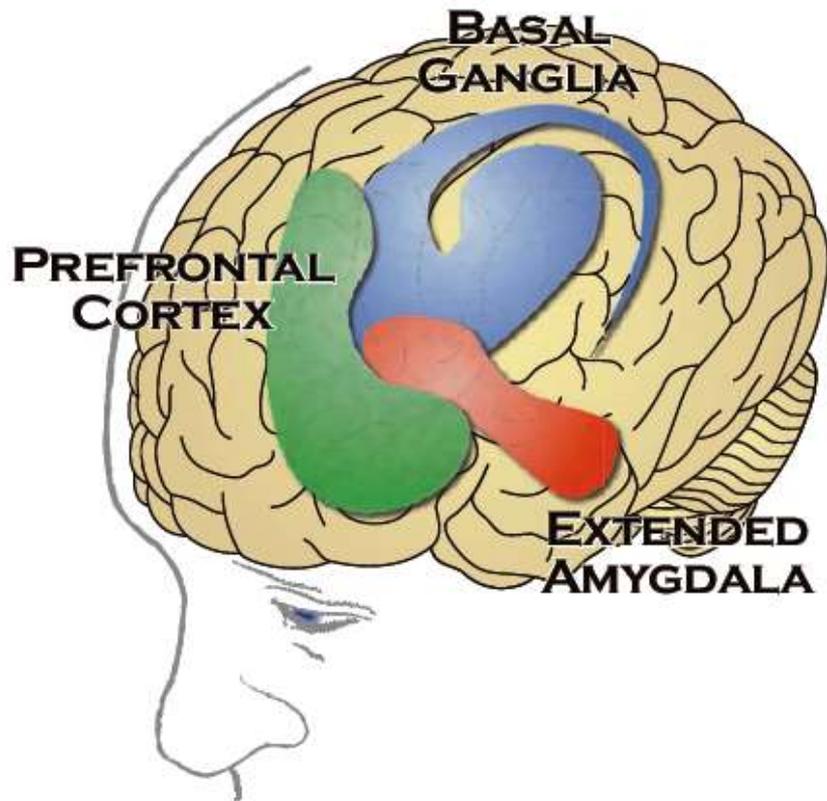
- The remedies for this disease have hitherto been religious and moral, and they have sometimes cured it. They would probably have been more successful, had the been combined with such as are of a physical nature...
- ... to these I shall add one more, and that is, the establishment of a hospital in every city and town in the United States, for the exclusive reception of hard drinkers. They are as much objects of public humanity and charity, as mad people. ...



Substance Use Disorder

- **Characterized by clinically significant impairments in**
 - *health*
 - *social function and*
 - *voluntary control over substance use*
- **Chronic, subject to relapse, and influenced by**
 - *genetics*
 - *developmental factors*

Areas of the Human Brain Especially Important to SUD



Disruptions in these three areas of the brain contribute to the onset, development and continuation of SUD.

Disruption of Areas of the Brain Important to SUD

- Enables substance-associated cues to trigger substance seeking;
- Reduces sensitivity of the brain systems involved in the experience of pleasure and reward and increases activation of brain stress systems
- Reduces function of brain “executive control systems” which necessary for regulating emotions and impulses, and making decisions

Withdrawal and Tolerance

- **SUD cannot be diagnosed on the basis of withdrawal and/or tolerance alone.**
because
- **Withdrawal and tolerance can be a normal response to medication taken as directed.**

Why are opioids such a problem?

The Mysteries of Opium Revealed

Dr. John Jones -1701

- Describes the effects of opium and their management including overdose, and recommends slow titration after “long and lavish use.”
- Proposes what he thinks will be a preparation that will render opium “safe and innocent.”
- We are still looking for this today.

of Opium Revealed. 295

C H A P. XXVIII.

The Cure of the ill Effects of Opium.

HAVING shewn how to prepare *Opium*, so as to render it safe and innocent in a *Moderate Dose*, and how much that *Moderate Dose* is, one may be apt to think that this *Chapter* is needless; but when you consider how many there are that may be negligent, wilful, want *Time*, *Skill*, &c. to prepare it, or take too much, or too long of it, and that the *Physician* must be able to Answer and Remedy all ill Accidents that may happen, you'll find it very requisite that I should shew how to cure the ill Effects of *Opium*, which proceed either,

1. From its *Resin at Stomach*; Or,
2. From too much *Relaxation by an Excessive Dose*; Or,
3. From a long and lavish *Use of it*; Or,
4. From a sudden leaving it off, after a long and lavish *Use* thereof.

I. To Cure the ill Effects of the *Resin at Stomach*, you are,

First, To know whether that be the Cause; which you may learn,

The search for a “safe and innocent” opioid continues

3. *The moderate and truly safe Dosing of them all; there being no Danger in well prepared Opium; but from Excess in the Use thereof.*



Am. J. Ph.]

7

[December, 1901

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How do people get opioid use disorder?

A Natural History of Substance Use Disorder



Variables that impact the risk of substance use disorder

Risk factor	Domain	Protective Factor
Early impulsive behavior	Individual	Self-control
Poor social skills	Individual	Positive relationships
Lack of parental supervision	Family	Parental monitoring and support
Substance use/abuse	Peer	Academic competence
Drugs easily available	School	Anti-drug policies
Poverty	Community	Strong neighborhood attachment

SAMHSA Definition of Recovery

A process of change through which individuals improve their health and wellness, live a self-directed life, and strive to reach their full potential.

- **Health**
- **Home**
- **Purpose**
- **Community**

[Samhsa.gov/recovery](http://samhsa.gov/recovery)



Thank you!

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Behavioral Health is Essential To Health



Prevention Works



Treatment is Effective



People Recover