**Addiction: A Treatable Disease**

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### Addiction: Definitions and Statistics

- Nearly 1 in 7 Americans (~40 million people) are addicted to a chemical substance.
- An additional 2 in 7 Americans (~80 million people) qualify as risky substance users; those who use chemical substances in ways that threaten their health and safety.

**Chemical addiction** is a chronic disease of the brain causing physical changes in areas related to reward, motivation, and memory. The manifestations of these changes include the biological, psychological, social, and spiritual changes that are commonly associated with addiction, including the pathological pursuit of a chemical substance. **Risky use** is the use of addictive substances in ways that threaten public health and safety. While this use increases the risk of harm and can certainly lead to addiction, it does not qualify as addiction.

**The Treatment Disconnect:**
- Despite the number of people suffering from addiction, there is a disproportionately low amount of funding spent on addiction treatment when compared to other common chronic diseases in the U.S.

### Allocation of Funds and the Number of Affected Individuals by Medical Condition (2010, United States)

<table>
<thead>
<tr>
<th>Condition</th>
<th>Treatment Funding (billions of dollars)</th>
<th>Number of People Affected (millions of people)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heart Conditions</td>
<td>110</td>
<td>0</td>
</tr>
<tr>
<td>Cancer</td>
<td>55</td>
<td>0</td>
</tr>
<tr>
<td>Addiction</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

- There is a lack of awareness of the issue of addiction. Only 29% of patients who visited a general practitioner in 2011 reported being asked about their use of alcohol or recreational drugs.
- No national standards exist defining who may provide addiction treatment, with only one state requiring a master’s degree, and six states requiring only a high school diploma.

### The Betty Ford Center: A Model for Treatment

The Betty Ford Center (BFC) is a chemical dependency treatment center located in Southern California. 70% of the staff identifies as in recovery.

**Treatment Goals:**
1. To remove all non-medical chemicals.
2. To reteach a lifestyle free of chemical use.

**Treatment Methods:**
- **Detoxification:** A licensed detoxification unit is on campus. BFC is also located next to Eisenhower Medical Center in case of emergencies.
- **Chemical Therapy:** BFC does not use ongoing chemical treatment for addiction with any drugs, including Methadone and Suboxone.
- **Inpatient:** Duration of treatment is ~30 days. Patients have daily small group therapy sessions, lectures, and exercise periods. Patients sleep dorm-style and must remain on campus at all times. They are not permitted use of cell phones or computers. The 12-step recovery model is heavily used.
- **Outpatient:** Duration of treatment is ~60 days. Patients have daily small group therapy sessions, lectures, and exercise periods. Patients transition to normal life by living in community residential housing owned by BFC and having access to cell phones and computers. Cars are only allowed with special permission and are not to be driven alone.

### The Biology of Addiction

**Anatomy:**
- Nearly all drugs of abuse affect the mesolimbic reward system of the brain. This pathway extends from the ventral tegmental area to the nucleus accumbens. It eventually connects to the prefrontal cortex, which is where decision-making takes place in the brain.

**Acute drug use** modifies brain function in ways that provide the characteristic “high”.

**Prolonged drug use** causes physical changes to the mesolimbic reward system that persist when the drug of abuse is no longer being taken. These physical changes affect normal processes that include:
- Brain metabolic activity
- Neurotransmitter receptor availability
- Gene expression
- Responsiveness to environmental cues

### The Bad News:
- 10-12% of doctors are addicted to a chemical substance. This rate is consistent with the percentage of the general population who are addicted to a chemical substance. Certain medical specialties have higher rates of addiction, including anesthesiologists, emergency medicine physicians, and psychiatrists.
- The Good News: 74-90% of doctors who undergo treatment will remain chemical free. This rate is much higher than the percentage of the general population who remain abstinent. One explanation for the difference is that the licensing board for physicians require longer durations of treatment and monitoring than is made available to the general population. This suggests that longer durations of treatment result in greater abstinence.

### Protection for the Addicted Physician:
- Most state licensing boards have shown leniency on physicians who come forward with addiction issues and who are willing to engage in treatment. This promotes the health and well-being of physicians and also protects the patients they treat. In addition, several laws including the Americans with Disabilities Act, provide general employment protection to physicians who are either actively engaged in treatment for a chemical addiction, or who are recovering addicts.

### Treatment for the Addicted Physician:
- Physicians with a chemical addiction must meet several requirements to keep their medical licenses. These requirements vary by state, but may include:
  - Completion of an inpatient treatment program
  - Continuing outpatient treatment (~ 5 years)
  - Periodic drug testing/monitoring (~ 5 years)
  - Use of Naloxone (opioid antagonist)

### Where to Seek Help:
- **State Physician Health Programs (PHP) -** Programs designed to manage the ongoing drug monitoring for physicians in recovery.
- **International Doctors in Alcoholics Anon.** - A membership only branch of AA requiring proof of doctorate level education in a health field. All meetings and member names are kept confidential. ([www.IDAA.org](http://www.IDAA.org))
- **Alcoholics Anonymous -** AA offers meetings specifically for healthcare workers of all types, including caduceus meetings. ([www.AA.org](http://www.AA.org))

### References