Drugs of Abuse

Chapter two overview

1. List at least four ways in which drugs may enter the body

2. How do the drug’s basic characteristics and the person’s blood volume affect the distribution of a drug within the body?

3. Psychoactive and Psychotropic drugs are “fat soluble.” Why is that relevant to understanding addiction?

4. List the primary function of the nervous system’s sub-systems:

   - Autonomic System
   - Somatic System
   - Central System

5. In 25 words, or less, describe the relevance of the “old brain/new brain” concept to the addictive process.
6. After reading the section on “Neuroanatomy” and carefully studying the Figures, define the following terms:

- Dendrite
- Synaptic gap
- Receptor site
- Neurotransmitter
- Reuptake port
- Agonist
- Antagonist

7. Mark the Table labeled Psychoactive Drug/Neurotransmitter Relationships (ex: use a paper clip, or colored tag), it will be helpful for future reference.

How Drugs Affect the Body

1. In 25 words or less, explain the concept of tolerance and how it relates to understanding addiction.
2. Define the following types of tolerance:

- Dispositional
- Pharmacodynamic
- Behavioral
- Reverse
- Acute
- Select
- Inverse

3. In 25 words or less, describe the relationship between dependence and withdrawal.

4. List at least five things that affect how drugs are metabolized:

5. Why would anyone use drugs, given all we know about their danger?
6. Why is it important to judge your client’s current level of drug use; and what factors would you consider when doing so?

7. We know that the progression from abstinence to addiction tends to be non-linear. What does that mean and how is it important in your work with addiction recovery?

8. List at least one characteristic that might indicate a person is experiencing the various levels of drug usage:

- Abstinence
- Experimentation
- Social/Recreational
- Habituation
- Abuse
- Addiction

- **Understanding Addiction**

1. Note the key element of the following “theories of addiction:"

- Disease
- Behavioral and Environmental
- Academic
2. If you have taken the NTI course “Understanding Addiction,” explain how a Christian theology of addiction would relate to the above models.

3. Note how each of the following factors can impact the addictive process.

<table>
<thead>
<tr>
<th>Heredity</th>
<th>The Environment</th>
<th>The Drug Itself</th>
</tr>
</thead>
</table>

4. After reviewing four figures that show the brain and its functioning, explain the “compulsion curve” and how that concept is relevant to your work in addiction recovery.

5. Why is it important to understand how a person in recovery can relapse?

**SECTION 1 APPLICATION:**

1. First review the material:
   a) Review the Study Guide pages on this section.
   b) Review the Chapter Summary.
2. Then apply your knowledge:
   a) Identify one new piece of information that you’ve learned from reading this chapter of the text:

   b) Explain how you might use this information in your work as an addiction counselor or lay leader:

   - Chapter three overview

   1. Mark the table labeled Uppers (Stimulants) (ex: use a paper clip or colored tag), it will be helpful for future reference.

   2. List at least four ways in which uppers effect the body:

   - Understanding COCAINE

   1. What kind of a substance is cocaine?

   2. Cocaine is typically used in what three ways?

   3. Briefly describe the ways in which cocaine effects us in each of the following areas:

      - Natural Medical
      - Neurotransmitters
      - Crashing
      - Withdrawal
      - Use of Polydrugs
      - Adulteration
      - Overdosing
      - Cardiovascular
      - Neonatal
4. How is “smokable cocaine” different than regular cocaine?

5. Why do people use cocaine and crack?

6. Why is crack cocaine such a problem for our society today?

Understanding AMPHETAMINES

1. Amphetamines can be defined as______________ stimulants.

2. They are different from cocaine in what two ways?

3. What are the major differences between amphetamine, methamphetamine and dextroamphetamine?

4. So that you will recognize the terms when you hear them from your clients, highlight the various names by which amphetamines are called.

5. Name at least three medical uses for legal amphetamines:

6. In 25 words or less, describe how the route of administration influences the effect of amphetamines.
7. List at least three negative physical effects of amphetamine usage:

8. List at least three negative mental/emotional effects their use:

9. Compare “ice” with other amphetamines:

10. What is an “amphetamine congener”?

11. Name at least three product names that are classified as congeners:

Understanding “Socially Acceptable Uppers”
“Lookalikes & Over the Counter (OTC) Stimulants”:
CAFFEINE and NICOTINE

1. What are the three most wide spread ways in which we consume caffeine?

2. Caffeine is an __________ of the chemical class called __________.

3. If caffeine is so popular and easy to come by, what’s the problem? Why might it be considered an abused drug?
4. How is nicotine related to cocaine and amphetamines?

- Many people will argue that nicotine is not an abused substance, to better understand the flaws in that reasoning carefully read the section on tobacco and nicotine pharmacology.

5. How quickly can the body develop a tolerance for nicotine?

6. Explain the relationship between withdrawal and the pleasure of smoking a cigarette.

7. Can tobacco use become addictive? Why/why not?
8. Briefly describe the effects of nicotine in each of the following areas:

- Longevity
- Cardiovascular
- Respiratory
- Cancer
- Fetal Impact
- Weight
- Mental/Emotional
- Second Hand Smoke

**SECTION 2 APPLICATION:**

1. First review the material:
   a) Review the Study Guide on this section.
   b) Review the Chapter Summary.

2. Then apply your knowledge:
   a) Identify one new piece of information that you’ve learned from reading this chapter of the text:
   b) Explain how you might use this information in your work as an addiction counselor or lay leader:
Chapter four overview

1. Differentiate the following terms:
   - Opium
   - Opiate
   - Opioid

2. The text uses which term to denote all three categories? ________________


4. Use the entire section labeled Opiates / Opioids to find the following information:

<table>
<thead>
<tr>
<th>Drugs included are:</th>
<th>Typically used by:</th>
<th>Effects include:</th>
<th>Dangers include:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Opium, notes:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Heroine</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Codeine</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>• Morphine</td>
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</tr>
</tbody>
</table>

Other Opioids include:

A. Sedative/Hypnotic

1. This class includes:
   a) 
   b) 

2. In general, this class of drugs impacts the body by affecting which system?
3. Briefly describe the problems these drugs cause in each of the following areas:

<table>
<thead>
<tr>
<th>Problem</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Tolerance</td>
</tr>
<tr>
<td>• Withdrawal</td>
</tr>
<tr>
<td>• Pregnancy</td>
</tr>
<tr>
<td>• Overdosing</td>
</tr>
</tbody>
</table>


5. Complete the following drug specific information:

<table>
<thead>
<tr>
<th>Drugs</th>
<th>Including:</th>
<th>Effects</th>
<th>Problems</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Benzodiazepines</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Barbiturates</td>
<td></td>
<td>* Note: be sure to include the interaction w. GABA.</td>
<td></td>
</tr>
<tr>
<td>• Others</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SECTION 3 APPLICATION:**

1. First review the material:
   a) Review the Study Guide pages on this section.
   b) Then review the Chapter Summary.

2. Then apply your knowledge:
   a) Which of the drugs described in this chapter is most prevalent in your work?
   b) Describe the most difficult case you have experienced related to downers; include the impact on your client and why the case was difficult for you as a counselor or lay leader?
   c) Identify one new piece of information that you’ve learned from reading this chapter:
   d) Explain how you might use this information in your work as an addiction counselor or lay leader?
Chapter five overview

1. As a psychoactive drug, alcohol primarily depresses which body system?

2. What does “fermentation” mean?

3. List the three types of alcoholic beverages:

4. Mark the following charts for future reference:
   - Table 5-1
   - Table 5-2
   - Figure 5-4

5. Alcohol addiction follows the same pattern as other addictions. List the levels of use leading to addiction:

How Alcohol Works

1. Why is alcohol more easily absorbed into the blood and tissues than any other drug?

2. What is the process by which alcohol is absorbed into the stomach called?

3. We know that alcohol moves easily through capillary walls. What impact does that have on the body?

4. What does the term “rate of absorption” mean?
5. List five things that impact an individual’s rate of absorption:

6. What does the term “metabolism” mean?

7. In your own words, explain the relationship between direct and chemical elimination of alcohol from the body.

8. Define BAC:

☐ **How Alcohol Effects Us**

1. Briefly describe the low dose effects of alcohol in the following areas:
   - Health
   - Sexual performance
   - Psychological
   - Inhibitions

2. What are the three factors that impact the onset of intoxication?

3. To what degree do these factors remain a key influence on the effects of alcohol?
4. Briefly describe the high dose effects of alcohol in the following areas:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Overdose</td>
<td></td>
</tr>
<tr>
<td>Nervous System</td>
<td></td>
</tr>
<tr>
<td>Withdrawal</td>
<td></td>
</tr>
<tr>
<td>Sobering Up</td>
<td></td>
</tr>
</tbody>
</table>

5. Describe the characteristics of alcoholism that indicate it as an addiction:

6. Briefly describe the frequent high dose effects of alcohol in the following areas:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Blackouts</td>
<td></td>
</tr>
<tr>
<td>Dependence</td>
<td></td>
</tr>
<tr>
<td>Withdrawal</td>
<td></td>
</tr>
</tbody>
</table>

7. Briefly describe the long term effects of alcohol in the following areas:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Liver</td>
<td></td>
</tr>
<tr>
<td>Heart</td>
<td></td>
</tr>
<tr>
<td>Brain</td>
<td></td>
</tr>
<tr>
<td>Gastrointestinal System</td>
<td></td>
</tr>
<tr>
<td>Reproductive System</td>
<td></td>
</tr>
<tr>
<td>Immune System</td>
<td></td>
</tr>
<tr>
<td>Nutritional Needs</td>
<td></td>
</tr>
</tbody>
</table>

8. What impact has the increased problem of polydrug abuse had on the addiction treatment community?
Recognizing Other Problems Related to Alcohol Usage

1. How does the term “coexisting condition” relate to alcohol usage?

2. Briefly describe how alcohol usage impacts the following areas:

<table>
<thead>
<tr>
<th>Area</th>
<th>Impact Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mortality</td>
<td></td>
</tr>
<tr>
<td>Injury</td>
<td></td>
</tr>
<tr>
<td>Accidents</td>
<td></td>
</tr>
<tr>
<td>Suicide</td>
<td></td>
</tr>
<tr>
<td>FAS/FAE</td>
<td></td>
</tr>
<tr>
<td>Aggression/Violence</td>
<td></td>
</tr>
</tbody>
</table>

Understanding Alcohol and Culture

SECTION 4 APPLICATION

1. Review the material:
   a) Review the Study Guide pages on this section
   b) Review the Chapter Summary

2. Apply your knowledge:
   a) To what degree is alcoholism a factor in your work as an addiction treatment professional?
   b) How consistent is the information contained in the chapter with your client experience?
   c) Identify one new piece of information that you’ve learned from reading this chapter of the text:
   d) Explain how you might use this information in your work as an addiction counselor or lay leader:
Chapter six overview

1. All arounders are referred to as ________________; they tend to distort ___________ and create a world in which ___________ is confused.

2. The two primary reasons that research, and documented evidence of the effects of psychedelics are limited include:
   a) 
   b) 

3. Psychedelics act by interfering with ________________, especially with the work of serotonin (which effects ___________).

4. The effect of these drugs is influenced by what three things?

5. Briefly describe the physical effects of psychedelics in the following areas:
   - Sympathetic Nervous System
   - Sensory Pathways
   - Disruption of visual/auditory centers

6. Briefly differentiate between the following emotional effects of psychedelics:
   - Illusions
   - Delusions
   - Hallucinations

7. Mark Table ALL ARROUNDERS (PSYCHEDELICS) for reference.

8. The two classes of psychedelic drugs are:
An Overview of INDOLE PSYCHEDELICS

1. LSD:
   a) List three reasons why LSD is popular in our culture:

   b) Describe the time parameters related to use of LSD.

   c) Individual tolerance tends to be ________________.

   d) List at least three effects associated with LSD:

   e) Briefly describe the debate regarding LSD and mental illness.

Magic Mushrooms:
   a) The major ingredients contained in a magic mushroom include:
      _________________ and ________________.

   b) There are at least ________________ species found in the US.

   c) Briefly describe the three primary effects of magic mushrooms:

2. Ibogaine:
   a) Ibogain comes from a shrub found primarily in ____________.
Lesson 5
Study Guide

b) Briefly describe its effects in the following doses:

<table>
<thead>
<tr>
<th>Low doses</th>
<th>High doses</th>
<th>Self-induced states</th>
</tr>
</thead>
</table>

3. Morning Glory Seeds: create ________ type reactions; and are known as “_________ blue” and “pearly _________.”

4. DMT: Dimethlytryptamine is both naturally occurring and easily synthesized
   a) List at least three ways in which DMT is used:

b) Describe the three primary effects of DMT:

5. Yage: is a ______ made from an Amazonian __________. It can cause ____ ________, ________, and ________. Its effects can last up to ______ hours. It is also used to enhance the effect of ______.

   ☐ An Overview of PHENYLALKYLAMINE PSYCHEDELICS

   1. Compare phenylalkylamines with amphetamines and LSD type psychedelics:

   2. Peyote/mescaline: come from ____________ and can be created synthetically.
      a) List the three ways in which these drugs are generally used:
b) Briefly describe their effects:

3. MDMA (and related drugs, including MDMA, MMDA, MDM, MDE)
   a) List at least three street names for these drugs:

b) How are these drugs generally used? _______________

c) Briefly describe their effects/problems in the following areas:

<table>
<thead>
<tr>
<th>Physical</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Mental</td>
<td></td>
</tr>
<tr>
<td>Toxicity</td>
<td></td>
</tr>
<tr>
<td>Use in Rave Clubs</td>
<td></td>
</tr>
</tbody>
</table>

4. STP: known as ____________, ____________, and the peace pill. Its effects can create a _____ hour _________________.

- **An Overview of ANTICHLINERGIC DRUGS (pg. 231)**

  1. List the four drugs found in this classification:

  2. These drugs act primarily by blocking ________________ receptor in the ___ __________ nervous system.

  3. Briefly describe the effects of these drugs:
4. Briefly describe the legal varieties and use of this drug classification.

- Considering OTHER PSYCHEDELICS

1. PCP:
   a) List at least three street names for PCP:

   b) Briefly describe why PCP is now totally illegal.

   c) Briefly describe the effects of PCP.

   d) Differentiate “small” and “deadly” doses of PCP.

   e) PCP is known for generating “flashback,” why is that?

2. Katamine (super-K):
   a) What is the legal use for this drug?

   b) List at least three ways in which this drug is used:

   c) How is Super-K similar to PCP?
3. Amanita Mushroom: most are deadly. Their effects last ____________ minutes and include:

- Understanding CANNABINOLS

1. Types and Terms
   a) List at least five street names for cannabis:

   b) List at least two ways in which “grass” is used:

2. Chemistry:
   a) There are approximately ________ different chemicals in a Cannabis plant.

   b) Briefly explain the major changes in grass since the 60’s:

   c) Why is THC an important factor in the use of marijuana?
      - Related to receptors:
      - Related to an antagonist:

   b) Why is anadamide an important factor in the use of marijuana?
3. List at least five physical effects, which vary according to amount, of marijuana

4. Briefly describe the mental effects of marijuana usage:

5. The long term negative effects of grass in the following areas:

   - Respiratory System
   - Immune System
   - Maturation
   - Mental System

6. Briefly describe the nature of tolerance to marijuana usage:

7. Withdrawal:
   a) Does discontinuing use of grass create symptoms of withdrawal? If so, what are those symptoms?

8. Briefly describe the nature of addiction to marijuana:

9. What does the term “gateway drug” mean and how does that relate to grass?
10. Briefly describe marijuana’s medical usage and the associated dangers:
   a) Usage tends to be __________________ in our culture today.
   b) Can help with the following conditions:

SECTION 5 APPLICATION

1. First, review the material:
   a) Review the Study Guide pages on this section.
   b) Review the Chapter Summary.

2. Then apply your knowledge:
   a) Which of the drugs discussed in this chapter is most prevalent in your work with addictions?
   b) How consistent is the information contained in the chapter with your client experience?
   c) Identify one new piece of information that you’ve learned from reading this chapter of the text:
   d) Explain how you might use this information in your work as an addiction counselor or lay leader:

   Chapter Six overview
   1. The drugs and behaviors discussed in this chapter share basic characteristics of other addictive substances including:
      - Reasons for use
      - The overall effect of changing one’s state of consciousness
      - The levels of use from abstinence to addiction
      - Medical value in controlled doses
      - Wide range of effect on the mind, body and emotions
      - Danger associated with use and abuse
2. The drugs discussed include:
   - Inhalants
   - Sport Drugs
   - Animal and nutritional products

3. Compulsive behaviors discussed include:
   - Gambling
   - Work
   - Sex
   - Shopping
   - Internet use
   - Physical “Ticks”

- **Inhalants**

  1. Defined as ________________________________;

  2. Include:

  3. Inhalants are differentiated from other drugs in several ways, including:

  4. These substances can be inhaled by:

  5. You can generally recognize, or should question, the use of inhalants by looking for the following signs:
6. Provide at least one sign, symptom or effect for each of the following inhalants:

- Toluene
- Trichloroethylene
- Gasoline
- Nitrites (amyl, butyl, isobutyl)
- Nitrous Oxide
- Halothane

Sport Drugs

1. Describe the intended medical use and associated danger of abuse for each of the following drug categories:

- Analgesics
- Muscle Relaxants
- Nonsteroidal anti-inflammatory
- Corticosteroids

2. Steroid Usage:
   a) The formal term for steroids is _________________, and they are referred to as either _____________________________ or __________ _____________________________.
   
   b) Define these terms:
      - Stacking –
      - Cycling -
c) Briefly describe the side effects of steroid use in the following areas:

| Analgesics | 
| Muscle Relaxants | 
| Nonsteroidal anti-inflammatory | 
| Corticosteroids | 
| Physical | 
| Mental/Emotional | 
| Compulsion | 

3. Beta Blockers:
   a) Why would individuals involved in competitive events want to use a beta blocker?

   b) What danger is there in their use?

4. Describe the danger of using diuretics to quickly loose weight.

5. Describe the primary danger of blood doping (adding blood to your system).

6. Describe the danger of unsupervised EPO.
7. Describe the intended effect and danger for each of the following substances:

- Bee pollen
- Calcium
- Ephedrine
- Ornithine
- Rimagen
- Vitamin B-12
- HCG
- Periactin
- Adrenaline

8. Make a note about each of the following unusual substances which have been abused to create an altered state of mind:

- Camel Dung
- C-4 Explosive
- Toad Secretion
- Embalming fluid
- Gasoline
- Ginseng Root
- Kava Kava
- Raid, Hairspray, Lysol
- M-99
- Cough Syrups
- Decongestants
1. Describe the four characteristics that are common to drug addiction and compulsive behaviors:

2. Briefly describe how the following factors can influence the development of compulsive behaviors:

   - Heredity
   - Environment
   - Escape

3. *Gambling*: Record at least four of the symptoms associated with pathological gambling:

4. *Eating disorders* are similar to other addictions in that they involve a sense of ____________, and ________________ with food and patterns of______ _______ and ________________ when confronted.

   a) Differentiate between anorexia and bulimia:

   b) Describe the female athlete triad:
c) Briefly summarize the information provided related to anorexia:

- Definition
- Cause
- Effects
- Treatment

d) Briefly summarize the information provided related to bulimia:

- Definition
- Cause
- Effects
- Treatment

e) Briefly summarize the information provided related to overeating:

- Definition
- Cause
- Effects
- Treatment

5. Make the list of symptoms associated with addition to the internet, or Cyberaddiction.

- Chapter eight overview

1. List the three most common methods of preventing addiction:
2. List the four most common goals of any addiction prevention program:

3. Why would community and family involvement be important to the success of any prevention program?

4. Briefly describe each of the following approaches to prevention:

   - Information Programs
   - Skill Building
   - Environmental Changes
   - Public Health Model

5. Name two ways in which we have tried to reduce the supply of drugs:

6. Define these terms as they relate to reducing the demand for drugs:
   a) Primary prevention
   b) Secondary prevention
   c) Tertiary prevention
7. Name two ways in which we have tried to reduce the harm associated with the use of drugs:

- The fact that you are taking this course, either for general information or as part of an overall certification and/or professional development process, indicates that you are familiar with the dangers associated with drug use and understand the negative impact they have on our culture. Please scan the statistics provided in figures within this chapter.

- This information can be useful in developing lectures, informing clients, or creating presentations as part of school prevention or community involvement programs.

- Make special note of the ‘risk and resiliency factors’.
- Note the desired vs. actual effect of drugs on sexual performance.
- Note the symptoms of sexually transmitted disease.
- Be sure you understand implications associated with drug testing.
- Highlight the age group information most relevant to your clinical/church work.
- Read the Chapter Summary.

- **Chapter nine overview**
  - Please read the Chapter Profile.
  - Please read the Chapter Summary.