Substance Dependence: Review Questions

Shannon C. Miller, MD, CMRO

QUESTIONS

Choose the single best answer for each question.

Questions 1 and 2 refer to the following case study.

An 18-year-old woman comes to the primary care clinic with her mother because of rapid onset of muscle aches, diarrhea, sweating, and a runny nose. The mother thinks that her daughter has influenza and reports that her daughter's last menstrual period occurred the previous week. The patient is noticed yawning often because of self-reported insomnia; the mother says that the patient has not been sleeping well since becoming ill. Results of a urine drug screen are positive for 6-monoacetylmorphine; results of a confirmation test are still pending. The patient clarifies that she received a prescription 3 days ago for oxycodone and acetaminophen because of a badly sprained ankle.

1. **Which of the following is the most likely diagnosis for this patient?**
   A) Food poisoning
   B) Heroin addiction/dependence
   C) Influenza
   D) Pregnancy
   E) Prescription medicine withdrawal

2. **Which of the following is the single best approach in this patient's treatment?**
   A) Provide detoxification with clonidine
   B) Provide detoxification with lorazepam
   C) Provide detoxification with methadone
   D) Provide detoxification with naltrexone
   E) Do not detoxify; refer patient for opiate agonist therapy instead

3. **During a primary care visit, a 45-year-old man reports smoking 2 packs of cigarettes daily for the past 20 years. When asked if he is interested in quitting, he states, "I know it's a problem, and I'd like to do something about it—but not now, maybe in 6 months or so. It would just be too hard right now." Which of the following stages of change is he experiencing?**
   A) Precontemplation
   B) Contemplation
   C) Preparation
   D) Action
   E) Termination

(turn page for answers)

For copies of the Hospital Physician Psychiatry Board Review Manual sponsored by Wyeth, contact your Wyeth sales representative or visit us on the Web at www.turner-white.com.

Dr. Miller is an Assistant Professor, Department of Psychiatry, Wright State University School of Medicine, Dayton, OH, and Uniformed Services University School of Medicine, Bethesda, MD; and the Residency Training Director, General Psychiatry, Wright-Patterson Air Force Base, OH.

Table 1. Stages of Change Related to Substance Abuse

Stage	Description
Precontemplation	Patients in this stage have no intention of making changes regarding substance use. They may be uninformed or underinformed. The risks of making change in their lives are often overestimated and seen as outweighing the benefits, which are often underestimated or unknown to the patient. There is little insight into the hazardous nature of their substance use. These persons are "resistant" or "unmotivated."
Contemplation	Benefits of change are now better recognized and understood but are still outweighed by the apparent risks. Patients in this stage are stuck in a "love-hate" relationship with the substance but may state a desire to make change in next 6 months.
Preparation/ determination	Patients in this stage state intent to take action within the next month or less. Concrete plan for change arises (eg, attending an Alcoholics Anonymous meeting, buying self-help book).
Action	Patients in this stage have made specific, concrete changes over the past 6 months, thus reducing their risk for disease (ie, changes have resulted in reduction or cessation of substance use).
Maintenance	Patients in this stage are engaging in lifestyle changes, which will actively prevent relapse. Relapse risk softens, cravings/temptation lessen, and confidence improves. This stage usually lasts 6 months to 5 years.
Termination	Patients in this stage have zero temptation and 100% self-efficacy. Most (> 80%) do not reach this stage.
Relapse	40%–60% of patients will relapse in the first year and may re-enter at any stage above.

Adapted from Prochaska et al.[1]

EXPLANATION OF ANSWERS

1. **(B) Heroin addiction/dependence.** Opiate withdrawal is characterized by either the recent reduction in heavy or prolonged opiate use or the administration of an opioid antagonist after a period of opioid use, functional impairment, and 3 or more of the following symptoms: dysphoric mood; nausea or vomiting; muscle aches; lacrimation or rhinorrhea; pupillary dilation, piloerection, or sweating; diarrhea; yawning; fever; or insomnia. Although food poisoning or influenza can present as the symptoms above, these diagnoses would not explain the urine drug screen results. Morning sickness from pregnancy is possible but would not fully account for the patient's symptoms. Although the patient could be in withdrawal from her prescribed oxycodone and acetaminophen, these medications have not been prescribed long enough to be a likely cause of her withdrawal. The presence of 6-monoacetylmorphine can only be attributed to heroin, an illegal drug of abuse.
2. **(C) Provide detoxification with methadone.** For a patient in opiate withdrawal, a basic issue to address is whether or not continued opiate prescribing is appropriate. The patient could have a chronic pain syndrome for which chronic administration of opioids is appropriate. However, this scenario does not apply to this case. A second issue to be addressed is whether referral for opiate agonist therapy (OAT) is more appropriate than is detoxification. Federal guidelines require a history of opiate addiction for at least 1 year and also at least 2 failed detoxification attempts in a 1-year period before referring for OAT. For those patients with heroin addiction who meet these and other federal criteria, OAT can be very effective. This patient has never had the opportunity of detoxification before, thus making OAT premature. Detoxification with methadone is the treatment of choice. Although clonidine can be a fairly effective medication for detoxification, when used alone it does not treat the full constellation of heroin withdrawal and is associated with orthostatic hypotension. Benzodiazepines do not treat the full syndrome of withdrawal when used alone. Naltrexone (an opioid antagonist with only marginal efficacy as an antirelapse agent for heroin dependence) would only worsen this patient's withdrawal syndrome. Buprenorphine, a new medication for OAT, will soon be available as well.
3. **(B) Contemplation.** Prochaska and DiClemente[1] have clarified that change is a process that unfolds over time through a series of stages (**Table 1**) requiring the clinician to tailor motivational attempts.

REFERENCE

1. Prochaska JO, DiClemente CC. Stages and processes of self-change of smoking: toward an integrative model of change. J Consult Clin Psychol 1983;51:390–5.

Copyright 2002 by Turner White Communications Inc., Wayne, PA. All rights reserved.