Out with the Old! The Importance of Safe and Responsible Disposal of Medication

EDUCATIONAL OBJECTIVES

Upon completion of this activity, participants will be better able to:

1. Describe current environmental concerns surrounding improper medication disposal;
2. Relate how improper medication disposal is correlated to prescription drug abuse;
3. Review current options available to dispose of unused medications;
4. Identify current legal considerations regarding medication disposal; and
5. Describe the role of pharmacy providers in medication disposal.

Post-test/Rationale:

1. Which of the following could result from the improper disposal of medications?
   - A. Harm to the environment
   - B. Drug diversion
   - C. Accidental poisonings
   - D. All of the above***

Correct Answer: D
Rationale: The safe and responsible disposal of medications is an important public health initiative that directly relates to both pharmacy providers and consumers. Improper storage and disposal of expired or unused medications has the potential for negative consequences, including harm to the environment, accidental poisonings, and drug diversion.

2. According to the study by the Associated Press, which of the following compounds was found in drinking water in the United States?
   - A. Estradiol
   - B. Azithromycin
   - C. Phenytoin
   - D. All of the above***

Correct Answer: D
Rationale: Table 1 provides the information that all three compounds were found in drinking water in the United States.

3. Which of the following contributes to the entry of pharmaceutical compounds into drinking water?
   - A. Pharmaceutical absorption
   - B. Pharmaceutical disposal
   - C. Pharmaceutical excretion
D. B and C only***

Correct Answer: D
Rationale: The environmental concerns with medications not only arise from their metabolism and excretion, but also from their improper disposal.

4. In 2014, how many people aged 12 years or older used narcotic prescription pain relievers for nonmedical purposes?

A. 900,000
B. 2.5 million
C. 4.3 million***
D. 6.7 million

Correct Answer: C
Rationale: In 2014, 4.3 million people aged 12 years or older used narcotic prescription pain relievers for nonmedical reasons.

5. How do individuals who abuse prescription drugs obtain access to them?

A. Medicine cabinets
B. Trash
C. Friends or families
D. All of the above***

Correct Answer: D
Rationale: Medicine cabinets, friends or relatives, and even household trash routinely provide access to many of the medications that are being abused.

6. Which of the following is an approved option available to consumers to dispose of unused or expired medications?

A. Self-disposal in the home
B. Returning the medication to an authorized pharmacy with a collection receptacle
C. Returning the medication to a take-back event conducted solely by a retail pharmacy
D. A and B***

Correct Answer: D
Rationale: Take-back events cannot be conducted solely by a retail pharmacy; they would have to partner with appropriate law enforcement to conduct a take-back event. However, returning medications to an authorized receptacle is now acceptable and medications can be self-disposed of in the home (although specific procedures should be followed).

7. Which of the following concerns surrounding the collection of medications may deter pharmacies from registering with the DEA as a collector?

A. Disposal costs
B. Registration and compliance requirements
C. Registration being mandated not voluntary
D. A and B

Correct Answer: D

Rationale: Due to a variety of reasons, including compliance and costs concerns, pharmacies may be hesitant to voluntarily become authorized by the DEA to collect medications. Therefore, it remains to be seen what collection and disposal options will become available to ultimate users and whether options expand as desired by the Secure and Responsible Drug Disposal Act and new DEA rules.

8. Which of the following is an important provision of the DEA rules implementing the Secure and Responsible Drug Disposal Act of 2010?

A. Incineration is the only allowable method to be used to destroy collected medications
B. Community groups may partner with law enforcement to offer collection events
C. Retail pharmacies authorized to collect but not capable of destroying medications on site may offer a mail-back program
D. The DEA will continue to hold multiple national take-back events each year

Correct Answer: B

Rationale: Collectors are not authorized to conduct take-back events. Law enforcement may continue to conduct take-back events at any time. However, any person or community group, registrant or nonregistrant, may partner with law enforcement to conduct take-back events.

9. A patient calls the pharmacy and asks how to dispose of their unused acetaminophen plus codeine tablets. Which of the following would be the best advice to give to the patient?

A. Dispose of the medication at a nearby collection receptacle
B. Keep the medication in a safe place until the next DEA take-back event
C. Throw the medication in the trash
D. Return the medication to their prescriber

Correct Answer: A

Rationale: Disposing an unused or expired controlled substance at a nearby collection receptacle allows the patient to get rid of the medication immediately, reducing the chances for potential diversion or injury.

10. Which of the following are important roles for pharmacy technicians regarding medication disposal?

A. Apply appropriate medication disposal standards to everyday practice
B. Educate patients regarding medication disposal
C. Keep up-to-date regarding new laws and regulations surrounding medication disposal
D. All of the above
Correct Answer: D

Rationale: Because the public often turns to their local pharmacy for advice about medication disposal, pharmacy providers have an obligation to educate patients and provide sound professional advice. To do this, pharmacy providers, including pharmacy technicians, must be aware of the negative consequences of improper medication disposal, the legal issues surrounding medication disposal, and the current medication disposal options.