Pearls

Educate patients about proper disposal of unused Rx medications—for their safety

atients often tell clinicians that

they used their "left-over" medica-

tions from previous refills, or that

a family member shared medication

Tanuja Gandhi, MD, and Kimberly Best, MD

Dr. Gandhi is a PGY-3 Psychiatry Resident and Dr. Best is Director of the Psychiatry Residency Training Program at Albert Einstein Medical Center, Philadelphia, Pennsylvania.

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 with them. Other patients, who are nonadherent or have had a recent medication change, might reveal that they have some unused pills at home. As clinicians, what does this practice by our patients mean for us?
Prescription drug abuse is an emerging crisis, and drug diversion is a significant contributing factor.¹ According to the Substance Abuse and Mental Health Services Administration's National Survey

on Drug Use and Health,² in 2011 and 2012, on average, more than one-half of participants age \geq 12 who used a pain reliever, tranquilizer, stimulant, or sedative nonmedically obtained their most recently used drug "from a friend or relative for free."

Unused, expired, and "extra" medications pose a significant risk for diversion, abuse, and accidental overdose.³ According to the Prescription Drug Abuse Prevention Plan,¹ proper medication disposal is a major problem that needs action to help reduce prescription drug abuse.

Regrettably, <20% of patients receive advice on medication disposal from their health care provider,⁴ even though clinicians have an opportunity to educate patients and their caregivers on appropriate use, and safe disposal of, medications—in particular, controlled substances.

What should we emphasize to our patients about disposing of medications when it's necessary?

Teach responsible use

Stress that *medications prescribed for the patient are for his (her) use alone* and should not be shared with friends or family. Sharing might seem kind and generous, but it can be dangerous. Medications should be used only at the prescribed dosage and frequency and for the recommended duration. If the medication causes an adverse effect or other problem, instruct the patient to talk to you before making any changes to the established regimen.

Emphasize safe disposal

Follow instructions. The label on medication bottles or other containers often has specific instructions on how to properly store, and even dispose of, the drug. Advise your patient to follow instructions on the label carefully.

Participate in a take-back program. The U.S. Drug Enforcement Administration (DEA) sponsors several kinds of drug take-back programs, including permanent locations where unused prescriptions are collected; 1-day events; and mail-in/shipback programs.

The National Prescription Drug Take-Back Initiative is one such program that collects unused or expired medications on "Take Back Days." On such days, DEAcoordinated collection sites nationwide accept unneeded pills, including prescription painkillers and other controlled substances, for disposal only when law enforcement personnel are present. In 2014, this program collected 780,158 lb of prescribed controlled medications.⁵



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Patients can get more information about these programs by contacting a local pharmacy or their household trash and recycling service division.^{1,6}

Discard medications properly in trash. An acceptable household strategy for disposing

of prescription drugs is to mix the medication with an undesirable substance, such as used cat litter or coffee grounds, place the mixture in a sealed plastic bag or disposable container with a lid, and then place it in the trash.

Don't flush. People sometimes flush unused medications down the toilet or drain. The current recommendation is against flushing unless instructions on the bottle specifically say to do so. Flushing is appropriate for disposing of some medications such as opiates, thereby minimizing the risk of accidental overdose or misuse.⁶ It is important to remember that most municipal sewage treatment plans do not have the ability to extract pharmaceuticals from wastewater.⁷

Discard empty bottles. It is important to discard pill bottles once they are empty and to remove any identifiable personal information from the label. Educate patients not to use empty pill bottles to store or transport other medications; this practice might result in accidental ingestion of the wrong medication or dose.

These methods of disposal are in accordance with federal, state, and local regulations, as well as human and environmental safety standards. Appropriate disposal decreases contamination of soil and bodies of water with active pharmaceutical ingredients, thereby minimizing people's and aquatic animals' chronic exposure to low levels of drugs.³

Encourage patients to seek drug safety information. Patients might benefit from the information and services provided by:

• National Council on Patient Information and Education (www.talkaboutrx.org)

• Medication Use Safety Training for Seniors (www.mustforseniors.org), a nationwide initiative to promote medication education and safety in the geriatric population through an interactive program.

Remember: Although prescribing medications is strictly regulated, particularly for controlled substances, those regulations do little to prevent diversion of medications after they've been prescribed. Educating patients and their caregivers about safe disposal can help protect them, their family, and others.

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