

Medication Errors at Home

Almost three billion drugs are prescribed each year in the United States.¹ The management of multiple prescription and over-the-counter drugs at home is part of the daily lives of many Americans. These medications are typically self-administered by the individual, family members, or unlicensed healthcare personnel. This, in combination with other factors such as misperceptions about medications, unfamiliarity with signs and symptoms of toxicity and general knowledge deficit regarding specific medications, all contribute to medication errors in the home setting.²

Examples of misperceptions about medications include:

- Philosophy that more is better: the patient either takes a higher dose than prescribed, takes extra doses, or takes meds that were recommended “as needed” on a routine basis. This results in an increased risk of side effects, toxicity, and overdose.
- Belief that prescription medications can be shared: lack of understanding that medications should only be taken by the person for which they were prescribed. Medications are prescribed based on medical condition, tolerance, drug interactions and properties of the drug itself. Sharing prescription medications with family and friends can cause serious harm and possible death.
- Inappropriate medication storage: pre-pouring medications and/or storing them in unsafe places where children or other family members could accidentally ingest them can be extremely dangerous.

Unfamiliarity with signs and symptoms of toxicity can result in a delay in seeking medical care and potentially result in fatal consequences. It is critical that patients know and understand the signs and symptoms of toxicity specific to their medications. General indications of toxicity include:

- Unconsciousness that is mistaken for sleep.
- Gurgling or unusual snoring which could be a sign of stupor.
- Sudden behavior changes.

The most common medications associated with serious adverse events including death are:

- opioids
- psychotherapeutic drugs
- insulins
- over-the-counter medications
- cardiovascular drugs
- anticoagulants
- anticonvulsants

Education can go a long way to help prevent unintended deaths associated with drug use. Clinicians should take time to review the following information with their patients regarding medications they take at home:

- Side effects and toxicity can occur if the medication is taken at a higher dose or more frequently than prescribed.
- Follow medication instructions on the label for both prescription and over-the-counter medications.

References

1. Centers for Disease Control and Preventions. (2017) Therapeutic Drug Use. Retrieve from <https://www.cdc.gov/nchs/fastats/drug-use-therapeutic.htm>
2. Institute for Safe Medication Practices. (2017). *Nurse Advise-ERR*. Retrieved from Institute for Safe Medication Practices: <http://www.ismp.org/newsletters/nursing/issues/NurseAdviseERR201703.pdf>

- Seek clarification from a healthcare provider if the directions for taking a medication are not clear or say “take as needed”.
- Differentiate dangerous side effects (i.e., somnolence) from harmless ones, and what to do to reduce harm.
- Signs and symptoms of toxicity requiring medical assistance.
- Avoid sharing medications with or taking medications from others.
- Information on high alert medications (i.e. opioid) including signs of over-sedation, toxicity and proper storage.
- Immediate communication with healthcare providers regarding changing or worsening symptoms, or unusual or sudden changes in behavior.
- Report all medication errors to a healthcare provider.
- Assess symptoms and medication effects at regular intervals.

Health care providers should take every opportunity to correct misperceptions that their patients may have about their medications, teach them the signs and symptoms of toxicity, and encourage them to seek care immediately if their symptoms worsen.

References

1. Centers for Disease Control and Preventions. (2017) Therapeutic Drug Use. Retrieve from <https://www.cdc.gov/nchs/fastats/drug-use-therapeutic.htm>
2. Institute for Safe Medication Practices. (2017). *Nurse Advise-ERR*. Retrieved from Institute for Safe Medication Practices: <http://www.ismp.org/newsletters/nursing/issues/NurseAdviseERR201703.pdf>