

Patient Safety

MEDICATION USE is a complex, multistep process that involves multiple individuals at various locations. Every step in the medication use process has the potential for error and the risk for patient harm. Pharmacy technicians need to understand the medication use process and error prevention strategies.



Objective:



Verify patient information, distinguish between look alike/sound alike drugs, and prepare medications and doses to meet standards.

Key Terms:



active listening

ambulatory

compounding

empathetic

garbing

infection control

Institute for Safe

Medication Practices

(ISMP)

Medication Error

Reporting Program

(MERP)

nonverbal

communication

Occupational Safety and

Health Administration

(OSHA)

Quality assurance (QA)

Safety Data Sheets

(SDS)

scoop method

Tall Man Lettering

transcribing

verbal communication

Verifying Patient and Medication Information

VERIFY PATIENT INFORMATION DURING PROFILE INTAKE

Information collected from the patient by the pharmacy technician is maintained in a patient profile. Every patient has a profile. This information is necessary for the pharmacist to ensure that patients receive the proper medications. The patient interview is the primary way

of obtaining comprehensive information about the patient. In some pharmacies, the patient may complete a hard copy form with medical and allergy information. The following information is used to develop a patient profile:

- ◆ Patient's complete name
- ◆ Patient's sex
- ◆ Patient's home address (street, city, state, and zip code)
- ◆ Patient's telephone number (home, work, and mobile)
- ◆ Patient's date of birth
- ◆ Patient's allergies (drug and food)
- ◆ Patient's insurance information (group number, member number, and relationship to the insurance holder)
- ◆ Patient's health condition
- ◆ Patient's medications
- ◆ Patient's medical history



FIGURE 1. When a patient arrives at the community pharmacy, the pharmacy technician will need to gather and verify important pieces of information from the patient.

Once the profile form is completed and signed by the patient, the pharmacy technician is responsible for **transcribing**, transferring information from the completed paper form to the electronic patient record in the pharmacy computer system. The Omnibus Budget Reconciliation Act of 1990 (OBRA '90) requires that every **ambulatory**, relating to or adapted to walking, pharmacy maintain patient profiles. The technician's transcription work plays an important role in ensuring and maintaining patient safety. The technician must be vigilant and verify that the information provided by the patient is both accurate and complete.

Good communication skills are important when developing a patient profile. Communication skills and questioning techniques, especially when it comes to communicating with patients, are learned and take time to develop. These skills and questioning techniques include the following.

Active Listening

Active listening, a communication technique in which listeners confirm understanding by restating what they have heard in their own words. Active listening responses help the patient feel heard and understood and can also serve to clarify patient responses.

Nonverbal Communication

Nonverbal communication, the act of giving or exchanging information without using spoken words. Technicians need to pay attention to patient's body language such as eye contact when verifying patient information. For example, if the patient is not looking you in the eye, they may be uncomfortable and not giving accurate information.

Verbal Communication

Verbal communication, the act of sharing information by individuals through the use of speech. Technicians need to verify information such as date of birth or allergies by asking the patient to repeat the information.

Open Ended Questions

Use open ended questions that require the patient to answer with more than a simple yes or no. These types of questions encourage the patient to disclose more information.

Empathy

Provide **empathetic**, showing an ability to understand and share the feelings of another, responses. When a patient believes you understand they will share more information that can assist with their care. This can help to validate the information that they are giving.

Verification

The pharmacy technician plays an essential role in entering information properly into the computer system and updating all patient information while ensuring the patient profile is accurate. The pharmacy technician must maintain the utmost level of accuracy when inputting patient information. The slightest error in doing so can prove detrimental to the patient's health.

DISTINGUISH LOOK-ALIKE/SOUND-ALIKE MEDICATIONS

More medicines and new brands are being marketed each year in addition to the thousands already available to consumers. Many of these medication names may look or sound alike. The potential for error due to confusing drug names is very high. In addition, when patients take multiple prescription medications and receive care from different providers, medication history information may be less reliable and more difficult to verify.

Each year in an effort to reduce confusion between drug names that look alike or sound alike, the United States Food and Drug Administration (FDA) reviews approximately 300 drug names before they are allowed to enter the market. Approximately one third of the names that companies propose are rejected.

The **Institute for Safe Medication Practices (ISMP)** is a nonprofit healthcare agency dedicated solely to medication error prevention and safe medication use. It has a voluntary medication error reporting system called the **Medication Error Reporting Program (MERP)**. The program is designed to allow healthcare professionals to report medication errors directly. Thousands of medication errors each year are due to look alike sound alike medication names.

One in every 1000 medication orders in a hospital, and one in every 1000 prescriptions in a community pharmacy, has been associated with selecting the wrong drug while prescribing, transcribing, dispensing, or administering medications. One of the key causes of these errors is drug name similarity. Factors that increase visual similarity among drug names include similar length of the names and the number of groups of similar characters or the same characters within the names.

The ISMP promotes the use of Tall Man Lettering as one means of reducing confusion between similar drug names. **Tall Man Lettering** uses mixed case letters to draw attention to the dissimilarities in look alike drug names. The tall man lettering combines lower and upper case bolded letters to highlight the differences between look alike and sound alike medicine names, for example, flu**OXET**ine and flu**VOXAM**ine, or bu**PROP**ion and bus**PIR**one, making them easier for the eye to distinguish.

Since 2008, the ISMP has maintained a list of drug names with recommended, bolded tall man letters. Periodically the ISMP updates the list. The ISMP also publishes a list of confused drug names for example; Prozac vs. Prilosec, Reminyl vs. Amaryl, or diazepam vs. diltiazem. The list can be used to determine which medications require special safeguards to reduce the risk of errors. Some other recommended strategies to reduce the risk of errors include:

- ◆ Use both the brand and generic names on prescriptions and labels.
- ◆ Include the purpose of the medication on the prescription.
- ◆ Configuring computer selection screens to prevent look alike names from appearing consecutively.
- ◆ Changing the appearance of look alike product names to draw attention to their dissimilarities.



FIGURE 2. Look alike drug names or packaging are known to contribute to medication errors. Separating them from each other is just one of many strategies a pharmacy uses to reduce medication errors.



FURTHER EXPLORATION...

ONLINE CONNECTION:

Drug Name Confusion: Preventing Medication Errors

With thousands of drugs on the market it is not hard to understand why so many of them have names that look alike, sound alike, or look and sound alike. Unfortunately, many medication errors result from confusion with drug names that look or sound alike. Read the article “Drug Name Confusion: Preventing Medication Errors,” at the web site https://www.onhealth.com/content/1/drug_name_confusion_preventing_medication_errors. Review the list of error prone drug information. Reflect upon the ways that the FDA is using to minimize confusion between drug names. Review the list of steps that you can take as a patient to reduce drug name medication errors.

PREPARE MEDICATIONS AND DOSES TO STANDARDS

Improving and sustaining the workflow process in order to provide the safest possible service to the patients is a challenge faced by every pharmacy. There are a variety of methods that when used correctly assist the technician to avoid the most common errors when dispensing medications

Quality Assurance

Quality assurance (QA) is a system created within an organization that when used correctly helps to ensure the quality of the product produced. The focus of a good quality assurance program is on error prevention. Each organization must maintain effective policies and procedures that must be adhered to at all times. There are many processes that pharmacies must examine for an effective QA program. The following are examples of processes monitored through QA programs:

- ◆ **Infection control** prevents or stops the spread of infections in healthcare settings. Infection control is vital for the **compounding**, preparing personalized medications for patients, of sterile products. Proper hand washing is important in compounding but also for preventing the spread of microorganisms to patients and to other pharmacy staff.
- ◆ Proper **garbing**, the act of putting on protective equipment, is essential for sterile compounding and other areas of pharmacy practice. Technicians put on shoe covers, hair covers, face masks, gowns, eye shields, and gloves for sterile compounding.
- ◆ When compounding sterile products it may be necessary to recap a needle. Using the **scoop method**, the cap of the needle remains on the counter and one hand is used to scoop the needle into the cap, can help to avoid needle sticks and potential infection control issues.

- ◆ Needles and syringes must be discarded immediately after use in labeled, puncture proof containers.
- ◆ Whenever possible the use of single dose vials is preferred over multiple dose vials.
- ◆ All pharmacies and equipment in the pharmacy shall be maintained in a clean condition and in good repair.
- ◆ All waste material shall be immediately deposited in an appropriate waste receptacle.
- ◆ Food and beverages shall only be placed in a designated area away from dispensing activities.

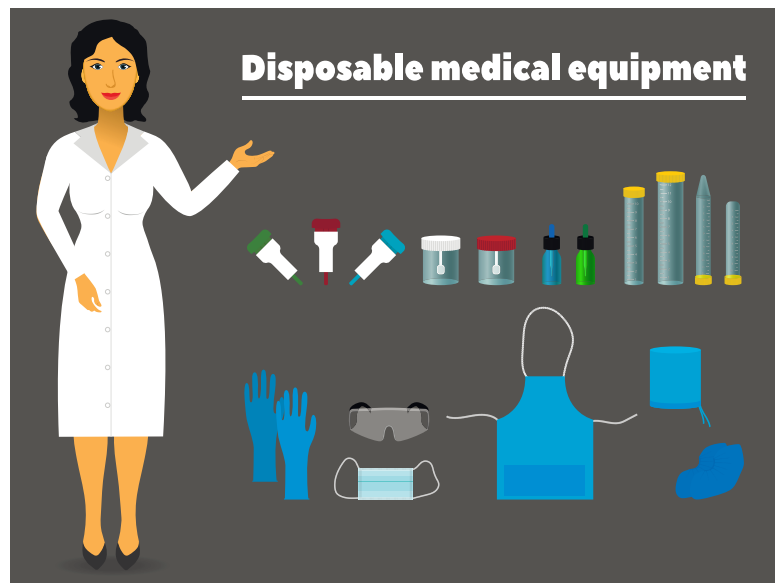


FIGURE 3. A good infection control program needs to include education of healthcare workers on the use of proper preventative safety measures.

OSHA

The **Occupational Safety and Health Administration (OSHA)** is an organization dedicated to making the workplace safe for employees. OSHA requires **Safety Data Sheets (SDS)**, information on all potentially dangerous chemicals in the workplace, to be on file at all workplaces, including pharmacies. The information on these sheets includes the storage requirements, handling procedures, and actions to take for spills and contact with the skin. Employers must provide the safety data sheets for all hazardous medications, such as some cancer medications, antiviral agents, and anesthetics.

OSHA requires employers to provide appropriate protective equipment to workers who handle potentially hazardous medication. OSHA recommends that facilities designate restricted areas to prepare hazardous drugs using approved biological safety cabinets. When disposing of hazardous drugs technicians must bag and properly label the medications. OSHA recommends that pharmacies keep all training records for proper medication management for three years.



FIGURE 4. All pharmacies must establish and maintain a quality assurance program designed to prevent medication errors.

Summary:



Pharmacy technicians are at the forefront in the effort to prevent medication errors. Pharmacy technicians must be vigilant when inputting patient information into the pharmacy computer system. They must double check that all information given to them by the patient is correct. Good communication skills can help to cut down on input errors. Pharmacy technicians should be familiar with the lists of look alike sound alike drugs. They should always double check that the correct medication has been dispensed. By adhering to the procedures and policies of the pharmacy, and following all OSHA guidelines, medication errors can be reduced.

Checking Your Knowledge:



1. List the information required for a patient profile.
2. Describe 5 communication skills that are important when developing a patient profile.
3. How does the use of tall man letters help to reduce medication errors?
4. Describe the role ISMP and MERP play in helping to reduce medication errors.
5. What is a quality assurance program?
6. Describe 5 ways to prevent or stop the spread of infections.
7. Explain how OSHA contributes to patient safety.

Expanding Your Knowledge:



Research the Internet for legal cases involving medication errors due to look alike sound alike medications. Report patient outcomes of these errors to your class.

Web Links:



Creation engineering: The art and science of naming drugs

<https://www.cnn.com/2016/11/25/health/art-of-drug-naming/index.html>

10 Strategies for Minimizing Dispensing Errors

<https://www.pharmacytimes.com/publications/issue/2010/january2010/p2pdispensingerrors-0110>

Working With The Pharmacist

<https://www.caregiverslibrary.org/caregivers-resources/grp-home-care/hsgrp-medications/working-with-the-pharmacist-article.aspx>