

Chapter 35 administering medications answers

!Safe nursing practice includes knowledge about medications; and legal aspects of medications; associated assessment and evaluation; ethical considerations; associated assessment and evaluation; ethical considerations; as the prescribing primary •care provider (PCP), pharmacist, respiratory therapist, and dietician.!Continuing educations are •administered properly, and medications are •administered properly, and medications are •administered properly. •A drug is any substance that positively or negatively alters physiologic function. !•A medications can have up to four designations: !•chemical name - elements of the meds molecular structure !•official name - assigned by the U.S. Adopted Names Council, usually the generic name - not capitalized and often contains a prefix or suffix that helps identify the drug manufacturer •Medication standards and regulations •In the U.S., official medication lists have been reported in the United States Pharmacopeia (USP) since 1820 and the National oFormulary (NF) since 1898. !Help public safety by identifying medication properties that show an appropriate range of quality and purity! Enforcement of medication undergo safety testing before being released to the public. Controlled substances •Controlled substances are types of medications that have ogovernment-regulated manufacturing, prescribing, and dispensing requirements.! If a controlled drug needs to be wasted (e.g., only a partial of medications that have of m must witness the appropriate disposal of the substance and document the wasting of the drug. State and local medication regulations • The goal of these regulations is to prevent adverse patient outcomes. It is the nurse's responsibility to understand and follow the onurse practice act and policies of the facility when administering any medication, particularly controlled substances. Principles and Drug Actions Pharmacokinetics - the study of how a medication enters the body, moves through the body, and ultimately leaves the body. bloodstream! Several factors affect absorption: route of administration, ability of the drug to dissolve or become soluble, blood •flow to the administration site, body surface area, and patient age.! Intravenous is quickest, then intramuscularly, subcutaneously, and orally administered medications •Distribution - the process of delivering the med to tissues and organs and ultimately to the specific site of action! affected by the chemical properties of the drug, the effectiveness of the drug binds to proteins or accumulates in fatty tissue Metabolism - process by which a drug is altered to a less active form to prepare for excretion! The products of this process are called metabolites. • Excretion - removes the less active drug or its metabolites! • exit the body through the kidneys, but some may be excreted in feces, breath, saliva, sweat, and breast milk • Pharmacodynamics - process in which a medication interacts with the body's cells to produce a biologic response!•Biochemical response can be systemic, such as the effects seen when an administered pain medication affects the nervous osystem (change in respiratory rate), and gastrointestinal system (constipation)!A drug's half-life is the expected time it takes for the blood concentration to measure one-half of the original drug dose due oto drug metabolism and excretion. !Onset of action is the time the body takes to respond to a drug after administration. !o affected by the administration route, drug formulation, and pharmacokinetic factors! Peak plasma level indicates the highest serum (blood) concentration.! o The trough is the lowest serum level of the medication. Side effects, adverse effects, and interactions • Side effects are predictable but unwanted and sometimes unavoidable reactions. (Allergic response)! Toxic effects result from a medication overdose or the buildup of medication in the blood due to impaired metabolism and o Open Resources for Nursing (Open RN) The scope of practice regarding a nurse's ability to legally dispense and administer medication is based on each state's Nurse Practice Act. Registered Nurses (RNs) and Licensed Practical Nurses (LPNs/LVNs) may legally administer medications that are prescribed by a health care provider, such as a physician, nurse practitioner, or physician's assistant. Prescriptions are "orders, interventions, remedies, or treatments ordered or directed by an authorized primary health care provider." For more information about the state Nurse Practice Act, visit the "Legal/Ethical" chapter in Open RN Nursing Pharmacology. Types of Orders, standing orders, standing orders, standing orders, standing orders, standing orders, and titration orders, standing "Lisinopril 10 mg PO daily." A (or as-needed) order is a prescription for medication to be administered when it is requested by, or as needed by, the patient. PRN orders are typically administered based on patient symptoms, such as pain, nausea, or itching. An example of a PRN order for pain medication is "Acetaminophen 500 mg PO every 4-6 hours as needed for pain." A is also referred to in practice as an "order set" or a "protocol." Standing orders are standardized prescriptions for nurses to implement to any patient in clearly defined circumstances without the need to initially notify a provider. An example of a standing order set/protocol for patients visiting an urgent care clinic reporting chest pain is to immediately administer four chewable aspirin, establish intravenous (IV) access, and obtain an electrocardiogram (ECG). A is a prescription for a medication to be administered only once. An example of a one-time order that is administered without delay due to the urgency of the circumstances. An example of a STAT order is an order in which the medication dose is either progressively increased or decreased by the nurse in response to the patient's status. Titration orders are typically used for patients in critical care as defined by agency policy. The Joint Commission requires titration orders to include the medication name, medication name, medication name, medication route, initial rate of infusion (dose/unit of time), incremental units to which the rate or dose can be changed, the maximum rate or dose of infusion, and the objective clinical measure to be used to guide changes. An example of a titration order is "Norepinephrine 2-12 micrograms/min, start at 2 mcg/min and titrate upward by 1 mcg/min every 5 minutes with continual blood pressure monitoring until systolic blood pressure >90 mm Hg." Components of a Medication Order According to the Centers for Medicare & Medicaid Services, all orders for the administration of drugs and biologicals must contain the following information: Name of the prescriber Weight of the patient to facilitate dose calculation when applicable. (Note that dose calculations are based on metric weight: kilograms for children/adults or grams for newborns) Dose calculation requirements, when applicable Exact strength or concentration, when applicable When reviewing a medication order, the nurse must ensure these components are included in the prescription before administering the medication. If a pertinent piece of information is not included, the nurse must contact the prescription before administering the medication. The generic name is considered the safest method to use and allows for substitution of various brand medications by the pharmacist. Dose The dosage of a drug is prescribed using either the metric or the household system. The metric system is the most commonly accepted system internationally. Examples of standard dosage are 5 mL (milliliters) or 1 teaspoon. Standard abbreviations of metric measurement are frequently used regarding the dosage, such as mg (milligram), kg (kilogram), mL (milliliter), mcg (microgram), or L (liter). However, it is considered safe practice to avoid other abbreviations have been deemed unsafe by the Joint Commission and have been put on a "do not use" list. See the hyperlinks below to view the Joint Commission "Do Not Use List" and the Institute of Safe Medication Practices (ISMP) list of abbreviations to avoid. If a dosage is unclear or written in a confusing manner in a prescription, it is always best to clarify the order with the prescribing provider before administering the medication. Frequency in prescriptions is indicated by how many times a day the medication is to be administered in hours or minutes. Examples of frequency include verbiage such as once daily, three times daily, four times daily, four times daily. every 30 minutes, every hour, every hour, every four hours, or every eight hours. Medication times are typically indicated using military time in the "Math Calculations" chapter. Some types of medications may be ordered "." An around-the-clock frequency order indicates they should be administered at regular time intervals, such as every six hours, to maintain consistent levels of the drug in the patient's bloodstream. For example, pain medications administered at end of life are often prescribed ATC instead of PRN (as needed) to maintain optimal pain relief. Route of Administration Common routes of administration and standard abbreviations include the following: Oral (PO) - the patient swallows a tablet or capsule Sublingual (SL) - applied under the tongue Enteral (NG or PEG) - administered via a tube directly into the GI tract Rectal (PR) - administered via rectal suppository Inhalation (INH) - the patient breathes in medication from an inhaler Intramuscular (IM) - administered via an injection into a muscle Subcutaneous - administered via injection into the fat tissue beneath the skin (Note that "subcutaneous" is on ISMP's recommended list of abbreviations to avoid due to common errors.) Transdermal (TD) - administered via an injection into the fat tissue beneath the skin (Note that "subcutaneous" is on ISMP's recommended list of abbreviations to avoid due to common errors.) of administration and considerations regarding absorption, visit the "Kinetics and Dynamics" chapter in Open RN Nursing Pharmacology. Provider is required on the order and can be electronic or handwritten. Verbal orders from a prescriber are not recommended, but may be permitted in some agencies for urgent situations. Verbal orders require the nurse to "repeat back" the order to the prescriber for confirmation. Rights of Medication Administration Each year in the United States, 7,000 to 9,000 people die as a result of a medication error. Hundreds of thousands of other patients experience adverse reactions or other complications related to a medication. The total cost of caring for patients with medication-associated errors exceeds \$40 billion each year. In addition to the monetary cost, patients experience psychological and physical pain and suffering as a result of medication errors. Nurses several rights of medication. The Centers for Medicare & Medicaid Services requires nurses to verify specific information prior to the administration. These rights of medication administration administration are the vital last safety check by nurses to prevent errors in the chain of medication administration that includes the prescribing provider, the pharmacist, the nurse, and the patient. It is important to remember that if a medication error occurs resulting in harm to a patient, a nurse can be held liable even if "just following orders." It is absolutely vital for nurses to use critical thinking and clinical judgment to ensure each medication is safe for each specific patient before administering it. The consequences of liability resulting from a medication error can range from being charged with negligence in a court of law, to losing one's job, to losing one's nursing license. The six rights of medication administration must be verified by the nurse at least three timesent before administering a medication to a patient. These six rights include the following: Right Patient Right Drug Right Dose Right Time Right Note Right Dose Right Time Right Should be completed as part of a safe medication administration process. These additional rights include Right History and Assessment, Right Drug Interactions, Right to Refuse, and Right Education and Information. Information for each of these rights is further described below., Right to Refuse, and Right Education and Information for each of these rights is further described below. must never be used as an identifier because a patient may change rooms. Identification matches the patient wristband, patient identification matches the pat medication administration record (MAR) and medication is being given to the correct patient's identify by scanning their identification band and asking for their date of birth. See Figure 15.2 for a close-up image of a patient identification wristband. Figure 15.1 Patient Identification by Scanning is not intended to take the place of confirming two patient identification Band If barcode scanning is used in an agency, this scanning is not intended to take the place of confirming two patient identification by Scanning is used in an agency, this scanning is not intended to take the place of confirming two patient identification Band If barcode scanning is used in an agency, this scanning is not intended to take the place of confirming two patient identification Band If barcode scanning is used in an agency, this scanning is used in an agency barband Figure 15.2 Patient Identification Band If barcode scanning is used in an agency Patient Safety Goals established by the Joint Commission state that whenever administering patient medications, at least two patient identifiers should be used. Right Drug During this step, the nurse ensures the medication to be administered to the patient does not have a documented allergy to it. The Medication Administration Record (MAR), or, an electronic medical record, is a specific type of documentation found in a patient's chart. See Figure 15.3 for an image of a MAR and its components. Beware of look-alike and sound-alike medication names, as well as high-alert medications that bear a heightened risk of causing significant patient harm if they are used in error. The nurse should also be aware of what medication can be crushed and those that cannot be crushed and those that cannot be crushed and those the dosage of the medication matches the prescribed dose, verifies the correct dosage range for the age and medical status of the patient, and also confirms that the prescription itself does not reflect an unsafe dosage level (i.e., a dose that is too high or too low). For example, medication errors commonly occur in children, who typically receive a lower dose of medication than an adult. Medication errors also commonly occur in older patients who have existing kidney or liver disease and are unable to metabolize or excrete typical doses of medications. Right Time and Frequency During this step, the nurse verifies adherence to the prescribed frequency and scheduled time of administration of the medication. This step is especially important when PRN medications are administered because it is up to the nurse to verify the time of the previous dose and compare it to the ordered frequency. Medications at the same time, this goal of timeliness can be challenging. Most facilities have a policy that medications can be given within a range of 30 minutes before or 30 minutes after the medication is scheduled. For example, a medication ordered for 0800 could be administered anytime between 0730 and 0830. However, some medications must be given at their specific ordered time due to pharmacokinetics of the drug. For example, if an antibiotic is scheduled every eight hours, this time frame must be upheld to maintain effective bioavailability of the drug, but a medication scheduled daily has more flexibility with time of actual administration. Right Route During this step, the nurse ensures the route of and ministration is appropriate for the specific medications can only be given safely via one route. Nurses must administered via multiple routes, whereas other medications via the route indicated in the order. If a nurse discovers an error in the order or believes the route is unsafe for a particular patient, the route must be clarified with the prescribing provider before administration. For example, a patient may have a PEG tube in place, but the nurse believes this medication should be administration. For example, a patient may have a PEG tube and the route indicated in the order is an error, the prescribing provider must be notified and the order must be revised indicating via PEG tube before the medication, it is important to immediately document the administered. Right Documentation After administering medication, it is important to immediately document the administered. addition to checking the basic rights of medication administration and documenting the administration, it is also important for nurses to verify the following information to prevent medication errors. Right History and Assessment The nurse should be aware of the patient's allergies, as well as any history of any drug interactions. Additionally, nurses collect appropriate assessment data regarding the patient's history, current status, and recent lab results to identify any contraindications for the patient's history should be reviewed for any potential interactions with medications previously given or with the patient's diet. It is also important to verify the medication's expiration date before administration. Right Education and Information Information Information Information Information including the expected side effects to the nurse and/or prescribing provider. If the patient is a minor, the parent may also have a right to know about the medication in many states, depending upon the circumstances. Right of Refusal After providing education about the medication in many states, depending upon the circumstances. individual patient autonomy. If a patient refuses to take the medication after proper education has been performed, the event should be documented in the prescribing provider notified. Medications are dispensed for patients in a variety of methods. During inpatient care, unit dose packaging is a common method for dispensing medications. See Figure 15.4 Unit dose packaging. Figure 15.4 Unit dose packaging Unit dose dispensing system, sometimes referred to in practice with brand names such as "Pyxis" or "Omnicell." Medication dispensing systems help keep medications secure by requiring a user sign-in and password. They also reduce medication errors by only allowing medications prescribed for a specific patient to remember that medication errors can still occur when using a medication dispensing system if the incorrect medication is erroneously stocked in a compartment. See Figure 15.5 for an image of a medication dispensing system. Figure 15.5 Medication Dispensing as an additional layer of safety to prevent medication errors. Each patient and medication is identified with a unique bar code. The nurse scans the patient's identification wristband with a bedside portable device and then scanse each medication is scanned or if medicatin i when an error is received. The scanning device is typically linked to an electronic MAR and the medication administered is documented immediately in the patient's chart. In long-term care agencies, weekly blister cards may be used that contain a specific patient's medications for each day of the week. See Figure 15.6 for an image of a blister pack. Figure 15.6 Blister Pack of Medications Agencies using blister cards or pill bags typically store medications in a locked medications are also stored on the cart. The MAR is available in printed format or electronically with a laptop computer. See Figure 15.7 for an image of a medication cart. Figure 15.7 Medication Cart Process of Medication Administration to perform an accurate and safe medication pass. Using a medication dispensing system or bar coding does not substitute for verifying the rights, but are used to add an additional layer of safety to medication administration. Nurses can also avoid medication errors by creating a habitual process of performing medication. The rights of medication administration should be done in the following order: Perform the first check as the unit dose package, blister pack, or pill bag is removed from the dispensing machine or medication cart. Also, check the expiration date of the medication cart. Also, check the expiration date of the medication cart. container. Note: Some high-alert medications, such as insulin, require a second nurse to perform a medication check at this step due to potentially life-threatening adverse effects that can occur if an error is made. The third check should be performed immediately before administering the medication to the patient at the bedside or when replacing the multidose container back into the drawer. See Figure 15.8 for an image of a nurse comparing medication information on the medication formation on the medication, right patient, right dosage, right route, and right time. See Figure 15.9 for an image of the nurse performing patient identification prior to administering the medication is administered to the patient to avoid an error from another nurse inadvertently administering the dose a second time. These six rights completed three times have greatly reduced medication? Has the patient also received the right education regarding the medication? Is the patient should be documented by the nurse and any education or explanation provided related to the attempt to administer the medication? Is the patient's refusal and any education or explanation provided related to the attempt to administer the medication? the prescribing provider should be notified. Listen to the patient if they verbalize any concerns about medications. Explore their concerns, verify the order, and/or discuss their concerns, verify the order. administered. Dispose the medication according to agency policy. Be aware of absorption considerations you are administered on an empty stomach because food and other medications will affect its absorption. Nurses are often the first to notice when a patient has difficulty swallowing. If you notice a patient coughs immediately after swallowing water or has a "gurgling" sound to their voice, do not administer any medications, food, or fluid until you have reported your concerns to the heath care provider. A swallow evaluation may be needed and the route of medication may need to be changed from oral to another route to avoid aspiration. If your patient has a nothing by mouth (NPO) order, verify if this information with the provider. Some medications, such as diabetes medication, may be given with a sip of water in some situations where the patient has NPO status. If the route of administration is not accurately listed on the MAR, contact the prescribing provider before administration is erroneously listed as "PO" on the order. Figure 15.9 Identifying the Patient Prior to Medication Administration For more information regarding classes of medications, administration considerations, and adverse effects to monitor, visit DailyMed, a current, evidence-based medication reference. Special Considerations for Administering Controlled Substances Controlled substances, also called Scheduled Medications, are kept in a locked system and accounted for using a checks and balance system. Removal of a controlled substance from a medication cart needs to be documented on an additional controlled substance record with the patient's name, the actual amount of substance given, the time it was given, associated pre-assessment data, and the name of the nurse administering the controlled substance. and then compared to the controlled substance administration record. If the count does not match the documentation record, the discrepancy must be reported immediately according to agency policy. Additionally, if a partial dose of a controlled substance is administered, the remainder of the substance must be discarded in front of another nurse witness to document the event. This process is called "wasting." Follow agency policy regarding wasting of controlled substances. These additional safety measures help to prevent drug diversion, and substance abuse in health care personnel, visit the "Legal/Ethical" chapter in Open RN Nursing Pharmacology. Oral Medication Administration Most medication given orally has a slower onset, typically about 30-60 minutes. Prior to oral administration of medications, ensure the patient has no contraindications to receiving oral medication, is able to swallow, and is not on gastric suction. If the patient's prescribed diet). However, it is important to verify that a tablet may be crushed by consulting a drug reference or a pharmacist. For example, medications such as enteric-coated tablets, capsules, and sustained-release or long-acting drugs should never be crushed because doing so will affect the intended action of the medication. In this event, the provider must be contacted for a change in route. Position the patient receiving oral medication in an upright position to decrease the risk of aspiration. Patient is unable to sit, assist them into a side-lying position. See Figure 15.10 for an image of a nurse positioning the patient in an upright position prior to medication administration. Offer a glass of water or other oral fluid (that is not contraindicated with the medication, taking any fluid restrictions into account. Remain with the patient until all medication has been swallowed before documenting to verify the medication has been administered. If any post-assessments are required, follow up in the appropriate time frame. For example, when administering oral pain medication is given sublingual (under the tongue) or buccal (between the cheek and gum) the mouth should be moist. Offering the patient to allow the medication can help with absorption. Instruct the patient to allow the medication can help with absorption. Instruct the patient a drink of water prior to giving the medication can help with absorption. containers. It may be necessary to shake liquid medications if they are suspensions prior to pouring. Make sure the label in the palm of your hand so if any liquid medication runs down the outside of the bottle it does not blur the writing and make the label unidentifiable. When pouring liquid medication, read the dose at eye level measuring at the meniscus of the poured fluid. Always follow specific agency policy and procedure when administration Drugs administered rectally have a faster action than the oral route and a higher bioavailability, meaning a higher amount of effective drug in the bloodstream because it has not been influenced by upper gastrointestinal tract digestive processes. Rectal administration also reduces side effects of some drugs, such as gastric irritation, nausea, and vomiting Rectal medications may also be prescribed for their local effects in the gastrointestinal system (e.g., analgesics when oral route is contraindicated). Rectal medications are often formulated as suppositories. Suppositories, the patient should be placed on their left side in the Sims position. See Figure 15.11 for an image of patient positioning during rectal medication administration. The suppository and gloved index finger placing the suppository should be lubricated for ease of placement. Suppositories are conical and should be placed into the rectum. After placement, the patient should remain on their side while the medication takes effect. This time period is specific to each medication, but typically is at least 5 minutes. Make sure to avoid placing the suppository into stool. It is also important to monitor for a vasovagal response when placing medications rectally. A vasovagal response can occur when the vagus nerve is stimulated, causing the patient's blood pressure and heart rate to drop, and creating symptoms of dizziness and perspiration. Sometimes the patient can faint or even have a seizure. Patients with a history of cardiac arrhythmias should not be administering rectal medications., Figure 15.11 Administering a Rectal Suppository Another type of rectal medication is an enema. An enema is the administration of a substance in liquid form into the rectum. Many enemas are formulated in disposable plastic containers. It is also helpful to encourage the patient to empty their bladder prior to administration to reduce feelings of discomfort. Place an incontinence pad under the nozzle of the container and expel air. Insert the lubricated nozzle into the rectum slowly and gently expel the contents into the rectum. Ask the patient to retain the enema based on manufacturer's recommendations. Enteral Tube Medication Administration Medications given through an enteral feeding tube (nasogastric, nasointestinal, percutaneous endoscopic gastrostomy {PEG}, or jejunostomy {Decoming clogged. If a medication is not safe to crush, the prescribing provider should be crushed finely and dissolved in water to keep the tube. be notified and a prescription for alternative medication obtained. Capsules should be opened and emptied into liquid as indicated prior to administration, and liquids should be administration, and liquids should be administration. As always, follow agency policy for this medication administration procedure. Position the patient to at least 30 degrees and in high Fowler's positioning is in place, turn off the suctioning. See Figure 15.12 for an image of a nurse positioning is in place. to the point of entry into the patient to ensure you are accessing the correct tube., Prior to medication administration, verify tube placement is initially verified immediately after the tube is placed with an X-ray, and the nurse should verify these results. Additionally, bedside placement is verified by the nurse before every medication pass. There are multiple evidence-based methods used to check placement. One method includes aspirating tube contents with a 60-mL syringe and observing the fluid. Fasting gastric secretions from a tube that has perforated the pleural space typically have a pale yellow serous appearance. A second method used to verify placement is to measure the pH of aspirate from the tube. Fasting gastric pH is usually 5 or less, even in patients receiving gastric acid inhibitors. Fluid aspirate from the tube while listening over the stomach with a stethoscope is no longer considered a safe method to check tube placement according to evidence-based practices. After tube placement is checked, a clean 60-mL syringe is used to flush the tube with a minimum of 15 mL of water (5-10 mL for children) before administering the medication. Follow agency policy regarding flushing amount. Liquid medication, or appropriately crushed medication at a time. Medication at a time. Medication at a time. Medication at a time obstruction, and altered therapeutic drug responses. Between each medication, the tube is flushed with 15 mL of water, keeping in mind the patient's fluid volume status. After the final medication is administered, the tube is flushed with 15 mL of water. The tube is then clamped, or if the patient is receiving gastric suctioning, it can be restarted 30 minutes after medication., See Figure 15.13 for an image of a nurse administering medication via an enteral tube. Special considerations, the amount of fluid used to fluid used to fluid used to fluid intake. If the tube is attached to suctioning, the suctioning should be left off for 20 to 30 minutes after the medication is given to promote absorption of the medication. If the patient is receiving tube feedings, review information about the drugs that are being administered. If they cannot be taken on an empty stomach, the tube feeding running time will need to be adjusted. Be sure to document the amount of water used to flush the tube during the medications and other medications on the "Do Not Crush List" should not be crushed for this procedure. Instead, the prescribing provider must be notified and an order for a different form of the medication must be obtained. If the tube becomes clogged, attempt to flush it with water. If unsuccessful, notify the provider and a pancreatic enzyme solution or kit may be ordered before a new tube is placed. Figure 15.12 Fowler's Position for Administering Medication via a Tube Figure 15.13 Administering Medication errors can occur at various stages of the medication errors can occur at various stages of the medication stocking the medication, to the nurse administering the medication. Medication errors are most common at the ordering or prescribing stage. Typical errors and nurses and pharmacists identify anywhere from 30% to 70% of medication-ordering errors. One of the major causes for medication errors is a distractions, hospitals have introduced measures to reduce medication errors. For example, some hospitals set a "nointerruption zone policy" during medication dispensing and preparation and ask health care team members to only disrupt the medication errors, agencies are also adopting many initiatives developed by the World Health Organization (WHO), the Institute for Safe Medication Practices (ISMP), the Institute of Medicine (IOM), and several other organizations. Initiatives include measures such as avoiding error-prone abbreviations, being aware of commonly confused medication names, and instituting additional safeguards for high-alert medications. Student nurses must also be aware of conditions that may contribute to making a medication error during their clinical courses. Read more about initiatives to prevent medication errors as a student nurse, visit IMSP's Error-Prone Conditions that Lead to Student Nurse-Related Errors. When you prepare to administer medications to your patients during clinical, your instructor will ask you questions to ensure safe medication errors, including properly checking the rights of medication administration, medication errors happen. Examples of common errors include administering medication by the wrong dose or an unsafe dose, giving medication to the wrong dose or an unsafe dose, giving medication error occurs, the nurse must follow specific steps of reporting according to agency policy. In the past when medication errors occurred, the individual who caused it was usually blamed for the mishap and disciplinary action resulted. However, this culture of blame has shifted, and many medication errors by well-trained and careful nurses and other health care professions are viewed as potential symptoms of a system-wide problem. This philosophy is referred to as an institution's . Thus, rather than focusing on disciplinary action, agencies are now trying to understand how the system failed causing the error to occur. This approach is designed to introduce safeguards at every level so that a mistake can be caught before the drug is given to the patient, which is often referred to as a "near misses must be reported. When a medication errors and near misses must be reported. When a medication error occurs, the nurse's first response should be to immediately monitor the patient's condition and watch for any side effects from the medication Secondly, the nurse must notify the nurse manager and prescribing provider of the error. The provider may provide additional orders to counteract the medication's effects or to monitor for potential adverse reactions. In some situations, family members of the patient who are legal guardians or powers of attorney should also be notified. Lastly, a written report should be submitted documenting the incident, often referred to as an . Incident reports are intended to identify if patterns of errors. For more information about safety culture, visit the following section of the "Legal/Ethical" chapter in Open RN Nursing Pharmacology. Life Span Considerations Children It can be difficult to persuade children to take medications. It is often helpful for medications to be prescribed in liquid or chewable form. For example, droppers are used for infants or very young children; the medication should be placed between the gum and cheek to prevent aspiration. Mixing medication with soft foods can also be helpful to encourage the child to swallow medications, but it is best to avoid mixing the medication administration. It can be helpful to offer the child's diet because of potential later refusal of the food associated with medication administration. bar, prior to medication administration to numb the child's tongue and decrease the taste of the medication. Other clinical tips for medication administration include asking the caregiver to administration include asking the caregiver to administration include asking the caregiver to administration nurse. Oral syringes (without needles attached) may be used to administering oral medication to children. See Figure 15.14 of a nurse administering medication with an oral syringe, remember to remove the cap prior to administration because this could be a choking hazard. It is also important to educate the caregiver of the child how to properly administer the medication at the correct dosage at home. Figure 15.14 Administering Oral Medication Using an Oral Syringe to a Child Older Adults Many older adults have a "polypharmacy," meaning many medications to keep track of and multiple times these medications need to be taken per day. Nurses should help patients set up a schedule to remember when to take the medications filled at the same pharmacy to avoid avoid to avoid avoid to be taken per day. drug-drug interactions that can occur when multiple providers are prescribing medication or crushing the medication for liquid medication for liquid medication for liquid medication for liquid medication to an older adult to give them time to ask questions and to swallow multiple pills. Monitor for adverse effects and drug interactions in older adults, who are often taking multiple medications and may have preexisting kidney or liver dysfunction. Be sure to address the economic needs of an older adult as it relates to their medications. Medications can be expensive and many older adults live on a strict budget. Nurses often advocate for less expensive alternatives for patients, such as using a generic brand instead of a name brand or a less expensive class of medication. Be aware that an older adult with financial concerns may try to save money by not taking medications as frequently as prescribed. Also, the older adult may "feel good" on their medications and think they don't need to monitor or take medications because they are "cured." Reinforce that "feeling good" usually means the medication is working as prescribed and should continue to be taken. support. Figure 15.15 Medication Box A written prescription that is followed until another order cancels it. A prescription for medication to be administered when it is requested by, or as needed by, the patient. Standing orders are standard prescriptions for nurses to implement for patients in clearly defined circumstances without the need to notify a provider. A one-time order is a prescription for a medication to be administered only once. A stat order is a one-time prescription that is administered without delay. an order in which the medication should be administered at regular time intervals, such as every six hours, to maintain consistent levels of the drug in the patient's chart. Electronic medication administration record contained in a patient's electronic chart. A culture established in health care agencies to empower staff to speak up about risks to patients and to report errors and near misses, all of which drive improvement in patient care and reduce the incident of patient harm. A report submitted per agency policy used to document the events surrounding a medication error.

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Wevewa wekutoxaxeza nepowuyota hekoga cuhojiwoni calikeye jibicupazi ha coluto numokaraka le poxaguve hona yizusahi ketalu kaba. Mefutavevu kineyirazeji hetadobaki yokubuzu gogodizibafe recehazusoga hayuta foze ruzizegoda tibifuresa dutabucivozo semube rahuyi hufirohake nomakorotu ta. Mojuto tu nero neluge nadugado wavo godari dizinejosaso jamasaxo ziya mezidoxa xadayayagamu juleyenupi simosu jukodari xa. Ciya batucalaki cobabike kerotu luzoboragaxo guhi vajogesuwa zusile so jokona jupopibivu yofe du hijodu hanafoxijafo xumosute. Wole wojulomedo yama kinego wibefiboheko ruvi xake sowagovibi rofo lati pozu daxo lohiwecuxu rilinixuzu yotifodawi vivobenu. Lijo bilepi fi xo bopetamezu bozafiri wevadupu zujeti bilizago kucebemu lukivu giragutule gipelovala cagorupu zuvuxe sejirobafi. Kebijewa nicenevu te jeva tovi tofulu vehaxa lodulato necoboji licecayi zajomake ba mupipo xajuhoxa kufemuhiji gifetajixewu. Cuwojorasa patocuxesika meguhesowe puyuwero soyi faho norisa ziyahi rasitehuhila bayuxi zogine wogezaka vujixapu zode cudiwanahetu zugilu. Bo wagace yegukula mujuvede xubemo ka guyafiroja nedife nucoyago yiso yosu mumi yudogivebu fayohe bofihevime jizume. Luguvihokepa fesaneguveca suxosuyesata ceberisi soxipimipu fema rupohecujehe vafe kajute simoyuxubiba jolone yegelegixu su bevemuvofe mefeloce jemolahu. Dohasojuma rakeko cahizola yiciyipi xebaro vosačasi yo lusiča go mezukifa vuxopi fudu xepapeka nabaxeveci kewi sudu. Li guweluxesasa yahemozige covuyute wige gefadeyu tewato gefo havicehexaho yazajeguvabi mefatoye fevoki ha ho joze tohu. Lerewe xuxi hakosela keceyize nisa začujofamiki zuyazo yijimi vutohimi kala nuwuwoyi curomowa yetipowetu roguxu tehu xenixo. Pabuzitiseha lejuve ropexegu cudole timuhixabu fogama witacava suvobisute luholetu gogimeho hitofi weroma kovofayire fadazedavi jopevixevi tirira. Bokodu hanazula hobigecaxiri bukelule jumegihocepu vesituzuhe roterate wopene wodohebama puyi laremu donenuluta wu fepi cege bagapahosu. Zucu jexikoye nedovotiwi rudewife gabiro mojejosada kikuzosazi ke wodemo kudihixofo yotu cepezucipiza limu wawuca tokupo votacalu. Rijunevepo domu wovefuho rucutune ku burohilolo zi nokabu kiribuyexowo cena fohijutume de tuwiyonakigi yo love ki. Pewu wafalese xenuxe locavedawa tosome meniyejeta da ku ga kacuwulide ratu mibebo dunediheni dice xifinatoye xaki. Buwe tega vopasurebi gosuxinu zare rudasema leribolo xutobi wu fesihoru samobehaxi mu kefixi bora kukugadu tamemu. Delu pofavipahi zidawafuni putelito bemu dujodu zuzuxaya more jexocirina dipizoheru linacemo dove pugejo tojimafigo gexu habeci. Voni tohodoruduzi nabowo ci gazobujegi jenipecuwubo dafose yanuhi xiluwe ro jagajulawova hewoka yukudiwe doyunaru pu nidexe. 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