Medicating Elderly Patients

Problem

Aging slows down a number of physiological processes and this has implications for use of drugs with elderly patients. The nurse needs to understand the role physiology plays in the health care of these patients and be alert to potential adverse effects of administered medications.

Consequence

The impact of medication errors can have severe consequences for the patient and their family. Medication errors could also result in action by the employer, the professional regulatory body, and in criminal and/or civil prosecution. Nurses should never underestimate their responsibilities when administering medication or choosing to omit it.

Solution

Here are some considerations and suggested ways to address problems in medicating the elderly.

- The elderly, even with normally functioning organs, experience a number of pharmacokinetic changes that alter the ways drugs act and side effects become apparent.
- While absorption if not dramatically affected by age alone, distribution, metabolism and elimination of drugs are.
- The distribution of a drug is affected by its binding to plasma proteins; the elderly have lower concentration of albumin and reduced fat stores which affect the loading and maintenance doses of some medications.
- Drug metabolism is affected by aging; the elderly have problems with the liver’s ability to metabolize medications.
- Aging affects the kidneys and their ability to eliminate medications.
- The nurse may need to adapt the loading dose, dosage and interval of medications for the elderly.
The nurse needs to be aware of toxic levels or adverse side effects from the buildup of medications, their metabolites or the synergistic effects of multiple drugs.

The nurse needs to work as a patient advocate advancing a care plan that is functional, affordable, and does not create complications once the patient leaves the hospital.

The elderly often have poor nutrition and eat irregularly; this will affect the medications they take and the ability of the medications to have their intended effects.

The elderly need to have a medication profile that has the fewest medications needed to ensure their intended effects.

These medications need to be clearly explained and written down so that the patient can follow the regimen.

The drugs need to be affordable, since the regimen the patient is discharged on will change if they are unable to buy the drugs.

The medications need to integrate appropriately with the patient’s diet.

The patient needs to be made aware of the side effects that arise from toxicity problems due to inadequate metabolism or elimination.

References

Avoiding Common Nursing Errors, Lisa Marcucci, MD, Editor, Lippincott Williams and Wilkins, 2010.

electronic Medicines Compendium (eMC): http://www.medicines.org.uk

Note: A narrated e-Learning module of this Nugget is available at LearningNurse.com.