Question:

In patients that require enteral medication administration, how does excess flushes, not enough flushes, and incompatible mixed medications affect the patient's medical goals?

Summary:

While performing research for enteral medication administration I have discovered that only about half of healthcare workers admit to administering enteral medication wrong. During a survey 5%-43% of practitioners use flush tubes before or between medications, only 32%-51% administer drugs separately from one another, only 44%-64% dilute liquid medication, and only 75%-85% avoid crushing modified-release dosage forms (Alhashemi et al., 2019). The study suggests that many of the nurses are consulting the wrong person when they have questions about administration. After this survey was completed, many nurses now rely on the pharmacists to answer their questions about enteral medication administration.

Many times, the patient receives excess flushes due to the feeding tube becoming occluded because of the types of medications. This occlusion causes many nurses to flush in excess to dislodge the occlusion. In a different survey sixty percent of nurses had experienced a blocked tube and 52% reported that the tube had to be removed due to the blockage (Barrett et al., 2020). The removal of the tube is very traumatic experience for the patient. They experience pain, damage to their mucosa, and could possibly develop aspiration pneumonia. I am unable to find research about adverse effects directly related to medication errors from enteral medication administration. The most profound observation documented in a journal is that most of the time all of the drugs are administered at the same time, crushed and mixed together, which is completely wrong. Drugs should not be mixed because of their physical and chemical incompatibility, tube occlusion, or changes in drug pharmacodynamics (Sohrevardi et al., 2017).

Conclusion:

The research I found on this topic was eye opening to say the least. The numbers were frightening, but not surprising. It appears that there are some training discrepancies among nurses, and who to consult if there is a question on administration. What I was surprised to not find in my research was no mention of nurses just not following their hospital policy during their administration. I have seen firsthand nurses crushing and mixing enteral medication even when they knew it was wrong because they were too busy to do multiple medications individually. Patient safety was thrown out the window at the nurse's discretion, and no one is at the bedside to witness the mistake and report it. The research into whether a patient was adversely affected by a nurse's medication error while administering enteral medication was not there. I found information as to what can occur biologically if a certain medication is crushed, that is not supposed to be crushed, is administered, but not a patient survey about any adverse effects afterwards. Most of the patients in the surveys are ventilated and unable to verbalize any adverse reactions to the enteral medication, making it hard to track and report these incidents.

Work Cited:

Primary Article

Hossaini Alhashemi, S., Ghorbani, R., & Vazin, A. (2019). improving knowledge, attitudes, and practice of nurses in medication administration through enteral feeding tubes by clinical pharmacists: A case–control study. *Advances in Medical Education and Practice*, *Volume 10*, 493–500. https://doi.org/10.2147/amep.s203680

Secondary Article

Tillott, H., Barrett, D., Ruan, J., Li, V., Merrick, S., Steed, H., Morrissey, H., & Ball, P. (2020). Survey of nurses' knowledge and practice regarding medication administration using enteral tubes. *Journal of Clinical Nursing*, *29*(23-24), 4614–4622. https://doi.org/10.1111/jocn.15498

Tertiary Article

Mirjalili, M., Sohrevardi, S. M., Jarahzadeh, M. H., Mirzaei, E., Tafti, A. D., & Heydari, B. (2017). Medication errors in patients with enteral feeding tubes in the intensive care unit. *Journal of Research in Pharmacy Practice*, *6*(2), 100. https://doi.org/10.4103/jrpp.jrpp_17_9