Title:
Grams vs Miligrams: A Fatal Mistake

Brandon De Horta
Chamberlain College of Nursing, Columbus, IL, USA

Session Title:
Rising Stars of Nursing Invited Posters - Group 2
Slot (superslotted):
RSG STR 2: Friday, September 26, 2014: 10:00 AM-10:30 AM
Slot (superslotted):
RSG STR 2: Friday, September 26, 2014: 11:45 AM-1:00 PM
Slot (superslotted):
RSG STR 2: Friday, September 26, 2014: 3:00 PM-3:30 PM

Keywords:
MedCalc: Grams, Medication Errors and Proper Abbreviation

References:
• Sanderson-Mann J, McCandless F. (2006) Understanding dyslexia and nurse education in the clinical setting. Nurse Education in Practice, 6(3), 127 – 133. • Macdonald, Ilene (2013) Hospital medical errors now the third leading cause of death in the U.S. Fierce Healthcare; Retrieved on 7/10/14 from http://www.fiercehealthcare.com/story/hospital-medical-errors-third-leading-cause-death-dispute-to-err-is-human-report/2013-09-20 • NIST U.S. Department of Commerce. (2008) The International System of Units (SI), 102-103. • The Joint Commission: Preventing pediatric medication errors #39, April 11, 2008: Retrieved on 7/10/14 from http://www.jointcommission.org/assets/1/18/SEA_39.PDF

Learning Activity:

LEARNING OBJECTIVES	EXPANDED CONTENT OUTLINE	TIME ALLOTTED	FACULTY/SPEAKER	TEACHING/LEARNING METHOD	EVALUATION/FEEDBACK
Example Critique selected definition of the term, "curriculum"	**Example** Definitions of "curriculum" Course of study Arrangements of instructional	**Example** 20 minutes	**Example** Name, Credentials	**Example** Lecture PowerPoint presentation Participant feedback	**Example** Group discussion: What does cultural training mean to you?

		materials The subject matter that is taught Cultural "training" Planned engagement of learners				
	To ensure the usage of the proper abbreviation of grams (g) in nursing practice	Statistics Medical Errors Case Studies	15 minutes	Brandon De Horta	Lecture Poster presentation Statistics	Pledge
	Identify the predictors of medication errors related to improper abbreviation of grams	Statistics, Medical Errors, Case Studies, Med Calc	15 minutes	Brandon De Horta	Lecture, Poster Presentation, Statistics	Group Discussions:Why is it important to utilize (g) over (gm) for grams?

Abstract Text:

Abstract

Medication errors are preventable adverse effects in patient care. With medical errors being one of the leading causes of inpatient & outpatient deaths, the nursing community has implemented several safety nets for improving medication practices. They happen for many reasons such as poor communication, improper documentation, illegible handwriting, similar medications, and high patient-to-nurse ratio. Unfortunately with all the guidelines for reducing medical errors, the nursing community still uses the improper abbreviation of ‘gm’ for grams than the International Standard of Unit (ISU) approved abbreviation ‘g’.

Nursing has become a very diverse practice that has been utilized by corporations, military branches, advisors for state and federal jobs and NASA. According to International Standard of Units (ISU) ‘Gm’ is

the abbreviation for giga-meter. Although giga-meter is unlikely to be utilized in nursing practice, the potential for errors still exists. Using the universally approved abbreviation promotes optimal communication across all careers, such as working with NASA or other astronautical engineers where 'Gm' would be confused with giga-meters. It's important for the nursing community to be easily integrated in all careers and fields.

A dangerous reason for using 'gm' for grams is that it can be confused with 'mg' for mili-grams. Dyslexia has been reported to be the most common disability ranging from mild to severe. One does not need to be diagnosed with dyslexia to have a dyslexic episode. The general populations, including nurses, have reported had a dyslexic episode at one point in their career. This can be exceptionally dangerous to pediatric patients since the potential for adverse drug events is three times higher than in adults. Making a dyslexic medical error with 'gm' to 'mg' or visa-versa could make drug 1000 times less effective or worse, more potent. It is important for nurses to consider every possibility that may lead to a medical error that could have been preventable.

Medication errors are preventable and are vital for us to predict where they may occur. Identifying the possibility of a dyslexic episode causing a mediation error will help evade a fatal mistake. It's also important for nurses to be prepared in all careers and fields. The proper usage of the abbreviation of grams not only allows for a universal acceptance but also decrease the possibility of a fatal medical error that could have easily been prevented.