

A Study on Medication Safety

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Introduction on Medication Safety:

- Medicines can help us to stay healthy, cure some diseases, relieve symptoms of disease & improve quality of life. But, like any form of treatment, medicines are not without risks & things may not always turn out as expected. All medicines have the potential for side effects. As well, despite the commitment & best planning of the people involved, mistakes sometimes happen. Doctors, nurses, pharmacists & other health cares are human. No matter how well trained, expert & committed they are, and sometimes they make mistakes. Mistakes usually result from system failure. A system failure can be defined as a fault or breakdown in part of a system that increases the risk of something going wrong.
- According to IOM's (Institute of Medicine's) report, medication-related errors were a significant cause of morbidity & mortality, accounted that" for one out of every 131 outpatient deaths, & one out of 854 inpatient deaths. Medication errors were estimated to account for more than 7000 deaths annually.

Objective:

- To identify the factors affecting medication safety
- To investigate major components resulting in Medication Error in all age groups and all stages from prescribing with reconciliation, transcribing, dispensing, administration of drugs.
- To understand major factors causing adverse drug reactions.
- To bring in suggestions to curtail down the errors and improve safety.

Methodology:

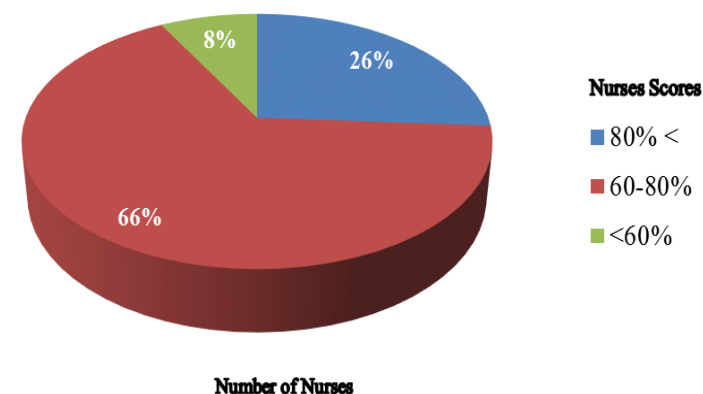
Study Design: Concurrent study

Sampling Design:

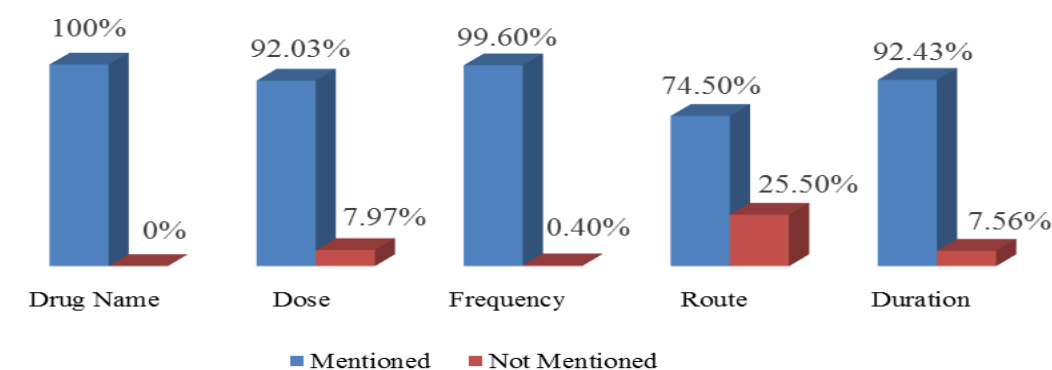
- Sampling technique:** Probability cluster sampling (Two cluster samples were considered - experience of nurses)
- Sample Population:**
 - Nurses with 6 months to 5 years & more than 5 years of experience
 - Prescription (inpatient medication chart)
- Sample Size:**
 - 100 nurses - 100 nursing interview (experience 6 months to 5 years & more than 5 years).
 - 251 prescription auditing (data collected from inpatient medication chart).

Data Analysis Plan: Basic excel software is used for data analysis.

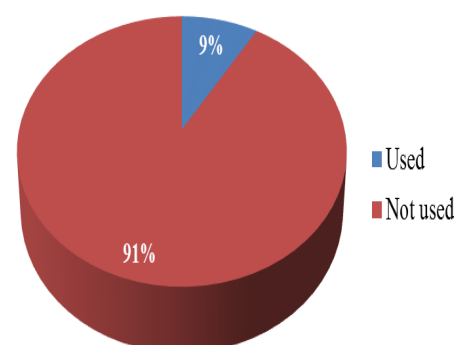
Nurses Awareness on Medication Safety - Total 15 Questions



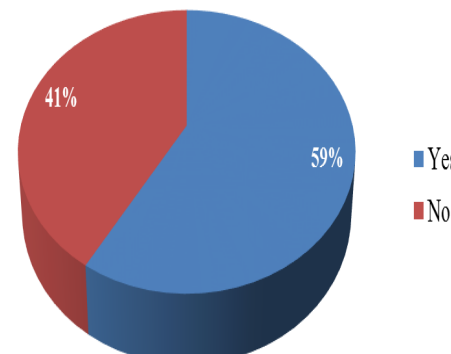
Prescription Audit - Total 251 prescriptions



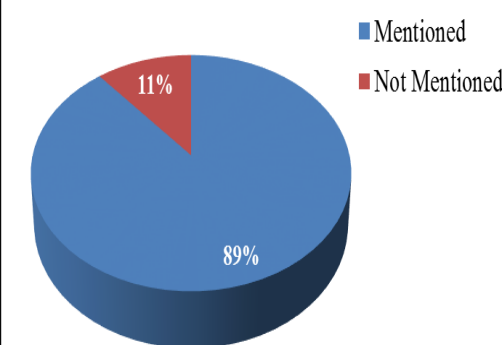
Unapproved Abbreviation
(A shortened form of a word or phrase)



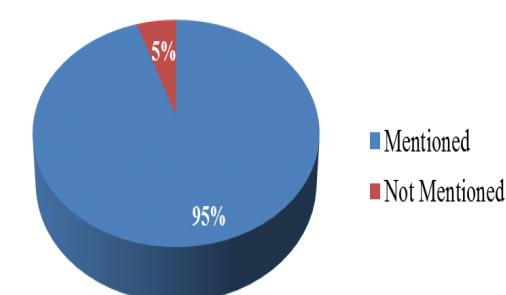
Legibility
(The quality of being clear enough to read)



Doctor's Signature
(Presence of signature in medication chart)



Allergy Status



Recommendations:

Training needs for Nurses & Doctors:

- To improve the knowledge as well as awareness about medication safety in nurses following activities can be undertaken,
 - In service training
 - Interactive sessions
 - Organizing symposium
 - Quiz program
- Continue Medical Education (CME) can be undertaken for resident doctors. This may be focused on prescription reconciliation & how to write prescription (mentioning drug name, dose, frequency, route, legible hand writing, allergy status, approved abbreviations & signature).

Education needs for Patients:

- Speak up campaign was conducted to create awareness among patients. Pamphlets were distributed to every indoor patient & their relatives regarding medication safety, patient rights to information & general information.
- Detailed information was given to the patient about the pamphlet (Image to the right).

