

Nursing as a caring act of science, offers its services on the complete care of patients regardless of the location. The act of nursing carries with it possibilities of errors and according to this study, error is any act of deviating from following the required procedures when carrying out nursing of patients. Errors during administration of medicines are the most occurring among medical errors. They affect the nurses; health of patients and on other days, they lead to death of patients. Errors have a negative impact on the economic wellbeing of patients and at large the health system of a country.

**AIM:** The study was conducted to determine the factors influencing occurrence of errors during administration of medicines among nurses. These were completed through determining the level of knowledge of nurses regarding the „6 rights“ and process of administering medications and determining communicational and work environmental factors influencing the occurrence of errors.

**METHODS:** A descriptive cross sectional study was used. The sample was 108 but 102 nurses responded in Gulu regional referral hospital. Quantitative data was collected using structured questionnaires which included four sections; demographic information, closed ended questions regarding the „right“ and process of medication administration developed from the study by (Raja et al., 2009) and communicational and work environmental factors considered to influence errors edited from a study by (Fu et al., 2007; Kilbride and colleagues, 2002). Key informant interview on the other hand was used to collect the qualitative data. Statistical analysis of the quantitative data was performed using SPSS 16.0 software with Bi-variate analysis used to show correlation between the occurrence of errors and the influencing factors. Relationship was tested using person's chi-square, p-value. A Multivariate analysis was applied to best show the relationship between occurrences of errors influencing factors using odd ratios.

**RESULTS:** No records of occurrence of errors are documented in the hospital. (n= 68, 63.0%) of the nurses stated that they had experienced errors in the past six months. The level of knowledge of the nurses was good with 53.0% showing high score, 43.0% medium score and only 4.0% low score. The influential factors that correlated with the nurses experiencing the occurrence of errors were lack of experience, use of abbreviation ( $X^2= 40.026$ ,  $P= 0.000$ ,  $OR= 6.509$ ), incomplete medical prescriptions ( $X^2= 38.310$ ,  $P= 0.000$ ,  $OR= 3.0342$ ), unclear medical prescriptions ( $X^2= 38.112$ ,  $P= 0.000$ ,  $OR= 2.259$ ), unable to interpret prescriptions ( $X^2= 39.736$ ,  $P= 0.000$ ,  $OR= 2.084$ ), being new ( $X^2= 36.282$ ,  $P= 0.000$ ,  $OR= 12.074$ ), distraction and interruption ( $X^2= 38.227$ ,  $P= 0.000$ ,  $OR= 5.865$ ), absence of another nurse while one is administering

medicine ( $X^2= 16.361$ ,  $P= 0.000$ ,  $OR= 0.214$ ) and the turn up of patients ( $X^2= 28.720$ ,  $P= 0.044$ ,  $OR= 1.447$ ). Medical ward 64.7% and maternal ward 69.9% were the two most error prone places.

**CONCLUSIONS AND RECOMMENDATIONS:** Most nurses indicated that they had experienced the occurrence of errors in the past six months but due to no records of documented errors, estimating the rate at which errors occurred was not done. This therefore calls for designing and implementation of an effective mechanism where health professionals report cases of errors. The system should not encourage a blaming culture but rather a way of developing strategies for minimizing occurrence of errors and promoting patient's safety. Factors influencing the occurrence of errors during administration of medicines were mostly correlated with use of abbreviation, incomplete instructions in the prescription form, unclear prescriptions, very demanding duties, distraction and interruption, being new and absence of another nurse during administering of medicines. This report suggests that errors during administration of medicines among nurses are inevitable; therefore monitoring and evaluating the performance of nurses will be helpful. Additional suggestion from the in charge nurses included having more nurses, improving hand written communication and training of nurses.