## ABSTRACT

Introduction: Cytotoxic anticancer drugs (CDs) are carcinogenic, mutagenic and teratogenic on additional of other side effects to human thus occupational exposures to them is a potential risk. Health care workers especially nurses who prepare and administer CDs may experience cytotoxic effects through skin contact, respiratory and oral exposure. General objective: The purpose of this study was to assess the knowledge, attitude and practices of nurses handling anticancer drugs at Uganda Cancer Institute.

Methods: The study was a descriptive cross sectional study that employed quantitative data collection methods. This study design allowed collection of data on knowledge, attitudes and practices simultaneously at a point in time. This survey was done by administering a self reported questionnaire to 75 nurses working at Uganda Cancer Institute. The questionnaire was designed using simple English containing five sections with a clear subtitle for each, covering, knowledge related to exposure, waste handling and administration of CDs, attitudes of nurses towards safety related issues and practices, and use of Personal Protective Equipment (PPE) while handling CDs. The evaluation of the practices on the different wards was done using a performance checklist categorised into three sections including available procedures (SOPs), PPE and practices.

Results: The majority of the participants 61 (81.3%) were females of reproductive age (median age 31yrs) with the diploma as the main nursing qualification with a nursing experience and chemotherapy handling experience of less than 10 years. Generally the participants had moderate levels of knowledge and a moderate positive attitude. Despite these moderate levels of knowledge and positive attitude they reported poor practices due to lack of training, unavailability of safety precautions and PPE. The performance checklist clearly highlighted the profound lack of safe handling policies and guidelines in all chemotherapy administration areas, and thus they should be formulated, updated and provided in all

units.

Conclusion: The participants had moderate knowledge and moderate positive attitude with generally poor practices while handling CDs.

Major recommendation: Provision of proper PPE, implementation of safety guidelines and systemic training programs could demonstrate the institutional supports and reduce the concerns of nurses when handling CDs.