# **ABSTRACT**

**Introduction**: There is an increase in the prevalence of dyslipidemia in Sub Sahara Africa. Dyslipidemia has showed a link with existence of high-grade squamous intraepithelial lesions while several studies have shown a correlation between elevated blood cholesterol levels and cancer risk. In Uganda cervical cancer is the most prevalent type of malignancy. However, the evidence for the association between dyslipidemia and cervical lesions in a society with a high burden of infection-related cancers like Uganda requires further investigation. This study is the first in Uganda, to assess dyslipidemia among women with cervical lesions.

**Objectives**: The goal of this study was to determine the prevalence of dyslipidemia and its association with precancerous and cancerous lesions among women attending cervical cancer clinic at Uganda Cancer Institute.

**Methods**: In this cross-sectional study, we recruited women aged between 21-50 years. Data on social demographics was filled out in a questionnaire. Four milliliters of venous blood were drawn aseptically in a plain tube and serum was separated for analysis of lipid profile using COBASTM 6000 Clinical Chemistry Analyzer. Association between dyslipidemia, precancerous and cancerous lesions was determined using chi square test and a p value of ≤ 0.05 was considered as statistically significant.

**Results:** Overall, the prevalence of dyslipidemia among women with cervical lesions was 65%. Low HDL had the highest prevalence at 46.5% followed by high Triglycerides at 15%. There was no significant association observed between precancerous lesions and dyslipidemia, however high Triglycerides and high low-density lipoprotein showed a significant association with cancerous lesions.

**Conclusion and recommendation:** Prevalence of dyslipidemia among women with precancerous and cancerous lesions was high. High TGs and high LDLc were significantly associated with cancerous lesions. We recommend that women with cancerous lesions be regularly screened for dyslipidemia.