## **ABSTRACT**

The incidence of oesophageal cancer (OC) varies geographically, with more than 80% of cases and deaths worldwide occurring in developing countries. The aim of this study is to characterize the disease burden of OC in four urban populations in Eastern Africa, which may represent a previously undescribed high-incidence area. Data on all cases of OC diagnosed between 2004 and 2008 were obtained from four population-based cancer registries in: Blantyre, Malawi; Harare, Zimbabwe; Kampala, Uganda; and Nairobi, Kenya. Age-standardized incidence rates (ASRs) were calculated for each population, and descriptive statistics for incident cases were determined. In Blantyre, 351 male (59%) and 239 (41%) female cases were reported, with ASRs of 47.2 and 30.3. In Harare, 213 male (61%) and 134 (39%) female cases were reported, with ASRs of 33.4 and 25.3, respectively. In Kampala, 196 male (59%) and 137 female (41%) cases were reported, with ASRs of 36.7 and 24.8. In Nairobi, 323 male (57%) and 239 female (43%) cases were reported, with ASRs of 22.6 and 21.6. Median age at diagnosis was significantly different among the four populations, ranging from 50 years in Blantyre to 65 years in Harare (p < 0.0001). Except in Nairobi, incidence among males was significantly higher than among females (p < 0.01). Squamous cell OC was the predominant histologic subtype at all sites. ASRs at all four sites were remarkably higher than the mean worldwide ASR. Investigation to evaluate potential etiologic effects of dietary, lifestyle, environmental, and other factors impacting the incidence in this region is needed.