Introduction: Cancer is becoming one of the most important public health problems in low income countries, like Ethiopia. A ten year retrospective study was carried out on all histologically diagnosed solid malignant tumors to determine the relative frequency, and patterns of malignant solid tumors in the department of Pathology, Tikur Anbessa Specialized Teaching and Referral Hospital.

Materials and methods: Pathology reports of all patients diagnosed with solid malignant tumors within the study period (2003-2012) were retrieved and assessed with respect to age, gender, site and histology types. Data were entered and analyzed using Statistical Package for Social Sciences Statistics 21.0.

Result: A total of 15,685 patients were histopathologically diagnosed with various solid malignant tumors. Most cancers were recorded among females, accounting for 71.4% of the total cases. The pattern of the top ten solid malignant tumors diagnosed in this hospital between 2003 and 2012 are illustrated in Fig 1. Accordingly, malignant neoplasm of cervical uteri was almost three times more common than all other cancer cases combined and the most frequently diagnosed cancer in Tikur Anbessa Specialized Hospital. This study also indicated that malignant neoplasm of the breast is the second commonest solid malignant tumor followed by neoplasm of lymphoid tissues. Other malignant neoplasms, like malignant neoplasm of the skin, soft tissue, the colorectum, and esophagus are still common types of malignancies observed among the top ten malignancies in the study group.

Figure 1: The ranking of the 10 most common cancers diagnosed at Tikur Anbessa Specialized Teaching Hospital from 2003 to 2012, Addis Ababa, Ethiopia.

Figure 2: Trend of cancer cases diagnosed at Tikur Anbessa Specialized Teaching Hospital from 2003 to 2012, Addis Ababa, Ethiopia.

Solid tumors of the eye and adnexa, the bladder and secondary neoplasms of lymph nodes are observed at the bottom of the top-ten solid malignant tumor lists. Pattern of solid malignant tumors among men population in this study was complex. Malignant neoplasm of lymphoid tissues was the dominant malignancy in all the study years, with an occurrence ranging between 53 cases in 2003 to 96 in 2009.

Future study focuses on clinicopathological, epidemiological and molecular characterization of breast and cervical cancers. We are also interested to investigate why some cancers, like colorectal cancers are happening in lower age groups compared to the West. Infection-related cancers are also the interest area of investigation.

Figure 3: Age pyramid of patients with solid malignant tumors diagnosed at Tikur Anbessa Specialized Teaching Hospital from 2003 to 2012, Addis Ababa, Ethiopia.

The second common type of solid malignant tumor in men was malignant neoplasm of the the skin, and its occurrence ranged between 31 cases in 2003 and 86 cases in 2009. Other malignant neoplasms observed in men include malignant neoplasms of the colon and rectum, the soft-tissues and neoplasms of the bladder (Fig 2). In this study, the predominant age group in prevalence was between 45 and 54, accounting for 25.64% of all cases (Fig 3). This is in accordance with other studies from other Africa countries and low and middle income Asian countries (1, 2).

Reference