

## ABSTRACT

Nowadays, increasing number of pediatric malignancy admitted to hospitals was one of the major health threats in Myanmar. Reliable data plays an essential tool for assessing the magnitude of this problem and also for establishing qualified cancer care. This hospital based retrospective descriptive study aimed for assessing the Hematology-Oncology Unit (HOU) in YCH from the point of manpower, services, distribution of various pediatric malignancies according to age, sex, residence and outcome of diseases. Strengths and weakness were explored by KII to healthcare providers. This study covered 775 confirmed malignancies cases from children aged 0 to 14 years by using three years hospital records from 2015 to 2017. HOU in YCH was one of the two pediatric oncology and hematology centers in Myanmar. Although that unit had 75 inpatient beds, most of the major keys are not sanctioned for HOU in YCH. Occurrence of pediatric malignancy was common in less than five year of age with male to female ratio of 1.3:1. One-fourths of the study population was from Yangon Region. In 2017, the number of patients increased up to 1.5 times compared to 2015. Among the study population, 64.2% had hematological malignancies and 35.8% had solid tumors. The most common childhood malignancies were ALL, AML and retinoblastoma with proportionate morbidity rate of 31.6%, 16.5% and 10.4% respectively. The percentage of children with completed chemotherapy was 51.1%, abandonment of treatment was 24.4% and children who expired were 24.5%. ALL, AML and Wilms tumor were the most common cause of death with proportionate mortality rate of 31.1%, 24.2% and 8.9% respectively. The strengths of HOU were availability of most drugs, good international training, getting confirmation of diagnosis by the collaboration with the regional and international outreach programs, online tumor board meeting every two to three times per week. However there was also some insufficient manpower, inadequate space, unable to do transplant, difficult in diagnosis confirmation and infection control. So, by upgrading the human workforces and necessary infrastructure, the workflow of HOU will be functioning well and leading to the better treatment outcome of the children with cancer.