

# Paediatric Oncology Faces Global Issues

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## Introduction

As developing countries' health improves, the need for cancer programmes to be developed and maintained becomes increasingly critical. One of the Millennium Development Goals is to reduce childhood mortality, and low- and middle-income countries (LMICs) are making progress towards the target. Around 200 000 children and adolescents are diagnosed with cancer every day around the world; 80% of all these children and teenagers live in LMICs, which responsible for 90% of cancer mortality. Our knowledge of paediatric cancer epidemiology is limited in LMICs due to a dearth of high-quality population-based cancer registries. Late presentation and underdiagnoses, high abandonment rates, high incidence of malnutrition and other comorbidity, inefficient supportive and palliative treatment, and restricted access to curative therapies all influence the outcome of children with cancer in LMICs. The increased proportion of cases in these countries is due to demographics and ageing, as well as lower infection mortality. As a result, the cancer burden is obviously shifting toward countries with limited resources. Cancer in children is no exception. Over the last 50 years, the percentage of children dying before reaching the age of five has reduced from 250 per 1000 live births to fewer than 70. The vast majority of children under age of five die as a result of poverty, and the bulk of these fatalities might have been avoided with simple public health services [1,2].

## Impact on paediatric oncology epidemiology

In HICs, cancer is the major cause of mortality due to illness. Unfortunately, little is known about the epidemiology of paediatric cancer in low and middle-income countries (LMICs). Oncology registries are scarce, and over diagnosis and under registration are further obstacles; the creation of childhood cancer registries in LMICs should be a top priority. The magnitude of this problem is magnified in paediatrics. Children's cancer registries differ from adult registries because of the relative rarity of paediatric cancer, the different spectrum of tumours, and the use of histology-based classifications, as opposed to site-specific classifications used to estimate cancer incidence and mortality in adults [3].

## Epidemiology paediatric oncology

Adult cancer data reveal global disparities in cancer incidence and distribution, which typically reflect interactions between ethnic, environment, factors, and genetics. Health disparities research in HICs could provide a robust evidence base for leading epidemiological research programs in resource-constrained regions. Cancer incidence rates vary between societies within a country and between countries with similar ethnic compositions.

## Acute leukaemia

Acute leukaemia is a type of leukaemia that develops quickly LICs have a much lower yearly leukaemia incidence per million children than HICs. Because acute leukaemia presents like an acute infection, and early death might

occur before malignancy is identified or confirmed, these disparities could indicate underreporting. Illness ideas of leukemogenesis have been driven by observations of a considerably elevated incidence rate of ALL in children between the ages of 2 and 5 in affluent countries, the lack of such an age peak in LICs, and occasional clustering of young any instances. The reasons for such ethnic disparities in ALL incidences remain unknown; however genetic and no genetic variables are likely to play a role. Genetic polymorphisms in ARID5B have recently been linked to susceptibility to juvenile ALL, according to genomic sequence analyses [4,5].

## The cancer child in a resource-limited environment

Initiatives aimed at improving the outcomes of paediatric cancer in LMICs must take into account the distinctive characteristics of the host, diseases, and social, economic, and national contexts; the host, diseases, and social, economic, and cultural contexts are all very different from adults. All aspects of cancer control, including primary prevention, early detection, diagnosis and treatment, survivorship, and palliative care, must be viewed through the eyes of children.

## Childhood cancer essential medicine

Many international organisations, non-profit organisations, and charities follow the WHO list of critical chemotherapeutic medications. In 2007, the World Health Organization (WHO) published a separate essential medications list for infants. The Essential Medicines list has been incorporated into the UN Committee of Economic, Social, and Cultural Rights' definition of the right to health, despite the fact that it is primarily meant for the treatment of hematologic malignancies. All of the medications on the Essential Medicines list for youth cancer are also routinely used in adult treating cancer, therefore they aren't unique to children.

## References

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