DETERMINANTS AND CONSEQUENCES OF DIAGNOSTIC DELAY IN CHILDHOOD CANCER : A STUDY FROM THE PEDIATRIC ONCOLOGY UNIT IN BENIN

BOGNON G [1,2], LADJOUAN C [1,2], MASSI R [3], HOUNTONDJI A [1,2], KINDJINOU M [4], DANTONDJI M [1], HESSISSEN L[2]

1- Pediatric Oncology Unit (UOP), University Hospital Center (CHUDOP), Porto-Novo, Benin 2- Franco-African Pediatric Oncology Group (GFAOP), Villejuif, France
3- Hematology Unit of the University Hospital Center (CHUDOP), Porto-Novo, Benin 4- Ophthalmology Department of the University Hospital Center (CHUDOP), Porto-Novo, Benin

Introduction

Diagnostic delay remains one of the leading causes of mortality in childhood cancer in low-income countries. This study aims to investigate the determinants and consequences of diagnostic delay in children with cancer admitted to the Pediatric Oncology Unit (UOP) in Benin at CHUD-OP. This unit is a member of the GFAOP (Francophone-African Group of Pediatric Oncology) network.

Methodology

A retrospective, descriptive, and analytical study was conducted from May 2022 to November 2023, involving children receiving cancer care at the UOP. Diagnostic delay was defined as a period exceeding one month between the onset of the first sign and confirmation of the diagnosis. Data collected were entered and processed using Census and Survey Processing System (CSPro version 7.7). The P-value was considered significant when below 5%.

Results

Out of 167 admitted children, 93 were included, yielding a hospital frequency of diagnostic delay of 55.7%. There was a male predominance (n=52; 55.9%), resulting in a sex ratio of 1.27. The average age of the children was 7.25 years ± 5 years. The majority of parents had a low level of education (n=76; 81.7%) and a low socioeconomic status (n=62; 66.7%). The most common cancers were nephroblastoma (n=16; 17.2%), retinoblastoma (n=16; 17.2%), and Hodgkin's lymphoma (n=8; 8.6%). Over half of these children were admitted at a late stage (stage 3, stage 4, stage 5, or stage C) and had a poor prognosis at admission (n=52; 55.9%). One-third were lost to follow-up, and the mortality rate was 22.6%. Factors significantly favoring diagnostic delay included the level of education (p=0.02), socioeconomic status (p=0.02), female gender (p=0.03), and the nature of the cancer (p=0.02).

Conclusion

Addressing the determinants of diagnostic delay is crucial to improving the prognosis of children and achieving a survival rate of at least 60% by 2030 (WHO).