# RETROSPECTIVE PROFILE OF CHILDHOOD CANCER CASES AT THE DONKA PEDIATRIC ONCOLOGY UNIT, CONAKRY, GUINEA (2019-2023): A STUDY BY THE GROUPE FRANCO AFRICAIN D'ONCOLOGIE PÉDIATRIQUE (GFAOP)

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**Background :** The entire population of **Guinea (15 million** (World Bank data)**),** with about 2 million living in the region of Conakry, 41% <15years of age, is served by a single **Paediatric Oncology Unit (POU)**, situated at the **Donka National Hospital** in the capital, Conakry. There are 2 full time pediatric oncologists and a bed capacity of XXX. Despite the presence of a population-based cancer registry initially created in 1993, reactivated in 2010 existing national cancer registry data are insufficient for specific childhood cancer strategies due to poor funding and the merging of adult and pediatric cases.

The POU is a member of the **GFAOP** since 2018, entering data into the GFAOP database on all cases attending since 2019. Here we aim to leverage this unique GFAOP hospital data base to document the first **comprehensive baseline characteristics** of all children treated at the Donka POU. These data are essential for evaluating the unit's operational needs and structuring appropriate, **evidence-based national cancer control plans for children in Guinea**.

**Methods:** We analyzed for children admitted to the POU from **01/01/ 2019 to 31/12/2023**. All patients with a confirmed cancer were included, determined by histological, radiological, or hematological reports. We extracted the following variable: **cancer type, stage, treatment, time from first symptom to diagnosis and demographic data**. We documented children who refused and children who abandoned treatment. For overall survival we selected diagnosed and treated patients and analysis was descriptive. Lost to follow up (LTFU) was considered for children who had finished treatment

**Results :**

440 children had a clinical suspicion of a cancer, and **331 had a cancer confirmed**. The median age was 5 with a range of 0-18 years, sex ratio M/F: 1.47. Median time to diagnosis from first symptoms was 1 month and 48% of diagnosed cases resided over 200 km from the POU.

**Table I : Distribution of patients according to ICCC-3 and % of Stage IV metastatic or high risk**

| ICCC-3 | N | % | Stage IV Metastatic or High Risk | % |
|---|---|---|---|---|
| I.a ALL | 71 | 21,5 | 47 | 66,2 |
| I.b AML | 25 | 7,6 | 0 | 0,0 |
| I.c CML | 1 | 0,3 | 0 | 0,0 |
| II.a Hodgkin lymphoma | 13 | 3,9 | 2 | 15,4 |
| II.b/II.e Other lymphomas | 10 | 3 | 1 | 10,0 |
| II.c Burkitt lymphoma | 74 | 22,4 | 9 | 12,2 |
| IV. SNS tumor | 2 | 0,6 | 1 | 50,0 |
| V. Retinoblastoma | 61 | 18,4 | 47 | 77,0 |
| VI. Renal tumor | 44 | 13,3 | 7 | 15,9 |
| VII.a Hepatoblastoma | 4 | 1,2 | 2 | 50,0 |
| VIII. Osteosarcoma | 7 | 2,1 | 5 | 71,4 |
| IX. Sarcoma | 5 | 1,5 | 0 | 0,0 |
| X. Germ cell tumor | 4 | 1,2 | 1 | 25,0 |
| XI. Carcinoma | 9 | 2,7 | 2 | 22,2 |
| XII. Other | 1 | 0,3 | 0 | 0,0 |
| Total général | 331 | 100 | 124 | 37,5 |

*No Brain tumor cases were registered*

**Stage was known for 268 patients,**

- **52% were stage III**
- **275 (83%) of diagnosed cases were treated**
- **32 (9%) of diagnosed patients refused treatment**
- **49 (18%) of patients did not finish their treatment**

**Figure 1 :** Information of follow up is known for 221 cases

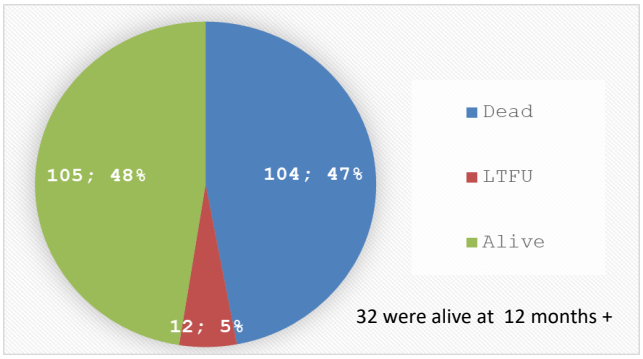
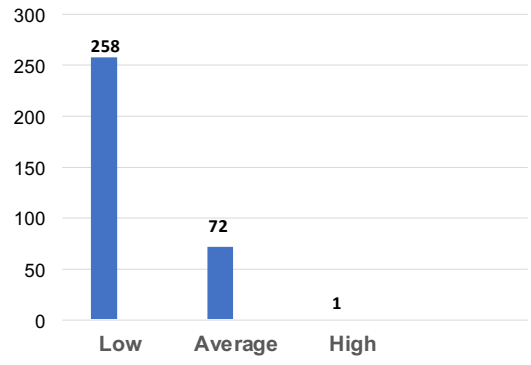



**Figure 2 :** Distribution of patients according to socioeconomic status.




**Conclusion :** Burkitt Lymphomas represented the biggest proportion of cases seen in the service, followed by ALL Retinoblastoma, and Renal tumors. 77% of metastatic disease were reported for RB, possibly reflecting the delay of one month between time of symptoms and arrival in the service. We exposed the need for better data collection practices for follow up data, to enable evaluation of treatment and outcome. It is essential to pursue early diagnosis strategies, improve access to care and strengthen family support programs to reduce the number of patients who abandon treatment.