# OUTCOMES OF PAEDIATRIC CANCERS IN PORT MORESBY GENERAL HOSPITAL

DCH PROJECT 2018 DR BENJAMIN DAUR PAEDIATRIC REGISTRAR PORT MORESBY GENERAL HOSPITAL

#### BACKGROUND

- Recent advances in industrial countries have now paved ways for once incurable paediatric cancers to be curable.
- In Papua New Guinea there has been two previous detailed reviews of Paediatric Cancers in 2004 and 2016.
- The four potentially treatable cancers in the country are Acute Lymphoblastic Leukaemia, Wilms tumour, Retinoblastoma and Burkitts Lymphoma
- Paediatric cancers account for 0.5-1% of admissions to the PMGH Paediatric Unit

#### AIM

The aim of this study was to identify outcomes of paediatric cancers admitted to Port Moresby General Hospital between January 2016 to January 2018 and compare with previously reported data.

# **OBJECTIVES**

Evaluate

- Demographics
- Management
- Outcome

# METHODOLOGY

Site of Study

PMGH's Paediatric Oncology Ward (Ward 1E)

#### Study Design

- It is a retrospective descriptive study of children with cancer between January 2016 to January 2018
- Qualitative semi-structured interviews of current inpatients

# METHODOLOGY

#### **Inclusion criteria**

- Children age <15 years diagnosed with a paediatric cancer
- January 2016 January 2018 to the Paediatric Oncology Unit of PMGH

#### **Exclusion criteria**

- Readmissions from previous years
- Admissions confirmed not to be cancer

# METHODOLOGY

#### Data Collection and Analysis

- Retrospective study;
  - Paediatric Oncology Registry Book
  - Hospital charts
- A specially designed questionnaire to collect data
- Analysis: Excel
- Qualitative: A series of interviews in Tok Pisin and English. Consent obtained and interviews electronically recorded

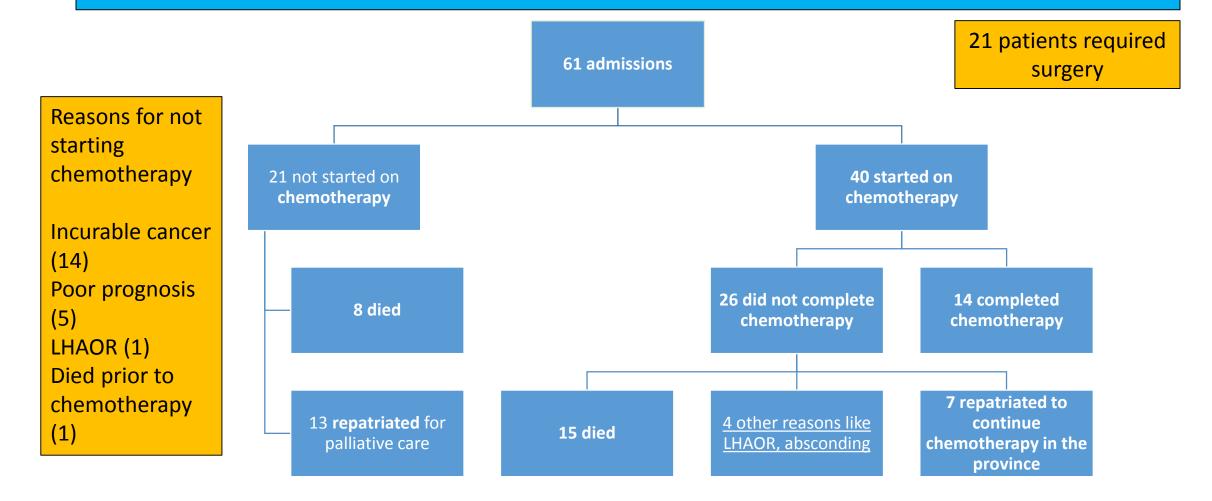
# **RESULTS-DEMOGRAPHY & MANAGEMENT**

- Sex
  - 36 males, 25 females
  - Sex Ratio of 1.41: 1
- Age Range
  - 5 months-15 years
  - Median age: 4; IQR (3-7)
- Referred cases: 38 patients (62%)
- Mean Length of Hospital stay: 93 days
- Mean Time of Diagnosis from time of admission: 9 days
- Mean Time of Diagnosis from time of 1<sup>st</sup> symptom: 8 months

# **RESULTS-DIAGNOSIS**

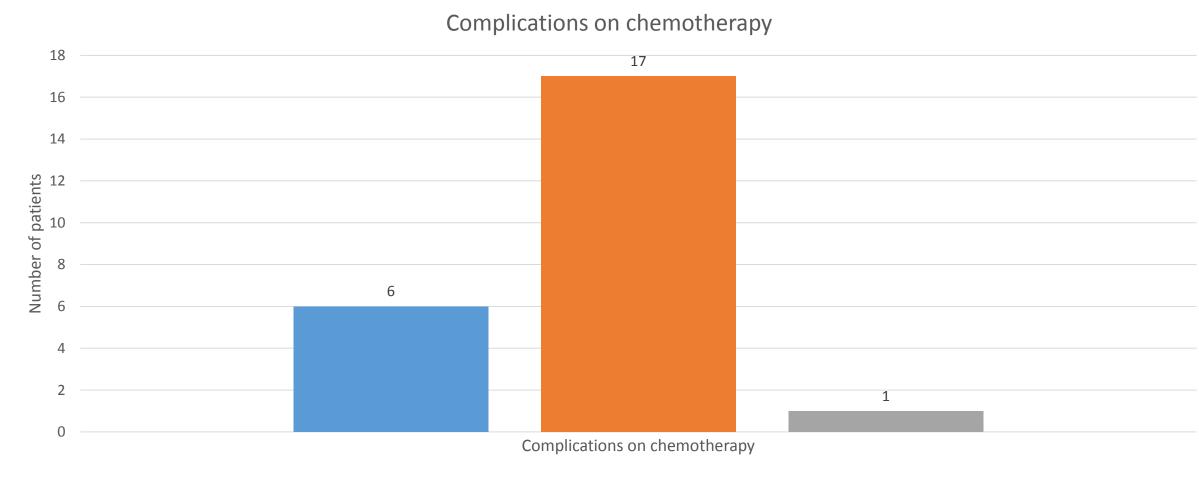
Diagnosis	No. of admissions	No of patients referred	No of patients started on chemotherapy
ALL	12	5	9
AML	9	6	0
CML	1	1	1
Hodgkin's Lymphoma	1	0	1
Non Hodgkins Lymphoma	5	4	5
Burkitts Lymphoma	1	1	1
Retinoblastoma	11	8	10
CNS Tumour	3	3	0
Wilm's Tumour	5	4	3
Hepatoblastoma	3	2	3
Rhabdomyosarcoma	5	3	4
Other Cancers	5	1	3
TOTAL	61	38	40

# **RESULTS-OUTCOMES**



23 Deaths (38%)

# COMPLICATIONS ON CHEMOTHERAPY



# **RESULTS-INTERVIEWS**

Socio-economic factors related

- Poor family and social support
- Family separation
- Poor financial support

Service provider related

- Meals
- Delays in Chemotherapy
- Support from referring hospitals

# DISCUSSION

	1998-2001 (3.5 Years)*	Jan2014-Dec2015 (1.5 years)*	Jan2016-Jan2018 (2 years)
Sex Ratio	1.8:1	1.35:1	1.41:1
Age (yrs) Median (IQR)	5 (3-7)	5(3-7)	4(3-7)
Leukaemia	19(30%)	16 (34%)	22 (36%)
ALL	4	10	12
AML	11	5	11
CML	4	1	1
Retinoblastoma	6(9%)	8(17%)	11(18%)
Lymphoma	19(30%)	8(17%)	6(10%)
Hodgkins Lymphoma	2	2	1
Non-Hodgkins Lymphoma	6	2	4
Burkitts Lymphoma	11	4	1
Others	20(31%)	15(31%)	22(36%)
Total	64	47	61

### DISCUSSION

- In this series there is no difference in the demographic data to the 2 previous studies
- Increase in the presentation of Lymphoma and slight increase in the Leukaemia presentation compared to the first study published in 2004
- Decrease in Lymphoma presentations noted progressively through the 3 series

### CONCLUSION

- Similar trends have been noted in this series to the previous study published in 2016.
- More patients have been commenced on chemotherapy in this study compared to the previous study.
- Chemotherapy was not only commenced on the 4 potentially curable cancers. But other conditions also for the first time in the country which included Rhabdomyosarcoma, Hepatoblastoma and Neuroblastoma
- Many socio-economic difficulties are faced by families in the ward particularly patients referred in from other provinces

# RECOMMENDATIONS

Socio-economic factors

- Support groups for cancer patients and their families
- Better meals for patients in the ward
- Better support from referring centres

Hospital related factors

- Better inter-disciplinary communication and management
- Introduction of awareness of early warning signs

Structured template to collect cancer statistics Better recording of complications, drug shortages and follow up of results

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- Anga G, Vince JD Paediatric cancer in Papua New Guinea: moving to the next stage. *PNG Med J.* 2016;59(1-2):23-29
- **Kiromat M, Vince JD, Oswyn G, Tefuarni N.** The management of children with cancer in Papua New Guinea: a review of children with cancer at Port Moresby General Hospital. *PNG Med J.* 2004;47:138-145.
- Deshmukh RD, Dhande DJ, et al. Patient and Provider Reported Reasons for Lost to Follow Up in MDR TB Treatment: A Qualitative Study from a Drug Resistant TB Centre in India. PLOSONE | DOI: 10.1371/journal.pone.0135802. August24,2015.