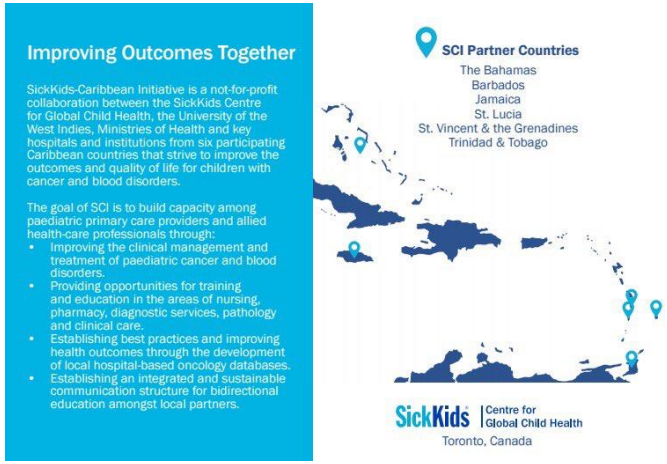
SCI

SickKids-Caribbean Initiative
Enhancing Capacity for Care in
Paediatric Cancer and Blood Disorders

Aggregate Childhood Cancer Data from the Six SCI-Partner Countries



Sumit Gupta, MD, PhD (on behalf of many, many others!)

PAHO Caribbean Childhood Cancer Meeting

Feb 11, 2020

Port of Spain, Trinidad and Tobago

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History, Goals, and Some Caveats

- An important goal of the Sickkids-Caribbean Initiative (SCI) was to establish an oncology registry with patient data to provide an accurate picture of the number of paediatric oncology patients presenting at participating treatment centres, causes of treatment failure and evaluation of implemented changes in therapy or supportive care in order to increase utilization of best practices in patient management standards of care

- Goal of this talk is to present some data on Caribbean specific childhood cancer outcomes

- Throughout the day, Caribbean experts will present on different aspects of the context which leads to these outcomes

The Local Oncology Database

- Secure online platform with common variables
- Data managers in each site entered anonymized patient, disease, and treatment data on each patient in each of the 7 SCI participating centres
- Uniform training of data managers
- Real time review and validation of each case by local clinicians and database managers
- Regular meetings of all data managers and database co-chairs
- Each site owns its own data; no site could access any other site's information
- Approved by each site's hospital administration, REB, and Ministry of Health as appropriate

Dr. Tracey Gibson

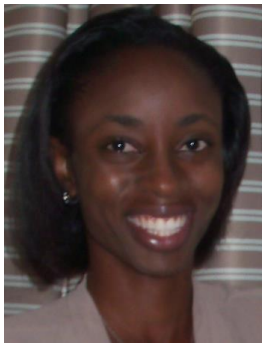
Daisy Gibson

Corey George

Virginia Leandre-Broome

Miranda Biroo

Naomi Palmer-Mitchell



Sabrina Beeput

Keisha Glasgow

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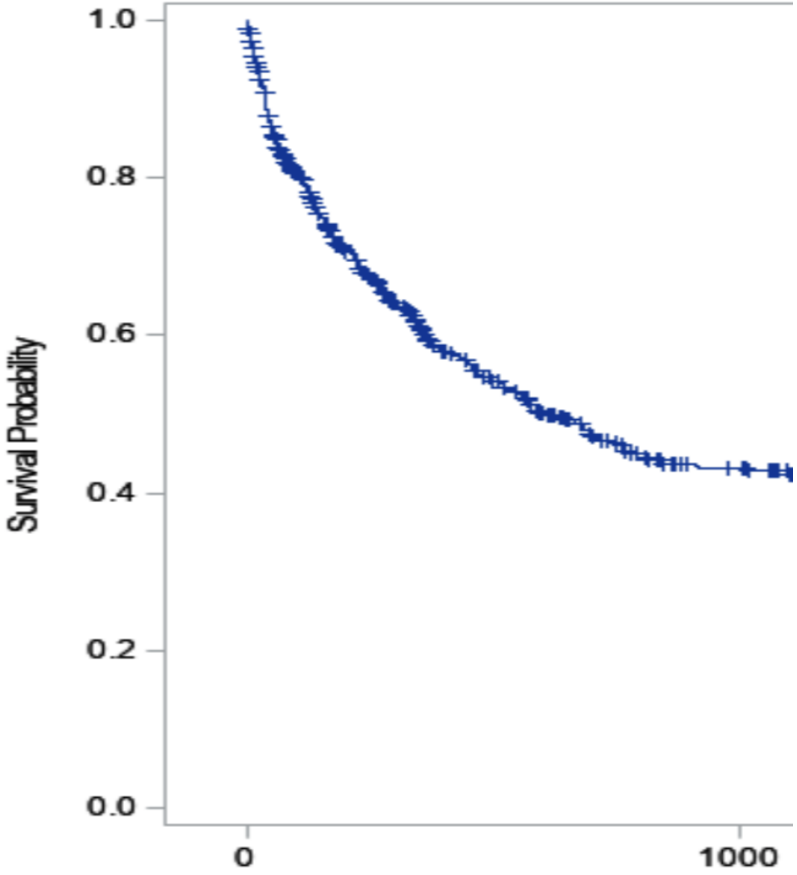
Methodology Points to Remember

- Hospital-based, not population-based
- Approximates population-based in countries like Trinidad and Tobago, Barbados, but not in Jamaica
- Database launched in Nov 2013, so data from 2011-2013 is retrospective
- For retrospective data, more faith in overall survival data (died or didn't) than in specific events like relapse

Patients in the Database

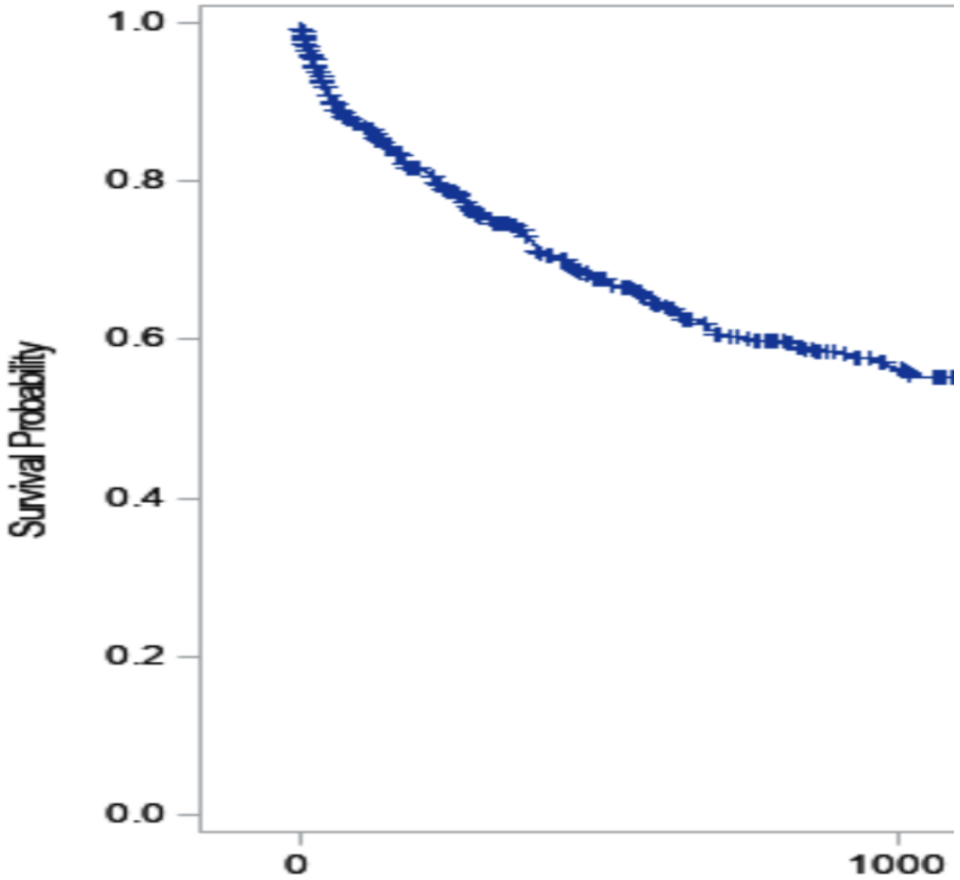
- Between 2011 and 2019, 665 patients diagnosed in the participating centres with data entered into the database (approximately 75 per year)

Leukemia	217	32.7%
ALL	154	23.2%
AML	51	7.7%
Other	12	1.8%
Lymphoma	55	8.3%
HL	23	3.5%
NHL	32	4.8%
Solid Tumor	272	41.0%
Neuroblastoma	48	7.2%
Wilms	59	8.9%
Other	165	24.9%
CNS	119	17.9%



3-year EFS

43% +/- 2%



3-year OS

55% +/- 2%

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Causes of Treatment Failure

- Of the 308 events:

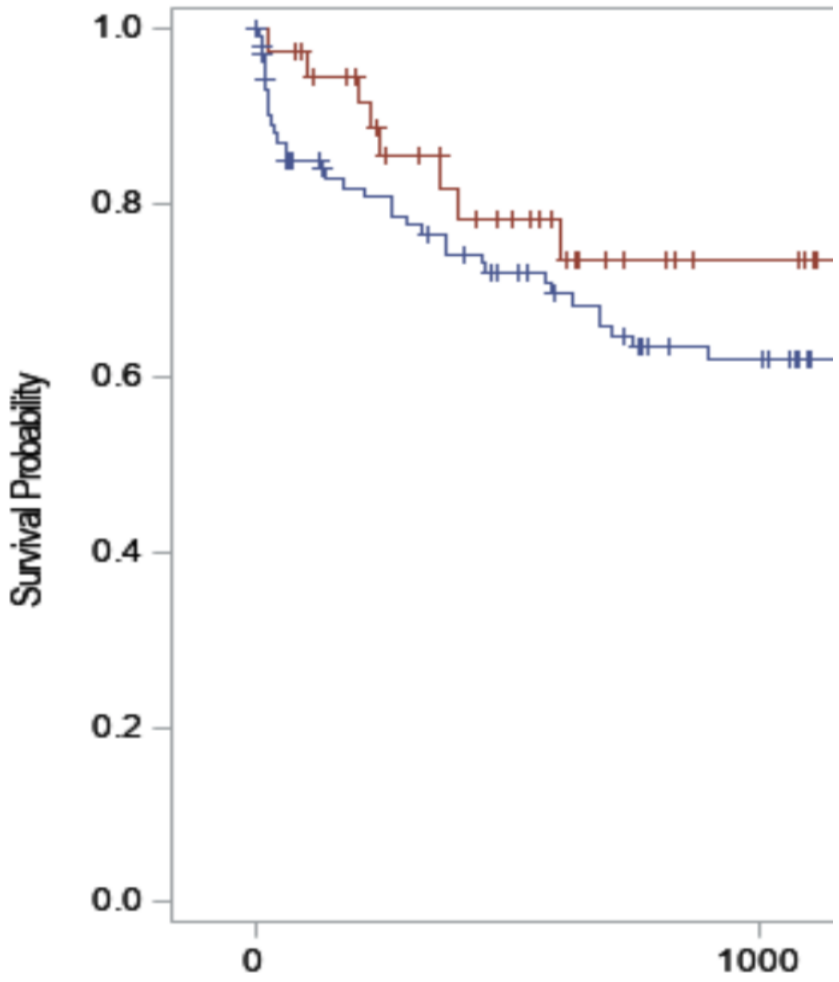
Relapse/Progressive Disease	128	41.5%
Treatment Related Mortality	117	38.0%
Refusal or Abandonment	62	20.1%

Abandonment

- In the 2016-2018 cohort, 12/200 (6%) refused therapy and 12/200 (6%) abandoned, leading to a total rate of 12%

- 9/12 who started treatment but abandoned (75%) within the first six months of therapy

Potential Signs of Initial Successes



ALL Overall Survival between 2011-2015 vs. between 2016-2018

3-year OS

2011-2015: 62% +/- 5%
2016-2018: 73% +/- 8%

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Small but Important Examples of Success

- Treatment-related mortality (TRM) is the term given to when children die from toxicity/complications of treatment

- Elevated rates of TRM are one factor for lower childhood cancer cure rates in resource-constrained settings

- In acute leukemia, rates of early death (within 42 or 60 days of diagnosis) are a measure of TRM

Early Death in Leukemia

ALL

2011-2015
13/98 (13.3%)

AML

2011-2018
14/44 (31.8%)

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Key Messages

- Childhood cancer outcomes in the SCI-participating centres are superior to those in many other parts of the world, but there is still a survival gap compared to HICs
- The causes of treatment failure are similar to those in other resource-limited settings, but perhaps in different proportions
- Outcome data crucial to inform families, providers, and Ministries, to inform the most important interventions, and to continuously evaluate such interventions
- Signs of some improvement in outcomes in the last few years, likely due to multiple reasons

Questions to Ponder

- What are the outcomes in non-SCI participating centres and countries?
- How can improvements seen in the participating centres/countries be sustained and built upon?
- How can improvements seen in the participating centres/countries be translated to other centres and countries?
- Do further improvements in outcomes require more system-level interventions as opposed to local interventions?

Questions and Discussion

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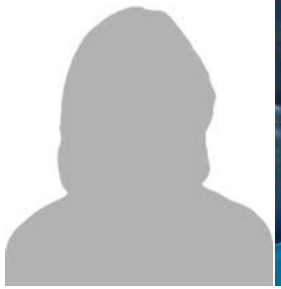

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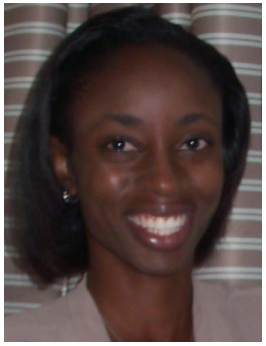

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