BIPAI

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BAYLOR COLLEGE OF MEDICINE

CHILDREN’S FOUNDATION

TANZANIA

2019
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BAYLOR COLLEGE OF MEDICINE
CHILDREN’S FOUNDATION
TANZANIA
2019
BIPAI
HISTORY AND SCOPE

Baylor College of Medicine International Pediatric AIDS Initiative (BIPAI) at Texas Children’s Hospital is the largest care and treatment network based at an academic institution supporting programs for HIV-infected and -affected children in the world. BIPAI consists of nine independent non-governmental organizations (NGOs) operating 11 Centers of Excellence that provide comprehensive outpatient care for more than 300,000 children and families worldwide. Over the past 20 years, BIPAI has also evolved its mission beyond HIV to include comprehensive health programs designed to work within the existing health systems and improve maternal and child health outcomes. BIPAI provides technical assistance to its network to ensure the highest level of quality care and treatment, education and training for health professionals, and operational research to improve patient care.
STATISTICS

$43  ➔ Million budget

80,000  ➔ Health professionals trained around the world

300,000  ➔ Patients in care

1,500+  ➔ Staff Members

200  ➔ Texas Children’s Global Health Corps physicians

1 — Foundations:
Romania (2001)
Botswana (2003)
Lesotho (2005)
Eswatini (2006)
Malawi (2006)
Uganda (2008)
Tanzania (2011)
Colombia (2014)
Argentina (2017)

2 — Programs:
Angola (2011)
Papua New Guinea (2013)

*Foundations are independent and legally registered non-governmental organizations located in the respective countries.
*Date refers to year of establishment
### Acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Full Form</th>
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<tbody>
<tr>
<td>AIDS</td>
<td>Acquired Immune Deficiency Syndrome</td>
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<tr>
<td>ALHIV</td>
<td>Adolescent Living with HIV</td>
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<tr>
<td>ARV</td>
<td>Antiretroviral Drugs</td>
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<tr>
<td>BIPAI</td>
<td>Baylor College of Medicine International Paediatric AIDS Initiative</td>
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<tr>
<td>CHV</td>
<td>Community Health Volunteer</td>
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<td>CTC</td>
<td>Care and Treatment Centre</td>
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<tr>
<td>DSD</td>
<td>Differentiated Service Delivery</td>
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<tr>
<td>HIV</td>
<td>Human Immunodeficiency Virus</td>
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<td>IAS</td>
<td>International AIDS Society</td>
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<tr>
<td>ICPCN</td>
<td>International Children’s Palliative Care Network</td>
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<tr>
<td>IPT</td>
<td>Isoniazid Preventive Therapy</td>
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<tr>
<td>LTFU</td>
<td>Lost To Follow Up</td>
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<tr>
<td>MoHCDGEC</td>
<td>Ministry of Health, Community Development, Gender, Elderly and Children</td>
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<tr>
<td>NMSF</td>
<td>National Multi-Sector Framework</td>
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<td>OVC</td>
<td>Orphans and Vulnerable Children</td>
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<tr>
<td>PEPFAR</td>
<td>U.S. President’s Emergency Plan for AIDS Relief</td>
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<td>PLHIV</td>
<td>People Living with HIV</td>
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<tr>
<td>SHARE</td>
<td>Symposium for Health and Academic Research</td>
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<tr>
<td>SPEEDI</td>
<td>Standardised Paediatric Expedited Encounters for ART Drugs Initiative</td>
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<tr>
<td>STI</td>
<td>Sexually Transmitted Infections</td>
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<tr>
<td>TB</td>
<td>Tuberculosis</td>
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<tr>
<td>UNAIDS</td>
<td>Joint United Nations Programme on HIV and AIDS</td>
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<tr>
<td>UNICEF</td>
<td>United Nations International Children’s Emergency Fund</td>
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<tr>
<td>USAID</td>
<td>United States Agency for International Development</td>
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This year’s annual report highlights our achievements in providing paediatric health care and integrating HIV/AIDS, TB, and psychosocial services for the people of Tanzania.

Thousands of children and their families received testing, treatment, and educational services from Baylor Tanzania during the 2018-2019 period as part of our goal to meet the UNAIDS 95-95-95 objective.

I am grateful for the combination of financial support from our donors, the collaboration of community leaders and host institutions, and the unwavering dedication of the Baylor Tanzania staff to strengthening the health system and providing our support to the Lake and Southern Highland Zones and beyond.

Our model of family-based health care and support services is rapidly increasing the impact we are having on paediatric HIV and related conditions. We are happy to have treated more than 3,902 patients this year, including tuberculosis and malnutrition clients. HIV case-finding initiatives tested more than 6,389 children and caregivers in the operational zones of Baylor Tanzania, not including many thousands more who were tested at the sites we mentor clinically.

While we take time to celebrate successes, we recognise there is much work ahead, ever reminding us to remain diligent in our cause—always learning and keeping long-range goals in focus. In the core areas of prevention, treatment, education, and community strengthening, Baylor Tanzania has implemented robust and effective programmes that have reached not only individuals but families and even whole communities.

Our success would not be possible without the support of the Tanzanian government through the Ministry of Health, Community Development, Gender, Elderly and Children (MoHCDGEC); the United States Agency for International Development (USAID) through the United States President’s Emergency Plan for AIDS Relief (PEPFAR); United Nations Children’s Fund (UNICEF); and BIPAI and Texas Children’s Hospital; Our strong appreciation also goes to our official collaborative partners at the Mbeya Zonal Referral Hospital and Bugando Medical Centre—as well as local government authorities, organisations, partners, and communities that continue to support our efforts.

I am happy to present our 2018-2019 annual report, and I hope you will all enjoy reading it.

Sincerely,
Lumumba Mwita, MD, MMED
Executive Director
OUR VISION

To provide high-quality, high-impact, highly ethical paediatric and family-centred health care, health professional training, and clinical research, focused on HIV/AIDS, tuberculosis, malaria, malnutrition, and other conditions impacting the health and well-being of children and families.

OUR MISSION

To be the model of paediatric excellence, empowering health professionals, and communities to ensure sustainable, superior paediatric care, enabling healthy and fulfilling lives for the children of Tanzania and their families.
TANZANIA

- People living with HIV: 1,600,000
- Children living with HIV aged 0-14 years: 92,000
- Adult HIV Prevalence Rate: 4.6%

- ART Coverage for Adult: 72%
- ART Coverage for Children: 65%
- Children HIV Prevalence Rate: 1.41%

TOTAL POPULATION: 59,148,950
AT A GLANCE (2018/2019)

PATIENT CENTRED CARE

- 248 Home visits conducted
- 1,256 Total OVC supported
- 191 “clinical attachment” programme
- 387 Total completed IPT
- 5% Proportion of clients in ART care who are LTFU
- 246 Total initiated on ART
- 1,100 Total receiving TB services
- 157 Total receiving TB treatment
- 271 Total tested HIV positive
- 6,389 Total tested for HIV
- 490 Adolescents receiving sexual reproductive services
- 2,553 Currently on ART treatment
- 87% % of HIV-positive adolescents (ages 10-19) in Teen Club

2018 / 2019
Baylor Tanzania advanced national community health at the policy and operations levels according to guidelines in the Tanzanian National Policy on Community Health. We did this by building sustainable primary health care, empowering individuals and communities, and aligning stakeholder support to national policies, strategies, and plans.

Our value proposition centres on consistently supporting the MoHCDGEC by pursuing clinical excellence, creating sustainable service delivery approaches, as well as participating in national and international policy strategising and planning activities.

A year after adopting the government policy on the Differentiated Service Delivery Model (DSD), Baylor Tanzania expanded the scope for antiretroviral service provision within its health facilities, supported sites, and communities by integrating DSD models in line with the HIV care and treatment guidelines released by the government of Tanzania. We also transitioned clients to the newly adopted ART regimen (Dolutegravir). Clients who have attained full viral suppression (viral load <50copies/ml) are being individually or group fast-tracked during their ART pick-up visits. These individuals are offered multiple-month prescriptions, which reduces the burden of frequent clinic visits and the workload on the healthcare workers.

Our services now extend beyond treatment. We remain committed to understanding the needs of our clients, and we employ creative approaches to support them within the HIV prevention, care, and treatment process. We offer a range of services, including adherence support groups to adolescents and caregivers, psychosocial support services, as well as legal, economic, and social support services. These complement the National Multi-Sector Framework on HIV (NMSF) 2018-2023, which aims to ensure we enrol, treat, and retain all clients.

We provided HIV testing to 5,816 ALHIV, and among this group 216 (3.7%) tested positive. We then ensured a continuum of care, ranging from Community Health Volunteers (CHVs) to government health facilities.

We expanded our services to four regions in the country and offer support to 50 more sites.
PREVENTION
PREVENT disease in children and adolescents

Led by a team of experts, Baylor Tanzania offers a comprehensive array of preventive services for HIV, TB, malnutrition, violence, and common childhood and adolescent illnesses.

HIV

Children born to a mother living with HIV commonly develop HIV themselves without intervention. To discourage HIV infection among exposed infants, we administer prophylactic medicine; we also give prophylaxis against opportunistic infections, such as pneumonia and brain abscesses. For HIV-negative clients who are exposed to HIV, often through sexual assault or needle accidents, we offer post-exposure prophylaxis to prevent HIV infections.

TB

Tuberculosis (TB) is a leading killer of children with HIV, so we are diligent about detection and prevention. Every child undergoes a TB screening upon arriving at one of our clinics, and all children living with HIV are offered six months of TB prophylaxis medicine. TB is also prevented through strong infection control efforts in schools and communities, such as tracing and testing all the contacts of an individual who has a smear-positive TB case.
STIs & Pregnancy

We offer reproductive health counselling and services to reduce the spread of sexually transmitted infections (STIs) and decrease unwanted pregnancies. Services include weekly “Teen Talks” to teach adolescents about living positively with HIV, screening and treatment for STIs, and access to reproductive and child health care in a safe, confidential environment.

Other Prevention

Not only do we closely follow HIV-exposed children to ensure they stay HIV-negative, but we also monitor their growth and development and provide treatment or counselling for any issues that may arise. We immunise all children under our care according to the national immunisation schedule, conduct regular weight checks, and provide nutritional counselling and breastfeeding support to prevent malnutrition. Cervical cancer is prevented by offering human papillomavirus vaccinations to all 14-year-old girls.

As a child-safeguarding organisation, we screen for violence against children and adolescents and advocate for their protection. Mental illnesses, such as depression and anxiety, are prevented through robust peer support groups, empowerment and stigma reduction efforts, and adolescent-friendly services.
From the moment that children walk through our door, the Baylor Tanzania team assesses them for health and social issues. At triage, children are screened for malnutrition and TB. When visiting with the clinician, not only does our staff check their vital signs, lab results, and any reported symptoms, but they also inquire about family health and social issues. It is important for us to know whether a child is in school or, if they’re past school age, if they’re working. We want to know if there are other children in the household and whether they have been tested for HIV. Rather than wait for problems to become severe, we aim to proactively identify them and start working on solutions.

A Model for HIV Care

Baylor Tanzania is working to achieve the UNAIDS 95-95-95 goal, where 95% of children living with HIV are tested for HIV and know their status; of these children, 95% are started on treatment; and finally, of those on treatment, 95% are virally suppressed. We support the entire family of clients living with HIV by promoting the HIV testing of all relatives and sexual partners. We also aim to serve the most vulnerable and high-risk populations with our targeted testing and screening activities.

Baylor Tanzania utilises a multi-disciplinary “patient first” approach that simplifies and adapts treatment services to our patients’ needs so that every patient receives the care and support they need to thrive. We are a national leader in innovative programmes that offer peer support, family assistance, and personal empowerment to create effective practices that are essential to achieving sustained treatment success.
Sickle Cell

We diagnose and educate children living with this disease. We also provide them with medication to prevent infection and anemia.

Cancer

Baylor Tanzania provides regular cancer screening. Our clinic in Mbeya provides chemotherapy and other treatment for children with Kaposi Sarcoma, one of the most common childhood cancers in Tanzania. It also links children with appropriate services if they are suffering from lymphoma or other childhood cancers.

Palliative Care

The goal of the palliative care programme is to provide comprehensive, high-quality medical and psychosocial care for children and adolescents suffering from life-limiting conditions. Baylor Tanzania utilises an integrated, multidisciplinary palliative care approach by giving medications and equipment to ease pain, addressing psychosocial challenges, and providing social support to minimise financial burdens. Patients receiving palliative care are also eligible to participate in a “wish-making” programme in which they select a small toy or item.

Nutrition Classes

Nutrition classes are offered every week, including cooking demonstrations. Families have access to nutritionist support and social programmes that help provide food items for those in the greatest need. Our clinics treat and cure malnutrition using therapeutic food supplements.
Health System Strengthening

Baylor Tanzania strengthens health systems by supporting them and improving the quality of the services delivered by them. We gather information, provide assistance, address gaps, and promote the adoption of improved health care delivery models. In doing so, we aim to strengthen the building blocks of health systems as defined by the World Health Organization.

Dissemination of Best Practices

Baylor Tanzania provides high-quality technical assistance that focuses on national priorities and maximises the effectiveness of the country’s resources. We use our expertise to advise the Paediatric Technical, HIV, and TB Working Groups in the national government. We disseminate best practices at supported facilities, such as paediatric HIV care via community ART, the practice of viremia clubs, teen clubs, and caregivers’ involvement in adherence. We participate in health professionals’ and experts’ platforms and symposiums, which focus on basic science research, community health, and wellness interventions.

Furthermore, Baylor Tanzania works hand-in-hand with the different levels of the national health system to improve the health of children and adolescents through capacity building. This includes strengthening the supply chain by identifying gaps and performing data analysis of the collaborative efforts done with other partners.

Capacity Building

Baylor Tanzania welcomes health care providers (HCPs) from around the country to participate in an intensive, hands-on, paediatric HIV, TB, and malnutrition training course. HCPs attend lectures from our paediatric experts and get hands-on experience taking care of children with real-time feedback. We also empower them with mentorship and quality improvement skills so they can improve the performance of health care services in their respective regions. To increase the number of HCPs receiving first-hand training, we have adopted an onsite training approach that is cost-effective. Roughly 160 health professionals have benefitted from this programme.
Off-Site Education

Baylor Tanzania physicians, nurses, counsellors, and support staff visit each of our 56 outreach sites at least once per quarter. We reinforce best practices in paediatric HIV and TB care, identify areas for improvement, and help providers in the Lake and Southern Highlands Zones provide excellent, evidence-based HIV, TB, and general paediatric care.

Information and Feedback

In our supported sites, we hold feedback, learning, and sharing sessions at the zonal, regional, district, and facility level to discuss challenges, successes, and progress towards achieving paediatric targets. The regional and district health management teams, members from the health facilities in charge, and other stakeholders are all involved. It is during these meetings that Baylor Tanzania provides feedback on different implemented activities and receives feedback on its performance. Feedback from these sessions is used to create sustainable health programmes which place increasing responsibility on local facilities to provide high-quality health services. Fostering local ownership of these health services also leads to positive health outcomes.
HIV is a social issue. Since it has a severe impact on youth, any solution requires engaging young people and putting them at the centre of the decision-making process regarding their health-related issues. Adolescents face a number of health and social challenges that make them vulnerable to poor clinical outcomes. It is important to make adolescents living with HIV aware of the prevention, care, and treatment process. Baylor Tanzania has developed both structural and systemic service delivery approaches and initiatives that empower our adolescents, improve their self-esteem, and develop leadership skills. These approaches include:

**EMPOWERMENT**

**Adolescent Programmes.**

We host peer-led initiatives that empower adolescents with leadership skills. Girls are the most vulnerable group of adolescents living with HIV, and those who are identified as being at risk of early pregnancy or abuse are recruited into a six-month programme. We teach them about reproductive health, human rights, sexual abuse, and how to access support systems within Tanzanian society. At the end of six months, participants have the skills to cope with and prevent the stigma of being HIV-positive and/or surviving sexual abuse. They also learn important life skills, including how to look after their reproductive health. These initiatives reached 490 girls and boys during the reporting period.
Income-Generating Activities:

We offer skill development programmes that aim to equip adolescents living with HIV with income generating skills that will help them earn a living and improve their self-esteem. Adolescents are enrolled in sewing and beading classes if they are out of school and live with families that cannot afford options to develop their skills through formal training. We also have a demonstration garden where interested clients receive technical training that they can apply to their gardens at home. This produce provides nutritious meals to their families and a source of income for the household.

Social Welfare:

By administering a daily assessment of each client in our clinics, we identify adolescents and caregivers with different social needs. We then implement a structured programme to resolve their issues with weekly multidisciplinary social rounds, home visits, and family meetings. We provide clients with services at the clinic or refer them to community-based organisations or legal services. We also support caregivers through these same channels.
Benki Yetu
(“Our Bank”)
This is a peer-led programme in which 25 adolescents learned financial management skills, such as how to receive and use micro-finance loans.

Shamba Darasa
Programme
Many Baylor Tanzania clients are so poverty-stricken that they cannot afford food that meets daily nutrition requirements, and they often have difficulty paying the transport fees to travel to a clinic. Baylor Tanzania started “Shamba Darasa”, a backyard vegetable-growing initiative to help support malnourished clients attending Baylor clinics. The programme offers practical classes that demonstrate how to develop a vegetable garden that supports a healthy, nutritious diet and provides a source of income. Baylor Tanzania led 361 sessions, reaching more than 647 caregivers and adolescents between 14 and 18 years old.
We want the successes of Baylor Tanzania to spread beyond the regions in which we work so that other organisations can learn from our experiences and provide high-quality health care to more children. We continually examine our methods using a scientifically rigorous process to discover what works and where we can improve. We publish these findings as abstracts and scientific manuscripts that are submitted to Forums or publications. Baylor Tanzania also participates in conferences in Tanzania and around the world—not only to disseminate our best practices but also to hear about the experiences of others doing similar work.

Baylor College of Medicine Paediatric AIDS Initiative - Network meeting (South Africa)

Baylor Tanzania staff attended the following international meetings in 2019:

- International Children’s Palliative Care Network (ICPCN) Conference (Rwanda)
- Symposium for Health and Academic Research (SHARE) (Tanzania)
- Baylor College of Medicine Paediatric AIDS Initiative Network meeting (South Africa)
- International AIDS Society (IAS) Conference (Mexico)
- International Workshop on HIV and Adolescence Challenges and Solutions (Kenya)

Active Research

- Retrospective studies of clinical activities and outcomes
- Tuberculosis clinical outcomes
- Tuberculosis stool-based diagnostic assay
- Tuberculosis blood-based DNA methylation diagnostic assay


Success Story

Ndele Sanga is an adolescent who has struggled with an extremely resistant strain of HIV and clinical failure for the past seven years. His chronic medical conditions and the trouble he had adhering to treatments meant there was little hope for his medical condition to improve.

Early in 2019, Dolutegravir (DTG) came to Tanzania. Ndele started a salvage ART regimen including DTG, and he committed to adhering to these medications. Six months later, Ndele has made significant progress with suppressed viral load and raised CD4. He is stronger and happier than ever before, and living life to the fullest.

“A Weighted Matter: Team Work Equals Dream Work”

Background

I.S. was a 3 year and 9-month-old boy when he first came to Baylor Children's Center of Excellence in Mwanza. I.S.’s grandmother brought him to the clinic, being his sole caregiver since his mother and father abandoned him.

I.S. was initially admitted to Sengerema Hospital due to severe acute malnutrition, severe malaria and septicemia. After one week, he was transferred to Baylor Tanzania Mwanza COE for a higher level of management. His HIV test was reactive.

Description

I.S. had a history of high-grade fever and cough of unknown duration, weight loss, poor appetite, diffusely swollen lymph glands, severe wasting, excessive night sweats and irritability.

Our working diagnoses included Pediatric AIDS with severe acute malnutrition (marasmic kwashiorkor), malaria and anemia.
Management at Baylor Tanzania

I.S. tested positive for HIV and grandmother was counseled on the significance of this test result. Additionally, he had a positive TB screen and due to the severity of his combined co-morbidities, he was admitted to Bugando Medical Centre for inpatient care.

Management for severe acute malnutrition included zinc, folic acid, vitamin A, ceftriaxone and starting F-75 therapeutic formula. At the same time, I.S. began anti-tuberculosis therapy (ATT) and anti-retroviral therapy (ART) was initiated one week later.

His weight was monitored every week (See Graph Below). He used F-75 for eleven days, and then transitioned to F-100 when his appetite and weight improved, and he was clinically stable. As he regained his appetite, finishing all his food while asking for even more food, I.S. was ready to start Plumpy Nut and given a target discharge weight of 9.0kg.

After being an inpatient for 2 months, I.S. was 10.4kg and ready to be discharged! From that point forward, I.S. would come to Baylor Tanzania every 2 weeks for continued nutritional assessments, physician visits and tuberculosis treatment.

Grandmother would receive continual nutritional education and counseling. She was instructed on how to prepare nutritious meals with locally available foods, what constitutes a balanced diet, good personal hygiene and child feeding techniques. After three months, he was discharged from our Nutrition Program with a weight of 11.2kg and excellent physical and mental improvement (see before and after pictures below).

Lessons Learned
The successes of this story were many-fold. Not only did a severely malnourished child flourish back to good health, but a loving grandmother was provided the education and support to continue her grandchild’s sustained growth and development. Furthermore, these kinds of positive outcomes in our patients are proof of the dedication to maintaining collegial, cooperative, and collaborative relationships within and between the teams at Baylor Children’s Center of Excellence and Bugando Medical Centre.
DONATIONS AND OTHER SUPPORT

- Tanzanian Ministry of Health, Community Development, Gender, Elderly and Children
- United States Agency for International Development
- United Nations International Children’s Emergency Fund
- Regional and Zonal Governments of the Lake and Southern Highlands Zones
- Bugando Medical Centre
- Mbeya Zonal Referral Hospital
- Serious Fun Children’s Network
- Baylor College of Medicine International Paediatric AIDS Initiative
- Baylor College of Medicine Global Oncology and Global Childhood TB programmes