Baylor Tanzania welcomes you to the

21st BIPAI Network Meeting

Pushing Limits:

Setting the Standard for Maternal and Child Health

18th – 22nd November 2019

Venue: Kopanong Conference Center
Johannesburg, South Africa

Baylor College of Medicine | Baylor College of Medicine Children's Foundation Tanzania | BIPAI Baylor International Pediatric AIDS Initiative at Texas Children's Hospital | Texas Children's Hospital

This year, we would like to introduce four special themes:

1. **Putting Patients First**

"Patient-centered care" and "Child/adolescent-friendly services" are the foundation of BIPAI activities and are crucial for success in our settings. We are seeking experiences on unique and innovative activities and programs that embrace a "patient-first" approach, and/or that involve patients (and/or patient perspectives and inputs) from initiation to implementation and evaluation.

2. **Silver Linings**

The road to program success can be rocky, challenging, heartbreaking, and filled with ups and downs. This track focuses on both the successes and failures of programs and activities at BIPAI sites that provide valuable lessons for improvement and growth. Sharing experiences on programs and activities that didn't go as planned, or were not as successful as hoped, are key to a balanced, honest self-assessment and can spark a renewed invigoration for continued network and professional growth.

3. **If These Walls Could Talk**

Experiences focusing on unique efforts, programs, and activities that occurred within the NGO's primary clinical sites. These experiences should show the unique spirit of BIPAI, innovation, thinking outside-of-the-box, excellence of care and activities that can be scaled up to other sites to improve patient services and outcomes.

4. **Into the Great Wide Open**

Experiences focusing on unique efforts, programs, and activities that occurred outside of the COEs and primary clinical sites. BIPAI sites implement incredible efforts across their countries on a grand scope, transforming care and being recognized as national and international leaders. This includes activities, successes, challenges, and programs implemented outside of the COEs, to highlight the broader impact of the BIPAI teams.

These tracks are intentionally NOT disease or population focused to better reflect the diversity of the BIPAI Network and be more inclusive of BIPAI's non-HIV programs including women's health, tuberculosis, hematology/oncology, and emergency medicine. They are designed to be cross-cutting and inclusive, allowing for the full range of BIPAI sites and programs to share their most interesting and exciting findings at this year's Network Meeting.

PARTICIPANTS

WELCOME LETTER

It is a great time of the year when the BIPAI Network countries meet, and this year Baylor Tanzania happily welcomes you to the 21st BIPAI Network Meeting in Johannesburg, South Africa. We are privileged to host this year's Network Meeting and we look forward to great experiences in sharing and learning for better program work.

This year's theme is "Pushing Limits: Setting the Standard for Maternal and Child Health." We hope that this year's meeting will provide an opportunity for countries to share great innovations that have transformed lives in the populations we serve. At the same time, we hope to learn from programs which did not work as we expected, because we believe there are good lessons in failure.

To make the five days memorable, the land of Kilimanjaro and Serengeti has prepared an exciting program which combines work and fun!

It is our utmost hope that you will have a great time exchanging technical and scientific knowledge and strengthening our network.

Welcome!

Lumumba F. Mwita, MD, MMED
Executive Director
Baylor College of Medicine Children's Foundation - Tanzania

AGENDA

Kopanong Hotel and Conference Center Johannesburg, South Africa | 18-22 November 2019
MONDAY, 18th NOVEMBER 2019
Arrival / Registration **Welcome Reception and Intro to Tanzania**
TUESDAY, 19th NOVEMBER 2019
Welcome and Opening Remarks Executive Directors Roundtable IAS Panel Discussion Special Session: Biostatistics Oral Presentations: HIV and TB POSTER SESSION 1 Shop: BIPAI Craft Market ***PILI* - Movie Night**
WEDNESDAY, 20th NOVEMBER 2019
Adolescent Advocate Panel Discussion Oral Presentations: Putting Patients First Oral Presentations: Silver Linings Special Session: Quality Improvement POSTER SESSION 2 Shop: BIPAI Craft Market ***BIPAI's Got Talent* - Karaoke Night**
THURSDAY, 21st NOVEMBER 2019
Keynote Address: Dr. Linda-Gail Bekker Oral Presentations: If These Walls Could Talk Special Session: Noam Angrist Oral Presentations: Into the Great Wide Open Shop: BIPAI Craft Market **Cultural Dinner and Awards Celebration**
FRIDAY, 22nd NOVEMBER 2019
Special Session: BIPAI Research Best Practices Special Session: Philanthropy POSTER SESSION 3 Oral Presentation: Above and Beyond Oral Presentation Awards and Closing **Departure**

DETAILED AGENDA

MONDAY, 18th NOVEMBER 2019	
All Day	Arrival
All Day	Craft Market Set-up
16:00 - 18:00	**Conference Registration**
18:30 - 19:00	**Networking and Refreshments**
19:00 - 19:05	**Call to Order** Team Tanzania
19:05 - 19:20	**Welcome to Tanzania, Agenda Review** Dr. Lumumba Mwita, Baylor-Tanzania Executive Director
19:20 - 19:30	**Welcome to the 21st Network Meeting** Dr. Diane Nguyen, BIPAI Global Health Coordinator
19:30 - 19:40	**"Spirit of Tanzania"– Tourism Video**
19:40 - 20:00	**Networking and Refreshments**

TUESDAY, 19th NOVEMBER 2019	
7:30	**BREAKFAST**
7:55 – 8:00	**Video: Tanzania Tourism Board**
8:00 – 8:30	**Official Opening and Welcome Address** Dr. Diane Nguyen and Nancy Calles *Moderator: Dr. Lumumba Mwita*
	Video Remarks by Dr. Mark Kline Chairman, BIPAI
	Pasha from Team Tanzania
8:30 – 8:40	**Introduction to *Poll Everywhere* Evaluation System** Don Etoria, Business Manager, BIPAI
8:40 – 9:40	**BIPAI Executive Directors Round Table Discussion** Executive Directors from Angola, Argentina, Botswana, Colombia, Eswatini, Lesotho, Malawi, Romania, Tanzania, and Uganda *Moderator: Dr. Diane Nguyen*
9:40 – 10:30	**Special Session: IAS Panel Discussion** Panelists: Tara Devezin, Peter Elyanu, Dr. Mogo Matshaba *Moderator: Dr. Kevin McKenzie*
	Craft Market Preview – Tanzania (Mbeya and Mwanza) *2 minutes to present your crafts!*
10:30 – 10:45	**CHAI BREAK**
10:45 – 12:00	**Oral Presentations: HIV** *Moderator: Dr. Mercy Minde*
	Pediatric Third Line Program In Eswatini: Program Updates — Amanda Small (Eswatini)
	High Level Of Immunosuppression Found In HIV-Infected Adolescents Failing Antiretroviral Therapy In Tanzania — Kevin McKenzie (Tanzania)
	HIV Prevalence And Associated Factors Among Exposed Children In Kyegegwa District, Rural Western Uganda — Mugisa Emmanuel (Uganda)
	Examining EARNEST In Eswatini — Tara Ness (Eswatini)
	Q&A and Discussion
	Craft Market Preview – Colombia *1 minute to present your crafts!*
12:00 – 13:00	**LUNCH**
	Pasha from Team Tanzania

13:00 – 14:30	**Oral Presentations: Tuberculosis** *Moderator: Dr. Lineo Thahane*
	Integrated TB/HIV Care And Treatment Improves Outcome Among Children And Adolescents Living With HIV — Tara Devezin (Global TB)
	Comparison Of Stool Processing Methods For Xpert Mtb/Rif Ultra Testing Using BCG Spiked Stool — Qiniso Dlamini (Global TB)
	Performance Of Tuberculosis Symptom Screening For Children And Adolescents Living With HIV (CALHIV) In Six High HIV/TB Burden Countries In Eastern And Southern Africa — Alexander Kay (Global TB)
	ART Initiation Within 8 Weeks Of TB Treatment Leads To Superior TB Outcomes In ART-Naïve Children And Adolescents Living With HIV — Alexander Kay (Global TB)
	Actively Contributing To A Cascade Of Change - Analysis Of TB Cascade Among Children & Adolescents LHIV In Six High TB/HIV Burden Countries — Tara Devezin (Global TB)
	Q&A and Discussion
14:30 – 15:30	**Special Session: Biostatistics** Dr. Kjersti Aagaard
	Craft Market Preview – Eswatini *1 minute to present your crafts!*
15:30 – 15:45	**CHAI BREAK**
15:45 – 16:45	**Oral Presentations: HIV** *Moderator: Dr. Alex Kay*
	Long-Term Survival Of HIV-Infected Children Treated With Antiretroviral Therapy In Eastern And Southern Africa: 2006-2017 ***and*** *Age- And Site-Specific Trends In Proportion Of Children With Advanced HIV Disease At Antiretroviral Therapy Initiation In Eastern And Southern Africa: 2003-2017* — Peter Elyanu (Uganda)
	"TB and HIV/AIDS Holistic Care" A Two Years Retrospective Study on Direct Observed Therapy (DOT)Program at Baylor Tanzania — Mohamed Kipalaunga (Tanzania)
	Outcomes And Risk Of Mortality Among TB/HIV Co-Infected Patients On Anti-Retroviral Therapy In The Era Of Test And Start In Uganda — Rogers Ssebunya (Uganda)
	Q&A and Discussion
16:45 – 17:00	**Daily Wrap-up and Evaluations** (*Moderator: Team Tanzania)*
	Craft Market Preview – Botswana *1 minute to present your crafts!*
17:00 - 18:00	**POSTER & NETWORKING SESSION 1** **Authors please stand by posters until 17:30**
17:30 - 18:00	***SHOP:*** **BIPAI CRAFT MARKET**
18:30	**DINNER**
19:30	***PILI*** **- Movie & Popcorn Night**

WEDNESDAY, 20th NOVEMBER 2019	
7:30	**BREAKFAST**
7:55 – 8:00	**Video: Tanzania Tourism Board**
	Review of Daily Schedule (Tanzania Team)
	Pasha from Team Lesotho
8:00 – 9:00	***"Putting Patients First"*** **Special Session: Adolescent Advocate Panel** *Moderator: Salim Msonga*

9:00 – 10:15	**Oral Presentations: Putting Patients First (Session 1)** *Moderator: Salim Msonga*
	Beyond Survival – Strategies To Promote The Quality Of Life Of HIV Infected Young Adults At Botswana-Baylor — Kenneth Katse (Botswana)
	Evaluating Impact Of CAMARA Groups — Thithili Makhesi (Lesotho)
	More Contraceptives, Less Teenage Pregnancies — Victoria Berardi (Argentina)
	Reaching Men — Ernest Chaka (Lesotho)
	Q&A and Discussion
10:15 - 10:30	**CHAI BREAK**
10:30 - 11:30	**Oral Presentations: Putting Patients First (Session 2)** *Moderator: Dr. Adeodata Kekitiinwa*
	Effectiveness Of Stable Versus Unstable Service Delivery Models (SDMs) Among Children And Adolescents Living With HIV Attending Baylor Clinic In Mbeya, Tanzania — Philbert Anthony (Tanzania)
	Inconsistent And Episodic Adherence To Antiretroviral Medication Among Adolescents Living With Acquired HIV In The Kingdom Of Lesotho — Mabene Tsotako (Lesotho)
	Predictors Of Lost-To-Follow-Up Amongst Adolescents On Antiretroviral Therapy In An Urban Setting In Botswana — Abhilash Sathyamoorthi (Botswana)
	Q&A and Discussion
	Craft Market – Uganda *1 minute to present your crafts!*
11:30 - 12:30	**LUNCH**
	Pasha from Team Argentina
12:30 - 13:45	**Oral Presentations: Silver Linings** *Moderator: Dr. Bhekemusa Lukhele*
	Missed Opportunities For HIV Screening Prior To Diagnosis Of Pediatric Patients: Implications For Attainment Of The First And Second UNAIDS Fast –Track 95-95-95 Targets — Nondumiso Lukhele (Eswatini)
	Nutrition Support Among Children With Cancer At Kamuze Central Hospital — Prisca Masepuka (Malawi)
	Impact of change in consultation priority of Drop-in patients at the Botswana Baylor Children's Clinical Centre of Excellence (COE) — Bonnie Kgathi (Botswana)
	Implementation Of Challenge Clinic At Baylor COE To Tackle Chronic Poor Adherence And ART Failure In Patient On Protease Inhibitors-Based Regimen — Amanda Small (Eswatini)
	Q&A and Discussion
13:45 - 14:00	**CHAI BREAK**
14:00 - 16:45	**Special Session: Quality Improvement** *Moderators: Dr. Heather Crouse & Dr. Binita Patel*
16:45 - 17:00	**Daily Wrap-up and Evaluations** *(Moderator: Team Tanzania)*
17:00 - 18:00	**POSTER & NETWORKING SESSION 2** **Authors please stand by posters until 17:30**
17:30 - 18:00	***SHOP:* BIPAI CRAFT MARKET**
18:30	**DINNER - Braai Area**
19:30	***BIPAI's Got Talent* - Karaoke Night**

THURSDAY, 21st NOVEMBER 2019	
7:30	**BREAKFAST**
7:55 – 8:00	**Video: Tanzania Tourism Board**
	Review of Daily Schedule (Tanzania Team)
	Pasha from Team Angola

8:00 – 9:00	**Keynote Presentation: Dr. Linda-Gail Bekker** *Moderator: Dr. Mogomotsi Matshaba*
09:00 - 10:15	**Oral Presentations: If These Walls Could Talk (Session 1)** *Moderator: Ms. Ana Maria Galvis*
	Well-Child Screening Program in Anelo, Neuquen, Argentina — Andrea Imsen (Argentina)
	Sustainable Egg To Improve The Nutritional Status Of Vulnerable Indigenous Communities In Northern Colombia — Lina Solano Carrillo (Colombia)
	Exploring Parity Among HIV Positive Women Attending ANC At Rural Health Centre In Balaka, Malawi — Zina Nkhono (Malawi)
	Description Of A Mental Health Screening Program At Botswana-Baylor Children's Clinical Center Of Excellence — Tapiwa Tembwe (Botswana)
	Q&A and discussion
10:15 - 10:30	**CHAI BREAK**
10:30 - 11:45	**Oral Presentations: If These Walls Could Talk (Session 2)** *Moderator: Dr. Ronald Mataya*
	Early Outcomes Of A Cervical Screening Program For Young Women In Botswana — Mogomotsi Matshaba (Botswana)
	Self HPV Sampling — Victoria Berardi (Argentina)
	Dermatological Conditions In The HAART Era – A 4 Year Experience At Baylor Clinic In Constanta, Romania — Cristina Bagaiof (Romania)
	Asymptomatic Cryptococcal Infection In Virologically Non-Suppressed Patients At Fort Portal Regional Referral Hospital: A Retrospective Cohort Study — Solomon Okot Paul (Uganda)
	Q&A and Discussion
11:45 - 12:45	**LUNCH**
	Pasha from Team Romania
12:45 - 14:00	**Oral Presentations: If These Walls Could Talk (Session 3)** *Moderator: Dr. Diane Nguyen*
	A Case Study Of Protease Inhibitor (PI) High Level Resistance In A 3-Year-Old Child On ART In Botswana — Abhilash Sathyamoorthi (Botswana)
	Active Versus Passive Pharmacovigilance And Documentation Of Patient Outcome Following Documented Adverse Drug Reaction — Abiy Korsa (Eswatini)
	Electronic Behavior Change Records: A Novel Platform To Guide And Record Interventions In Usual Care — Ana-Maria Schweitzer (Romania)
	The Impact Of Having A Pharmacy And Therapeutics Committee In Baylor College Of Medicine Children's Foundation – Eswatini — Abiy Korsa (Eswatini)
	Q&A and Discussion
14:00 - 14:45	**Special Session: Revealing a Safer Sex Option to Reduce HIV Risk - A Cluster-Randomized Trial in Botswana** Speaker: Noam Angrist *Moderator: Dr. Mogomotsi Matshaba*
14:45 - 15:00	**CHAI BREAK**
15:00 - 16:15	**Oral Presentations: Into the Great Wide Open (Session 1)** *Moderator: Dr. Stephanie Marton*
	Which Strategy Is More Effective - Community Targeted HIV Testing Or Community Based Outreach HIV Testing? A Pilot Program In Mangochi District — Shalom Kawonga (Malawi)
	Characteristics And Distribution Patterns Of Sexual Partners Of HIV Index Clients Under Assisted Partner Notification (APN) In Uganda: A GIS Based Analysis — Rogers Ssebunya (Uganda)
	Vikela Ekhaya: Novel Strategy To Manage Child TB Contact Cascades In Hhohho Community, Eswatini — Godwin Mtetwa (Eswatini)

	Are We Getting There Yet?: The Ineffectiveness Of Prevention Of Mother To Child Transmission Of HIV In Pediatric Cohort — Mohamed Kipalaunga (Tanzania)
	Q&A and Discussion
16:15 - 17:30	**Oral Presentations: Into the Great Wide Open (Session 2)** *Moderator: Ms. Phoebe Nyasulu*
	Uptake Of Services At A Nurse-Led Outreach ART Clinic In South-Eastern Malawi — Zina Nkhono (Malawi)
	Involvement Of Various Stakeholders In Improving Viral Load Coverage In Fort Portal Region In Mid-Western Uganda — Christine Ocokoru (Uganda)
	Community Advisory Boards As A Model For Effective Community Engagement In The Collaborative African Genomics Network In Botswana — Abhilash Sathyamoorthi (Botswana)
	Managing Stock Levels Of HIV Commodities Using Electronic Systems In Baylor Uganda, Rwenzori Region — Mugisa Emmanuel (Uganda)
	Q&A and Discussion
17:30 - 17:45	**Daily Wrap-Up and Evaluations** *(Moderator: Team Tanzania)*
19:00	***Cultural Dinner* -Entertainment and Awards**

FRIDAY, 22nd NOVEMBER 2019	
7:30	**BREAKFAST**
7:55 – 8:00	**Video: Tanzania Tourism Board**
	Review of Daily Schedule (Tanzania Team)
08:00 - 08:45	**Special Session: BIPAI Research Updates** Nancy Calles
08:45 - 09:15	**Special Session: Fundraising Experiences Panel** *Moderators: Nadiya Jiwa and Nazarena Myenzi*
09:15 - 10:15	**Oral Presentations: Above and Beyond** *Moderators: Nadiya Jiwa and Nazarena Myenzi*
	Big Wish In A Small Pond: Development Of A Wish Making Program As Part Of A Multidisciplinary Palliative Care Program In Tanzania — Nazarena Myenzi (Tanzania)
	Funding The Pharmacy Gaps: What Is The Cost Burden To Protect Our Children? — Mary Brown (Tanzania)
	Joy Of Giving And Receiving: Grassroots Fundraising In Mbeya, Tanzania — Nadiya Jiwa (Tanzania)
	Q&A and Discussion
10:15 - 10:30	**CHAI BREAK**
10:30 - 11:00	Daily Wrap-up and Final Evaluations
11:00 - 11:15	**Oral Awards Ceremony** Team Tanzania
11:15 - 11:30	**Closing Remarks** Dr. Lumumba Mwita
11:30 - 12:00	**POSTER & NETWORKING SESSION 3**
	***SHOP:* BIPAI CRAFT MARKET**
12:00	**LUNCH**
PM	**DEPARTURE**

LOGISTICS INFORMATION

Conference Location: Kopanong Hotel &Conference Centre, 243 Glen Gory Rd, Norton's Home Estates, Benoni, 1501, South Africa.

Registration: Monday, 18th November 2019 from 4:00 PM – Hotel Lobby

Welcome Reception: Monday, 18th November 2019 from 6:00 PM – Main Room

Airport Transportation: Please ensure your team has communicated your departure time to the organizing team.

If you have any problems/questions please use the contacts found at the end of this document.

Concurrent Meetings: One concurrent meeting will be taking place during the conference, the Full Data Review Meeting.

Social Functions: Social entertainment and networking functions will be available during the conference**.**

On Tuesday 19th November 2019, we will have a movie night!

On Wednesday we will have karaoke and "BIPAI Got Talent"-participants from each COE across the network will have a chance to showcase their talents. Come prepared! Prizes will be given!

Thursday will be our cultural night. Please dress in national attire and select a song representative of your country. Please send the song name and artist to smsonga@baylortanzania.or.tz.

Craft Market: This year we will also be hosting a Craft Market for countries to showcase handiworks from each country. This market will serve to acquaint the group with unique goods and designs from each country and provide the opportunity to raise funds for our adolescent and maternal health programs. Items will be available for purchase with South African Rand (ZAR).

Dress code: The dress code for the Conference is business attire.

Internet connection: Wi-Fi is available to all participants with direct access to the internet at the principal main room and hotel lobby.

Code of Conduct: The conference is held on behalf of and by members of the BIPAI and so falls under the Code of Conduct of your foundation.

Emergencies: 10111 – Nationwide Emergency Response - This number works anywhere in South Africa and is the quickest way to connect to the police.

011 37 55 911 – City of Johannesburg Emergency Connect. This number will connect you with ambulance, fire and police services.

If for any reason you are required to access emergency response services, remember that <u>you must</u> notify the Houston team as soon as is reasonably possible.

Important Contacts: During the event, please use WhatsApp to reach the event team.

Name	Title	Contact Number
Salim Msonga	Meeting Coordinator (Tanzania)	+255 752 348 343
Nadiya Alnoor Jiwa	Meeting Coordinator (Tanzania)	+255 739 805 006
Jackson Kiaro	Meeting Coordinator (Tanzania)	+255 757 348 116
Glory Rwezaula	Meeting Coordinator (Tanzania)	+255 758 898 086
Dr. Mercy Minde	Meeting Coordinator (Tanzania)	+255 756 308 387
Dr. Kevin McKenzie	Meeting Coordinator (Tanzania)	+1 206 554 1316
Dr. Lumumba Mwita	Executive Director (Tanzania)	+255 754 095 653
Diane Nguyen	Global Programs Director	+1 713 992 6316
Taylor Napier-Earle	Global Health Project Manager	+1 713 410 6118
Adam Gibson	Global Health Project Manager	+1 713 377 2802
Don Etoria	Business Operations Lead	+1 516 974 8202

PARTICIPANTS

NAME	TITLE	EMAIL
ANGOLA		
Olga Denysyuk	Pediatrician	olga.denysyuk@bcm.edu
Arao Mateus Zacarias	Lab Technician	arpedroto@gmail.com
Indira Mateus Joaquim	Database Entry	imjoaqui@texaschildrens.org
ARGENTINA		
Mg. Augustina Perez	Executive Director	directoraejucutiva@baylorargentina.org
Dr. Javier Mozzi	Pediatrician	pediatria@baylorargentina.org
Lic Berardi Vitoria	Obstetrician	lic.obstetricia@baylorargentina.org
Maria Jose Valdes	Health Promoter	promotorasalud@baylorargentina.org
Nerina Hernandez	Administrative Coordinator	administracion@baylorargentina.org
Dr. Andrea Imsen	Pediatrician	pediatria2@baylorargentina.org
BOTSWANA		
Dr Mogomotsi Matshaba	Executive Director	matshaba@bcm.edu
Dr Abhilash Sathyamoorthi	Senior Medical Officer	abhilash@baylorbotswana.org.bw
Bokani Beo	Assistant M&E Officer	Bokan.Beo@bcm.edu
Tapiwa Tembwe	Social Worker	ttembwe@baylorbotswana.org.bw
Bonnie Kgathi	Nurse / TB Coordinator	bkgathi@baylorbotswana.org.bw
Kenneth Katse	Senior Programme Office	kkatse@baylorbotswana.org.bw
Lesego Ketumile	M&E Officer	lesego@baylorbotswana.org.bw
Zachary Foughty	Pediatrician	Zachary.Foughty@bcm.edu
COLOMBIA		
Ana Maria Galvis Serrano	Executive director	directoraejecutiva@baylorcolombia.org
Yoselin Fontalvo	Health Center Coordinator	medicinageneral1@baylorcolombia.org
Jaquelin López	Lead Nurse	enfermeria@baylorcolombia.org
Lina Solano	Lead Nutritionist	nutricionista@baylorcolombia.org
ESWATINI		
Bhekumusa Lukhele	Executive Director	blukhele@baylorswaziland.org.sz
Sandile Dlamini	M&E Manager	sdlamini@baylorswaziland.org.sz
Tandzile Simelane	Medical Doctor	tandziles@baylorswaziland.org.sz
Nondumiso Lukhele	Nurse	nondumisol@baylorswaziland.org.sz
Abiy Assefa Korsa	Pharmacist	akorsa@baylorswaziland.org.sz
Godwin Mthethwa	Nurse	gmtetwa@baylorswaziland.org.sz
Alexander Kay	Associate Director, Global TB	Alexander.Kay@bcm.edu
Qiniso Dlamini	Lab Technician	qinisod@baylorswaziland.org.sz
Wandile Mabaso	Teen Club Coordinator	wandilem@baylorswaziland.org.sz
Amanda Small	Medical Doctor	Amanda.Small@bcm.edu
Tara Ness	Medical Doctor	Tara.Ness@bcm.edu
LESOTHO		
Dr. Lineo Thahane	Executive Director	lthahane@baylorlesotho.org
Enerst Chaka	Professional Counsellor	echaka@baylorlesotho.org
Dr. Thithili Makhesi	Head Adolescent	tmakhesi@baylorlesotho.org
Dr. Mabene Tsotako	Medical Director	mtsotako@baylorlesotho.org
Maphafane Phafane	Pharmacy Technician	mphafane@baylorlesotho.org
Dr. Teresa Steffy	Paediatrician (GHC)	tfsteffy@bcm.edu

Makhorong Matsoso	M&E Coordinator	mdmaatsoso@baylorlesotho.org
Mamonyake Mokete	Head Nurse	mmokete@baylorlesotho.org
Matsiu Ralitapole	Head Nurse	mralitapole@baylorlesotho.org
Dr. Andrew Headrick	Global Health Resident	Andrew.Headrick@bcm.edu
MALAWI		
Phoebe Nyasulu	Interim Executive Director	pnyasulu@baylor-malawi.org
Menard Bvumbwe	Clinical Mentor	mbumbwe@baylor-malawi.org
Steven Mathuwa	Laboratory Manager	smathuwa@baylor-malawi.org
Prisca Masepuka	Teen Motherhood Program Manager	pmasepuka@baylor-malawi.org
Joseph Mhango	Monitoring & Evaluation, Research Director	jmhango@baylor-malawi.org
Tsogolo Itaye	Social Worker	titaye@baylor-malawi.org
Samuel Chilala	Cluster Coordinator	schilala@tingathe.org
Zina Nkhono	District Coordinator	znkhono@tingathe.org
Ellen Msukwa	Cervical Cancer Nurse	emsukwa@tingathe.org
Allieth Chikoti	Sr. Human Resource Officer	achikoti@tingathe.org
Shalom Kawonga	Research Fellow	skawonga@tingathe.org
Dr. Ronald Mataya	Team Lead, Maternal Health	Ronald.Mataya@bcm.edu
Dr. Chikondi Chiweza	Obstetrician/Gynecologist	cchiweza@baylor-malawi.org
ROMANIA		
Ana-Maria Schweitzer	Executive Director	aschweitzer@baylor-romania.ro
Stefania Florentina Mihale	Medical Programs Director	smihale@baylor-romania.ro
Cristina Bagaiof	RN Nurse	cbagaiof@baylor-romania.ro
Iuliana Ciocea	RN Nurse	iciocea@baylor-romania.ro
Alexandra Androne	Clinical Psychologist	aandrone@baylor-romania.ro
TANZANIA		
Dr Lumumba Mwita	Executive Director	lmwita@baylortanzania.or.tz
Kevin McKenzie	Pediatrician	Kevin.McKenzie@bcm.edu
Mercy Minde	Technical Director	mminde@baylortanzania.or.tz
Salim Msonga	Social Worker	smsonga@baylortanzania.or.tz
Glory Rwezahura	Patient Care Coordinator	grwezahura@baylortanzania.or.tz
Jackson Kiaro	IT Personnel	jkiaro@baylortanzania.or.tz
Nadiya Jiwa	Pharmacist	njiwa@baylortanzania.or.tz
Anthony Gesase	IT Manager	agesase@baylortanzania.or.tz
Dr. Lilian Komba	Clinical In-Charge	lkomba@baylortanzania.or.tz
Dr. Mohamed Kipalaunga	Medical Officer	mkipalaunga@baylortanzania.or.tz
Dr. Philbert Anthony	Regional Program Officer	panthony@baylortanzania.or.tz
Nazarena Myenzi	Social Worker	nmyenzi@baylortanzania.or.tz
Eutropia Masuka	Pharmaceutical Technician	emasuka@baylortanzania.or.tz
Mary Brown	Pharmaceutical Technician	mbrown@baylortanzania.or.tz
Thomas Roche	Counselor	troche@baylortanzania.or.tz
Delphinius Chritopher	Regional Program Officer	dchristopher@baylortanzania.or.tz
Moses Chodota	M&E Coordinator	mchodota@baylortanzania.or.tz
Vicki Ip	Pediatrician	Vicki.ip@bcm.edu
UGANDA		
Dr. Adeodata Kekitiinwa	Executive Director	akekitiinwa@baylor-uganda.org
Dr. Peter James Elyanu	Director of Research	pelyanu@baylor-uganda.org
David Damba	M&E Manager	ddamba@baylor-uganda.org

Dr. Jacqueline Balungi Kanywa	Clinic Manager	jbalungi@baylor-uganda.org
Solomon Paul Okot	Laboratory Services Coordinator	sokot@baylor-uganda.org
Christine Ocokoru	Care and Treatment Manager	cocokuru@baylor-uganda.org
Emmanuel Mugisa	HTS/PMTCT Coordinator	emugisa@baylor-uganda.org
Rogers Ssebunya	Study Coordinator	rssebunya@baylor-uganda.org
USA		
Taylor Napier-Earle	TCH Global Health Manager	tlnapier@texaschildrens.org
Adam Gibson	TCH Global Health Manager	abgibson@texaschildrens.org
Diane Nguyen	BIPAI Director of Global Programs	diane.nguyen@bcm.edu
Don Etoria	Business Operations Lead	don.etoria@bcm.edu
Tara Devezin	TB Program Manager	tara.devezin@bcm.edu
Andrew DiNardo	Assistant Professor	Andrew.dinardo@bcm.edu
Dr. Kjersti Aagaard	Vice Chair of Research, Obstetrics & Gynecology	aagaardt@bcm.edu
Dr. Margaret Ferris	Administrator, OB/GYN	mferris@bcm.edu
Cassandra Shorter	Administrator	cshorter@bcm.edu
Dr. Binita Patel	Pediatrician (Emergency Medicine)	bxpatel@texaschildrens.org
Dr. Stephanie Marton	Program Director of Global Child Health Residency	samarton@texaschildrens.org
Dr. Heather Crouse	Pediatrician (Emergency Medicine)	hlcrouse@texaschildrens.org
Nancy Calles	BIPAI Senior Vice President, Research	ncalles@bcm.edu
Dr. Jim Thomas	Medical Director, Latin America	jathoma1@texaschildrens.org
John Dudley	BIPAI IT Consultant	jdudley@emrx.org

POSTER PRESENTATION ABSTRACTS

POSTER SESSION 1 (Tuesday): Track 1 - HIV/TB (24)

BIPAI	1	Baylor College Of Medicine International Pediatric Aids Initiative (BIPAI) Continuing Professional Development Program: Year Two
Botswana	1	Expectations And Preferences Of Parents And Adolescents Regarding Feedback Of Individual Genetic Findings In An HIV-Tb Genomic Research Project In Botswana
Botswana	1	Synchronization Of Appointments For Mutual Patients Of Global Hope Botswana And Botswana-Baylor Infectious Disease Clinic
Eswatini	1	Progressive Burden Of HIV-Associated Tb In Children And Adolescents During An Era Of Increased ART Use: Data From 6 Sub-Saharan African Countries
Eswatini	1	Crawling To 90%: A Follow Up Of Baby Club In Mbabane, Eswatini And Expansion To The Satellite
Eswatini	1	Baylor-Eswatini HPV Genotyping Pilot Results And HPV Vaccine Introduction Plan
Eswatini	1	Baylor-Eswatini Screen-And-Treat Cervical Cancer Screening Program Outcome
Lesotho	1	Clinical Mentorship Program
Lesotho	1	Assessment For The Protocols For Prevention Of Mother To Child Transmission (PMTCT) Of HIV Used At Baylor College Of Medicine-Lesotho For Reduction Of MTCT From 2007-2015
Malawi	1	Putting Patients First – A Patient First Approach Of 7 Month Old Baby With MDR-TB In Rural Malawi
Malawi	1	Improving The Coverage Of Viral Load Testing Through A Simple Programmatic Intervention In Southeastern Malawi
Malawi	1	Vital Start- Video-Based Intervention To Inspire Treatment Adherence For Life: Pilot Of A Novel Video-Based Approach To HIV Counseling For Pregnant Women Living With Hiv In Malawi
Malawi	1	Assessing First Genotypic Drug Resistance Testing Results At Baylor Clinical Centre Of Excellence, Lilongwe
Romania	1	Implementation Of The BCG Vaccination Directive For HIV Exposed Children At Baylor Clinical Centre Of Excellence In Constanta, Romania
Romania	1	Lessons Learnt After 12 Years Of IPT Program
Tanzania	1	“Follow The Leader, Switch In Time”: The Story Of Ever-Changing Treatment Options In Tanzania
Tanzania	1	Poor Clinical Outcomes In HIV-Infected Children Who Start Antiretroviral Therapy At An Older Age
Tanzania	1	Low Level Viremia Predicts Subsequent Viral Failure In HIV-Infected Children In Tanzania
Tanzania	1	This Is How We Do It: Obtaining Medicines To Treat Opportunistic Infections in Baylor Tanzania
Tanzania	1	IPT Completion Rate And Side Effects Among Children Attending HIV Services In Tanzania

Tanzania	1	Tanzania's Second Act: To Suppress Or Not To Suppress? Comparing Viral Load Suppression And Adherence After Switching To Second-Line ART At Baylor Children's Center Of Excellence In Mwanza, Tz
Uganda	1	Test And Treat; Implementing Rapid ART Initiation In A Large Volume Rural Facility.
Uganda	1	Factors Associated With Liver Injury Among HIV Infected Children And Adolescents Attending A National Referral Pediatric HIV Clinic In Uganda
Uganda	1	Rapid Antiretroviral Therapy Initiation And The Risk Of Mortality And Loss To Follow-Up In Children With Hiv

<u>POSTER SESSION 2 (Wednesday):</u> Tracks 2, 3, 4 - Non-Communicable Diseases, MNCH and Nutrition, Adolescents and other Vulnerable Populations (28)

Argentina	2	Vision Screening Program In Children From 4 To 14 Years Old In Anelo, Neuquen, Argentina.
Botswana	2	Early Outcomes Of A Cervical Screening Program For Young Women In Botswana
Botswana	2	End Of Life Care Choices - Two Case Studies Of Pediatric Palliative Care In Botswana
Lesotho	2	Cervical Cancer Screening
Malawi	2	Conducting Screening Weeks To Increase Uptake Of Cervical Cancer Screening Among HIV Infected Women And Build Capacity Of Providers In Visual Inspection With Acetic Acid (VIA)
Argentina	3	Anemia Screening Program In 6 Month To 4 Years Old Children Living In Anelo, Neuquen, Argentina.
Colombia	3	Determining Factors For Relapse Into Acute, Moderate, Or Severe Malnutrition In The Wayuu Children Of The Rural Area Of Manaure, La Guajira.
Colombia	3	Growth And Development Control In The Wayuu Population With Differential Focus On Children Under The Age Of Five, For Purposes Of Reducing Infant Morbidity And Mortality
Colombia	3	Nutritional Recovery Center - Comprehensive Alternative For The Treatment Of Malnutrition
Lesotho	3	Implementation Of Mother Baby Pairs In Lesotho
Tanzania	3	Occupation And The Nutrition Health Status Of Children In Mbozi District Of Tanzania
Argentina	4	Gestational Diabetes & Pregnancy
Argentina	4	About A Case
Botswana	4	Meticulous Preparation For Implementation Of Comprehensive Care Project For Adolescents Living With HIV (ALHIV) In Botswana: Botswana-Baylor Experience
Botswana	4	Sexually Transmitted Infections Among HIV-Infected Adolescent And Young Women At Botswana-Baylor Clinic
Botswana	4	High Referrals Completion Rate For HIV Testing Services (HTS) Towards Achieving The 90-90-90 Target And Beyond
Botswana	4	Integrating Mental Health Into Youth HIV Care: Preliminary Results

Eswatini	4	Family Camp As A Differentiated Service Delivered To Challenge Clinic Patients To Help Improve Their ART Management
Eswatini	4	Patterns And Predisposing Factors For Non-Accidental Fractures In Children: Radiological Imaging Of Child Abuse
Eswatini	4	Evaluation Of Most Preferred Contraceptive Amongst Adolescent And Young Women In Baylor COE Eswatini
Eswatini	4	Impact Of Sibancobi Teen Camp On Attainment Of The Third USAID 95-95-95 Target
Eswatini	4	Peer Support For Adolescents And Young Adults At Baylor COE, Maszini: An Innovation To Optimize?
Malawi	4	Social Factors Associated With Virologic Suppression In Children And Adolescents Living With HIV Initiated On Antiretroviral Therapy In Lilongwe, Malawi
Tanzania	4	Viral Suppression Among HIV-Infected Children And Adolescents Living With A Blood-Related Caregiver Compared To Those Living With An Unrelated Caregiver
Tanzania	4	Paediatric Teen Club And Teen Talk Interventions Improve Knowledge And Clinical Outcomes In Children Living With HIV In Tanzania
Tanzania	4	Quality of Life Among Adolescents Living with HIV in Mwanza, Tanzania: Survey Responses from Teens Attending and Not Attending Baylor COE Teen Club
Tanzania	4	The first step is the hardest: Integration of Multidisciplinary Pediatric and Adolescent Palliative Care Services in Outpatient HIV/AIDS Care in Tanzania
Tanzania	4	Improving Quality Of Life for Children with Cerebral Palsy through Palliative Care: A 2 Year Retrospective Study at Baylor Tanzania

POSTER SESSION 3 (Friday): Track 5 - Social, Behavioral, and Implementation Science (24)

Argentina	5	Population Survey Reports
Argentina	5	Programa De Salud Rural En Anelo
Argentina	5	Training And Patient's Follow Up
Argentina	5	Articulation Health System - Fundación Baylor Argentina
Argentina	5	Eye Health
Argentina	5	Statistic Software: EpiInfo
Argentina	5	Program On Training And Protocols
Botswana	5	Compassionate Efforts Towards HIV Infected Adolescents Facing Socio-Economic Challenges In BBCCCOE – Bomme Giving Hands
Eswatini	5	Pediatric Phlebotomy And Quality Improvement In The African Laboratory
Eswatini	5	Bridging The Non-Conformity Gaps Identified During 2018 Baylor - Swaziland Lab Audit
Eswatini	5	Evaluating And Optimizing Antibiotic Use In A Children's HIV Clinic Eswatini
Eswatini	5	Improving Adolescent Adherence Using An Adherence Tracker
Lesotho	5	Litsatsabele Wellbeing Program

Malawi	5	Assessing The Effectiveness Of Contributory Pension Scheme In Non-Governmental Organizations: A Case Study Of Baylor College Of Medicine Children's Foundation Malawi
Malawi	5	Factors Associated With Burnout Amongst Healthcare Workers Providing HIV Care In Malawi
Romania	5	Why Do Our Patients Don't Disclose Early About Their Pregnancies? Lessons Learnt From A Romanian Group
Romania	5	Does Pre-Test Counseling Increase Specific Types Of Knowledge About Transmission Of HIV And Viral Hepatitis B(VHB) And C (VHC)?
Tanzania	5	"Don't Just Give Them Fish But Teach Them How To Fish" A 3 Months Observational Study On Home Garden Education To Patients With Malnutrition & HIV/AIDS At Baylor Tanzania
Uganda	5	Addressing Gaps In The Management Of Clients With Non-Suppressed Viral Load In Rwenzori Region, Uganda
Uganda	5	Implementing Strategies With Fidelity: Quality Improvement (QI) Methods Twinned To The 9S Of Surge To Improve Identification And Linkage To Care Of HIV Positives In The Fort Portal Region, Uganda
Uganda	5	Closing The Gap In TB Case Notification Through The TB Surge Strategy At Fort Portal Regional Referral Hospital HIV Clinic
Uganda	5	Effectiveness Of Monthly Intensive Adherence Counselling In Management Of 1st Line ART Failure
Uganda	5	Using A Two-Layered HIV Screening Approach In Identification Of New HIV Positives Under The PEPFAR Surge Performance In Rwenzori Region, Uganda.
Uganda	5	Increasing Retention In Care Through Community Systems Strengthening: Lessons Learned From 8 Districts In Rwenzori Region, Uganda

ORAL PRESENTATION ABSTRACTS

1. *FUNDING THE PHARMACY GAPS:* WHAT IS THE COST BURDEN TO PROTECT OUR CHILDREN?

Mary Brown[1], Mary Charles[1], Ruth Mbwanji[1], Vicki Ip[1,2], Mercy Minde[1], and Lumumba Mwita[1]
[1] Baylor College of Medicine Children's Foundation – Tanzania
[2] Baylor College of Medicine International Pediatric AIDS Initiative

Background: Baylor-Mwanza Center of excellence (COE) serves over 1,100 clients on ART, and close to 500 HIV-exposed infants. Although effective ART has improved the quality of life and survival for those living with HIV, many clients also have opportunistic infections, non-communicable diseases, and mental health conditions. As a COE providing family-centered comprehensive healthcare, we treat more than HIV itself. As such, funding for appropriate medications is not always available via USAID and the COE must find alternative means to cover these costs. This abstract describes the burden of funding pharmacy gaps for medications that are not covered by USAID.

Description: USAID provides a list of 40 medications in which the COE is able to procure. Out of these items, only 30 items are relevant to our clinic, from which only 24 items are available. Mwanza COE has an individual donor who provides $340-450 USD every month ($4080-5400 annually) for purchasing medications that are under-funded or not funded by USAID. We purchase medicines based upon clients' needs, ability to buy out-of-pocket, availability of health insurance coverage, and also severity of illness.

Lessons Learned: USAID does not fund any in-country injectable antibiotics or IV fluids such as normal saline; these are essential in emergency situations. Other unfunded medications include amoxicillin-clavulanate, antihistamines, inhalers for asthmatic and lymphocytic interstitial pneumonia (LIP) clients, and pyridoxine for clients on isoniazid preventive treatment (IPT) to prevent peripheral neuropathy. While some critical medicines have never been available at the COEs, others are temporarily available but often in low supply. The table below illustrates the costs of the most frequently used medicines at our COE not funded by USAID. Although we are fortunate to have an individual donor, only an estimated 28-37% of the pharmacy gap can be funded this way; this estimate does not include underfunded USAID medicines. We also realize that this source of funding is not sustainable, and that the COE is left with the cost burden of 63-72%, at minimum, to cover this gap.

Next Steps: We are continuously identifying the medication needs of our clients missed by USAID funding. Initiatives to raise funds for both COEs in Tanzania are underway locally, as well as internationally. This fund will help to purchase otherwise unavailable medicines and to provide health insurance for children and adolescents living with HIV, TB, and/or malnutrition at the COEs in Mwanza and Mbeya.

Item Description	Unit of Measure	Price of Each Item ($)	Yearly Estimated Consumption	Yearly Estimated Cost ($)
Amoxicillin/Clavulanate 500mg/125mg	P/14	2.2	204	449
Benzhexol 5mg	B/100	4.69	60	281
Cefriaxone Injection 1gm	vials	0.6	10,000	6,000
Risperidone 2mg	B/50	4.89	50	245
Haloperidol 1.5mg	B/100	4.69	60	281
Salbutamol Inhalation 100mg	Bottle	1.52	300	456
Ringer Lactate Infusion 500ml	Bottle	0.72	100	72
Sodium Chloride Intravenous 0.9%w/v	Bottle	0.72	100	72
Pyridoxine 100mg	B/60	10	660	6,600
TOTAL ANNUAL COST ($)				**14,456**
Annual Individual Donor Contribution ($)				**4,080-5,400**

2. "TB AND HIV/AIDS HOLISTIC CARE" A TWO YEARS RETROSPECTIVE STUDY ON DIRECT OBSERVED THERAPY (DOT) PROGRAM AT BAYLOR TANZANIA.

Alexander Mohammed*[1], Mohammed Kipalaunga[1], Nazarena Myenzi[1], lwijisyo Minga, Irene Kavishe[1], Lilian Komba[1], Bertha Kasambala[1].
[1]Baylor College of Medicine Children's Foundation - Mbeya, Tanzania

Background: Directly Observed Therapy is widely used to manage tuberculosis disease and it has been reported that more than 30 million patients with TB have been treated with DOTS and result in cure rates of > 80%. Adolescents with TB with or without HIV/AIDS co-infection face different challenges including psychological and social problems which affect their adherence to medication. Baylor Mbeya COE, Tanzania provides comprehensive DOT program to adolescents with TB disease with and without HIV/AIDS co-infection. The program aims in dose completion and prevention of possible relapse and resistance to medication for TB clients with adherence issues.
Methodologies: In this study, data from Jan 2017 up to Dec 2018 were involved. Data were collected via electronic medical record (EMR) and DOT register from social work department. Adolescents at age between 13 years and 18 years were enrolled in the program basing on specific criteria, such as social difficulties including negligence, lack of treatment supporter/close relatives, family conflicts and some of them were orphans. Also, most of them were TB relapse or TB-MDR cases with HIV/AIDS co-infection. So for TB with HIV/AIDS co-infection adolescents, DOT provided for both anti-TB and ART medications. Incentives like daily allowances for lunch and transport fare were provided.
Results: Out of 15 adolescents enrolled in DOT programs, 10(66.7%) were male.
On December 2018 out of patients enrolled in the study (n=15), 12 (80%) adolescents completed doses and graduated from program while 3 (20%) were still in the program. No report of relapse for adolescents completed the dose and graduated.
Of patients involved in the study (n=15), early HVL results when enrolled in DOT program were; 2(13.3%) patients had HVL results <1000copies/ml, 13(86.7%) patients had HVL results >1000copies/ml while none had full suppressed (HVL = 0). The late HVL results before graduation from the program were; 7(46.7%) patients suppressed with HVL results<1000copies/ml and among HVL suppressed patients (n=7), 4(57.1%) were full suppressed while 8(53.3%) had HVL results >1000copies/ml.
Also on CD4 results of patients in study (n=15), early CD4 results were; 1(6.7%) adolescent had CD4 results above 500cells/mm^3, 4(26.7%) adolescents had CD4 results between (500 - 100) cells/mm^3 while 10(66.7%) had CD4 results below 100cells/mm^3. The late CD4 result before graduation from the program were; 4(26.7%) adolescents CD4 results were above 500cells/mm^3, 8(53.3%) adolescents CD4 results were between (100 - 500) cells/mm^3 and 3(20%) adolescents CD4 results were below 100cells/mm^3.
Lesson learned: DOT program had a good outcome not only for TB patients but also for the HIV/AIDS patients as well, since approximately half of patients (46.7%) were able to suppress HVL and among them (n=7), 57.1% patients had HVL results full suppressed. Moreover the number of patient with CD4 above 500cells/mm^3 and 100cells/mm^3 rose by 26.7% and 53.3% respectively just few months before graduation.
Conclusion: Via a good outcome for HIV/AIDS patients on both HVL and CD4 results we hope that DOT program to be adopted not only for TB patients but also for HIV/AIDS patients with ADH issues as well.

3. BIG WISH IN A SMALL POND: DEVELOPMENT OF A WISH MAKING PROGRAM AS PART OF A MULTIDISCIPLINARY PALLIATIVE CARE PROGRAM IN TANZANIA

Liane Campbell[1,2,3], Beatrice Malingoti,[3] Nazarena Myenzi[3], Asulwisye Kapesa,[3] Jason Bacha, [1,2,3]
[1]Baylor College of Medicine International Pediatric AIDS Initiative at Texas Children's Hospital, USA
[2]Baylor College of Medicine, Houston, TX, USA
[3]Baylor College of Medicine Children's Foundation - Tanzania, Pediatrics, Mbeya, Tanzania

Introduction: For children and adolescents with life limiting conditions, palliative care services remain limited in Tanzania. These young palliative care patients experience many types of distress – physical,

emotional, spiritual - and benefit from multidisciplinary support. Programs such as Make-A-Wish® are commonly incorporated in pediatric palliative care in resource rich settings, but are rarely found in resource limited settings. We describe a unique wish making program created at the Baylor Tanzania Center of Excellence - Mbeya to complement its multidisciplinary, outpatient pediatric palliative care program.

Methods: All pediatric and adolescent patients receiving palliative care were eligible to participate in the wish making program. Patients met with a wish making coordinator – a receptionist with a passion for palliative care – to receive support and discuss a wish. Patients identified a small item that they thought would improve their quality of life, which was procured for them.

Through the process of identifying a wish, patients reflected on their hopes, dreams, and fears, and were provided a safe space to share their feelings. Wishes were granted in an expedient fashion, typically within one week, given many patients' short life expectancy. Wish making costs were covered by private donations and a True Colours Trust Small Grant. A retrospective chart review was conducted to describe characteristics of participants between program establishment on 1 March 2014 and 31 Dec 2018.

Results: 62 patients had wishes granted, which represented 49% of all palliative care patients. Participant median age was 13 years (range 3-20). 72% (45/62) of patients selected clothing such as track suits, dresses or shoes. 28% (17/62) of patients chose physical items such as radios, soccer balls or blankets. Of participants, 61% (38/62) are still alive, 32% (20/62) died, 3% (2/62) were lost to follow up and 3% (2/62) died.

The average cost per wish was USD$15. Feedback from wish making program participants and their families was universally positive with reports of increased happiness and improved quality of life.

Conclusion: A wish making program can be successfully implemented at minimal costs as a component of a pediatric palliative care program, even in a resource limited setting. Wish making programs focus on the humanity of children and adolescents facing serious illness and remind the palliative care team of these patient's multifaceted needs. Wish making programs can help to improve pediatric and adolescent palliative care patient's quality of life and address non-physical needs. Utilizing non-clinical personnel to implement wish making programs can help minimize workloads for clinical palliative care staff. Creative budgeting strategies for such activities are needed.

4. HIGH LEVEL OF IMMUNOSUPPRESSION FOUND IN HIV-INFECTED ADOLESCENTS FAILING ANTIRETROVIRAL THERAPY IN TANZANIA

Kevin P. McKenzie**[1, 2, 3], Moses Chodata[3], Bertha Kasambala[3]

[1]Baylor International Pediatric AIDS Initiative (BIPAI) at Texas Children's Hospital, Baylor College of Medicine - Houston, TX, USA

[2]Baylor College of Medicine - Houston, TX, USA

[3]Baylor College of Medicine Children's Foundation - Mbeya, Tanzania

Background: Adolescents have emerged as one of the most vulnerable populations in the HIV epidemic. Not only are mortality rates rising among adolescents despite an overall decrease in the number of deaths due to HIV, but there is a lack of understanding of the major issues HIV-infected adolescents face and how to address them.

Methods: A retrospective chart review was performed examining adolescent patients failing antiretroviral therapy (ART) at a pediatric HIV treatment center in Mbeya, Tanzania. All visits involving a viral load (VL) lab draw were examined between 2015 and 2018. Comparisons were made between children 0-9 years of age and adolescents 10-19 years of age.

Results: A total 398 patients failing ART were examined with an average age of 12.4 years. Among those, 265 (67%) were between 10-19 years of age at the time of lab draw and 51% (201/399) were female (Table 1). Compared to children aged 0-9 years, adolescents were significantly more immunocompromised with an average CD4 count of 424 cells/mm^3 vs. 1207 cells/mm^3 (P<0.00001). Moreover, significantly more adolescents had CD4 counts less than 100 cells/mm^3 (2/86 vs. 31/179; P=0.000538), less than 500 cells/mm^3 (19/86 vs. 120/179; P<0.00001), and CD4% <15% (9/86 vs. 69/179; P<0.000005). Adolescents were not

found to have higher VLs (128,643 vs. 155,821 copies/ml; *P*=0.531307). Adolescents were on ART for a significantly longer period of time (41 months vs. 72 months; *P*<0.00001) but other parameters including severe malnutrition, active tuberculosis, advanced WHO stage, protease inhibitor (PI) use, adherence listed as "poor", and outcome of lost to follow-up or death were similar between the groups.
Conclusions: Adolescents failing ART have significantly higher levels of immunosuppression than their younger counterparts including greater numbers with CD4 counts of less than 100cells/mm^3. Interestingly, adolescents do not exhibit greater elevations in their VL.

Table 1: Client characteristics

Group	0-9	10-19	*P*-value
Number	133	265	
Female (%)	59 (44%)	142 (54%)	0.082543
Months on ART (#)	41.3 (130)	72.4 (260)	<0.00001*
Average VL	155,821	128,643	0.531307
Median VL	11,429	15,145	0.32708
Average CD4 in cells/mm^3 (#)	1207 (86)	424 (179)	<0.00001*
CD4 <100cells/mm^3 (%)	2 (2)	31 (17)	0.000538*
CD4 <500cells/mm^3 (%)	19 (22)	120 (67)	<0.00001*
CD4% <15% (%)	9 (10)	69 (39)	0.000005*
Severe malnutrition (%)	5 (4)	16 (6)	0.337548
Active TB	3 (2)	8 (3)	0.661299
WHO stage 3 or 4 (%)	8 (6)	30 (11)	0.089321
On PI regimen (%)	78 (59)	129 (49)	0.060456
Outcome LTFU or death (#)	5 (118)	12 (237)	0.73134
Good adherence (#)	8 (117)	23 (233)	0.346035

ART: antiretroviral therapy; LTFU: lost to follow up; PI: protease inhibitor; VL: viral load; WHO: World Health Organization. **P<0.5.*

5. ARE WE GETTING THERE YET? : THE INEFFECTIVENESS OF PREVENTION OF MOTHER TO CHILD TRANSMISSION OF HIV IN PEDIATRIC COHORT

[1]Lilian B. Komba*, [1]Mohamed Kipalaunga, [1]Benson Mayalla, [1]Moses Chodota, [1]Bertha Kasambala, [1]Lumumba Mwita
[1]Baylor College of Medicine Children's Foundation, Tanzania

Introduction: Since 2010 Tanzania Prevention of mother to child transmission (PMTCT) program aimed at attaining the virtual elimination of Mother to child transmission (MTCT) of HIV by 90% by 2030 yet we still encounter a number of infants being HIV positive at their earlier stages of life. This study explores factors associated with early HIV infection among children at our pediatric HIV center in Mbeya, Tanzania.
Methods: Retrospective chart review of all Infants ≤ 18months of age with HIV diagnosis based on positive DBS result between December, 2014 to December, 2018. Baseline demographics, lab results for infant and maternal history were extracted and reviewed from the EMR.
Results: A total number of HIV exposed infants enrolled at COE were 189, in this cohort = 92/189 (47%) children all with confirmed DBS positive results were included in the study. Age at enrolment: 1-18 months (median = 10months); 41/92(44%), male. WHO clinical stage at presentation: I- 25/92 (27%), II-16/92 (17%), III- 17/92 (19%), IV- 34/92 (37%). Common diagnoses: 22/92(24%) asymptomatic, 12/92(13%) recurrent PNA, 3/92(3%) Pulmonary TB, 35/92(38%) severe acute malnutrition, 5/92 (6%) recurrent diarrhoea, 15/92(16%) moderate acute malnutrition. 69/92(75%) had recorded baseline CD4 results: 3-48 %(median 14%). 25/92 (27%) received some form of PMTCT; while 67/92 (73%) had not received PMTCT care. Infant outcomes; 64/92(69%) active, 10/92 (11%) died after enrolment, 9/92 (10%) LTFU, 9/92 (10%) transfer outs.

Maternal history: 27/92 (29%) HIV Positive on ART (14/27(52%) received PMTCT services), 18/92 (20%) HIV positive during pregnancy (10/18 (56%) received PMTCT services), 3/92 (3%) HIV positive during delivery (all did not receive PMTCT services), 33/92 (36%) newly diagnosed HIV positive during postpartum and had never been tested during pregnancy and 11/92 (12%) had undocumented HIV status (1/11 (9%) had received PMTCT services).
Conclusion: Most children in the cohort though eligible for PMTCT services that is mothers with positive results during the prenatal, natal and antenatal period, still a large number had not received these services.

Table 1: Shows the percentages of mothers and children who received PMTCT services

PMTCT intervention to infants	**Number of infants (N=92)**	**Percentage (%)**
Infant received Nevirapine after birth	25/92(27%)	
Did not receive Nevirapine after birth	67/92(73%)	
Maternal HIV status	**Number of mothers (N=92)**	**Number of mothers who did not receive PMTCT services (N=67)**
Mothers on ART	27/92(29%)	13/27 (48%)No PMTCT
Positive during pregnancy	18/92(20%)	8/18 (44%)No PMTCT
Positive during labor	3/92(3%)	3/3 (100%)No PMTCT
Never tested newly diagnosed	33/92(36%)	33/33 (100%)No PMTCT
Status unrecorded	11/92(12%)	10/11(91% No PMTCT

6. EFFECTIVENESS OF STABLE VERSUS UNSTABLE SERVICE DELIVERY MODES (SDMS) AMONG CHILDREN AND ADOLESCENTS LIVING WITH HIV ATTENDING BAYLOR CLINIC IN MBEYA, TANZANIA.

[1]Philbert A. Luge,[1,2]Jason M Bacha, [1]Lilian B. Komba, [1]Moses Chodata,[1]Bertha Kasambala, [1]Lumbumba Mwita
1 Baylor College of Medicine Children's Foundation-Tanzania Mbeya Centre of Excellence
2 Baylor College of Medicine – Houston, Texas USA

Background: In the Southern Highland Zone of Tanzania, retention to care and ART adherence among Children and Adolescent Living with HIV (CALHIV) are still major issues. 75% of CALHIV attending Baylor COE Mbeya have attained viral suppression which is still below the goal of 90% suppression by 2020.
As part of comprehensive care package, Baylor Tanzania adopted "Stable and Unstable" service delivery models (SDMS) in 2018. Stable refill mean a patient is "fast tracked" such as that they can directly collect medication if they are well and need to be over 5 years of age and virally suppressed of <50 HVL copies hence seen at the clinic every 3months. Unstable refill mean a client is not virally suppressed thus needed to be seen by a clinician in monthly basis. This study aimed at comparing effectiveness of these two models in contribution to engagement in care and viral suppression both by "Stable-Unstable" criteria and WHO HVL suppression criteria of <1000 HVL copies
Methodology: Data were collected retrospectively by extracting from the EMR all CALHIV on ART aged 5-18 years attending Baylor COE Mbeya between Jan 2018 to Dec 2018, Clients were categorized based on Stable and Unstable criteria of clinical condition, HVL<50 copies and >50 copies respectively. First HVL result documented during study period was taken as a baseline study lab in each category, and then data were analyzed using SPSS software version 26 to assess engagement in care as well as HVL suppression trend, both by Stable-Unstable criteria and WHO criteria of HVL <1000 copies/ml.
Results: 1563 CALHIV attending Baylor COE Mbeya year 2018 were captured. 695 clients [44.47%] were Stable and 868 [55.53%] were Unstable. Among 868 clients of Unstable category, 65 [7.49%] shifted from

Unstable to Stable of HVL<50 copies 220 clients [25.34%] suppressed from >1000 HVL to <1000 copies (WHO criteria), 803 [92.51%] remained Unstable of which 648 clients [74.65%] were >1000 HVL copies after 12 months follow-up.
Among 695 Clients of Stable category, 310 [44.61%] dropped back from been Stable to Unstable of which 168 clients [24.17%] became virally Un-suppressed of >1000 HVL copies (WHO criteria) and 142 clients [20.43%] ranged from 51 to 999 HVL copies, 385 clients [55.39%] sustained been Stable after 12 months follow-up.
Among 868 clients of unstable category, 26 clients [3.00%] were lost to follow-up, 3 clients [0.35%] died and 842 clients [97.00%] were active in care after 12 months follow up.
In Stable category of 695 clients, 19 [2.73%] were lost to follow up, 0 died, and 676 clients [97.27%] were active in care after 12 months follow up.
Services offered to unstable client to make them stable included Enhanced Adherence sessions (EAC), psychosocial supports, and physical supports from COE.
Lessons Learned: Trend of clients changing from Stable to Unstable was high compared to that of unstable to stable. Also suppression rate using WHO criteria was high in unstable category while that of stable keep decreasing.
The majority of patients, both Stable and Unstable, remained active in care, with very few deaths and lost to follow up overall.
Next Steps: Strategies should be established especially for those Stables to keep them clinically well, retain their viral suppression and engagement in care.

7. JOY OF GIVING AND RECEIVING: GRASSROOTS FUNDRAISING IN MBEYA, TANZANIA

N.A. Jiwa[1], D.Mwenisongole [1], E.Masuka[1], J. Bacha[1,2,3], L. Campbell[1,2,3], K. McKenzie[1,2,3] , B. Kasambala[1] and L. Mwita[1]
[1]Baylor College of Medicine Children's Foundation - Tanzania, Pediatrics, Mbeya, Tanzania
[2]Baylor International Pediatric AIDS Initiative (BIPAI) at Texas Children's Hospital, Baylor College of Medicine, Houston, TX, USA
[3]Baylor College of Medicine, Houston, TX, USA

Issues: Recent budgetary challenges have adversely affected our ability to purchase life-saving medicines, provide important social support packages (such as transport, clothes, blankets, basic necessities), and offer food packages for the most vulnerable children living with HIV/AIDS. To address these shortcomings, the Mbeya COE Pharmacy, Social Work and Nutrition departments created and implemented a fundraising event on World AIDS Day 2018.
Description: The event targeted the local community by inviting guests to the COE for a celebratory day, viewing of short inspiration HIV/AIDS videos, and discussions with COE staff about the program in hopes of soliciting local donations. As staff, we organized ourselves into two teams. One team handled internal logistics and event agenda, and the second team helped to deliver invitation letters and initiate mobilization amongst people to attend our event. Children from our clinic were not invited to curb disclosure of status in public and risk of unintended stigmatization. Our event had minimal budget, allowing only selected snacks and drinks during the event. Videos were chosen from YouTube focusing on positive messages on HIV/AIDS in children. Event agenda commenced with opening speech from Clinic In-Charge, followed by viewing of videos, and auction of Bead X Bead items and other items donated by our staff.
This event was attended by over two dozen people, and gathered a grand total of cash and auctions worth of USD $3,730. Donated products (e.g. sugar, flour, clothes, powdered soap) are being stored for distribution through Social Work department to eligible children. Perishable items such as eggs were distributed to around 60 vulnerable families attending the COE to celebrate Christmas before the holidays. Donated containers of liquid soap will be auctioned to raise additional money to support COE patients.
Lessons learned: This event brought to light kindness that community bears in relation to giving for children living with HIV/AIDS. As departments, we have also learnt about the constraints facing us, our duties for our

children, and how to tackle these challenges. A committee and formalized processes have been created for accessing and using the products and money accumulated from this cause. It is also important to clearly depict processes of dispensing the donated items and funds since delays and uncertainties of distributing them can decrease staff motivation around this exercise.
Next steps: We hope to continue these community level fundraising efforts on an annual basis in Mbeya. We hope to collaborate through other community partners, civil society organizations, and the commercial business sector in the community to further mobilize our cause and keep receiving community support for future.

8. SUSTAINABLE EGG TO IMPROVE THE NUTRITIONAL STATUS OF VULNERABLE INDIGENOUS COMMUNITIES IN NORTHERN COLOMBIA

Lina Solano*, Ana María Galvis, James Thomas

Background: The Wayuu, the largest Amerindian group in Colombia, inhabit La Guajira state, plagued by drought and extreme poverty. In this region, acute < 5 yr malnutrition exceeds 3.2% (national prevalence ~1%) and chronic malnutrition approaches 28%. The Wayuu suffer increased malnutrition-associated mortality due to inadequate food intake, the malnutrition-infection cycle, deficient sanitation and impaired access to healthcare. As part of a program to reduce malnutrition-associated mortality, we piloted a collaborative egg production program in 6 Wayuú communities. Eggs were chosen for their contribution to dietary diversity and their relative ease of production.
Description: The sustainable egg-health production project was carried out in the target Wayuú communities for 6 months with 3 activities: nutritional screening, medical care and egg production. Nutritional and medical care included growth and development surveillance, prenatal care, immunizations, and educating all beneficiary families about healthy nutrition and eating habits. Egg production included ND vaccination, predator-resistant coop construction from local materials, use of supplemental feeds from agricultural wastes, and holistic extension courses. Outcomes at the end of the piloted project were compared to baseline data collected.
Results: In the 6 communities, 455 members were screened and treated, 22% were children <5 yr. 500 layer hens produced 35,288 eggs. 90.4% of eggs were consumed by the communities. Nutritional results showed a reduction in acute malnutrition to 3.7% (Guajira prevalence 28%) and 100% of children and pregnant women had up-to-date health controls. Additionally, 10% of the eggs were sold and the resulting income funded a new production cycle. The table below compares health indicators, at the outset and finish of the production program and demonstrates the contribution of dietary egg intakes to improved maternal and child nutrition and health.
Lessons learned: This egg production project was a practical, low-cost, easy-to-replicate and income-generating initiative for Wayuú families with food insecurity. It also outlines a potential pathway to prevent chronic malnutrition, the main cause of malnutrition-associated problems. Additional steps must be taken to address cultural barriers and decrease the production costs to improve project efficiency.
Achievement of sustainable health outcomes requires addressing determinants of health and not just diseases. Moreover, working with experts in other disciplines, like food production, to develop holistic approaches to health potentiates the ability of health programs to effect positive change among vulnerable indigenous populations.

	Beginning	**Current**
# Families that have benefitted	39	91
# Children under 5	85	99
% Acute malnutrition	8.8%	3.7%
% Children with up-to-date growth and development control	42%	100%
% Children with up-to-date vaccinations	61%	89.60%
% Pregnant women with up-to-date prenatal control	77%	100%

9. WELL-CHILD SCREENING PROGRAM IN AÑELO, NEUQUEN, ARGENTINA.

Dr. Andrea Evelyn Mariana Imsen, Pediatrician Fundación Baylor Argentina

Background: Childhood is a time of rapid growth and change. The Argentine Pediatric Society recommends regular well-child visits to assess whether the child is meeting developmental milestones for hearing, vision, nutrition, sleep and growth, as well as to reduce the risk of disease and injury. These visits also provide an opportunity for additional age-appropriate preventive services such as immunizations, screening and monitoring to detect developmental delays and follow up with early intervention services as needed. Information on sleep, safety, childhood diseases, expectations for child growth and development is given to the family, and also the opportunity to discuss any questions or concerns they may have about their child's health.

Before Fundación Baylor Argentina started working in Añelo, no well-child visits were performed in the town by the public health system.

Description: The well-child visits program includes tracking the child's growth and development in children from birth to 14 years old living in Añelo and surrounding areas. The Foundation's pediatrician reviews the child's growth and development by physical examination, screening tests, checking blood pressure level, vision, hearing and anemia detection on each scheduled visit. These visits are also a time to review and discuss each of the important areas of childhood development, including physical, cognitive, emotional and social development.

Since the Fundación Baylor Argentina program started in Añelo, from February 2018 to May 2019, we have performed **1,517 well-child visits** with a complete examination including a review of growth, a complete birth history, information of prior screenings, diet, sleep, dental care and medical, surgical, family and social histories. Also **1,517 immunizations schemes** were reviewed and updated as needed.

Twenty percent **(20%)** of the children seen by the program are under follow up for conditions identified through the screening, including: anemia, obesity, malnutrition, hypothyroidism, celiac disease, rheumatic diseases, cryptorchidism and dermatological diseases.

Identifying possible problems and early disease detection gives our children the best chance for proper and successful treatment.

Lessons learned: Well-child visits for infants and young children provide opportunities to screen for medical problems, to provide preventative guidance to parents and caregivers, and to promote good health. Through the screenings we have detected conditions early and provided timely treatment.

Healthy behaviors are important to instill at a young age, and the well-child visit is a time to review these important behaviors, such as nutrition, sleep and physical activity**.** We believe that a strong doctor-patient relationship is good for children and families.

Next Steps: We plan to continue to raise awareness about the importance of preventive health care visits, to start working on a follow-up program for patients with detected pathologies (20%) with our new health promoter to ensure treatment is followed and is successful. Finally, we will begin a series of community preventative health workshops and childcare knowledge dialogues.

10. MORE CONTRACEPTIVES, LESS TEENAGE PREGNANCIES

Lic. Berardi Victoria

Problem: The occurrence of pregnancies before physical, mental or social maturity has both short and long term consequences that harm the right of children to a healthy childhood and adolescence thus affecting the later stages of the life cycle. In Argentina, estimates have that 109,000 teenage pregnancies are registered a year, 3000 of which are in girls under 15 years old. From there, 83.4% and 58.9% respectively were not wanted. This leads to school dropout as a secondary consequence or else as a result of maternity. At present, there is a very effective method for teenagers, a sub-dermal implant, which in turn is short of supply.

Purpose: To cut down on the number of teenage pregnancies, especially those unwanted and therefore encourage family planning. The woman and the family can then decide when to, according to their

circumstances. Currently available options for the population of Añelo include: oral and injectable contraceptives, condoms, IUD and sub-dermal implants. The latter becomes very effective as once implanted it lasts 3 years and does not depend on other methods. Based on these options the woman is to choose the one that best fits her lifestyle and her maternity will.
Methodology: Sip (IT perinatal system) database was checked correspondingly for the June 2017 - June 2018 period, compared to June 2018 – June 2019. Taking into account the number of pregnant patients seen in the city of Añelo under the age of 19 included.
Results: In the city of Añelo, of the 64 patients seen in the June2017 - June 2018 period, 17 teenage pregnancies were found (25.56 %), and of the 90 patients seen for the June 2018-June 2019 period, 18 teenage pregnancies under 19 years old were registered, amounting to 20%. Reduction reaches 5.56% after the implementation of the teenage pregnancy prevention program in the said location.
Conclusion: To offer Añelo's location, through health care services, the possibility to choose a contraceptive method, with the corresponding information, which renders a lower rate of teenage pregnancies in the location year-on-year. Consequently, the location can offer better life quality and family planning which excludes unwanted pregnancies and the physical, mental and emotional complications this might bring in a person's life.

11. SELF HPV SAMPLING

Lic. Berardi Victoria

Problem: The World Health Organization (WHO) considers that, annually in the world, 530,000 women are diagnosed cervix cancer (CCU), and around 275,000 will die for the illness. Cervix cancer is the second cause of death for cancer in women between 35 and 64 years old. In Argentina 5.000 cases are diagnosed a year and 1.800 die for the illness. Detection is mainly hindered by access to controls. Obstacles include long distances to the health center, time needed, family and labor organization, as well as difficulties in getting doctor's appointments so that the condition is detected late or at an advanced stage.
Purpose: The goal of the cervix cancer prevention program held in the location of Añelo under Fundación Baylor, is to break with the barriers that prevent women with the risk of developing the condition to obtain an early diagnose through an easy access tool and early screening in the natural history of the pathology, such as the self-test for HPV, and with that a lower number of deaths for this cause.
Methodology: A population of 100 women between 30 and 64 were screened in the location of Añelo, excluding pregnant women, in the January 2018 – June 2019 period. Using the self-test methodology for HPV, i.e., the women themselves collected the sample comfortably and simply from their homes. The kit counts on a soft brush to take vagina cells. Women introduce it themselves and turn it inside, and then they place it in a tube. The sample is then sent to be analyzed in the city of Neuquén. Results are obtained in less than 15 days. Of the samples taken, those positive are virus carriers, and therefore, candidates to develop cervix cancer. In order to be able to detect this, once the positive result is obtained, tests continue with a Papanicolaou test, as recommended by the National protocol.
Results: Of the 575 women in Añelo in the age rank assessed, the HPV self-test was taken in 100. Positive for the HPV virus were 29 (19.31%). So, percentage of positive tests in Neuquén is 15%. Those women were adequately followed-up pursuant to the triage protocol for cervix cancer.
Conclusion: This self-test modality became adequate to pull down barriers hindering cervix cancer prevention measures. It has been widely accepted among women, given its simplicity and sample extraction speed, the possibility of taking it without going somewhere, and its prompt results. This activity enabled the timely detection of pre-cancer and cancer cells and their adequate treatment and control. It helped cut down women mortality because of this illness.

12. DESCRIPTION OF A MENTAL HEALTH SCREENING PROGRAM AT BOTSWANA-BAYLOR CHILDRENS CLINICAL CENTER OF EXCELLENCE

O. Phoi[1], M.Brookes[1], O. Tshume[1], T. Tembwe[1], M. Monyane-Pheko[1], M. Matshaba [1,2]
[1]Botswana Baylor Clinical Centre of Excellence, Gaborone, Botswana
[2]Baylor College of Medicine, Houston [3] University Pennsylvania, Philadelphia, Pennsylvania.

Background: Globally, 1/5 of youth have a mental health diagnosis; and, suicide is the 3rd most common cause of death for adolescents worldwide [1]. This problem is *further* amplified in developing settings where opportunities for treatment are severely limited. The Botswana-Baylor mental health screening program was implemented in February 2019 after the realization that there was a high prevalence of mental health problems among HIV positive and adolescents. Through daily mental health screening, the clinical psychologist manages an average of 5 cases with on suicide ideation, delusions, severe scores on depression, anxiety and substance abuse. Thus so far, the program has screened over 685 adolescents.
Description: The COE mental health program is a quality improvement initiative that was initiated after the death of one adolescent who committed suicide, who was doing well clinically and academically. The Psychology Intern and a Research Assistant invites all adolescents aged 13 to 24 years for mental screening on daily basis as they come for their clinic appointments. These adolescents are offered to repeat the screening at regular quarterly visits to the clinic.
If an adolescent agrees to be screened, the patient is send to a screening room and the team orientates the client on the procedure. Patients are also made aware that they have an option to use either the Setswana or English version on a tablets computer pre-loaded with for depression (PHQ-9), anxiety (GAD7), substance use (RAB and Audit), and general psychological disease (SSQ). If the patient has some difficulty with reading, the questions are clearly read to them by the team as the client gives verbal responses. Those with the red flag or severe results, the (Red-Cap will alert the screening coordinator) are immediately sent to the clinical psychologist either as an emergency or urgent cases.
The following procedure indicates management of the cases:

Psychological emergency as indicated above means that a client is showing signs of psychosis or indicates suicidal ideation. Thus answering yes to question:
I have thought about killing myself
Answering yes to the question: I see or hear things others don't see or hear
Psychological urgency is defined as scores as below <u>without the red flags</u> as indicated

1. Scoring above 20 on the PHQ9
2. Scoring above 15 on the GAD7
3. Scoring above 12 on the SSQ
4. Scoring above 20 on Audit

If mild to moderate score referral is to other members of the psychosocial team.

Lessons learnt: Doing well clinically and academically does not necessary mean that the patient is mentally stable. Regular mental health screening provide insight whether psychological symptoms are present hence provision of interventions on time. Improvement in mental health functioning for the patients may prevent future adherence and psychological challenges.

13. A CASE STUDY OF PROTEASE INHIBITOR (PI) HIGH LEVEL RESISTANCE IN A 3-YEAR-OLD CHILD ON ART IN BOTSWANA.

J. Farirai[1], B. Thuto[1], M. Matshaba[1,2]
Botswana-Baylor Children's Clinical Centre of Excellence, Gaborone, Botswana 2.
Baylor College of Medicine, Houston, Texas

Introduction: ART has been shown to be highly effective in children living with HIV, with a significant proportion of infants started on ART surviving into adulthood. According to the Botswana ART guidelines all infants testing HIV positive should be immediately commenced on ART therapy and the regimen of choice is

Protease inhibitor-based, with NNRTI being avoided due to concern of resistance as single dose Nevirapine is given at birth to all HIV-exposed infants.

Case Presentation:3 years old O.K , was commenced on ART (Zidovudine/ Lamivudine/Lopinavir /r) at age of 3 months. The mother was diagnosed HIV late in pregnancy and commence ART, however she delivered within 2 days of starting ART. At birth O.K received single-dose Nevirapine and commenced Zidovudine for 4 weeks as prophylaxis for PMTCT. He was formulae fed. He tested HIV DNA PCR positive (16/11/15), at age of 2 months and commenced ART one month later. Intolerance to medications and poor adherence/supervision resulted in virological failure.

Lab Results while on AZT/3TC/ Lopinavir/r

	Dec/2015	July/2016	Sept/2016	Dec/2016	May/2017	Aug/2017	Mar/2018	Aug/2018
VL	Not available	619 710	>750 000	52 130	<400	>750 000	634 529	102 320
CD4	388/15%	670/14%	977/11%	-	-	1125/19%	-	1710/15%

Resistance Assay (06 April 2018)- 28 months on ART

PI mutations:

M46I, I50V, I54V, V82A

High level Resistance : Lopinavir/r, Atazanavir/r, Saquinavir/r, Nelfinavir/r, Indinavir/r, Fosamprenavir/r

Intermediate Resistance: Darunavir/r, Tipranavir/r (No available Childrens Formulations)

NNRTI Mutations:

D67N, M184V, T215Y, K219KQ

High level Resistance: Lamuvidine, Emtricitabine, Zidovudine, Stavudine

Intermediate Resistance: Abacavir, Didanosine,

Low level Resistance : tenofovir (No available Childrens Formulations)

NNRTI

No Mutations, EFV, NVP susceptible

Commenced Salvage ART (Sept 2018)- Abacavir, Lamuvidine, Efavirenz and Lopinavir/r

Lab results after switch to Salvage ART

	Nov/ 2018	Jan/2019	Mar/2019	May/2019
Viral Load	1724	<400	595	544
CD4	1710/18%	1992/23%	1509/17%	1190/19%

Lessons learned: Despite the high genetic barrier to resistance associated with Protease inhibitor based ART regimens multi-drug PI resistance can develop in a few years while on ART in children with concurrent poor adherence. This results in limited options of ART regimens in children with HIV PI-resistance. However Salvage ART even consisting of drugs with resistance mutation can significantly reduce viral load, which would keep the child alive for them eventually switch to Dolutegravir based regimens when age and weight is appropriate (NB- Raltegravir children's formulations, not available in Botswana).

Conclusions: Salvage ART regimens on a background of multi-drug resistance can improve clinical outcomes in children as there are limited options of regimens available for children. More ART drug formulations for children need to be developed to increase treatment options for this vulnerable group.

14. PREDICTORS OF LOST-TO-FOLLOW-UP AMONGST ADOLESCENTS ON ANTIRETROVIRAL THERAPY IN AN URBAN SETTING IN BOTSWANA

J. Farirai[1], D. Cooper 3, A Sathyamoorthi1, M. Matshaba[1,2]

1. Botswana-Baylor Children's Clinical Centre of Excellence, Gaborone, Botswana

2. Baylor College of Medicine, Houston, Texas 3. University of Western Cape, School of Public Health.

Background: There has been a gradual increase in the proportion of adolescents living with HIV being enrolled on anti-retroviral therapy (ART) in Botswana, with more than 90% accessing this life saving therapy. During this turbulent period, significant proportion became lost-to-follow-up (LTFU) from the ART care, reversing the initial gains attained. The factors associated with lost-to-follow-up in this vulnerable HIV positive adolescent population in Botswana are generally unknown, as most studies on this subject are focused adults. This study therefore aims to investigate the rate and factors associated with lost-to-follow up amongst middle and late adolescents (15-19 years) on ART at Botswana-Baylor.
Methods: The research design in an observational comparison between those LTFU on ART and those retained on ART from June 2003 to December 2018. Data on the risk factors were retrospectively extracted from patient records stored in a data-base at the clinic. The data were analyzed using Epi-info 7 statistical software.
Results: The study had 133 of those LTFU among adolescents (15-19 years) and who were matched with 133 of those not LTFU(Rate 1:1). The LTFU rate in the clinic was estimated at 4.6%. Using bivariate analysis, there were significant associations between LTFU and the following variables: CD4 count (prior to LTFU), detectable viral load, past history of Tuberculosis, PI-based ART regimen and suboptimal adherence. There was no association between LTFU and relation to caregiver, baseline CD4 and WHO clinical staging. However after multivariate analysis, only detectable viral load and suboptimal adherence were independent predictors of lost-to-follow-up. Middle and older adolescents lost-to-follow-up were 5 times more likely to have a detectable viral load and 4 times more likely to have suboptimal adherence than those not lost-to-follow-up.
Conclusion: Multiple factors are associated with LTFU in older adolescents in our setting. These study findings are significant and will assist Botswana-Baylor clinic in identifying adolescents that require extra support in retention to care which will lead to improved clinical outcomes. More studies, however, are necessary at regional public sectors due to the sizeable number of people living with HIV in middle and late adolescence where lost-to-follow up could be higher.

15. EARLY OUTCOMES OF A CERVICAL SCREENING PROGRAM FOR YOUNG WOMEN IN BOTSWANA

M. Matshaba[1,2], B. Mathuba[1], K, Mokete[1], O.Tshume[1], T. Phologolo[3]
1. Botswana-Baylor Children's Clinical Centre of Excellence(COE), Gaborone, Botswana
2. Baylor College of Medicine, Houston, Texas, USA
3. University of Botswana, Gaborone, Botswana

Introduction: Even though the visual inspection with acetic acid (VIA) screening is freely available in health facilities in Botswana, the uptake remains low, especially among young people due to the WHO recommended screening age of 30 years. Anecdotal evidence suggest screening must start earlier in sexually active young women born with HIV. The objective of the study is to describe the early outcomes of a new screening clinic for young women opened in December 2017 at COE.
Methods: Data were extracted from the COE's electronic medical records, clinic registers and patient files from December 2017-December 2019.
Results: Of the 148 clients seen in the facility 103 were below age of 25 years with 99 of these (Average 21,47 years) being HIV positive. Of HIV positive adolescents 4.5% had history of smoking tobacco (N=44), poor condom use (N=96) at 41.67% and eight (or 8.08%) aged18-24 years (Average 22.1 years) had a positive VIA. Of these, 2 were treated with cryotherapy, 6 were sent for Pap smear(PS) and/or referred to gynaecologist due to extensive lesions or genital warts. PS results showed 1 negative, 2 atypical squamous cells of undetermined significance(ASCUS), 3 LSIL. Other infections recorded included HPV infection, genital warts, vaginal discharge. Of note, 6 with had negative screen or ineligible for VIA or with genital warts and/or other infections.
Conclusion: Our observations reveal a complex sexual history characterized by poor condom use. A significant proportion of the population already had lesions requiring treatment. VIA results did not differ too much with PS. To our knowledge this is the first report of high prevalence of cervical lesions in a

population of African adolescent girls and young women born with HIV. More extensive research is required to understand factors associated with cervical dysplasia in this group.

16. COMMUNITY ADVISORY BOARDS AS A MODEL FOR EFFECTIVE COMMUNITY ENGAGEMENT IN THE COLLABORATIVE AFRICAN GENOMICS NETWORK IN BOTSWANA.

Regonamanye T, Mathuba K, Mokete K, Kyobe S, Mathuba B, Matshaba M
[1]Botswana Baylor Clinical Centre of Excellence, Gaborone, Botswana
[2]Baylor College of Medicine, Houston
[3] Baylor College of Medicine Children's Foundation Uganda.

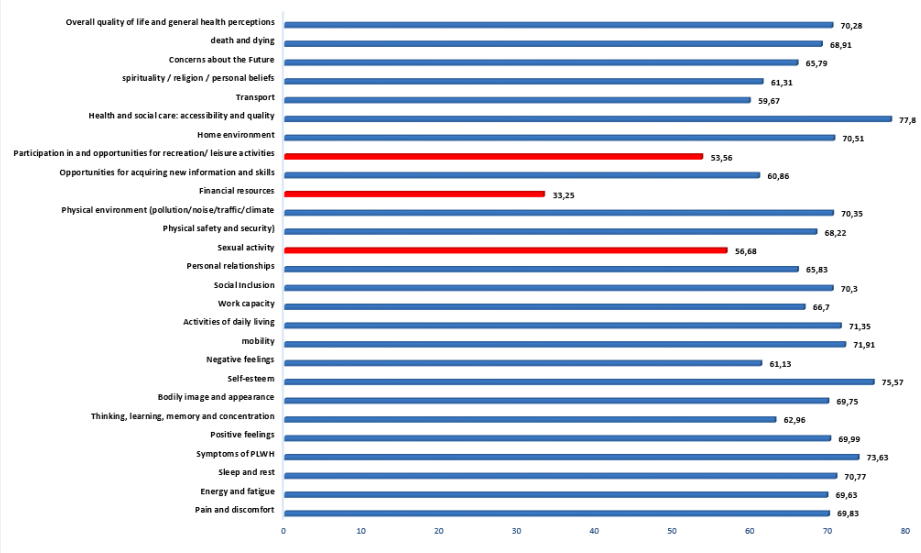
Background: Collaborative African Genomics Network (CAfGEN) is a Human Heredity & Health in Africa (H3Africa) affiliate and National Institutes of Health (NIH) funded study with the aim of integrating genetics and genomics technologies to probe host genetic factors that are important to the progression of HIV and HIV-TB co-infection in sub-Saharan African children. Study recruitment is conducted in three African sites in Uganda, Botswana and Eswatini, while genomics analysis is done by African doctoral students in Texas, USA. Collaborative genomics studies of this nature require effective community mobilization and engagement to encourage community participation. Over the years, community engagement has emerged as a key area in developing best ethical practice for researchers involved in H3Africa. Community Advisory Boards (CABs) is an effective method to engage both the researcher and the community. Projects in the H3Africa set up CABs involving a number of community representatives that meet regularly to act as intermediaries between the researchers and the community.
Description: The CAfGEN CAB in Botswana was established in 2015, it comprises of twelve key stakeholders with expertise and interest in children namely Ditshwanelo, (a human rights organization), youth representative, Childline Botswana(Orphanage), Men and Boys for Gender Equality(Male Engagement Organization), Botswana Network on Ethics, Law and HIV/AIDS, general community, Infers Group(Youth Led Company), Botswana Council of Churches, Ministry of Youth Empowerment, Sport and Culture Development and Botswana Network for People Living with HIV/AIDS. The main role of the CAB is to be a guardian of CAfGEN study participants. CAB meetings are held monthly to be updated and provide feedback on study progress. The highlight of the CAB engagement with the community was the development of genome adventure comics. This is a four series story that is in 8 African languages; English, Setswana, Luganda, Swahili, Arabic, Hausa, French and Portuguese. The target for these comic books was school going children, youth and adults. During the CAB monthly meetings, useful feedbacks and suggestions were provided on graphics, method of distribution, and monitoring and evaluation. The comic books were piloted in schools and Gaborone Teen club. Participants were given a pre-test before reading the comics and a post-test after reading. Once completed, the books were distributed and launched in Botswana, Tanzania and Uganda. The books are also freely accessible online.
Lesson learnt: The CAB has provided useful guidance and feedback to CAfGEN study and is thus a suitable model for resource limited settings. Early engagement with community leads to a well accepted conduct of study as there is buy in from the community. The CAB recommended the development of a scientific comic genome adventures book as part of engaging the public which has been well received the world over.
Next Steps: The model will continue to be used in the next funding phase of the CAfGEN study. The CAB will help with further development of 2 more books to deal with other research issues. We hope to publish this experience so that other communities can benefit from the model.

17. BEYOND SURVIVAL – STRATEGIES TO PROMOTE THE QUALITY OF LIFE OF HIV INFECTED YOUNG ADULTS AT BOTSWANA-BAYLOR.

G. Karugaba[1], M. Makhele[1], K. Katse[1], R. Kgaswane[1], M. Matshaba[1, 2]
1. Botswana-Baylor Children's Clinical Centre of Excellence, Gaborone, Botswana.
2. Baylor College of Medicine, Texas Children's Hospital, Global HOPE, Houston, Texas, USA.

Background: As more HIV infected adolescents survive into young adulthood, there is a push to better understand and promote their quality of life (QOL). Young adults with HIV (YALH) have to contend with challenges related to HIV infection while faced with the developmental tasks of this important phase in life. However, not enough is known about the special strengths, vulnerabilities and QOL of this growing population in Botswana. The aim of this study was to assess the QOL of YALH and identify their perspectives on how to promote their QOL. The results of the study will inform quality improvement at Botswana-Baylor.
Methods: We used 1) WHOQOL-HIV BREF instrument to assess the QOL of YALH aged 18-29 years. The WHOQOL Group recommends a minimum of 300 participants in sites using the instrument for the first time. 2) in-depth interviews (IDI) with 40 purposefully sampled participants. IDI sample size was determined by data saturation.
Results: 242 females and 257 males were surveyed. As shown in figure1, the median of overall quality of life and general health perceptions (<70) was used as the upper cut off for poor QOL. The lowest mean QOL scores were recorded in the financial resources facet (33.25); opportunities for recreation/leisure activities (53.56); and satisfaction with sexual life (56.68). IDI results show risk factors of poor QOL to include: poor school performance/achievement; financial stressors due to unemployment/underemployment; orphan hood; stressful romantic relationships; fear of stigma and disclosure; limited social support; poor self-acceptance/image; single parenting by young women; worries and fears about the future; and treatment related challenges. YALH's recommend establishment of policies and programs to increased access to vocational training opportunities; preferential access to youth development schemes; expand employment opportunities for low skilled people; creating and environment of care and concern and protection; and group level interventions to promote self-image, self-confidence and self-esteem in order for YALH to live independently.
Conclusion: Results of this study demonstrate that being on ART alone does not guarantee good QOL. Many other factors are responsible for QOL of YALH. Many risk factors for low QOL identified by this study are potentially modifiable and can be effectively targeted for policy and interventions to maximize patients' QOL. A multi-sectoral approach is needed to promote the QOL of YALH. However, health care encounters offer opportunity for professionals to have a positive influence on the QOL of YALH and also act as a gateway to other services such as social welfare support, business financing and mental health care.

Figure1: The QOL of YALH at Botswana-Baylor (N=499)



18. IMPACT OF CHANGE IN CONSULTATION PRIORITY OF DROP-IN PATIENTS AT THE BOTSWANA BAYLOR CHILDREN'S CLINICAL CENTRE OF EXCELLENCE (COE)

B. Mathuba[1], S. Malanga[1], D.Dipotso[1], O. Tshume[1] , M. Matshaba[1, 2]
1. Botswana-Baylor Children's Clinical Centre of Excellence, Gaborone, Botswana (BBCCCoE)
2. Baylor College of Medicine, Houston, USA

Background: The Botswana-Baylor Children's Clinical Centre of Excellence (COE) is the largest paediatric and adolescent HIV Clinic in Botswana serving in excess of 3500 patients across the country. Patients presenting for medical consultation at the COE are given numbers according the different sections of care they came for. Each number is preceded by a descriptive alphabet;
N or F: (national program or family Model clinic) for routine visits. The former for paediatric and adolescent patients while the latter is for care givers and young adults.
S: (screening) for transfers, first visits, PreHAART and HAART initiation
D: (drop ins) for routine patients who present on days other than their appointed dates
SV: (sick visit) for unwell or emergency patients.
N/F patients are seen on a first come first served basis. S and SV patients are priority patients while D patients were seen after all other groups of patients. This meant that D patients would wait for long periods of time before being consulted. This practice was initially introduced in 2013 as a deterrent when drop in patient numbers were overwhelming to the clinic. On 25/02/19 in a clinicians meeting, a decision was taken to abolish the issuing of D numbers as it was anecdotally seen as punitive by patients (some cited it as the reason for hesitation and procrastination after missing appointments) and clinicians alike. This review serves to document the short term impact of this policy change on the drop-in trends.
Methods: A review of the drop in register was done from the beginning of 2019 to the end of March 2019 as it had section of both pre and post change data from. Records from prior years were not considered (to minimise the likelihood of differences due to Socio-political changes from different years). In this time period, 36 clinic days occurred prior the policy change date while 23 occurred after.
Results: 329 Drop-ins came between January to March 2019. They were then categorised as those who came before or after their appointment dates, defaulted drop ins, and unspecified drop ins. The average number of drop ins increased after the policy change. There was also an increase in the number of days patients presented prior to their appointment and a decrease in the days post the appointment. This suggested that patients were getting more comfortable to come to the clinic as soon as they had missed a date or as soon as they knew they would not mange an appointment. It was also noted that drop ins also came earlier as they no longer anticipate being last.

	before policy change	**after policy change**	**implications**
average drops in per day	5.3	6	increasing
average days a patient presents prior to appointment	3.4	3.7	increasing
average days a patient presents after to appointment	5.9	5.6	-decreasing - Less medications missed

Table 1: drop in Averages

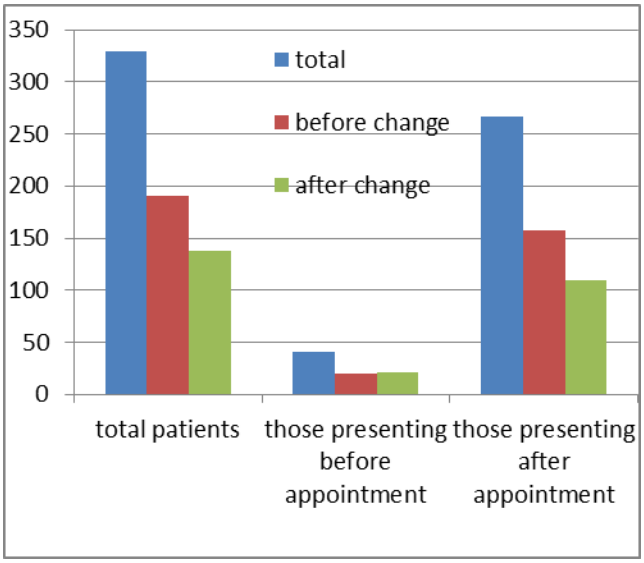


Figure 1: Numbers of Drop in Patients in 2019

Conclusion: Though our findings were not subjected to rigorous statistical interrogation, Policy change in this setting may have both positive and negative impacts on services delivery. Careful analysis and planning for any policy change should be advocated for any proposed change, no matter how small. More work needs to be done in this area.

19. EXAMINING EARNEST IN ESWATINI

Miriam Abadie[2], Sarah Perry[2], Daniel Charlton[1], Tandzile Simelane[1], Bhekumusa Lukhele[1,2]
Baylor College of Medicine-Bristol Myers Squibb Children's Clinical Centre of Excellence, Mbabane, Eswatini
Baylor College of Medicine, Houston, Texas

Background: The EARNEST trial provided evidence that patients with virologic failure on first line ART should be virally suppressed on second line ART regardless of cross resistance to nucleoside reverse transcriptase inhibitors (NRTIs) if an active protease inhibitor (PI) is included in their regimens. Recently in Eswatini, an increased number of genotypes have been sent for patients failing PI-based ART. For patients with genotypes displaying PI sensitivity, the current practice is to continue these patients on PI-based ART regardless of NRTI resistance or prior time on a PI. Although the patient population in EARNEST was failing first line ART and then switched to a new PI-based second line regimen, the patient population in Eswatini was already on PI-based ART with multiple detectable viral loads. This study examines whether patients in Eswatini who were failing PI-based ART were able to suppress their viral loads with the use of an active PI regardless of resistance to NRTIs or the presence of the M184V mutation.
Methods: This retrospective study analyzed all pediatric and adult patient genotypes received between January 2014 and April 2019 at the Baylor College of Medicine Children's Foundation, which is the national referral center for pediatric second line ART failure in Eswatini. Genotypes (57) were included in the analysis if patients had PI sensitivity, did not require third line ART, were still living, and had completed a viral load after genotyping. Eligible genotypes were then reviewed for NRTI resistance and the presence of M184V. Resistance was determined using the Stanford HIV Drug Resistance Database and bivariate analysis was conducted in R.
Results: Of the 57 genotypes with PI sensitivity, 32 patients had a suppressed viral load < 400 copies/ml at any time after genotyping (56%). Compared to patients with resistance to both NRTIs, where 7 of 14 (50%) had viral suppression, 4 of 7 (57%) patients with one predicted-active NRTI had viral suppression (p=0.757), and 21 of 36 (58%) with two active NRTIs had viral suppression (p=0.594). For patients with M184V, 8 of 18 (44%) were virally suppressed compared to 24 of 39 (61%) without M184V (p=0.227).

Conclusions: This study suggests that rates of viral suppression are consistent in Eswatini for patients on PI-based ART regardless of resistance to NRTIs or the presence of M184V. The rates of viral suppression, however, are much lower in Eswatini than in EARNEST, which is likely due to sustained poor adherence in a cohort of mostly pediatric patients. At this point, Eswatini should continue to provide psychosocial support for patients who fail to virally suppress, but novel interventions are needed that focus on adherence support and regimen optimization. Due to the introduction of dolutegravir (DTG) in Eswatini, and evidence that DTG is superior to ritonavir-boosted lopinavir when administered with at least one active NRTI, further studies should examine how DTG-based ART relative to PI-based ART affects viral suppression in patients with varying levels of resistance to NRTIs in Eswatini and similar lower-middle income countries.

20. PERFORMANCE OF TUBERCULOSIS SYMPTOM SCREENING FOR CHILDREN AND ADOLESCENTS LIVING WITH HIV (CALHIV) IN SIX HIGH HIV/TB BURDEN COUNTRIES IN EASTERN AND SOUTHERN AFRICA.

Alexander Kay[1,4,5], Bryan Vonasek[1,2,3], Dilsher Dhillon[1,4], Sandile Dlamini[1,5], Tara Devezin[1,4], Heather Haq[1], Jill Sanders[2,6], Jason Bacha[1,2,4,7], Katie Simon[2,3,8], and Anna Mandalakas[1,4]
[1]Department of Pediatrics, Baylor College of Medicine, Houston, TX, USA
[2]Baylor International Pediatric AIDS Initiative (BIPAI) at Texas Children's Hospital, Baylor College of Medicine, Houston, TX, USA
[3]Baylor College of Medicine Children's Foundation, Lilongwe, Malawi
[4]The Global Tuberculosis Program, Texas Children's Hospital, Department of Pediatrics, Baylor College of Medicine, Houston, TX, USA
[5]Baylor Swaziland TB Center of Excellence, Mbabane, Eswatini
[6]Baylor College of Medicine Children's Foundation-Lesotho, Maseru, Lesotho
[7]Baylor College of Medicine Children's Foundation - Tanzania, Pediatrics, Mbeya, Tanzania
[8]Technical Support to PEPFAR Programs in the Southern Africa Region – TSP, Lilongwe, Malawi

Background: Despite limited evidence, the World Health Organization (WHO) recommends actively screening CALHIV for TB symptoms at every clinical encounter to improve TB case detection. As TB/HIV care is scaled up for CALHIV, the performance of this TB screening approach needs comprehensive assessment. This study evaluates the performance of a four-question TB symptom screen in CALHIV at seven sites across six high TB/HIV burden countries in southern and eastern Africa.
Methods: We performed a retrospective longitudinal cohort study of seven HIV clinics in Uganda, Tanzania (Mbeya and Mwanza), Malawi, Lesotho, Eswatini, and Botswana from January 2014 to June 2017. Data was extracted from electronic medical records for patients under 20 years of age with documented HIV infection. Incident TB disease cases were defined as those initiating anti-TB treatment within 30 days of TB diagnosis and with no previous diagnosis of TB disease at that facility. The most recent symptom screen result within the 30 days preceding a diagnosis of TB disease was analyzed. In accordance with WHO guidelines, any current fever, cough, poor weight gain, or recent TB contact defined a positive screen in children. Any current fever, cough, weight loss, or drenching night sweats defined a positive screen in adolescents.
Results: Our data set analyzed 20,706 patients collectively completing 316,740 clinic visits that included 240,161 documented TB symptom screens and 35,701 (14.9%) positive TB screens. 1592 patients had documented TB disease, of which 1212 (76%) fit inclusion criteria for incident TB disease. TB symptom screen performance measures are shown in the table.
Conclusions: While specificity and negative predictive value performed well, the sensitivity and positive predictive value of the TB symptoms screen were low in our study population. In areas with a high burden of HIV-associated TB, more targeted and accurate screening approaches are needed to optimally identify TB disease in CALHIV.

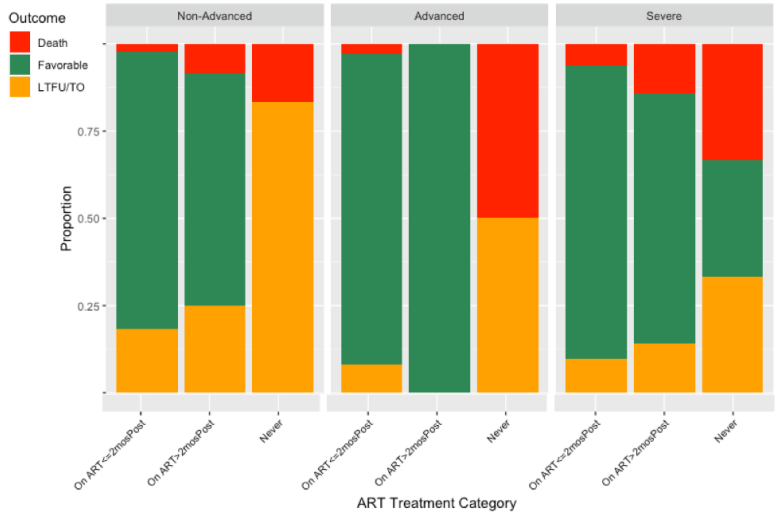
Measure	Estimation	95% Confidence Interval
Sensitivity	61.2%	58.4-64.0%
Specificity	88.8%	88.7-88.9%

Positive Predictive Value	3.2%	3.0-3.4%
Negative Predictive Value	99.7%	99.7-99.7%
Positive Likelihood Ratio	5.5	5.2-5.7
Negative Likelihood Ratio	0.44	0.41-0.47

21. ART INITIATION WITHIN 8 WEEKS OF TB TREATMENT LEADS TO SUPERIOR TB OUTCOMES IN ART-NAÏVE CHILDREN AND ADOLESCENTS LIVING WITH HIV: RESULTS FROM SIX HIGH TB/HIV BURDEN COUNTRIES.

A. Kay[2,4,5], J. Bacha[1,2,3], T. Devezin[2,5], D. Dhillon[2,5], S. Dlamini[4], R. Golin[6], N. Chidah[7], A. DiNArdo[2,5], K. Simon[8], S. Ahmedov[6], N. Fida[6], M. Sekadde[9, 10], G. Schutze[1,2], A. Mandalakas[2,5]
[1]Baylor International Pediatric AIDS Initiative (BIPAI) at Texas Children's Hospital, Baylor College of Medicine, Houston, TX, USA
[2]Baylor College of Medicine, Houston, TX, USA
[3]Baylor College of Medicine Children's Foundation - Tanzania, Pediatrics, Mbeya, Tanzania
[4]Baylor Swaziland TB Center of Excellence, Mbabane, Eswatini
[5]The Global Tuberculosis Program, Texas Children's Hospital, Department of Pediatrics, Baylor College of Medicine, Houston, TX, USA
[6]United States Agency for International Development (USAID), Washington, DC, USA
[7]Baylor Swaziland TB Center of Excellence, Mbabane, Botswana
[8]Baylor College of Medicine Children's Foundation-Malawi Tingathe Program
[9]Baylor Swaziland TB Center of Excellence, Mbabane, Uganda
[10]National Tuberculosis and Leprosy Programme, Uganda

Introduction: Early initiation of antiretroviral therapy (ART) reduces tuberculosis (TB) mortality among adults with AIDS. However, the optimal timing of ART initiation in ART-naïve children and adolescents with HIV (C/ALHIV) with associated TB has not been as clearly demonstrated. This multi-site study measured clinical TB outcomes - relative to timing of ART and anti-TB treatment (ATT) initiation in ART-naïve C/ALHIV.
Methods: Patient data from 2013 to 2017 was extracted from electronic medical records (EMR) and national paper registers at seven BIPAI Centres of Excellence: Botswana, Eswatini, Lesotho, Malawi, Tanzania–Mbeya, Tanzania–Mwanza, and Uganda. Data was analyzed on ART-naïve C/ALHIV with associated TB (ages 0-18.99 years for Tanzania; ages 0-19.99 years for the remaining sites). TB outcomes were assigned in accordance with WHO definitions. An Adaptive Lasso Multi-Variate Regression approach was used to provide consistent unbiased estimates and to perform variable selection.
Results: Of the 463 ART-naïve C/ALHIV with TB analyzed, 73.4% (340/463) had favorable outcomes (cured or treatment completed), 17.7% (82/463) transferred out/lost-to-follow up, and 8.9% (41/463) died. Favorable outcomes were associated with ART initiation <8 weeks (Figure) and older age irrespective of immune status. C/ALHIV who initiated ART <2 months of ATT initiation were 65% less likely to have unfavorable outcomes (OR = 0.35, p = 0.04, 95% CI 0.10-0.89), while those with no documentation of ART initiation were 12 times more likely to have unfavorable outcomes (OR = 12.55, p = <0.01, 95% CI 2.57-66.76) (Figure). Older children were 43% more likely to have favorable outcomes (OR = 0.57, p=<0.01, 95%CI 0.34-0.70).
Conclusion: Our findings demonstrate that initiation of ART within 8 weeks of ATT initiation leads to favorable outcomes for ART-naïve C/ALHIV with HIV-associated TB. Special attention must be given to younger ART naïve patients, as their risk of poor TB outcomes is higher than their older counterparts.



Disclaimer: The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the U.S. Agency for International Development, the U.S. President's Emergency Plan for AIDS Relief, or the United States Government. This brief has been supported by the U.S. President's Emergency Plan for AIDS Relief (PEPFAR) through the U.S. Agency for International Development.

22. INTEGRATED TB/HIV CARE AND TREATMENT IMPROVES OUTCOMES AMONG CHILDREN AND ADOLESCENTS LIVING WITH HIV

T. Devezin[1,2], J. Bacha[1,2,3,4], A. Kay[1,2,5], D. Dhillon[1,2], R. Golin[6] , A. DiNardo[1,2], S. Dlamini[5], S. Ahmedov[6], N. Fida[6], N. Chidah[7], R. S. Wanless[4], A. Mandalakas[1,2]
[1]Baylor College of Medicine, Houston, TX, USA
[2]The Global Tuberculosis Program, Texas Children's Hospital, Department of Pediatrics, Baylor College of Medicine, Houston, TX, USA
[3]Baylor College of Medicine Children's Foundation - Tanzania, Pediatrics, Mbeya, Tanzania
[4]The International Pediatric AIDS Initiative (BIPAI) at Texas Children's Hospital, Baylor College of Medicine, Houston, TX, USA
[5]Baylor Swaziland TB Center of Excellence, Mbabane, Eswatini
[6]United States Agency for International Development (USAID), Washington, DC, USA
[7]Baylor Swaziland TB Center of Excellence, Mbabane, Botswana

Background: Tuberculosis (TB) is the leading cause of mortality in people living with HIV. Children and adolescents living with HIV (C/ALHIV) are up to 24 times more likely to develop TB compared to HIV-negative peers, and are at risk for worse outcomes. This analysis uncovers gaps in TB care for C/ALHIV enrolled in HIV services.
Methods: TB outcomes of C/ALHIV receiving care between April 2013 and June 2017 were extracted and analyzed across seven BIPAI clinics offering integrated TB/HIV care in Botswana, Eswatini, Lesotho, Malawi, Tanzania (inclusive of two clinics) and Uganda. Data was extracted from electronic medical records and national paper registers.
This study evaluated 22,490 C/ALHIV, including 1,217 individuals who were diagnosed with TB disease (aged 0 – 18.99 years in Tanzania and 0 – 19.99 years in the remaining five countries). Descriptive and bivariate analysis was performed to describe the cohort and inform associations with TB outcomes. An Adaptive Lasso Regression was employed to support optimal descriptive power while offering an unbiased approach for identifying risk factors impacting TB outcome.
Results: TB symptom and contact screening was performed at a rate of >97% across the sites. C/ALHIV showed 4% average annualized prevalence rate of TB disease, with young CLHIV (<5years of age) having the highest risks of developing TB, followed by ALHIV (10-18 years of age). Those with normal/mild immune suppression were 58% less likely to have an unfavorable outcome compared to those with advanced

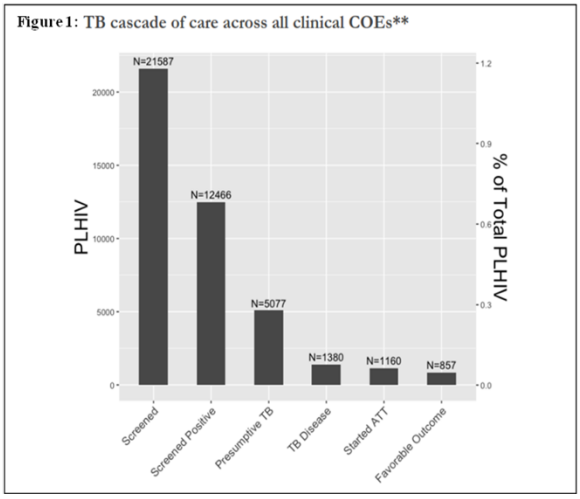
immune suppression. Antiretroviral therapy (ART)-naïve patients who received ART within 2 months of TB diagnosis were 59% less likely to have an unfavorable outcome compared those starting ART after 2 months or 6 months preceding (OR = 0.41, P < 0.0051).
Conclusion: This analysis supports the continued need to promote policies and practices that fully integrate pediatric and adolescent HIV and TB care and treatment. Children under five and adolescents living with HIV show particular risk for TB, and early ART initiation mitigated this risk. Integration of TB screenings within HIV services affords an opportunity to promote early TB case detection and improved outcomes. Fully integrated TB/HIV care and treatment is effective and should be an adopted model of care for C/ALHIV.
Disclaimer: The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the U.S. Agency for International Development, the U.S. President's Emergency Plan for AIDS Relief, or the United States Government. This brief has been supported by the U.S. President's Emergency Plan for AIDS Relief (PEPFAR) through the U.S. Agency for International Development.

23. ACTIVELY CONTRIBUTING TO A CASCADE OF CHANGE: ANALYSIS OF THE TB TREATMENT CASCADE AMONG CHILDREN AND ADOLESCENTS LIVING WITH HIV IN SIX HIGH TB/HIV BURDEN COUNTRIES.

A. Kay[2,4,5], J. Bacha[1,2,3], T. Devezin[2,5], D. Dhillon[2,5], R. Golin[6], S. Dlamini[4], N. Chidah[7], S. Ahmedov[7], N. Fida[7], R. S. Wanless[1], A. Mandalakas[2,5]
[1]Baylor International Pediatric AIDS Initiative (BIPAI) at Texas Children's Hospital, Baylor College of Medicine, Houston, TX, USA
[2]Baylor College of Medicine, Houston, TX, USA
[3]Baylor College of Medicine Children's Foundation - Tanzania, Pediatrics, Mbeya, Tanzania
[4]Baylor Swaziland TB Center of Excellence, Mbabane, Eswatini
[5]The Global Tuberculosis Program, Texas Children's Hospital, Department of Pediatrics, Baylor College of Medicine, Houston, TX, USA
[6]United States Agency for International Development (USAID), Washington, DC, USA
[7]Baylor Swaziland TB Center of Excellence, Mbabane, Botswana

Introduction: While substantial attention has been given to facility-based TB symptom screening, analyses of the subsequent TB diagnostic and treatment cascade has been remarkably limited. To inform comprehensive TB care for children and adolescents living with HIV (C/ALHIV), this study analyzed retention within the cascade among C/ALHIV in sub-Saharan Africa.
Methods: Patient data from 2013 to 2017 were analyzed from electronic medical records and national paper registers utilized at seven BIPAI Centres of Excellences (COEs): Botswana, Eswatini, Lesotho, Malawi, Tanzania–Mbeya, Tanzania–Mwanza, and Uganda. Data were analyzed on C/ALHIV (ages 0- 18.99 years in Tanzania; ages 0-19.99 years in the remaining five sites) along the TB cascade. TB symptom screening, diagnosis, and treatment practices followed national and COE protocols. TB treatment outcomes were defined in accordance with WHO definitions.
Results: Of the 22490 patients analyzed, 96% (21587/22490) completed TB symptom screening, and 58% (12466/21587) had a positive screen at one or more visit during the analytic period. After clinical evaluation, 41% (5077/12466) of C/ALHIV with a positive symptom TB screen were classified as presumptive TB, and 27% (1380/5077) of those were diagnosed with TB. TB treatment was initiated in 84.1% (1160/1380) of C/ALHIV with TB, of which 73.9% (857/1160) had favorable outcomes (cured or treatment completed). Among C/ALHIV with available data, TB was bacteriologically confirmed in 32% (216/675) of those initiating anti-TB treatment (ATT).
Conclusion: Facility-based TB symptom screening is feasible early in the TB cascade. High rates of positive TB symptom screening and presumptive TB cases, combined with drop offs in TB diagnoses, ATT initiation, and favorable outcomes underscore the need for improved retention throughout the TB cascade. Thorough follow-up and action along the cascade are needed to ensure that presumptive TB cases receive appropriate diagnostic evaluation, workup, and treatment, particularly in the late downstream steps.

Figure 1: TB cascade of care across all clinical COEs**



24. VIKELA EKHAYA: NOVEL STRATEGY TO MANAGE CHILD TB CONTACT CASCADES IN HHOHHO COMMUNITY, ESWATINI.

Godwin Mtetwa[1], Kay Alexander[2], Anna Mandalakas, Lukhele Bhekisisa[1], Banele Ndlovu[1], Martha matsenjwa[1], Musa Makhabela[1] , Hloniphile Gama[1]
1. Baylor college of Medicine Children's Foundation Swaziland, Mbabane.
2. Global TB Program, Department of Pediatrics Baylor College of Medicine, Children's Hospital, Houston, Texas, USA

Background: Eswatini has a tuberculosis (TB) incidence rate of 308 per 100,000 population and adult TB/HIV coinfection rate of 69%. The percentage of children (age <5) who had household TB exposure and were reported nationally in 2017 as having received TB preventive therapy (TPT) is very low (n=89, 7%).We describe a community based TB contact management intervention with linkages to health care services for enhanced diagnostics.
Description: Vikela Ekhaya TB project is a household TB contact management program that actively identifies people with recent household exposure to TB through community based clinical evaluation and prompt diagnoses of people with active TB. It supports the activities of community Active Case Finders (ACF) and capacity building of health care workers to collect pediatric TB samples (sputum and stools), evaluation of TB/HIV and provision of TPT.
Entry into the project involves TB Nurses using a TB contact management application to enroll TB index cases identified at facilities. Household TB contacts are identified and assigned to project mobile outreach teams. Two nurse-led mobile outreach teams coordinate with ACFs and schedule home evaluations to screen all household TB contacts.
Under 5 children who are screened positive for TB symptoms are referred to Basic Management Units (BMU) with transport assistance for further evaluation. Eligible persons are initiated on TPT, either on 3HR or 6H based on their HIV status. Families who decline home evaluations are given an option for clinic based evaluation and follow up.
Lessons Learnt: Data analysis for the first two months of the project indicated that 58 homes had been visited by the mobile teams. 266 household contacts were evaluated, of which 27% (n=71) were children under the age of 5 years and 62 ultimately initiated TPT after TB exclusion. An additional 16 PLHIV initiated TPT in the community. The mobile outreach teams identified 9 children (<5 years) as having TB symptoms, these were referred to facility based childhood TB evaluation. These referrals included medical examination and the collection of induced sputum and gastric aspirate sample resulting in 1 confirmed TB case, by stool Xpert Ultra, in a child < 5 years. Of the evaluated 266, 85% (n=225) had documented up-to-date HIV status. HIV screening was provided for 30/40 patients who had an unknown HIV status. The first two months of the project taught us that process of digitalization of community health data systems requires sustained staff

development and capacity building of both health care workers and ACF. Working with ACF increases prospects of successful leveraging grass-roots platforms to educate and support TB screening, uptake of TPT and referral linkages to health services.
Next steps: Sustainable and affordable community based TB preventative medicines should be scaled up while strengthening linkages into care. Real time TPT community based data using mobile care teams is feasible and allows strengthening and capacity building of communities to participate in their own health care

25. MISSED OPPORTUNITIES FOR HIV SCREENING PRIOR TO DIAGNOSIS OF PAEDIATRIC PATIENTS: IMPLICATIONS FOR ATTAINMENT OF THE FIRST AND SECOND UNAIDS FAST-TRACKED 95-95-95 TARGETS

Florence Anabwani-Richter[1], Thembela Mavuso[1], Bhekumusa Lukhele[1, 2]
Baylor College of Medicine-Bristol Myers Squibb Children's Clinical Centre of Excellence, Mbabane, Eswatini
Baylor College of Medicine, Houston, Texas

Background: Despite dramatic reductions in perinatal human immunodeficiency virus (HIV) transmission in Eswatini following implementation of robust PMTCT guidelines, and early linkage and initiation of paediatric patients on antiretroviral therapy (ART) following roll-out of the Test and Start ART guidelines, obstacles to early paediatric HIV diagnosis that include failure to test pregnant women for HIV before delivery and missed opportunities to test and follow-up paediatric patients during the neonatal, infancy and adolescence periods often lead to HIV transmission.
Methods: This abstract describes the contribution of missed opportunities for paediatric HIV prevention to HIV transmission in paediatric patients transferred-in to Baylor-Eswatini COE between July-2017 and May-2019. A retrospective chart review of 32 patients referred to Baylor Clinic for ART initiation during the abovementioned period was done. Of these, majority never been tested for HIV prior to their presentation at the clinic despite having been seen at peripheral clinics and regional referral hospitals for sick visits and immunization.
Results: The ages of the paediatric patients in the cohort analysed was 2-weeks to 16 years, with the mean age of 5.6 years and standard deviation of 4.9years. 29/32 (90.6%) of these patients were not tested for HIV when they presented to different health care facilities at different points in time during documented immunization and sick visits. The odds of having an HIV test done during their first facility visit were 15 times lower among children and adolescents who presented for a sick visit of for immunization at a peripheral clinic [adjusted odds ratio (aOR): 15.7; 95% confidence interval (CI): 11.12–21.81]. On average, Baylor COE was the third health facility which they presented to prior to HIV testing.
Conclusions: Missed opportunities for HIV testing for infants and adolescents during presentation to health facilities for immunization and sick visits contributed to delayed HIV diagnosis and resultant delays in ART initiation of a significant proportion of HIV-infected infants and adolescents. Employing innovative approaches such as point-of-care HIV testing using Alere-Q platforms and a re-testing approach through national policies and guidelines may minimize risk perception. These can be used as strategies in Eswatini, a country of high HIV incidence, to attain global goals of eliminating paediatric HIV transmission.

26. THE IMPACT OF HAVING A PHARMACY AND THERAPEUTICS COMMITTEE IN BAYLOR COLLEGE OF MEDICINE CHILDREN'S FOUNDATION - ESWATINI

Abiy Korsa[1], Xavier Katembo[1], Sandile Dlamini[1], Bhekumusa Lukhele[1]
[1]Baylor College of Medicine Children's Foundation - Eswatini

Background: Medicines can save and improve quality of life, but if misused, it can be dangerous. Formation of Pharmacy and Therapeutics committee (PTC) is an important practice to achieve high quality of care and

prevent misuse and dangers related with medicine use in the health care sector. The PTC is designated to ensure the safe and effective use of medicines in our facility.

Description: The PTC includes a multidisciplinary team, having a chair-person and secretary who directly reports to the Executive Director. The committee is aiming to promote better quality of care and rational use of medicines for achieving high quality of care for our patients in our facility through:-

- Advising medical, pharmacy, and administrative staff
- Developing pharmaceutical policies and procedures
- Evaluating and selecting formulary medicines
- Identifying medicine use problems
- Promoting interventions to improve medicine use
- Managing ADRs and medication errors
- Advise medical, administrative, and pharmacy departments
- Advice and support other clinical organizations on medicine-related issues
- Participate in clinical committees and departments on all matters concerning medicines

The PTC has set annual work plan and key performance indicators (KPIs) which are analysed on a routine periodic bases. The committee meets monthly for evaluation follow-ups of the existing tasks and address medicine related issues and look the best way of improving quality of care.

Lessons learned: The existence of PTC in our facility gave us an opportunity to measure our performance through KPIs which evaluates and show our performances against the standard practice, thereby indicating quality improvement areas. One major gap that was identified through the PTC was malpractices in the prescription of antibiotics, which had led to poor quality of care for our patients. To address this, the committee updated the existing Essential Medicine List and Antibiotic guideline (EML) to assist prescribers refer to a standard practice in as far as antibiotic utilization is concerned. The use of this document has been enforced and monitored by this committee.

Next Steps: We will monitor our performance after the implementation of this EML to see if our practices have improved. Also going forward, we will capacitate health care providers towards quality improvement through the following different strategies; organizing internal and in-house training, ensuring that all guidelines and Job aids are in place, monitoring and evaluation of activities and putting a strategy accordingly towards achieving the set goals, and establishment of sub-committees like antimicrobial resistance and Pharmacovigilance.

27. IMPLEMENTATION OF CHALLENGE CLINIC AT BAYLOR SCOE TO TACKLE CHRONIC POOR ADHERENCE AND ART FAILURE IN PATIENTS ON PROTEASE INHIBITORS-BASED REGIMEN

Mafulu Mundende Yves[1], Tenele Dlamini[1, 2], Sarah Perry[1, 3], Ntombikayise Sibiya[1], Senzo Motsa[2], Sandile Dlamini[1], Bhekumusa Lukhele[1, 3]

[1]Baylor College of Medicine Children's Foundation – Eswatini

[2]Raleigh Fitkin Memorial Hospital

[3]Baylor College of Medicine, Houston, Texas

Background: By the end of 2017, 90% of people living with HIV (PLHIV) knew their HIV status in Eswatini, 85% were on ART and 74% had their viral load (VL) suppressed (UNAIDS, 2019). These figures have since increased getting close to the 2020 UNAIDS targeted 90-90-90. The last 90 is still low raising the need to tackle the contributors to high VL. This is even more critical for children and adolescents taking a Protease Inhibitor (PI)-based regimen. Some adherence issues seem intractable through routine adherence counselling methods. For this reason, an intensified model of adherence counselling named "Challenge clinic" (CC) was developed at Baylor Eswatini. It has been successfully implemented at the main COE in Mbabane since 2014 and has showed positive outcomes. The aim of the intervention is to achieve better virologic and clinical outcomes in patients on PI-based regimens, by improving adherence to care and tackling the underlying adherence and psychosocial barriers, thus slowing down the need of third line ART through a multidisciplinary approach.

Description: In October 2018 we implemented the Challenge Clinic (CC) at Baylor Satellite COE in Manzini. We specifically target patients on PI-based regimens with VL >1000 copies/µl. Generally these patients have chronic poor adherence usually associated with psychosocial issues and sometimes economic problems. We allocate one day a week, Mondays, to this activity. To tackle the issues as a whole and avoid "dissecting" the patient by being seen separately by different care providers, the patient (and ideally their caregiver) is seen by different cadres in the same room (at the very least a doctor and social worker, but ideally an expert client and nurse as well). Occasionally a representative of social welfare is involved when coercive measures for the caregiver need to be taken based on the child's best interest. VL is ideally repeated after 3 months until suppression is reached, or it is clear the client needs a genotype for second line treatment failure.
Lessons Learned: Eight months after implementation, 37 patients were enrolled in CC, 64.9 % are male, and the mean age is 12.3 years, with majority > 14 years (51.4%). Average duration on a PI-based regimen was 3.4 years. 35 were eligible for a repeated VL and 10 of them (27%) already had a suppressed VL (< 200). These results can predict the effectiveness of the intervention. The set-up of the challenge clinic gives an impression of the seriousness of the situation for the patient and the caregiver. Moreover peer support and child's welfare department involvement can bring a positive synergism.
Next steps: Though the intervention is promising based on the interim outcome, it is early to conclude on its sustainable efficacy. We first need to strengthen it. Having an extra social worker on the CC days will allow one to only focus on the CC patients and maximise the benefit of each session. We will continue to track progress biannually and adjust the intervention as we go to maximize effectiveness of the program.

28. INCONSISTENT AND EPISODIC ADHERENCE TO ANTIRETROVIRAL MEDICATION AMONG ADOLESCENTS LIVING WITH PERINATAL ACQUIRED HIV IN THE KINGDOM OF LESOTHO

Ntaoleng Mohlabane*
Baylor College of Medicine Children's Foundation - Lesotho

Background: Adolescents remain one of the population groups with challenges maintaining adherence to antiretroviral treatment (ART) and whose HIV-related complications continue to increase. The majority of children infected perinatally are growing into adolescents and young adults who encounter challenges associated with long-term therapy. In Lesotho, there is a recognized problem with adherence among adolescents leading to regimen changes including second and third-line therapies. Yet, there are limited studies addressing the complicated adherence patterns of adolescents. The purpose of the study is to determine adherence patterns to ART and associated factors among adolescents with perinatal acquired HIV attending clinics in Mohale's Hoek district.
Methods: The study period was May 2018 to December 2018. Using cross- sectional quantitative descriptive approach, adolescents receiving ART at nine local clinics which offer adolescent-friendly services in Mohale's Hoek district were recruited using a validated semi-structured researcher-administered questionnaire. Disclosure status was determined and only those with assent from the adolescent and informed written consent from caregiver were enrolled. Data analysis was done using STATA 13.0 for descriptive categories such as socio- demographic data using univariate analysis, bivariate and t – test.
Results: A total of 130 adolescents aged between 10 to 19 years were enrolled into the study with a mean age was 15 years. The majority (57%) were in the age category of 11 -15 years (n=74), followed by 16 -19 years (n=53) at 41% and lastly 10 years at 2% (n=3). Most of the participants were female (n=74) at 57% and male (n=56) at 43%. The majority were living with grandparents (54%), followed by those living with mother alone (20%). Most caregivers were unemployed 81% (n=105) with only 19% (n=25) with employment. Orphan hood was prevalent with 37% no longer having a mother and 58% no longer having a father. Majority of participants acknowledged challenges taking medications on time at 87%, especially in the evenings 79 %, followed by weekends at 6%. Participants were knowledgeable about the benefits of ART and the consequences of stopping ART.
Conclusions: Adolescents have inconsistent situational adherence patterns often influenced by where they are at the moment of taking ART such that they will miss their doses in the evenings especially in the older

age group of 16-19 years. This adherence pattern is not influenced by lack of knowledge, orphan hood, or type of caregivers. The reason for missing medication for short periods of time was largely influenced by their location at time of administration, routine or social circumstances surrounding their absence from home. Therefore, understanding these behavioural factors can better enable interventions such as scheduling dates or time of taking medication that is convenient to each as they grow and mature.

29. REACHING MEN

Mabene Tsotako, Ernest Chaka*, Jill Sanders, Lineo Thahane
Baylor College of Medicine Children's Foundation – Lesotho
Track 5: Social, Behavioural and Implementation Science

Background: As a group, men are reluctant to seek health care services and often wait until the disease or condition is in a rather more advanced and harder to treat stage before presenting to a health facility. One of the reasons men give for late presentation is that they hate waiting in long queues. In an attempt to reach men for health services, coordinators of the Caring Fathers support group organised a special event on one of scheduled support group meeting days, with the hope that being in a male friendly environment would motivate men to timeously seek medical attention.
Description: Caring Fathers support group is an initiative of Baylor College of Medicine Children's Foundation – Lesotho aimed at engaging male caregivers (fathers, grandfathers, stepfathers, uncles and brothers) in the day to day care of children enrolled at the Baylor College of Medicine Bristol-Myers Squibb Children's Clinical Centre of Excellence (COE). The group meetings are held at the COE on the first Friday of each month, with discussions on topics selected by the participants and coordinators. In March 2019, coordinators chose a new direction – caring for the carers. During morning announcements at the COE, patients and caregivers were made aware that the March Caring Fathers meeting would be a special event for which all men, including those who are not members of the support group, were invited to the COE to receive health care services based on their needs.
On the day, brief health talks were given on: erectile dysfunction, prostate cancer, sexually transmitted infections and prevention (including proper condom use demonstration), pre-exposure prophylaxis, post-exposure prophylaxis, and importance of seeking health care services in a prompt manner. Thereafter, participants were given an opportunity to consult health care providers for a variety of services including blood pressure measurement, HIV testing, TB screening, nutritional analysis, and physician consultation and referral where necessary. The activity was primarily supported by male health professionals.
There were 27 participants; one tested positive for HIV and was linked to care. Four men were referred to Queen 'Mamohato Memorial Hospital for additional services.
Lessons learnt: More work is needed to help men appreciate the importance of active involvement in their own health. There are male caregivers who bring their children or relatives to the COE, yet they are sick themselves and do not seek medical attention.
Next steps: BCMCFL intends to host at least two male-specific clinical events each year. The coordinators will expand communication strategies regarding the events beyond simple announcements at the COE to reach additional participants. Supplemental activities will be developed to support effective referrals and retention in care of men.

30. EVALUATING THE IMPACT OF CAMARA GROUPS

Thithili Makhesi*, Matlotliso Khesa, Mosa Molapo Hlasoa, Jill Sanders
Baylor College of Medicine Children's Foundation – Lesotho

Background: To meet the needs of adolescents and young people living with HIV (AYLHIV) and provide effective adherence support, flexible, responsive and adaptive service-delivery models are required.

Examples of service-delivery models include after-hours clinics, facility- and community-based support groups, and intensive facility-based care.

In September 2017, Baylor College of Medicine Children's Foundation-Lesotho (BCMCFL) introduced innovative community support groups for adolescents in three districts in Lesotho through the USAID-funded MELD project. A preparatory survey showed high interest in the model, with stigma, inadvertent disclosure of HIV status, and lack of privacy viewed as potential barriers.

Description: Initial eligibility criteria for Community Adherence Monitoring and Refill Assistance (CAMARA) groups included full disclosure of HIV status, aged 11-19 years, from the same or nearby village where the group was to be held, on ART for more than six months, and viral suppression. During the course of implementation, adolescents with high viral loads were also recruited into the groups. The CAMARA groups seek to address issues faced by AYLHIV such as poor adherence, high viral load, inadequate HIV education, limited disclosure within families, and real and perceived lack of support from their families and communities.

Whilst experienced social workers are responsible for the sensitization and establishment of the CAMARA groups, trained youth mentors facilitate meetings, providing peer-to-peer support, HIV education, and psychological support. 330 CAMARA groups have been established at 52 supported health facilities, with each group consisting of 3 to 6 members, for a total of 957 participants. Adolescents continue to receive clinical consultation and medication refills at facilities CAMARA groups are active at sites that also have the ability to provide multi-month dispensing of ARVs, and facility-based peer support groups.

The CAMARA groups were evaluated on the following aspects after ~13 months of implementation:

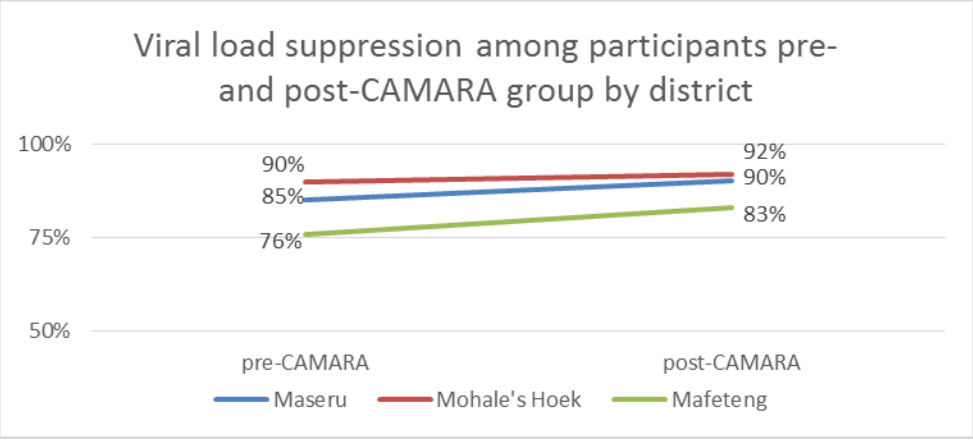
Adherence: Adherence among group members was assessed with the expectation of 90% of adolescents would adhere well to medication

Viral load: Pre-CAMARA group and post-CAMARA group viral load results were assessed, with the expectation that 90% of the adolescents in the groups would have a suppressed viral load

Overall, there was an improvement in adherence and viral load suppression.

Lessons learned: CAMARA members opted to have their meetings focused on psychosocial support without incorporating community-based medication delivery. As another innovation, the criteria for enrolment into the CAMARA groups do not exclude patients with poor adherence and high viral load. There is significant improvement in both calculated adherence rates and viral load suppression across CAMARA groups in the three districts. Members of the CAMARA groups are not given incentives such as meals and transport reimbursement as this will ensure sustainability and a sense of ownership even beyond the lifetime of the MELD Project.

Next steps: CAMARA groups are one option for delivering chronic care for AYLHIV. Lessons learned will be shared with stakeholders such as donors, Ministry of Health and other implementing partners to facilitate geographic expansion of the model. Monitoring and evaluation will focus on both participant satisfaction and sustained treatment success.



31. EXPLORING PARITY AMONG HIV POSITIVE WOMEN ATTENDING ANC AT RURAL HEALTH CENTRE IN BALAKA, MALAWI.

Z. Nkhono,*[1] T. Chunga,[1] H. Ngwena,[1] Maria Kim,[1,2] Peter Kazembe,[1,2] Saeed Ahmed[1,2]
[1]Baylor College of Medicine Children's Foundation Malawi, Lilongwe, Malawi
[2]Baylor College of Medicine International Pediatric AIDS Initiative, Texas Children's Hospital, Houston, United States of America (USA)

Background: As Malawi clocks 15 years on free Antiretroviral Therapy associated with healthier lives, more HIV positive women desire fertility and studies in Malawi suggest that more HIV positive women continue to desire children in spite of the risks associated with it. It is believed that in Malawi child bearing is associated with several social cultural factors but to-date the factors have not been fully studied.
Methods: A retrospective cross-sectional data analysis of social demographic variables was conducted among antenatal attendees for a period of 6 months (Nov 2018 to May 2019) at Namanolo, a local government free service facility in Balaka, Malawi. The descriptive variables were summarized as previous positives, new positives and negatives but also parity of the HIV positives was analyzed. The HIV positive women were categorized in age ranges and then further into new positives and previous positives and parity ranges for new and previous positives.
Results: A total of 397 women attended ANC clinic during this period with age range of 19 to 39 years. Out of these 25 were HIV+ representing 6.3%, 7 were new positives (yield=1.8%), 18 (4.5%) previous positives were initiated or continued on ART). For ages 20-24 (3 new positives, 5 previous positives), 29-29 years (2 new positive, 9 previous positive), 30-34 years (1 new positive, 4 previous positive) 36-40 years (new 1, prev-0). On parity, there was one first pregnancy with no previous delivery (1 new positive), gravida (pregnancy) 2 para (delivery) 1 were 2 new positive, 15 previous positive, while gravida 3 para 2 (1 new positive, 7 previous positive), gravida 4 para 3 (new positive 1, previous positive=1) and at least gravida 4 with previous set of twins 1 previous positive, finally gravida 5 with previous set of twins 1 and singleton (new positive =0, previous positive =1),
Conclusion: Having relatively few children assumed factors to influence HIV positive women's desire to have more children**.** Programs and policy developers need to consider the issue of parity and fertility in HIV positive women fertility desires as they develop population and HIV control in Malawi.

32. WHICH STRATEGY IS MORE EFFECTIVE - COMMUNITY TARGETED HIV TESTING OR COMMUNITY BASED OUTREACH HIV TESTING? A PILOT PROGRAM IN MANGOCHI DISTRICT.

A. Ng'ambi,*[1] S. Kawonga, [1] C. Pfaff, [1] E. Chester,[1] Peter Kazembe,[1,2] Saeed Ahmed[1,2]
[1]Baylor College of Medicine Children's Foundation Malawi, Lilongwe, Malawi
[2]Baylor College of Medicine International Pediatric AIDS Initiative, Texas Children's Hospital, Houston, United States of America (USA)

Background: Community Based Outreach HIV Testing and Counselling (OUT) and Targeted Community HIV Testing (TCT) are initiatives to increase identification of new HIV infections, thus accelerating progress towards attainment of the 1st 90 of UNAIDS 90:90:90 goals. OUT involves routine testing of patients in hard to reach areas following the set up dates of the village clinics that were designed to overcome transport barrier of community members to travel to the health facility whereas TCT involves training committee members of identified and defined high-risk groups so that they are knowledgeable and confident to invite their social contacts to the private place prepared for HTC, the target population influence decisions of the testing location, hours and time. The study compared the effectiveness of TCT and OUT testing strategies in Mangochi district
Description: Testing strategies were evaluated from January to March 2019. In the TCT strategy, committees were formed comprising high risk social groups - fisher folks, sex-workers, youth aged 15-24, construction workers, estate workers and patients consulting traditional healers. These committees were trained on the importance of HIV testing and linkage to care and then asked their fellow social contacts to come for HTC.

HTC was done by HTS Providers. HTC was conducted in the tents and private rooms provided by the community members to ensure Confidentiality. 49 TCTs were done. 22 TCTs for fisher folks were conducted in tents at different fishing beach, 7 for estate workers in the rooms, 6 for sex workers done at their different rest house residence, 3 for Construction workers done in the rooms at their work place, 2 for people attending traditional healers done in the rooms, and 9 for the youth 15-24 done in the tents. No mobilization activity done. In OUT Strategy, people were mobilized and confirmed that health workers are coming for the Village Clinic on the date set. 12 OUT activities were done in routine places on different days of the week. HTC was done in the village clinic set up rooms. For the two strategies, HTC was done according to MoH guidelines.

Lessons Learned: Through TCT 1,145 people were tested with the following yields in the various groups. Sex-workers 127 (61 Male) yield 9.4%; fisher folks 790 (543 males) yield 6.7%; youths 15-25 years 145 (17 Males) 0% yield; football players 38 (all male) 9% yield; 10 business people 10 (6 men) 10% yield; 35 Construction Workers 35 (25 men) 2.8% yield. Through OUT, 948 people tested, (259 males) yield 0.9%. Overall, all 76 New Positives were successfully initiated on ART by the ART Providers who accompanied the community testing teams.

Conclusion and Next Steps: TCT has a higher yield than OUT and shown to be more effective in mobilizing men to be tested. Testing of sex workers and fisher folk had particularly high yield. TCT strategy need to be incorporated in the effort to meet the first 90 of the UNAIDS goals.

33. DERMATOLOGICAL CONDITIONS IN THE HAART ERA – A 4 YEAR EXPERIENCE AT BAYLOR CLINIC IN CONSTANTA, ROMANIA

Popescu Nelu Doru MD PhD, Bagaiof Cristina RN, Stefania Mihale LSW

Background: Dermatological conditions (DC) have been associated with HIV since the beginning of the HIV epidemic. The introduction of HAART dramatically changed the incidence and occurrence of DC and, with this, also the interest in the field of dermatology in HIV area waned.

Baylor Romania started implementing a dermatology medical service for PLWHA in 2015, as a medical need identified by the ob/gyn specialist.

In the same time, dermatology in Romania is usually a paid service, not covered by the medical insurance. The interventions and medication are expensive and visiting the specialist is usually postponed, until the DC become painful or impacts a person's self-image or wellbeing.

The objectives were:

To facilitate the access of PLWHA to free of charge dermatology medical care

To increase awareness about dermatology problems among PLWHA

Description: Overall service coverage:

The dermatology medical services are offered in one session, once a week.

Between 2015 – 2018, 272 unduplicated PLWHA accessed dermatology (about one third of active cases). They received 523 medical consultations. Men and women are equally represented, the percentage being even. 14.53% of PLWHA presented were new cases.

Also, in 75.3% of the diagnosis, only one DC was observed. Only in 2% of patients were diagnosed with 3 DC and in 22 % with two.

Clinical observations:

Viral infections: common warts, genital warts, molluscum, herpes zoster, papilloma – 127/24.32%

Microbial infections: pyodermas, ecthyma, eczema, latent syphilis – 113/ 21.65%

Latent syphilis – represented 42 diagnosis from the total - 8.04%

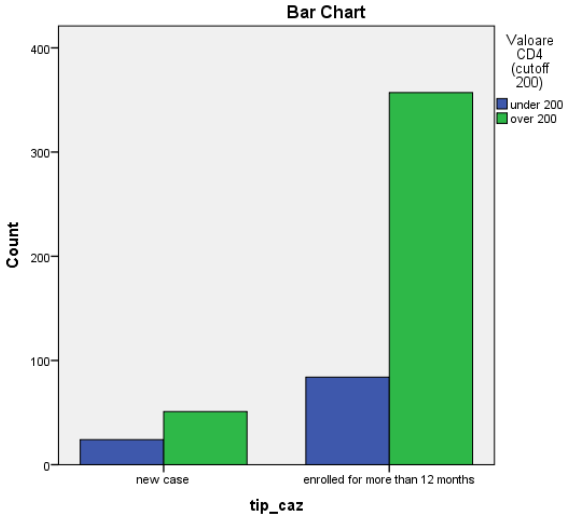
Fungal infections: tinea pedis and cruris, pityriasis versicolor, fungal dermatitis, fungal eczema, balanoposthitis, onychomycosis – 80/ 15.32%

Prurigo: with various causes (arthropod, microbial, allergic) – 40/ 7,66%

Seborrheic dermatitis – 30/ 5.74%

Allergies: contact dermatitis, lichen planus – 27/ 5.17%

As expected, in the HAART era, only one case of Kaposi's sarcoma and only 2 cases of molluscum contagiosum were registered. All cases had CD4 below 200 and two were newly diagnosed with HIV.
In groups with low CD4 (<200), the observed frequencies of viral, fungal and microbial infections were significantly higher than in the groups with high CD4 (chi square goodness of fit test significant for p<.01)
Lesson learned: Our experience shows that dermatological services are needed to improve the quality of care the Baylor center
We observed a significant moderate association between lower CD4 levels among new cases, compared with those enrolled for longer time
Patients with low CD4 and new cases should be monitored more closely for DC, regardless their etiology.
Next steps: Our experience shows that viral infections are more frequent as CD4 decreases, therefore we plan to prioritize HPV screening for this subgroup. Patients have difficulties in recognizing DC that require medical assistance, thus we plan to become more proactive in communicating the role of this specialty.



Graph: New cases seen at the dermatology office have significantly lower CD4 levels

34. ELECTRONIC BEHAVIOR CHANGE RECORDS: A NOVEL PLATFORM TO GUIDE AND RECORD INTERVENTIONS IN USUAL CARE

Ana-Maria Schweitzer, Mihaela Bogdan, Stefania Mihale, Gabriela Bazaitu, Alexandra Androne, Elena Rizea, Florica Nicolaie, Alexandra Dima

Background: The scientific community urges for increased reporting of usual care and for integration of evidence-based techniques and theories into routine practice. The Baylor clinic in Romania provides behavior care for people living with HIV in the Constanta region since 2001. Recently, an Electronic Behavior Change Records (EBCR) platform was developed to capture objectives and techniques used in self-management support and quality of life (QoL) improvement interventions.
Description: The platform was developed through an iterative procedure guided by the Intervention Mapping framework and the behavior change techniques (BCT) taxonomy. Resulting coding categories are care phases (diagnosis, pretreatment, treatment), performance objectives (PO), change objectives (CO), and BCTs. We conducted user training and data entry audits within initial stages of deployment. We extracted data from July 2018 to January 2019 on treatment phase psychologist-delivered interventions and examined BCT use and associations to objectives.
Lessons learned: The EBCR recorded 799 treatment phase interventions, 45% targeting self-management and 55% QoL POs. Self-management COs focused on adherence (43%), reducing behavioral risks (28%), emotion regulation (10%); QoL COs aimed at increasing life satisfaction (74%) and self-efficacy (26%). Most interventions used one BCT (64%; 66 different techniques); 29% combined 2 BCTs and 7% had >=3. BCT sub-

set choice varied by CO: for adherence interventions 34 BCTs were used, and 27 for life-satisfaction interventions.
Next steps: The EBCR contributes to quality improvement in usual care. Recording intervention content, together with outcome measures, will allow real-life evaluation of effectiveness in behavioral care.

35. ASYMPTOMATIC CRYPTOCOCCAL INFECTION IN VIROLOGICALLY NON-SUPPRESSED PATIENTS AT FORT PORTAL REGIONAL REFERRAL HOSPITAL: A RETROSPECTIVE COHORT STUDY

Solomon Okot Paul[1*], Winnie Akobye[1], Johnathan Izudi[1], Michael Manyindo[2], Paul Ngobi[2], Adeodata Kekitiinwa[1]
[1]Baylor College of Medicine Children's Foundation, Mulago Hospital Complex, Kampala, Uganda.
[2]Ministry of Health, Fort portal Regional Referral Hospital, Rwenzori region, Uganda.

Background: Cryptococcal meningitis is a leading cause of mortality among Human Immunodeficiency Virus (HIV) infected persons with severe immune suppression, CD4<100. However, data is limited on magnitude and factors associated with Asymptomatic Cryptococcal Infection (ACCI) among HIV positive persons with un-suppressed viral load after six months of anti-retroviral therapy (ART). This study investigated the prevalence of ACCI among HIV positive persons who failed to suppress viral load after six months of ART in Fort Portal Reginal Referral Hospital from October 2017 to July 2018.
Methods. The study used a retrospective cohort design. Data was abstracted on 384 participants from electronic medical registers using abstraction form, entered in Epi-Data and exported to STATA version 15 for statistical analysis. The key variables included age, sex, baseline viral load, baseline CD4, mid-upper arm circumference, presence of opportunistic infections, and WHO clinical stage. Univariate, bivariate, and multivariate analysis was performed. The binary logistic regression was used. Results were presented with odds ratio and 95% confidence interval in publication quality tables. We built a parsimonious model by performing logistic regression analysis until the final model showed non-statistical significance (Chi-squared value, 13.06, p=0.668).
Results: Out of 384 virologically non-suppressed participants enrolled in the study, 22(5.7%) were identified with Asymptomatic Cryptococcemia using CrAg test. In multivariate analysis, moderate malnutrition (MUAC, 16.0-16.9 cm) was statistically significantly associated with ACCI (Adjusted Odds Ratio (AOR), 3.88; 95% CI, and 1.19-12.66). However, opportunistic infection (AOR, 0.35; 95% CI, 0.12-1.02), baseline CD4 count of 250-350 cells/ul (AOR, 2.30; 95% CI, 0.12-1.02) and 350 cells/ul or more (AOR, 3.43; 95% CI, 0.95-12.31), WHO clinical stages III/IV (AOR, 5.52; 95% CI, 0.40-76.35), and baseline viral load greater 1000 copies/ul (AOR, 0.92; 95% CI, 0.37-2.26) were not statistically significantly associated with ACCI.
Conclusion: The prevalence of ACCI in Virologically non-suppressed patients is comparable to 6.0% global cryptococcal antigenemia estimate of 2017 and is associated with malnutrition. Virologically non-suppressed persons at 6-months of ART and Malnourished should be screened for ACCI using CrAg test for early detection and management with pre-emptive Fluconazole. Nutritional assessment, counselling and support for people living with HIV should be prioritised.

Characteristics	**ACCI test positive**					**Unadjusted analysis (OR, 95% CI)**	**Adjusted analysis (OR, 95% CI)**	**P-value**
	No.	%	Yes	%	total			
MUAC								0.014
Green	340	95.2	17	4.8	357	1	1	
Yellow	2	100.0	0	0.0	2	1.00 (1.00,1.00)	3.88(1.19,12.66)	
Red	19	79.2	5	20.8	24	5.26(1.75,15.80)	1.00 (1.00,1.00)	
OIs present?								0.019
No	39	86.7	6	13.3	45	1	1	
Yes	323	95.3	16	4.7	339	0.32(0.12,0.87)	0.35 (0.12,1.02)	

Baseline CD4 (cells/ul)								0.111
<250 cells/ul	126	97.7	3	2.3	129	1	1	
250-350 cells/ul	33	94.3	2	5.7	35	2.55 (0.41,15.86)	2.30 (0.35,15.07)	
>=350 cells/ul	126	97.7	3	2.3	129	3.52(1.01,12.24)	3.43 (0.95,12.31)	
Baseline WHO clinical stage								0.095
I/II	359	94.5	21	5.5	380	1	1	
III/IV	3	75.0	1	25.0	4	5.70 (0.57,57.15)	5.52 (0.40,76.35)	
Baseline viral load (copies/ml)								0.769
<=1,000	153	93.9	10	6.1	163	1	1	
>1,0000	209	94.6	12	5.4	221	0.88 (0.37,2.09)	0.92 (0.37,2.26)	

Table 1: Unadjusted and adjusted analysis of factors associated with ACCI
*Significance level <0.05

36. CHARACTERISTICS AND DISTRIBUTION PATTERNS OF SEXUAL PARTNERS OF HIV INDEX CLIENTS UNDER ASSISTED PARTNER NOTIFICATION (APN) IN UGANDA: A GIS BASED ANALYSIS.

Rogers Ssebunya[1*], Emmanuel Mugisa[1], Sadadi Ojoatre[2], Albert Maganda[1], Adeodata Kekitiinwa[1]
[1]Baylor College of Medicine Children's Foundation, Mulago Hospital Complex, Kampala, Uganda.
[2]Geospat Analytics LTD, P.O Box 6808, Kampala Uganda

Background: Assisted Partner Notification (APN) is a yielding strategy in identifying new HIV positive individuals in Uganda. Demographic characteristics and geo-locations of both index clients and their sexual partners are informative in the control of the epidemic. We sought to characterise and assess distribution patterns of HIV index clients and their sexual partners using geographical Information systems (GIS) in Rwenzori region of western Uganda.
Methods: We abstracted routinely collected data between July and November 2018 from APN registers using an open data kit (ODK) based platform at a large regional referral hospital in Kabarole, western Uganda. Data on both index and their sexual partners (age, sex, place of residence, HIV status of their sexual partners) were captured. Data were entered in both Stata v.13 for descriptive statistics and ArcGIS software for statistical and spatial modelling. Data was overlaid on existing sub-county and parish boundaries.
Results: Of the 362 index clients, 552 sexual partners had been registered i.e. 218 (60.2%) had one sexual partner registered, 105 (29%) had 2 sexual partners, 32 (8.8%) had 3 partners and 7 (1.9%) had 4 sexual partners. Despite majority (69.2%, 382/552) of the sexual partners sharing the same district of residence, close to 7% (37/552) were from varying locations (>120km from the index clients' district). A mixture of urban and rural settings harbour sexual partners. Index clients aged 15-19 years are having sexual intercourse with older sexual partners; 5% (18/362) with 20-24 year olds while 2% (6/362) with 36-45 year olds. An overall 12.7% (70/552) HIV yield was recorded among new testers with males disproportionately affected compared to females (54 vs 14 positives).
Conclusion: Pattern of sexual relationships in Rwenzori region is predominantly within closed proximities. GIS based analyses provides insight on geographical patterns of sexual relationships and therefore targeted identification of new positives and epidemic control. We therefore recommend HIV program implementers to embrace utilisation of GIS in targeting their interventions effectively and efficiently.

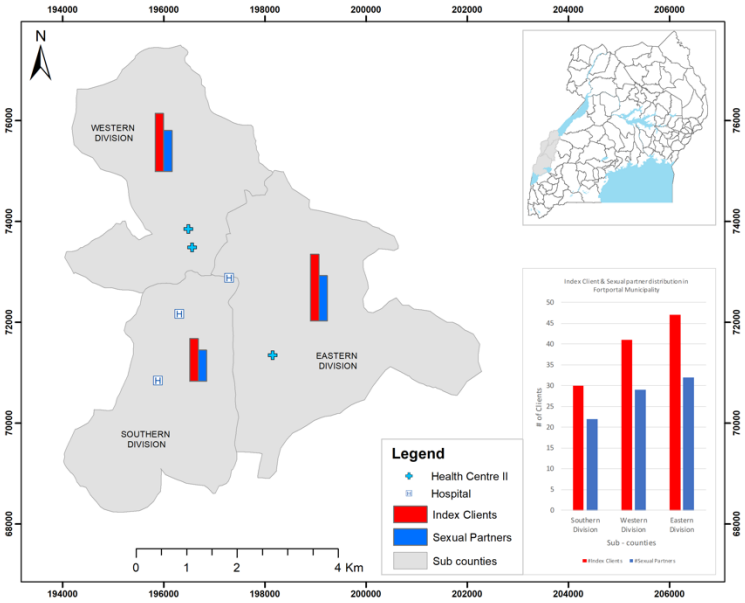


Figure1: Map showing the spatial distribution of index clients and their related sexual partners in Fort portal municipality.

37. HIV PREVALENCE AND ASSOCIATED FACTORS AMONG EXPOSED CHILDREN IN KYEGEGWA DISTRICT, RURAL WESTERN UGANDA

Mugisa Emmanuel[1]*, Mugabekazi Mary[1], Birungi Denise[1], Adeodata Kekitiinwa[1]
[1]Baylor College of Medicine Children's Foundation-Uganda, Fort Portal region

Background: Without any Prevention of mother to child transmission (PMTCT) intervention, the risk of Mother to Child Transmission of HIV is 25-45%. Implementation of PMTCT option B+ in Uganda has markedly reduced the number of new HIV infections in children. The objective of this study was to determine associated factors with Mother to Child Transmission of HIV (MTCT) among exposed children who were no longer breastfeeding in Kyegegwa district.
Methodology: A cross-sectional study targeting HIV exposed children in Kyegegwa district in the period-June and September 2018 was conducted. A total number of 234 HIV exposed children was computed, selected using a stratified sampling approach by health facility level and their mothers interviewed to ascertain factors associated with MTCT of HIV. Data was analyzed with STATA version 14 using a binary logistic regression model. A forward stepwise modelling approach was used, considering 5% as the level of significance.
Results: Of the 208 HIV exposed children that participated in the study, 120 (57.7%) were male. The mean age of the exposed children was 16.4 months. HIV prevalence among exposed children in Kyegegwa district was 3.8% (8/208). Majority (n=7, 87.5%) of the HIV positive children were male. ART status during pregnancy [AOR 0.2 (95% CI 0.05-0.87, p = 0.03)] and ANC attendance were associated with reduction in the likelihood of Mother to Child Transmission of HIV [AOR 0.456 (95% CI 0.01-0.30, p value = 0.002)] while delay in initiation of nevirapine prophylaxis for more than six weeks after birth was significantly associated with MTCT of HIV mother to child transmission of HIV [AOR 3.1 (95% CI 1.35-4.85, p = 0.001)].
Conclusions: HIV prevalence among exposed children in Kyegegwa district was below the national EMTCT target of <5%. Delayed initiation of nevirapine suspension, ANC attendance and ART status during pregnancy were protective factors. Promote early attendance of antenatal care and strengthen same day ART initiation for HIV positive pregnant women and provide infant nevirapine suspension prior to delivery for HIV positive who are unlikely to return to the facility for delivery.

Characteristic	Categories	AOR	P value
Mother attended ANC	No	Ref	
	Yes	0.46 (0.01-0.3)	0.002*
ART status during pregnancy	Did not receive ART	Ref	
	Received ART during pregnancy	0.2 (0.05-0.87)	0.03*
STI diagnosis during pregnancy	No	Ref	
	Yes	0.96 (0.11-8.00)	0.976
Place of delivery	Facility	Ref	
	Home	0.92 (0.1-7.7)	0.935
Timing of Nevirapine syrup initiation	Within 72 Hours	Ref	
	>72 hours<6weeks	2.1 (0.27-4.00)	0.025*
	>6weeks	3.1 (1.35-4.85)	0.001*
Level of adherence to Nevirapine syrup	<95%	Ref	
	>95%	0.96 (0.11-8.00)	0.967
Timing of 1st DNA PCR HIV Test	6-8weeks	Ref	
	>8weeks	0.14 (0.03-0.61)	0.008*
Maternal six month viral load test result	Non-suppressed	Ref	
	Suppressed	0.15 (0.0143-1.49)	0.105

Table1: Multivariate logistic regression analysis for factors associated with HIV infection in exposed children.

38. INVOLVEMENT OF VARIOUS STAKEHOLDERS IN IMPROVING VIRAL LOAD COVERAGE IN FORT PORTAL REGION IN MID-WESTERN UGANDA

Christine Ocokoru[1*], Solomon Okot[1], Paul Tumbu[1], Adeodata Kekitiinwa[1]
[1]*Baylor College of Medicine Children's Foundation, Mulago Hospital Complex, Kampala, Uganda.*

Background: Viral load is the gold standard for monitoring response to anti-retroviral drugs. Baylor-Uganda through CDC funding used district led programming approach and supported health facilities in 8 districts of Fort Portal region to track the 3rd 95 UNAIDS target through viral load (VL) monitoring. Viral load coverage depicts the proportion of eligible clients in an area accessing VL test at a given time. The overall VL coverage in the region was low (51%) in September 2016. This paper documents contribution of engaging various stakeholders in improving VL coverage in Fort Portal region.
Methods: By September 2016, the VL coverage in the region was 51%. While monitoring VL in the region, the project engaged the District Health Teams (DHT) led by the District Health Officers (DHO) to form district VL Technical Working Groups (VL TWGs) whose responsibility was to intensify supervision of health facilities, community based organizations (CBOs) who mobilized clients for VL tests, communication for Health Campaign (CHC) team who led health education sessions for clients, MOH to play supervisory role, People living with HIV/AIDS (PHA networks) to conduct home visits for clients due for VL and project staff to support transportation of samples and health facility staff to bleed the clients for VL tests.
Viral load demand creation campaigns and VL camps were conducted, materials about VL testing were provided to health workers and patients during health education and mobilization of clients for viral load tests were done by CBOs.
Results: In September 2016, 37,738(51%) of the eligible clients had accessed VL test. By September 2017, 67,942 (93.2%) of the 72,876 eligible clients for VL testing in fort portal region accessed a viral load test. By the end of September 2018, 77,560 out of the 79,653 eligible clients in the region had accessed viral load

test, hence achieving VL coverage of 97%. This achievement resulted from the collective efforts of all stakeholders involved.
Conclusion: The VL coverage in Fort Portal region improved within 2 years; way above the 2016 performance following engagement of different stakeholders. Engagement of various stakeholders is critical to achieving key care and treatment indicators in a region.

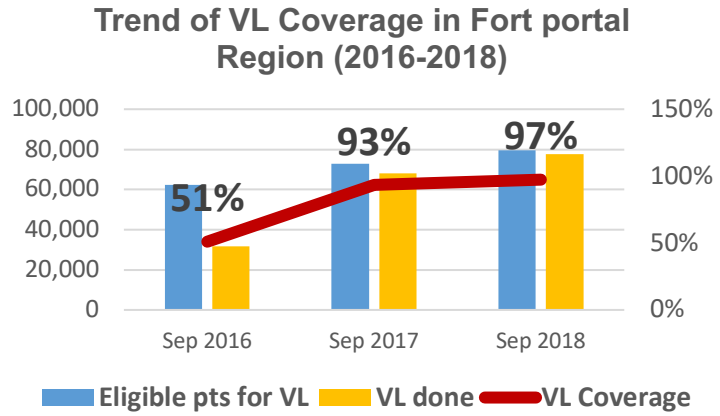


Figure1: Viral Load coverage trends in Fort Portal Region

39. MANAGING STOCK LEVELS OF HIV COMMODITIES USING ELECTRONIC SYSTEMS IN BAYLOR UGANDA, RWENZORI REGION

Joseph Kabanda*[1], Allan Mutebi[1], Mildred Kabagaya[3], Francis Abura[2] William Mutabaazi[1], Patrick Ajuna[1], Leticia Namale[1] and Adeodata Kekitiinwa[1]
[1]Baylor College of Medicine, Children's Foundation, Uganda
[2]Ministry of Health, Mulago Hospital
[3]Interbureau coalition (IBC) of Uganda, Rwenzori region, Uganda

Background: Availability of HIV Rapid Test kits and antiretroviral (ARV) medicines are contributing significantly contributed to attainment of the 95-95-95 UNAIDS targets. However, stock levels of HIV commodities in Uganda have been intermittent in the past one year with at least 1-2 commodities getting stocked out. Additionally available stock monitoring techniques have proven to be inaccurate due to the quality of the data and complexity of the tools. We assessed the contribution of using a Real-time ARV Stock Status Monitoring tool (RASS) on stock management in Rwenzori region, Uganda.
Methods: As part of project implementation, a computer based system was developed by METS/CDC to monitor weekly stock levels of ARVs and Rapid Test kits in health facilities. RASS is a dashboard based tool that monitors data on ARV supplies while integrating it with WAOS data (Patient numbers, orders and distributions) for enhanced decision making. Health workers were trained on use of the manual tool, SMS reporting and online reporting. They were also provided with smart electronic reporting devices. District mentors were identified and trained as super users to support and mentor persistently stocked out health facilities. Data used in this analysis was extracted from the RASS dashboard between June and September 2018.
Results: Following the interventions stock out reporting rates of HIV commodities have declined from 13% in January 2018 to <1% in December 2018. Use of the RASS tool has improved stock levels of HIV commodities through evidenced based redistributions/redirection of stock to low stocked health facilities hence combating any eminent stock outs. The program was also able to save close to $130,000 in costs for the ARVs distributed using the RASS tool. The savings came from averted potential wastage and expiries of medicines which would have been underutilised by health facilities.
Conclusions: The RASS tool provides accurate data for better decision making and it's easy and simple to use to all health workers across the region. Health service interruption was reduced and the country is on course

to meet the 95-95-95 UNAIDS targets. Advocacy for other commodities like Anti-TB medicines, OI medicines and tracer EMHS should be added on the RASS tool to reduce the stock out of these commodities in health facilities which impacts on the care and treatment of clients.

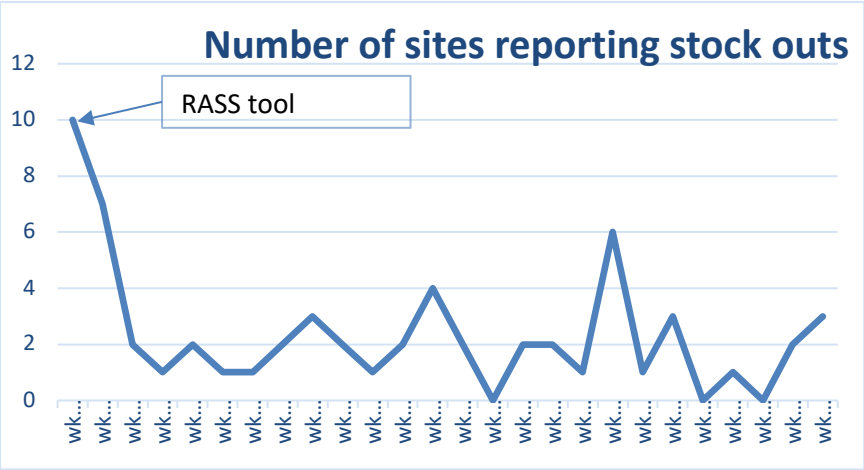


Figure 1: RTK Stock out reporting rates

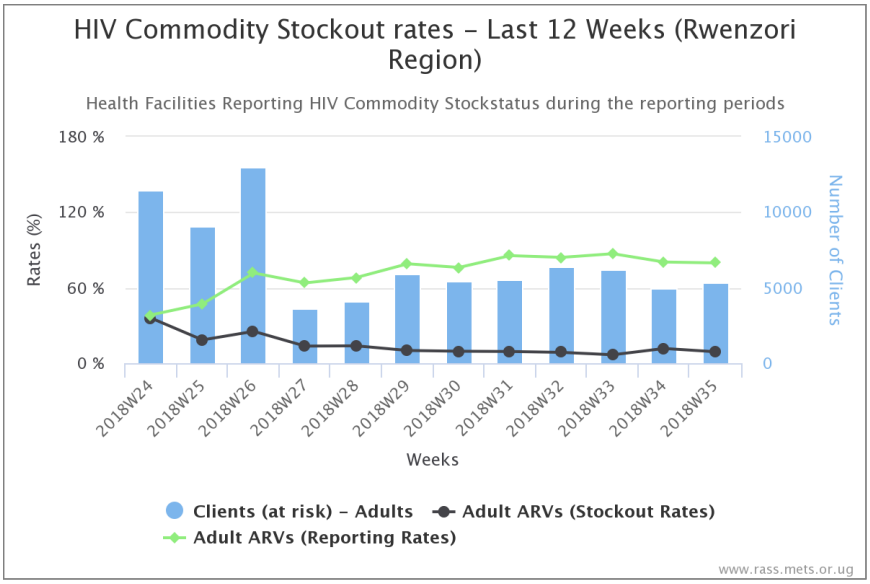


Figure 2: HIV Commodities stock out rates

40. OUTCOMES AND RISK OF MORTALITY AMONG TB/HIV CO-INFECTED PATIENTS ON ANTI-RETROVIRAL THERAPY IN THE ERA OF TEST AND START IN UGANDA.

Rogers Ssebunya[1*], Winnie Akobye[1], Rosemary Odeke[1], Mathew Kagwisagye[1], Albert Maganda[1], Adeodata Kekitiinwa[1]
[1]Baylor College of Medicine Children's Foundation, Uganda

Background: Benefits of starting antiretroviral therapy (ART) early among HIV/TB co-infected individuals has been widely documented. However TB treatment outcomes and their risk of mortality in the test and start era has not been evidenced. We therefore sought to bridge this knowledge gap using secondary data from four large HIV clinics in Rwenzori, western Uganda.
Methods: A retrospective cohort review of 443 charts was conducted for all HIV/TB co-infected individuals started on TB treatment between January 2016 and December 2017. Time from starting TB treatment to death as documented in registers was the main outcome. Risk of mortality stratified by timing of ART among

patients on TB treatment was assessed using Kaplan Meier curves and estimates measured as number of deaths per 1000 person-years.

Results: An overall TB treatment success rate of 73.6% (326/443) and a mortality rate of 17.4% (77/443) were registered at 12 months after starting TB treatment. A total of 305/443 (68.9%) were on ART by the time TB diagnosis and treatment were made, 119 (26.9%) started ART after TB treatment while 19 (4.2%) started ART and TB treatment on the same day. A significantly large proportion of registered deaths (67/77, p=0.001) were among those clients who started TB treatment while they were on already ART and a small number (3/77, 3.9%) started ART and anti-TB drugs on the same day. Of the 67 registered deaths, 55/67 (82.1%) had been on ART two weeks and more before started anti-TB drugs. Risk of mortality was higher among those who were on ART before starting anti-TB drugs (1.45 person-years, 95%CI: 1.14 - 1.85) compared to those who started both HIV and TB treatment on the same day (1.04 person-years, 95%CI: 0.34 - 3.22) and those who started ART after starting TB treatment (0.34 person-years, 95%CI: 0.16 - 0.71).

Conclusion: Results indicate significantly higher mortality among clients already on ART at the time of start of TB treatment and contributes to low treatment success rate among ART clients. Further investigation are needed to determine reasons for the high mortality.

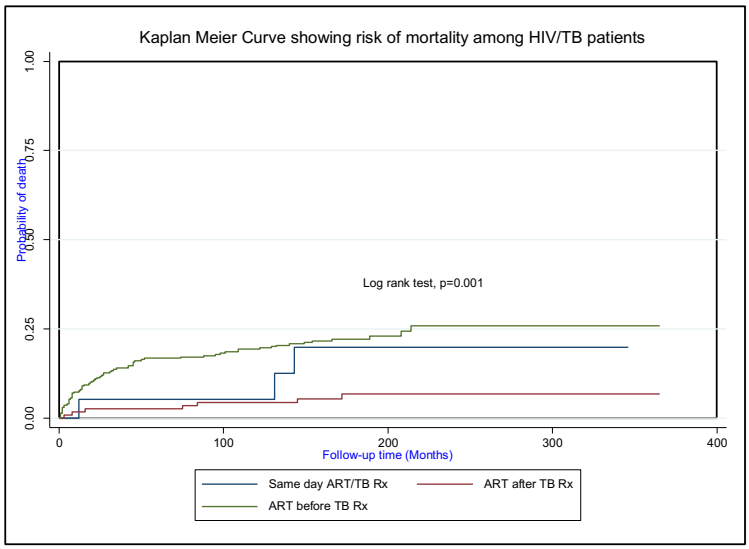


Fig1: Probability of survival among HIV/TB co-infected patients who started on both TB and ART.

Category	N	Events (deaths)	Person years	Rate	95% CI
Incidence rates among patients initiating ART before or after TB treatment					
Same day ART/ TB treatment	19	3	2.89	1.04	0.34 - 3.22
ART after TB treatment	119	7	20.73	0.34	0.16 - 0.71
ART before TB treatment	305	67	46.06	1.45	1.14 - 1.85
Rates among patients starting ART before TB treatment*					
Within 2-14d	24	6	3.06	1.96	0.88 - 4.36
Within 15-30d	15	2	2.17	0.92	0.23 - 3.69
Above 30d	266	59	40.83	1.45	1.12 - 1.87

Table 1: Risk rate of mortality among TB patients initiation ART treatment.

41. AGE- AND SITE-SPECIFIC TRENDS IN PROPORTION OF CHILDREN WITH ADVANCED HIV DISEASE AT ANTIRETROVIRAL THERAPY INITIATION IN EASTERN AND SOUTHERN AFRICA: 2003-2017.

Peter James Elyanu[1, 2, 3*], Mary Elizabeth Paul[2, 3], Ruosha Li[1], Christine Markham[1], Sebastian Wanless[3], Mogomotsi Matshaba[4], Makhosazana Hlatshwayo[5], Lineo Keneuoe Thahane[6], Peter Kazembe[7], Lumumba Mwita[8], Adeodata Kekitiinwa-Rukyalekere[9], Lu-Yu Hwang[1]

1 University of Texas Health Science Center at Houston, School of Public health, Houston, Texas, USA
2 Baylor College of Medicine, Retrovirology, Houston, Texas, USA
3 Baylor College of Medicine International Pediatric AIDS Initiative at Texas Children's Hospital, USA
4 Botswana-Baylor Children's Foundation, Gaborone, Botswana
5 Baylor College of Medicine Children's Foundation Swaziland, Mbabane, Swaziland
6 Baylor College of Medicine Children's Foundation Lesotho, Maseru, Lesotho
7 Baylor College of Medicine Children's Foundation Malawi, Lilongwe, Malawi
8 Baylor College of Medicine Children's Foundation Tanzania, Mwanza, Tanzania
9 Baylor College of Medicine Children's Foundation Uganda, Kampala, Uganda

Approval: Baylor College of Medicine IRB # H-43410

Introduction: Data on age-specific trends in advanced HIV disease at antiretroviral therapy (ART) initiation are limited. We examined age and site-specific trends in advanced HIV disease among HIV-infected children initiating ART between 2003-2017 at seven Baylor International Pediatric AIDS Initiative clinics in six Eastern and Southern African countries. We also examined trends in time-to-ART-initiation.

Methods: We retrospectively analyzed records of ART-naïve HIV-infected children aged <15 years who initiated ART. Advanced HIV disease was defined as having WHO clinical disease stage III or IV and/or severe immune suppression for age according to WHO criteria, and time-to-ART-initiation was measured from date of entry into care. We analyzed age (<2 year, 2-4 years, 5-9 years and 10-14 years) and site-specific trends in proportion of children initiating ART with advanced disease over seven calendar periods (from 2003 to 2017) using Chochran-Armitage test-for-trend. Trends in time-to-ART initiation and median age were analyzed using Cuzick's test-for-trend. Median age and proportion with advanced disease were analyzed over ART initiation periods; time-to-ART-initiation was analyzed over periods of entry into care.

Results: A total of 20,605 children (31.6% aged <2 years, 20.2% 2-4 years, 26.6% 5-9 years and 21.6% 10-14 years) were included. Half were girls, 33% were from Uganda, 19.8% from Malawi, 13.9% from Lesotho, 13.3% from Tanzania, 10.8% from Eswatini and 9.2% from Botswana.

Between 2003-2017, the proportion of children initiating ART with advanced disease declined among ages 5-9 years (58.3% to 39.9%; p<0.01) and 10-14 years (61.9% to 38.1%; p<0.01), remained the same for ages <2 years (72.7% to 70.6%; p=0.1), and increased slightly for ages 2-4 years (59.4% to 62.3%; p<0.01) Figure 1b. By site, the proportion decreased in Eswatini (69% to 33%), Lesotho (80% to 34%), Malawi (94% to 33%), and Tanzania (71% to 69%) (all p<0.01), remained the same in Botswana (70% to 52%, p=0.06) and increased in Uganda (46% to 65%; p<0.01) Figure 1c and 1d. The trend in median age at ART initiation varied across sites. In Uganda, the median age (IQR) declined from 6.7 (3.8-10.6) to 2.1 (0.8-6.2) years; p<0.01, remained the same in Tanzania [4.2 (1.5-9.5) to 3.3 (1.4-8.9) years; p=0.1], and increased in Botswana [5.1 (2.2-8.1) to 9.6 (1.5-12.6) years; p<0.01], Eswatini [4.3 (1.6-8.1) to 8.5 (1.7-11.7) years; p<0.01]; Lesotho [3.9 (1.4-7.9) to 8.4 (2.8-11.5) years; p<0.01] and Malawi [5.4 (2.2 to 8.5) to 6.6 (1.9-10.8) years; p<0.01] Figure 2. Time-to-ART-initiation reduced among all children [median (IQR):87 (24-389) to 2 (0-14) days; p<0.01)].

Conclusion: Between 2003-2017, disease severity at ART initiation declined among children aged 5-14 years, remained the same in children <2 years, and increased in those aged 2-4 years. Over time, children initiating ART in southern Africa sites were older and less severely ill; those in Eastern Africa sites were younger and more severely ill. In 2016-2017, children-initiated ART within the first week in care, but a substantial proportion did so with advanced disease. More efforts are required to diagnose and initiate children on ART early.

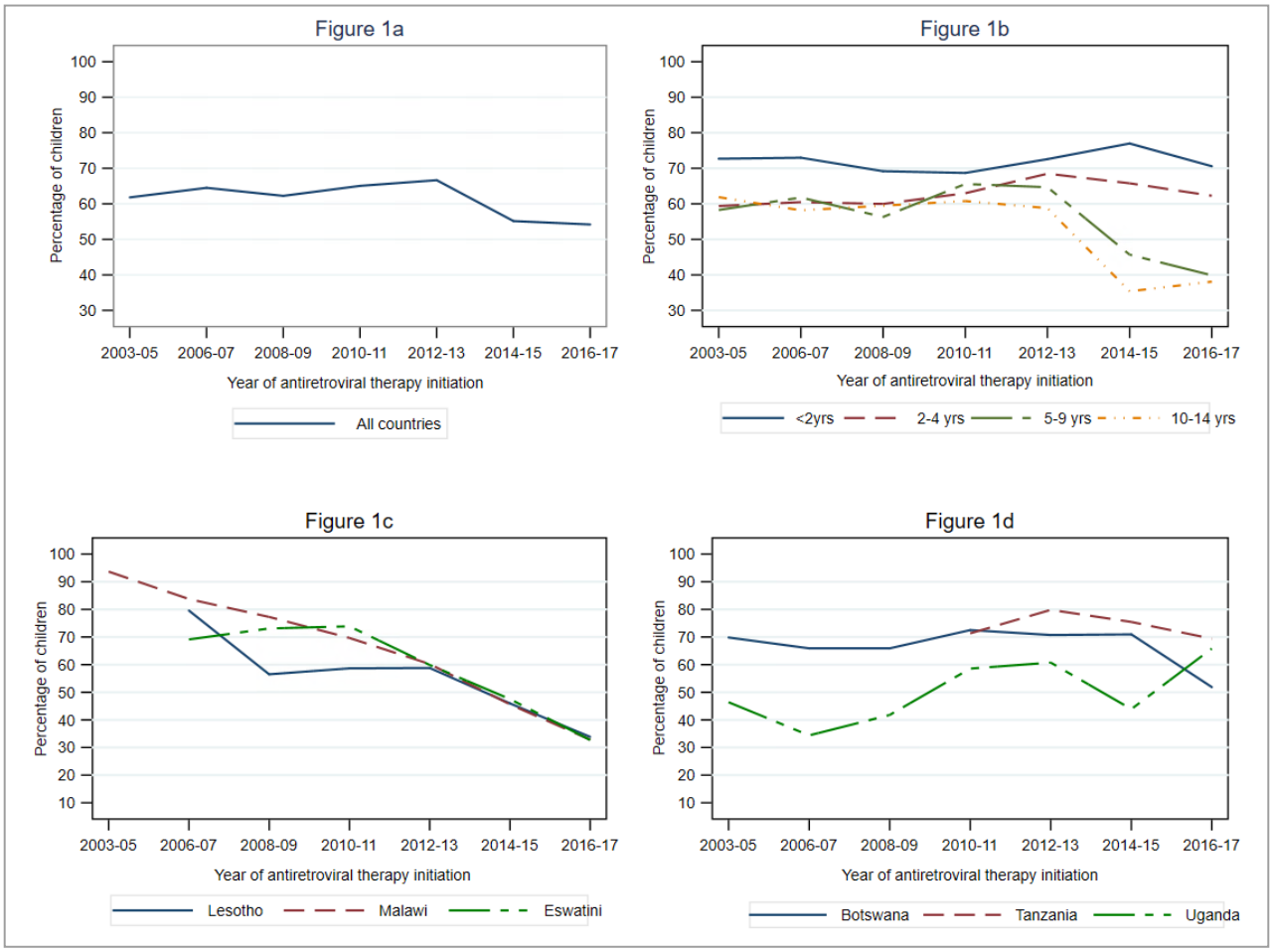


Figure 1: The proportion of children with advanced HIV disease at ART initiation by calendar period. (a) All the six countries combined (b) By age group (c and d) by country.

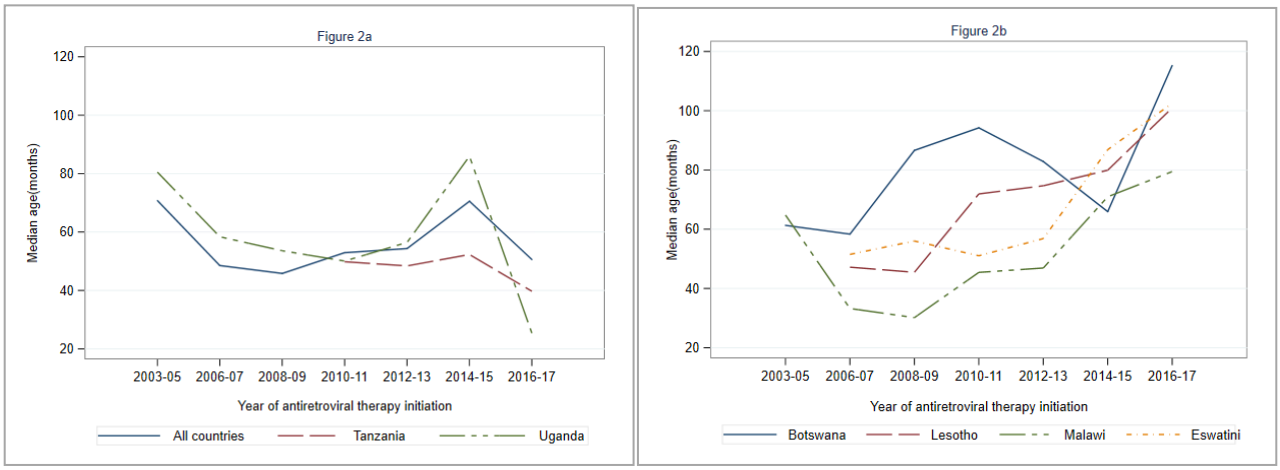


Figure 2: The median ages at initiation by calendar period. (a) in all countries, Tanzania and Uganda; (b) in Botswana, Lesotho, Malawi, and Eswatini

42. LONG-TERM SURVIVAL OF HIV-INFECTED CHILDREN TREATED WITH ANTIRETROVIRAL THERAPY IN EASTERN AND SOUTHERN AFRICA: 2006-2017

Peter James Elyanu[1, 2, 3*], Lu-Yu Hwang[1], Ruosha Li[1], Christine Markham[1], Sebastian Wanless[3], Mogomotsi Matshaba[4], Makhosazana Hlatshwayo[5], Lineo Keneuoe Thahane[6], Peter Kazembe[7], Lumumba Mwita[8], Adeodata Kekitiinwa-Rukyalekere[9], Mary Elizabeth Paul[2, 3]

1 University of Texas Health Science Center at Houston, School of Public Health, USA
2 Baylor College of Medicine, Retrovirology, Houston, Texas, USA
3 Baylor College of Medicine International Pediatric AIDS Initiative, USA
4 Botswana-Baylor Children's Foundation, Gaborone, Botswana
5 Baylor College of Medicine Children's Foundation Swaziland, Mbabane, Swaziland
6 Baylor College of Medicine Children's Foundation Lesotho, Maseru, Lesotho
7 Baylor College of Medicine Children's Foundation Malawi, Lilongwe, Malawi
8 Baylor College of Medicine Children's Foundation Tanzania, Mwanza, Tanzania
9 Baylor College of Medicine Children's Foundation Uganda, Kampala, Uganda

Approval: Baylor College of Medicine IRB # H-43410

Introduction: Despite providing pediatric antiretroviral therapy (ART) for >10 years, data on long-term survival of HIV-infected children receiving ART in resource-limited settings are scarce. Such data, along with knowledge of risk factors for death are of utmost importance to patients, clinicians and health-care-planners essential to inform clinical care and policy. We describe 10-year survival and risk factors for early mortality in HIV-infected children receiving ART.

Methods: We conducted a retrospective cohort study of HIV-infected children (0-14 years) who initiated ART between 2006-2017 at seven Baylor International Pediatric AIDS Initiative centers of excellence in Botswana, Eswatini, Lesotho, Malawi, Tanzania, and Uganda. To estimate mortality rates, time to death was measured from the ART initiation date, and children were right-censored at the earliest of either loss to follow-up (LTFU), transfer out, 10-years of follow-up or database closure date (Dec 31, 2017). LTFU was defined as having a gap of 90 days between their last clinic appointment and the database closure date. We estimated the Kaplan Meier 10-year survival probability by age group, country and period of ART initiation and tested differences in survival curves using log-rank test. We assessed risk factors for early mortality (24 months) using Cox proportional hazard regression. We imputed missing covariate data using multiple imputation by chained equations.

Results: 18,010 children (median age, 4.5 years; girls, 50%; half were girls) were included. The median duration of follow-up was 4.34 (IQR: 1.69-7.47) years with 85,140 person-years (PY) of follow-up. During follow-up, 1528 (8.5%) children died, 3333 (18.5%) transferred out, 1633 (9.1%) were LTFU, and 11,516 (63.9%) remained in care. Half died within 6-months of therapy (mortality rate=9.17, 95% CI: 8.55-9.84 per 100 PY) and overall 10-year survival probability (95% CI) was 88.9% (88.3%-89.5%). By age group, 10-year survival probability(95% CI) was 83.7% (82.5%-84.8%) in children aged <2 years, compared to 91.9% (90.7%-93.0%) in those 2-4 years, 92.6% (91.5%-93.6%) in 5-9 years and 88.8% (87.2%-90.2%) in 10-14 years; Figure 1a. The 10-year survival probability in Botswana was 91.7% (89.1%-93.7%), compared to 89.8% (88.1%-91.2%) in Eswatini, 86.9% (85.2%-88.4%) in Lesotho, 86.5% (84.9%-88.0%) in Malawi and 90.7% (89.6%-91.6%) in Uganda. In Tanzania, the 5-year survival probability was 89.5% (88.0%-90.9%), Figure 1b.There was no difference in survival by period of ART initiation (Figure 1c). The independent risk factors of mortality were: baseline age <2 years compared to 10-14 years; WHO stage 4 and stage 3 compared to stage 1 and 2 disease; severe and moderate immune suppression compared to no/mild immune suppression; and severe underweight compared to normal weight-for-age (table 1).

Conclusion: 10-year survival in children receiving ART is good. Mortality is highest in the first 6-months of ART and young age (<2 years), advanced HIV disease and severe underweight at ART initiation were associated with a higher risk of early mortality. Our findings re-emphasize the need for early infant diagnosis and treatment and close monitoring during the first 6-months of therapy as measures to reduce mortality of HIV-infected children receiving ART.

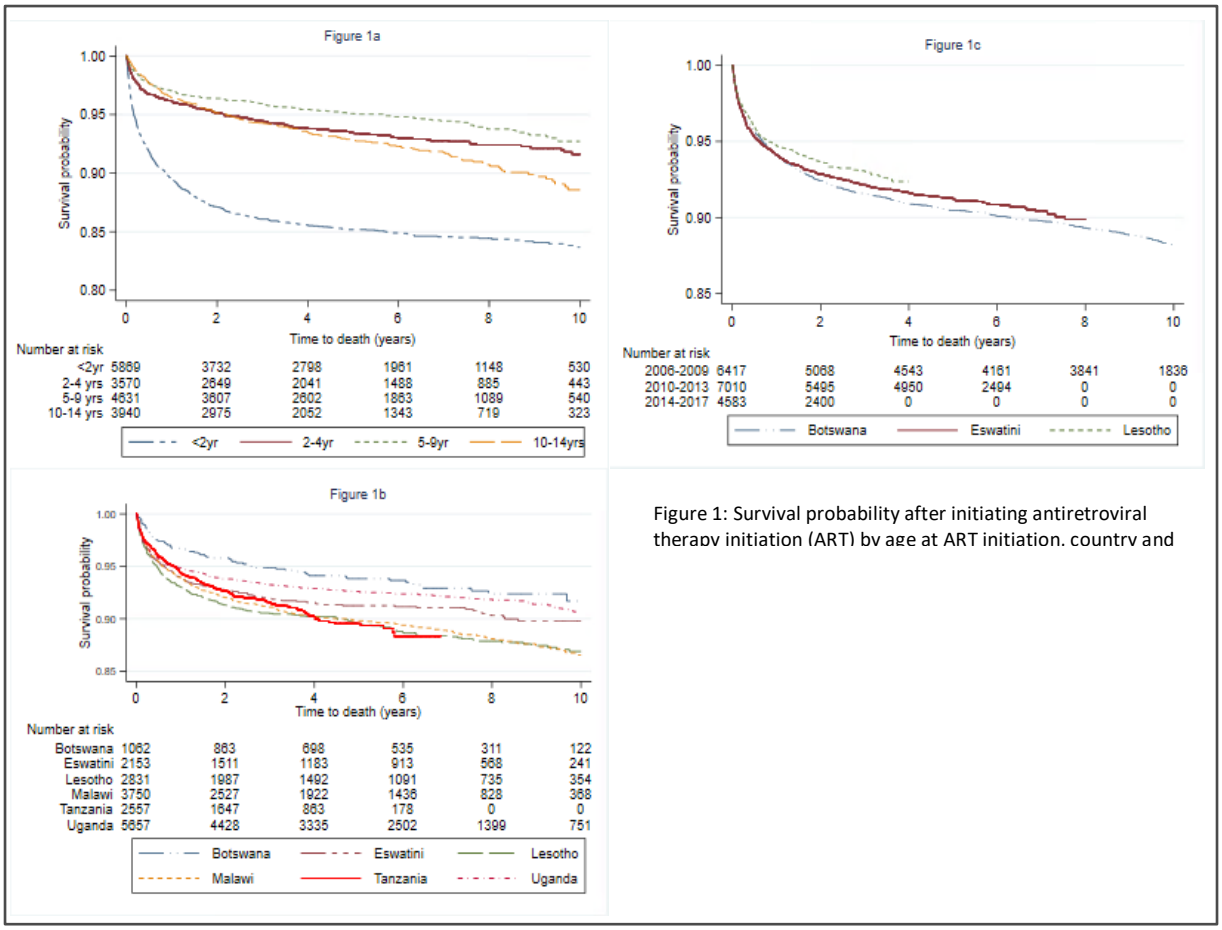


Figure 1: Survival probability after initiating antiretroviral therapy initiation (ART) by age at ART initiation, country and

43. UPTAKE OF SERVICES AT A NURSE-LED OUTREACH ART CLINIC IN SOUTH-EASTERN MALAWI

Samuel Chilala,*[1] Steven Masiano,[1] Saeed Ahmed,[1,2] PN Kazembe[1,2]
[1]Tingathe Program, Baylor College of Medicine Children's Foundation, Lilongwe, Malawi
[2]Baylor College of Medicine International Pediatric AIDS Initiative, Texas Children's Hospital, Houston, United States of America (USA)

Background: Among people living with HIV, retention in care is critical for achieving viral suppression which is the third goal of the UNAIDS 90:90:90. However, in resource-limited settings such as Malawi, long distances to ART clinics are a barrier to retention. To overcome this barrier, we introduced a Nurse-led outreach clinic for stable ART clients at Chipolonga Health Post in Machinga to reduce travelling distance for ART services to the nearest Chikweo Health Centre, about 15 km away. According to the Malawi Ministry of Health data, Chikweo Health Centre has 1615 clients alive on ART of whom 40% (or 650) come from the catchment area of Chipolonga Health Post which does not does not provide ART services. This study describes the organization of the outreach ART clinic and preliminary enrolment results and acceptability of the outreach clinic.

Description: The Nurse-Led ART Clinic, introduced in February 2019, is conducted every two weeks and provides the following services to stable clients on ART: nutritional assessment, ART adherence counseling, and ART refills. The outreach team, which comes from Chikweo Health Center, comprises 1 Nurse for clinical review of clients, 1 Clerk for data entry, 1 Health Surveillance Assistant for the nutritional assessments, and 1 Community Health Worker to deliver health talks and making appointments. A client on ART is stable if they have suppressed Viral Load, are not pregnant nor breast feeding, and have no medical conditions requiring Clinician's review. Information about the outreach ART clinic, as well as the eligibility criteria for the outreach clinic, was disseminated to clients during health talks at Chikweo Health Center ART Clinic for a

period of 4 weeks. To assess the acceptability of the outreach clinic, we interviewed clients accessing ART services at the clinic and healthcare workers at the clinic.
Lessons Learned: Since the outreach ART clinic was introduced, seven clinics have been conducted (February-May 2019). A total of 127 visits —25 males and 102 women— were seen during the clinics. These visits are for 43 clients only who have been enrolled at the site and some clients who did not meet the criteria for admission and were sent back to Chikweo. Random interviews to understand reasons for the low enrolment numbers revealed that many clients do not want to be seen receiving ART for fear of being stigmatized given that the outreach clinic is a specialized clinic and can inadvertently disclose their HIV status. Additionally, some clients doubt the continuity of the clinics as a similar initiative for antenatal care is inconsistent in terms of both scheduling and availability of the antenatal care services.
Conclusion and Next Steps: Our findings suggest that outreach ART clinics can be an effective strategy in improving retention in HIV care of stable ART clients. This effectiveness can be enhanced if we can overcome other barriers to HIV care such as stigmatization of people living with HIV. This can, in part, be achieved by integrating outreach ART services with other services such as those for out-patients and non-communicable diseases.

44. NUTRITION SUPPORT AMONG CHILDREN WITH CANCER AT KAMUZE CENTRAL HOSPITAL

Susan Mhango,*[1] Peter N. Kazembe[1,2]
[1]Baylor College of Medicine Children's Foundation Malawi, Lilongwe, Malawi
[2]Baylor College of Medicine International Pediatric AIDS Initiative, Texas Children's Hospital, Houston, United States of America (USA)

Background: Worldwide, children with cancer are at risk of undernutrition due to their disease and complications that result from the disease. This results in inadequate growth and development, delayed wound healing, impaired cardiac function, and decreased immune function. As such, the nutrition support for children with cancer at Kamuzu Central Hospital (KCH) has been enhanced so as to improve and maintain good nutritional status among these children to help reduce mortality and morbidity. This is a description of the nutritional evaluation among children admitted with cancer at KCH.
Description: The foundation supports provision of a package of intervention that include screening for malnutrition, treatment and prevention of malnutrition and continued evaluation of the program. Screening was done to all patients admitted in the ward except those who were critically ill. Indicators used were weight for height (less than -3 and -2 Z score) and mid upper arm circumference (MUAC). A 24 hour dietary recall was done in a period of 4 days. The primary drivers of the initiative included; identification of malnourished patients; malnourished in-patients receive therapeutic (milk and ready to use therapeutic feed) as well as supplementary feeds in form of porridge on daily basis. The children are also provided with fresh milk and boiled eggs to increase their protein intake. Guardians understand what constitutes a sound nutritional diet and how to provide it for their children through weekly nutrition education and cooking demonstrations. Once discharged children have access to nutritional supplements in their communities through strengthened referral system.
Lessons Learned: Nutritional assessments among 35 pediatric oncology patients aged between 10 months to 15 years was done. All children did not have oedema, MUAC ranged from 10.3 cm to 18.8 cm, weight ranged from 7.8 to 42.5 kilograms, height (length) ranged from 77 cm to 173.1 cm. Based on MUAC measurements about 23% (8/35) children were normal, 46% (16/35) were moderately malnourished while 31% (11/35) were severely malnourished. Twenty seven children were in the first cycle of three cycles of chemotherapy (cancer hyper metabolic disease), 6 patients were in cancer replete disease with weight gain and 2 were in a relapse state. All 35 children were assessed on dietary intake and 77% (27/35) of them did not meet their estimated energy requirements while 63% (22/35) did not meet their protein requirements, 91% (32/35) did not meet their fat requirements and 57% (20/35) did not meet all the requirements.
Conclusion and Next Steps: Malnutrition is highly prevalent in children with cancer. Children admitted for cancer lack adequate energy and nutrient intake hence need for supplementary feeding in addition to the

meals provided by the hospital's main kitchen. Currently, children with cancer are not getting the much needed nutritional support that they need due to inadequate staff and resources. This evaluation calls for financial support to enable hire more nutrition experts and continue carrying out the nutrition interventions. There is also need for sip feeds such as pediasure and multigrain nutrient dense high energy food to increase the daily energy and nutrient intake.

45. ACTIVE VERSUS PASSIVE PHARMACOVIGILANCE AND DOCUMENTATION OF PATIENT OUTCOMES FOLLOWING DOCUMENTED ADVERSE DRUG REACTIONS

*Florence Anabwani-Richter[1], Thembela Mavuso[1], Bhekumusa Lukhele[1, 2]

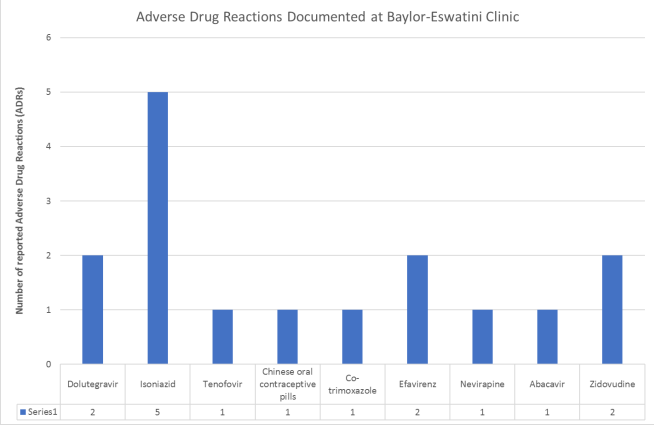
1. Baylor College of Medicine-Bristol Myers Squibb Children's Clinical Centre of Excellence, Mbabane, Eswatini
2. Baylor College of Medicine, Houston, Texas

Background: Adverse drug reactions (ADRs) are harmful or unpleasant reactions resulting from routine clinical use of a medicinal product. Ethical, logistical, legal, financial and commercial constraints dictate drug formulations used in a setting. An increase in the number of drugs on the market and an upward trend in polypharmacy are contributing factors to the prevalence of ADRs worldwide. There is no universal scale for describing or measuring the severity of an ADR. Assessment is largely subjective. ADRs contribute to ambivalent patient attitudes towards health care workers. This abstract describes the outcomes of patients who developed ADRs at our Clinic between June 2018 and June 2019.

Methods: At the Baylor Clinics in Eswatini, ADRs are reported as onset, severity, seriousness, ADR management and outcomes on 2 types of registers. The reports can be passively reported in an ADR Register, or passive in an Active Pharmacovigilance Data Collection Register. ADRs were described as mild, moderate, severe requiring hospitalization and lethal (deadly). These reactions were used to predict hazard from future administration of the same drug and warrant specific treatment, or alteration of the dosage regimen, or withdrawal of the product and monitoring of patient outcomes.

Results: The ages of the patients in the cohort analysed was 14 to 48 years, with the mean age of 33 years. Contributing factors to the prevalence of ADRs in our setting are classified as patient-centric e.g. their age, sex, and co-morbidities (HIV and TB co-morbidity), and by drug factors (e.g., type of drug, administration route, treatment duration, dosage). The odds of developing an ADR were 11 times higher in male patients on more than 3 drugs (polypharmacy) with few reactions reported in patients on only 1 drug (Odds ratio 11.1111, 95 % CI: 2.4160 to 51.1006, P = 0.0020). Most ADRs were associated with the use of Isoniazid for TB preventive therapy. For mild or moderate ADRs, discontinuation of the offending drug, or re-evaluation of the dose, frequency of use, and timing of doses were revised. Antihistamines and steroids were used to control the ADRs in most cases.

Conclusions: Pharmacovigilance plays a major role in pharmacotherapeutic decision-making at individual, regional, national or international levels. Rational drug use through tracking the average number of medicines prescribed per patient encounter, establishing a pharmaceutical and therapeutics committees and pharmacovigilance were interventions implemented at our Clinic to monitor ADRs. We established guidelines for management of ADRs contextualized to our facility needs. ADR reports are routinely shared with the Clinic management team and during national surveillance frameworks and drug forecasting meetings. Exponential increases of ADRs related to specific batches/manufacturers were reported during post-marketing drug surveillance phases, and national SOPs used to recall the implicated drugs. Drug tendering processes were revised where recommended.



46. PEDIATRIC THIRD LINE PROGRAM IN ESWATINI: PROGRAM UPDATES

Authors: *Sarah Perry[1], Miriam Abadie[1], Bhekumusa Lukhele[1,2]
[1]Baylor College of Medicine, Houston, Texas, USA
[2]Baylor College of Medicine Children's Foundation Swaziland, Mbabane, Swaziland

Background: HIV resistance mutations have created the need for robust second line regimens throughout the Sub-Saharan African region, and in the recent years, the need for a third line program has become increasingly pressing. This abstract shares the early trends of such a pediatric program in Eswatini.
Description: In 2013, the first pediatric patient in Eswatini was identified as needing 3rd line and was put on treatment. Since November 2014, an official third line program supported by Eswatini National Aids Program (ENAP) has required referral of all at-risk pediatric patients (0-19 years old) to one of three Baylor clinics in the country. From these clinics, patients have access to stepped-up-adherence counseling tools such as social workers, home visits, and challenge clinic. In addition, it is only from these sites that they can get genotypes and pediatric third line drugs. All clients are given transport reimbursement through partnerships with local NGOs as well as UNICEF. This abstract is a program description using the Baylor Swaziland electronic medical records and genotype results stored in the internal third line registers to follow-up on patients enrolled to date.
Lessons learned: Since 2013, 17/71 (24%) genotypes that have been sent have confirmed PI resistance mutations necessitating a change in regimen. To date, 17 pediatric patents (0-19 years) have been initiated on individualized 3rd line treatment regimens, specific to their genotype results. Each year, enrollment has doubled as the program has expanded (Figure 1.)
These patients have a bimodal age distribution with the majority coming from the under 5 year age group and adolescents between 15-19 years (Figure 2). Despite the fact that 30/71 (42%) of genotypes sent were from female patients, only 3/17 (18%) of those requiring third line treatment are females. 13/15 (88%) of patients that have been on the new regimen long enough to have a VL value have achieved viral suppression to <1000 copies. Three official trainings for doctors on pediatric second line failure have been facilitated during this time period with support of partners. While there have been many drugs in short supply, we have managed to maintain stock for all pediatric third line drugs over the past 5 years. Nine of our 17 third line patients are from Baylor with the others being referred from outside facilities.
Next Steps: In summary, a centralized pediatric third line program for the early stages of program development is feasible and sustainable with partner and MoH support. As patient numbers grow and drug supply as well as access to genotyping becomes more fluid, decentralizing the program should always be the long-term goal, but in the beginnings of building a program, vigilance and focus with a centralized program has been beneficial for the children of Eswatini.

NOTES

MULŢUMESC!

NGIYABONGA!

ZIKOMO!

Ke a leboga!

Obrigado!

Kea leboha!

Gracías!

Thank you!

Asante sana!