



NETWORK MEETING

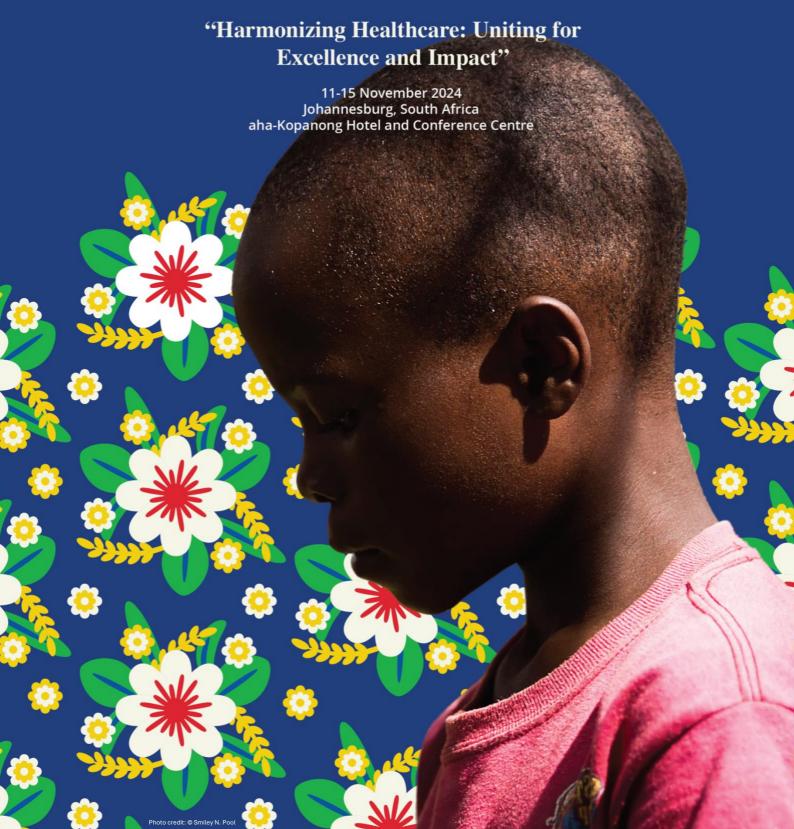


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Notes

Welcome Letter



Dear All,

On behalf of the Baylor Foundation Malawi team, I wish you a very warm welcome to the 25th Global Health Network Meeting! We are thrilled to be hosting this year's gathering and have worked closely with the Houston team to prepare an exciting program.

This year's theme, "Harmonizing Healthcare: Uniting for Excellence and Impact," reflects our focus on strengthening collaboration and driving meaningful outcomes. The agenda will highlight critical topics such as clinical leadership, non-communicable diseases, psychosocial health, stigma reduction, research funding and design, quality improvement, multisite research, and updates on HIV and tuberculosis innovations. We look forward to in-depth discussions, sharing best practices, and fostering impactful partnerships.

As we embark on this journey together, I want to express my gratitude for your commitment and engagement. Your contributions are key to the success of this meeting, and we look forward to learning from one another. A special thank you to the Texas Children's Global Health team in Houston for their partnership in organizing this event. The Baylor Foundation Malawi team has thoroughly enjoyed the collaboration.

With gratitude,

Phoebe Nyasulu, M.B.A.

Phoebe Nyasulu

Executive Director

Baylor College of Medicine Children's Foundation - Malawi

Argentina • Botswana • Colombia • Eswatini • Lesotho • Malawi • Romania • Tanzania • Uganda





Theme

Conference Theme Overview

The theme of this year's Network Meeting is "Harmonizing Healthcare: Uniting for Excellence and Impact," which reflects the Texas Children's Global Health Network's commitment to ensuring equitable, quality healthcare for all, especially the most vulnerable. By uniting our implementing partner foundations, we strive to advance healthcare equity through collaborative innovation in care, education, and research. This theme underscores our belief that everyone, regardless of race, religion, or socioeconomic status, deserves access to excellent healthcare. Together, we are building empowered communities, equipping them with the tools to create healthier, more prosperous futures. Through this collective effort, we aim to make a lasting impact on global health, fostering excellence across all our initiatives.

Agenda

Day	Event
	Executive Directors Forum (Invitation only)
Monday,	Delegate Registration
11 November	Moderator Orientation (Invitation only)
	Welcome Reception & Dinner (Mopanong Center)
	Welcome & Official Opening: State of the Network
	IAS Updates and Scholarship Opportunities
	Oral Abstracts & Discussion: HIV Care and Challenges for Children and Adolescents
Tuesday,	Telling Your Story: Communicating Your Foundation's Mission to Stakeholders and Donors
12 November	Oral Abstract & Discussion: Addressing Psychosocial Challenges and Stigma
	Mastering the Basics of Quality Improvement: Train-the-Trainer Session (Invitation only)
	2024 Wellness Walk
	Dinner (Restaurant)
	Morning Report: Clinical Conundrums – Navigating Complexities in Diagnosis and Treatment
	Oral Abstracts & Discussion: Women's and Neonatal Health
	Oral Abstracts & Discussion: Innovative Approaches to HIV and Tuberculosis
	Effective Strategies for Workshop Proposal Development
	Oral Abstracts & Discussion: Addressing Community Needs Together
Wednesday, 13 November	Video: Service Line Showcase
13 November	Group Photo
	Service Line Showcase: Building Capacity Across Healthcare Services
	Working with Learners (Invitation only)
	Enhancing Impact: Monitoring & Evaluation for Global Health (Invitation only)
	Poster Session & Dinner
	Oral Abstracts & Panel Discussion: Advancements in Multisite Research
	Fundamentals of Research: Building a Strong Foundation
	Navigating Funded Research Opportunities and Developing Strong Proposals
Thursday,	Oral Abstracts & Discussion: Advancing Healthcare Through Quality Improvement
14 November	"Top Posters" Presentations
	Network Meeting Overall Evaluation
	Advancing Clinical Excellence (ACE): Elevating Standards in Healthcare Delivery (Invitation only)
	Dinner & Cultural Performance
	Introduction to Quality Improvement: QI Basics Teaching Session
Friday,	Awards & Closing Remarks
15 November	Lunch / Departures

Detailed Agenda

Day	Time		
)er	9:00 - 16:00		*Executive Directors Forum (Room: Cycad 4)
November	16:00 - 16:30	Delegate Registration (Conference Center Lobby Area)	
11	16:30 - 17:00		* Moderator Orientation (Room: Cycad 4)
Monday,	17:00 - 18:00		
M	18:00 - 20:00	Welcome Reception & Dinner Speakers: Mr. Michael B. Mizwa; Ms. Phoebe Nyasulu heavy appetizers, live jazz band: Ethnix Sax & Strings (Room: Mapogong Center)	

*Invitation only			
Day	Time	Room: Cycad 5-6-7	
	7:00 - 8:00	Breakfast	
	8:00 - 8:15		
	8:15 - 9:30	†‡Welcome & Official Opening: State of the Network Speakers: Mr. Michael B. Mizwa; Ms. Phoebe Nyasulu Meeting Reminders Energizer	
	9:30 - 10:30	Country Update Video: Malawi †‡IAS Updates and Scholarship Opportunities Speakers: Dr. Patricia Ntege Nahirya, Dr. Jacqueline Balungi-Kanywa, Dr. Katherine Simon, Dr. Sarah Perry Moderators: Dr. Heather Haq, Ms. Taylor Napier-Earle	
	10:30 - 10:45	Tea Break	
mber	10:45 - 12:00	†‡ Oral Abstracts & Discussion: HIV Care and Challenges for Children and Adolescents Abstracts (7): 19, 25, 32, 58, 90, 94, 136, 181 Moderators: Dr. Tamanda Hiwa, Dr. Neema Kipiki	
Nove	12:00 - 13:00	Lunch (Restaurant)	
Tuesday, 12 November	13:00 - 14:45	Energizer Country Update Video: Tanzania †‡Telling Your Story: Communicating Your Foundation's Mission to Stakeholders and Donors Speaker: Mr. Adam Gibson, Ms. Taylor Napier-Earle, Dr. Heather Haq	
	14:45 - 15:00	Tea Break	
	15:00 - 16:00	† ‡Oral Abstract & Discussion: Addressing Psychosocial Challenges and Stigma Abstracts (6): 54, 74, 106, 107, 151, 158 Moderators: Ms. Ana-Maria Schweitzer	
	16:00 - 17:00	*Mastering the Basics of Quality Improvement: Train-the-Trainer Session Speakers: Dr. Heather Haq, Dr. Susan Torrey, Dr. Binita Patel, Dr. Heather Crouse	
	17:00 - 18:00	2024 Wellness Walk Coordinators: Team Malawi (Outside Fitness Center)	
	18:00 - 19:00	Dinner (Restaurant)	

*Invitation only: Contact a speaker for the Zoom link †Zoom Webinar Available (https://bcm.zoom.us/i/96214395620) ‡Spanish Translation Available

	7:00 - 7:45	Brea	akfast
	7:45 - 8:00		
	8:00 - 9:15	Country Update † ‡Morning Report: Clinical Conundrums – Navi Abstracts (7): 6, 7,	rgizer Video: Botswana igating Complexities in Diagnosis and Treatment 18, 50, 62, 146, 148 Steffy, Dr. Elizabeth Maidl, Dr. Sarah Perry, Dr. Katherine Simon
	9:15 - 10:00	Abstracts (5): 47,	n: Women's and Neonatal Health 118, 121, 122, 133 oa, Dr. Florence Anabwani-Richter
	10:00 - 10:15	Tea	Break
oer 1	10:15 - 11:00	Country Update Video: Colombia †‡Oral Abstracts & Discussion: Innovative Approaches to HIV and Tuberculosis Abstracts (5): 24, 35, 49, 51, 155 Moderators: Dr. Moses Mugerwa, Dr. Lilian Komba	
Novem	11:00 - 12:00	†‡Effective Strategies for Workshop Proposal Development Speakers: Dr. Heather Haq, Dr. Heather Crouse	
7, 13	12:00 - 13:00	Lunch (Restaurant)	
Wednesday, 13 November	13:00 - 14:00	Energizer Country Update Video: Lesotho †‡Oral Abstracts & Discussion: Addressing Community Needs Together Abstracts (6): 82, 114, 119, 124, 157, 174 Moderators: Ms. Ana Maria Galvis, Dr. Tiwonge Msonda	
	14:00 - 14:15	Video: Service Line Showcase	
	14:15 - 14:30	Group	p Photo
	14:30 - 16:00	Service Line Showcase: Building Capacity Across Healthcare Services Tea Break (Room: Cycad 1-2)	
	16:00 - 17:00	*‡Working with Learners Speakers: Dr. Stephanie Marton, Dr. Heather Haq, Dr. Heather Crouse, Ms. Cathy Namagambe	*Enhancing Impact: Monitoring & Evaluation for Global Health Speaker: Ms. Nadia Rahman (Room: Marula 1-3)
	17:00 - 18:00		
	18:30 - 20:30	Poster Session & Dinner Moderator: Dr. Susan Torrey pizza, heavy appetizers (Room: Cycad 1-2)	

*Invitation only: Contact a speaker for the Zoom link †Zoom Webinar Available (https://bcm.zoom.us/ij/96214395620) ‡Spanish Translation Available

	7:00 - 7:45	Breakfast	
	7:45 - 8:00		
	8:00 - 9:00	Energizer Country Update Video: Romania †‡Oral Abstracts & Panel Discussion: Advancements in Multisite Research Abstracts (4): 41, 44, 102, 140 Moderators: Dr. Heather Haq, Mr. Sandile Dlamini	
	9:00 - 9:15	Tea Break	
	9:15 - 10:00	‡Fundamentals of Research: Building a Strong Foundation Speaker: Dr. Shubhada Hooli	
	10:00 - 12:00	‡Navigating Funded Research Opportunities and Developing Strong Proposals Speakers: Dr. Amy Sanyahumbi, Dr. Shubhada Hooli, Dr. Angella Mirembe Nanteza, Dr. Heather Haq, Dr. Patricia Nahirya Ntege, Ms. Bridgette Naik	
empe	12:00 - 13:00	Lunch (Restaurant)	
Thursday, 14 November	13:00 - 14:00	Energizer Country Update Video: Eswatini †‡Oral Abstracts & Discussion: Advancing Healthcare Through Quality Improvement Abstracts (7): 46, 69, 101, 105, 117, 149, 159 Moderators: Dr. Binita Patel, Dr. Heather Crouse, Dr. Elizabeth Davis	
	14:00 - 14:15	Tea Break	
	14:15- 14:45	Country Update Video: Uganda †‡"Top Posters" Presentations Moderator: Mr. Joseph Mhango	
	14:45 - 15:00	Network Meeting Overall Evaluation	
	15:00 - 16:45	*‡Advancing Clinical Excellence (ACE): Elevating Standards in Healthcare Delivery Speakers: Dr. Heather Haq, Dr. Susan Torrey, Dr. Binita Patel (Room: Marula 1-3)	
	16:45 - 18:00		
	18:00 - 21:00	Dinner & Cultural Performance: Cultural Dance, Karaoke, Dance Party (Cultural dance and attire are optional)	

*Invitation only: Contact a speaker for the Zoom link †Zoom Webinar Available (https://bcm.zoom.us/i/96214395620) ‡Spanish Translation Available

	7:00 - 7:45	Breakfast
	7:45 - 8:00	
15 November	8:00 - 9:45	Energizer †‡Introduction to Quality Improvement: QI Basics Teaching Session Speakers: QI Basics Training Course Graduates Moderators: Dr. Susan Torrey, Dr. Heather Haq, Dr. Binita Patel, Dr. Heather Crouse, Dr. Elizabeth Davis, Dr. Stephanie Marton, Dr. Monika Patil
ay,	9:45 - 10:00	Tea Break
Friday,	10:00 - 11:00	‡Awards & Closing Remarks Speakers: Mr. Michael Mizwa; Ms. Pheobe Nyasulu
	11:00 - 12:00	
	12:00 - 13:00	Lunch (Restaurant) / Departures

†Zoom Webinar Available (https://bcm.zoom.us/j/96214395620) ‡Spanish Translation Available

Conference Information

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

Social Functions:

- Monday evening: Welcome Reception & Dinner
 - o Live jazz and celebratory "Roll Call"
- Tuesday evening: 2024 Wellness Walk
- Wednesday evening: Poster Session & Dinner
- Thursday evening: Cultural Dinner & Performance
 - o Optional cultural attire, dance party follows

Dress Code: Smart business casual.

Electricity: Load shedding may occur, but the hotel has a generator. Emergency lighting is available in all rooms.

Internet: Wi-Fi is available in meeting rooms, the lobby, and possibly guest rooms.

Code of Conduct: Follow your Foundation's Code of Conduct. Professionalism is required.

Airport Shuttle: Meet the shuttle at Johannesburg Airport behind the InterContinental Hotel. Contact Ms. Faith Biyela (Phone: + 27 78 536 9895; WhatsApp: +27 71 398 9939), Ms. Ratania Green (WhatsApp: +1 713 253-1849), or Mr. Joseph Mhango (WhatsApp: +265 9 9924 2305), if delayed.

Emergencies:

- 10111: Nationwide emergency services
- 011 37 55 911: Johannesburg emergency 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 Lesotho host team.

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Oral Abstract Schedule

Session	ID#	Abstracts	Presenter
Oral Abstracts & Discussion: HIV Care and Challenges for Children and Adolescents	19	Results of HIV – Self Testing Pilot Program in an Environment with Structural Challenges: Youth in the General Population Show Satisfaction with the Physical Characteristics of Tests	Mihaela Bogdan
Tuesday, 12	25	Emerging Dolutegravir Resistance in Children and Adolescents Living with HIV in Malawi	Katherine R Simon
November 10:45 - 12:00	32	Mortality Rates and Individual Characteristics Among Under-Five Children Living with HIV at Baylor-Foundation Uganda Clinic.	Victoria Ndyanabangi
	58	Pediatric HIV Care in Malawi: An Analysis of Treatment Response Time and Its Determinants in Tingathe Supported Health Facilities	Jemimah Nyirongo
	90	Description of Mother Infant Pairs among infants with Incident HIV infection in a routine program setting in Malawi	Katherine R Simon
	94	Pediatric and Adolescent Clinical Tool (PACT) guides targeted adherence support to children and adolescents unsuppressed viral load in supported facilities in Malawi	Katherine R Simon
	136	Factors associated with HIV status disclosure to sexual partners among young people living with HIV/AIDS at an urban HIV clinic, Kampala, Uganda	Moses Mugerwa
	181	Pre-Exposure Prophylaxis Program at Botswana-Baylor Children's Clinical Centre of Excellence	Shimane Lekalake

Session	ID#	Abstracts	Presenter
Oral Abstracts & Discussion: Addressing Psychosocial	54	HIV-Positive Emerging Adults' Psychosocial Struggles and the Support Networks That Help Them Cope Well (A Study of Baylor C.O.E)	Emily Mwase
Challenges and Stigma	74	Exploring Mental Health in the Wayuu: An Approach from Ancestry	Eslenys Paola Noriega Diaz
Tuesday, 12 November	106	Shared Secret: Exploring HIV Status Disclosure to Intimate Partners among Young People Living with HIV at Baylor Centre of Excellence, Malawi.	Chifundo Phalyce Chigwenembe
15:00 - 16:00	107	Caregiver Perceptions on Determinants of Retention in Care and Treatment Abandonment for Children with Cancer in Malawi: A Mixed Methods Study	Constance Nyasulu

151	Routine palliative care counselling: A critical component in navigating the common ethical dilemma of caregiver resistance in consenting for the provision of end-of-life counselling to Paediatric oncology patients in Botswana	Sewelo Sosome
158	Enhancing HIV Awareness and Reducing Stigma among Adolescents: A Targeted Educational Intervention in Mwanza, Tanzania	Denis Kagodo

Session	ID#	Abstracts	Presenter
Morning Report: Clinical Conundrums – Navigating	6	Incidental Hepatitis B Surface Antigen Positivity in Infancy: Two cases from Lesotho	Teresa Steffy
Complexities in Diagnosis and	7	The Role of CT scan for Acute Pulmonary Tuberculosis Diagnosis: A Case Report	Teresa Steffy
Treatment	18	Creative Social Work Techniques Can Be Used to Improve the Link to Care and Adherence for PLWHA	Iuliana Costaș
Wednesday, 13 November 8:00 - 9:15	50	Management of Streptococcus Pneumoniae with multiple resistance in an HIV infected Adolescent with Meningism yield desirable results at pediatric ward, Kamuzu Central Hospital, Malawi	Adamson Munthali
	62	A Child Living with HIV in Malawi with Mixed Subtype Localized Scleroderma, Most Prominently Coup de Sabre	Kelvin Jobo
	146	Paediatric Nasopharyngeal Carcinomas at Botswana Baylor Children's Clinical Centre of Excellence (BBCCCOE)	Ludo Molwantwa
	148	Perianal Abscess in A Prolonged Neutropenia Paediatric Patient with A Rhabdomyosarcoma at The Botswana- Baylor Children's Clinical Center of Excellence	Ludo Molwantwa

Session	ID#	Abstracts	Presenter
Women's and Neonatal Health	47	An Innovative, Sustainable, Midwife Mentorship Program Within a Busy Community Hospital in Malawi: A Pilot Study	Rose Swai
	118	Improvement In Number of Women Screened for Cervical Cancer Among Women Living with HIV At Lungwena Health Center In Rural Malawi: A CQI Project	Stevie Kamoto
November 9:15 - 10:00	121	Situational Analysis of Factors Contributing to Low Uptake of Cervical Cancer Screening and Treatment Services in Local Entities Advancing and Driving Health Responses (LEADR) Supported Districts.	'Makatleho Sejana
	122	Group Antenatal Care (G-ANC) Model to Improve Maternal and Child Healthcare Outcomes: Baseline Feasibility Assessment.	Limpho Seeiso

133	Characteristics and outcomes of neonates attended at Area 25 health facility in	Melvin Kunsembe
	Lilongwe, Malawi	

Session	ID#	Abstracts	Presenter
Oral Abstracts & Discussion: Innovative Approaches to HIV and Tuberculosis Wednesday, 13 November 10:15 - 11:00	24	The CHILD ICT Tool: A Simple Family Mapping Approach to Close the Pediatric Case Finding Gap	Katherine R Simon
	35	Protease Inhibitor Stock-out in Sub Saharan Africa: Real-World Implications of Single- Drug Substitutions to Dolutegravir in Treatment Experienced Clients	Sarah Perry
	49	An Assessment of Video Observed Treatment (VOT) as an Adherence Support Tool for DR-TB Patients in Eswatini: A Qualitative study.	Babongile Nkala
	51	Improving HIV Case Identification Among Undiagnosed Populations in High Volume Sites Across Six Districts in Eastern Uganda, A Cross-sectional Study from HTS Community of Practice (CoP), June 2024	Ssekiswa Lwanga Zimwanguyiza
	155	Effect of Directly Observed Treatment Support (DOTS) on viral load suppression among children and adolescents: a cross- sectional analysis in Bunyoro Region, mid- western Uganda.	Lubulwa Shafick

Session	ID#	Abstracts	Presenter
Together Wednesday, 13 November 13:00 - 14:00	82	Piloting of Community Watchers	Maira Alejandra Fernandez
	114	Perception of Teen Club Mentors on sustainability of the Teen Club Module in Dedza, Mchinji and Ntchisi, Malawi.	Symon Mtambo
	119	Accelerating TB Case Identification: A PHC Intergrated Approach, Bringing Services to the People in their Communities.	'Mareitumetse Ramootsi
	124	Community peer-led approach to improve access to pre-exposure prophylaxis among HIV high-risk populations in Bunyoro region, mid-western Uganda.	Lubulwa Shafick
	157	Extended Evening ART Clinic Improving Access to care for HIV Positive Clients a Case of Mangochi DHO, in Malawi	Ian Khruza
	174	Expanding a Permaculture Garden for Patient Education and Food Security: Cultivating Wellness and Sustainability	Brenda Njete

Session	ID#	Abstracts	Presenter
Advancements in Multisite Research Thursday, 14 November 8:00 - 9:00	41	Integrase Inhibitor Resistance Among Children and Adolescents Living with HIV in sub-Saharan Africa: A Descriptive Case Series	Sarah Perry
	44	Screening Rates and the Prevalence of Hepatitis B among children and adults living with HIV in Africa: A BIPAI Network study	Eunice Ketang'enyi
	102	Low-level viremia leads to increased risk for virologic failure in children and adolescents living with HIV on antiretroviral therapy in sub-Saharan Africa (CLOVES): a multicenter, retrospective cohort study	Lilian Komba
	140	Development and Validation of a Clinical Predictive tool for Viral Non-Suppression in Children and Adolescents Living with HIV: A prospective Study Analysis	Phumzile Dlamini

Session	ID#	Abstracts	Presenter
Oral Abstracts & Discussion: Advancing Healthcare Through Quality Improvement	46	Sustaining Viral Suppression Among Clients with Previous Persistent High Viral Loads at Baylor COE: A Retrospective Analysis	Menard Bvumbwe
	69	Quality Improvement to Improve the Completeness of Laboratory Request Form Documentation and Conform to ISO 15189:2022 Standards	Lindokuhle Dlamini
Thursday, 14 November 13:00 - 14:00	101	Assessing and Improving Health Outcomes among Adolescents and Youth in Baylor Foundation Eswatini through Clinic-Based Health Risk Screening: A Quality Improvement Initiative.	Nkosibonile Nkambule
	105	Improving infant prophylaxis coverage through continuous quality improvement (CQI) interventions for HIV-exposed infants at a remote site, in Mangochi Malawi	Sangwani Longwe
	117	Optimizing molecular testing for Tuberculosis diagnosis through Leadership engagement and continuous quality improvement interventions in Eastern Uganda.	Ssekiswa Lwanga Zimwanguyiza
	149	Improving Functionality of Health Facility Quality Improvement Committees; Experiences from Bunyoro Region, Uganda.	Lubulwa Shafick
	159	Implementing a new impact measurement strategy for FBA Vision Screening Program	Andrea Imsen

Poster Presentation Schedule

Poster Session & Dinner

Wednesday, 13 November 2023

18:30 - 18:45 Welcome & Introduction: Dr. Susan Torrey

	Screen	ID#	Title	Presenter		
	1	9	Enhancing Maternal and Child Health Services to Prevent Mother-To-Child Transmission Of HIV/AIDS: Challenges and Quality Improvement Strategies At Baylor Children Foundation, Mwanza COE	Neema Kipiki		
	Through the Looking Glass: Empowering Youth Community Advisory Boards in Tanzania as a Sustainable Youth Engagement Model to Inform Policy and Practice Engagement Model to Inform Policy and Practice					
40.45	When All You Have is One Session: How Can We Tailor Health Education Content for Students in the General Population. The Experience of Baylor Foundation Romania					
18:45	18:45	23	Routine Assessment of Life Satisfaction Patient Reported Outcomes (PROs) among People Living with HIV/AIDS (PLWHA) Indicate Maintenance of Overall Care Results at the Baylor Clinical Center of Excellence in Constanta, Romania over Four Years	Elena Costi		
	Factors Influencing Guardian's Health-Seeking Decisions for Children with Burkitt Lymphoma in Malawi			Hellen Mbutuka		
6 22		22	Assessment of Anti-Pneumococcal Vaccination Health Beliefs Among Patients Living with HIV and Viral Hepatitis in Constanta, Romania	Ana Maria Schweitzer		
	7	45	Optimising Data Capture for Viral Load and Early Infant Diagnosis into African Laboratory Information System Using a Quality Improvement Project at Baylor Foundation Uganda COE.	Jacqueline Balungi Kanywa		

	Screen	ID#	Title	Presenter
18:50	1	30	Comprehensive Breastfeeding Support Program: Enhancing Maternal and Child Health at Baylor Foundation Eswatini, Center of Excellence (COE) at Mbabane.	Nkosibonile Nkambule

	2	10	Long-term Impact of Camp Program on Viral Load Suppression for Adolescents at Baylor Clinic Mwanza, Tanzania	Lilian Komba
	3	164	Use of Motorbikes by CHWs Improves Client Tracing Outcomes in the Facilities with Motorbikes in Baylor Malawi Supported Districts.	McDonald Komakoma
18:50	4	27	Improving the Rational Use of Antibiotics Through Diagnostic Stewardship in Mid-Western Uganda.	Stephen Olinga
	5	12	Comparative Uptake of Cervical Cancer Screening at Baylor, Self Sample Collection vs Via, Baylor Clinic, Center of Excellence Malawi.	Maureen Langa
	6	80	Vaccination in the Wayuu Population of the Region Towards an Intercultural Immunization System	Carmen Judith Garcia Diaz
	7	48	Moving Towards EMTCT: Does the Infant Vaccination Visit HIV Screening Help to Address Gaps in Identifying New EID as Well as Infants That Missed Milestone Testing?	Elijah Kavuta

	Screen	ID#	Title	Presenter
	1	33	Psychosocial Needs of PBFWLHIV	Valentine Banda
	2	11	Assessing the Effect of Empowerment Interventions on Medication Adherence among HIV-Positive Adolescents at Baylor Mokhotlong, Lesotho	Matheo Ndaule
18:55	3	42	Leveraging Community Health Workers to Increase HIV - Testing Services for Men 15 Years and Above in Budaka District, Eastern Uganda.	Ssekiswa Lwanga Zimwanguyiza
	4	34	Pediatric Dolutegravir Optimization: 18 Month Follow Up of Viral Load Suppression	Sarah Perry
	5	13	A Provider-focused Approach to Improving Cervical Cancer Screening Rates in Women Living with HIV at the Baylor Foundation Lesotho Center of Excellence in Maseru, Lesotho	Katleho Mahamo

18:55	6	81	Strengthening Oral Health to Improve the Quality of Life of Vulnerable Populations	Karol Vanessa Rios Arregoces
	7	64	Leave Management System for a Workplace: A Case Study of Baylor College of Medicine Children's Foundation of Malawi	Andrew Kunje

	Screen	ID#	Title	Presenter
	1	36	A Comparison of the Effectiveness of Two Nutritional Supplements on Children with Malnutrition at Baylor Qacha's Nek Satellite Center of Excellence (Q-SCOE)	Rets'elisitsoe Mahlaha
	2	26	A Quality Improvement Initiative to Reduce Risk of HIV in Incarcerated Adolescents at a Juvenile Training Center in Maseru, Lesotho	Nomazizi Maqalika
19:00	3	126	Perceptions of Skilled Birth Attendants on the Utilization of Artificial Intelligence (AI) Augmented Fetal Heart Rate Monitoring at Area 25 Community Hospital	Esther Moyo
	4	39	HIV Drug Resistance Trends Among 294 Treatment Experienced Children and Young Adults (0-24) in the First Decade of a National Pediatric HIVDR Program	Sarah Perry
	5	16	Lived Experiences of Parents and Guardians Providing Home Care for Their Terminally Ill Child in Malawi	Constance Nyasulu
	6	15	Increasing Uptake of Integrated COVID-19 Vaccination in Western Uganda Through Community Dialogues and Sensitization	Stephen Olinga
	7	63	Enhancing Quality of Care, Education and Teamwork Through Weekly Nursing Meetings at Baylor Foundation of Eswatini, Centre of Excellence (COE) Mbabane.	Nkosibonile Nkambule

		Screen	ID#	Title	Presenter
19	9:05	1	52	Childhood Burn Injuries in a Tertiary Hospital in Suriname: A Descriptive Study	Sara Yasrebi

	2	86	Community Adolescent Treatment Supporters (CATS) care program description.	Njabuliso Gcebile Nkambule
	3	91	High rates of virologic resuppression achievable among children with high viral load utilizing Virtual Center of Excellence (vCOE) model at health facilities in Malawi	lan Khruza
19:05	4	53	Hepatitis B Contact Tracing and Screening in HIV Coinfected Patients at Baylor Foundation Malawi-Centre of Excellence.	Elias Ayoub
	5	98	Improving HPV Vaccine Awareness and Uptake: Impact of the Mwanza Youth Community Advisory Board's Educational Initiatives	Neema Kipiki
	6	60	Improving Uptake of TB Preventive Treatment (TPT) in Hlathikhulu SCOE	Nkosibonile Nkambule
	7	66	A Localized Mentorship Approach to Enhance Infection Prevention and Control at Points of Entry in Western Uganda	Stephen Olinga

	Screen	ID#	Title	Presenter
	1	61	Prevalence of Hearing Loss at Primary Health Care Clinic (Baylor Clinic)	Florence Anabwani- Richter
	2	92	Sustained high Teen Club attendance rates among adolescents living with HIV in Malawi	Golden Kang'oma
19:10	3	93	Virtual and In-person Counselling Services Expand Access to Psychosocial Counselling for Children and Families Affected by HIV in Malawi	Valentine Banda
	4	57	Viral Load Suppression Rates in 1 and 2 Drug Switches Following DTG Optimization	Menard Bvumbwe
	5	168	Curating Memories for Paediatric Oncology Palliative Care Patients: An Essential Healing Space for Bereavement	Sewelo Sosome

19:10	6	87	Impact of Routine HIV Risk Screening on Oral Pre-exposure Prophylaxis Uptake Among Adolescent Girls and Young Women in Baylor College of Medicine Children's Foundation Malawi Supported Health Facilities	Fraser Tembo
	7	116	Using Echo-Zoom Technology to Improve HIV Recency Testing at 99 Health Facilities in Eastern Uganda.	Richard Kyakuwa Jjuuko

Break: 19:20 - 19:30

	Screen	ID#	Title	Presenter
	1	89	Prevalence, Indications, and Fetal Outcomes of Caesarean Sections at an Urban Community Hospital in Lilongwe, Malawi in 2023	Nomsa Kafumba
	2	99	Empowering Self-Disclosure: Lessons from a Peer-Led Intervention for Adolescents and Young Adults Living with HIV (AYALWH) in Tanzania.	Eunice Ketang'enyi
19:30	3	95	Improving Tuberculosis case finding among children through GeneXpert Multiplexing: A case study of Kabarole district, Uganda	Stephen Olinga
	4	67	Viral Load Trends in Children and Adolescents During the DTG Era: Strides Towards HVL <50 Copies in Mwanza and Mbeya Centers of Excellence	Neema Kipiki
	5	175	Enhancing Pediatric Care and Emotional Well-being: The Vital Role of Play Therapy in Hospital Setting	Brenda Njete
	6	96	Scaling up Pre-Exposure Prophylaxis (PrEP) – Lessons Learnt from Baylor College of Medicine Children Foundation Malawi Supported Health Facilities.	Ndumezi Shaba
	7	131	Caregivers' and Clients' Satisfaction About Healthcare Services Provided at Baylor Center of Excellence (COE) Clinic in Lilongwe-Malawi	Emily Mwase

	Screen	ID#	Title	Presenter
19:35	1	135	Trends Among Non-Citizen Children at Botswana-Baylor Children's Clinical Centre of Excellence	David Mark Thomas

	2	137	Enhancing HIV Care for Adolescents: The Impact of multidisciplinary team in management of CALHIV at the Mwanza Centre of Excellence	Denis Kagodo
	3	112	Engaging Hard to Reach Men Through Community-based Health Services in Four Districts of Lesotho: A Descriptive Study.	Motlatsi Letsika
19:35	4	88	Despite Successful Treatment, TB Survivors Have Persistent Inflammation, Lipid Peroxidation, and Decreased Redox Capacity and Carotenoid Levels	Nondumiso Premilla Dube
	5	100	Scale-up Screening of Cervical Cancer Extends Services for Women Living with HIV at Baylor College of Medicine Children's Foundation Malawi Supported Health Facilities	Golden Kang'oma
	6	120	Improving Pre-exposure Prophylaxis Continuity (PrEP_CT) Among HIV High-risk Populations Through KP/PP Gatekeepers: A Programme Evaluation at Kagadi Hospital, Mid-western Uganda.	Lubulwa Shafick
	7	68	A Quality Improvement Project on Reducing Patient Waiting Times in a Resource-Constrained Clinic	Florence Anabwani- Richter

	Screen	ID#	Title	Presenter
	1	127	Well-child Visits Program in Remote Locations, Fundacion Baylor Argentina	Andrea Imsen
	2 Symptoms of Depression in HIV Positive Youth at Botswana- Baylor Children's Clinical Center of Excellence		David Mark Thomas	
3 144 Takulandirani Welcon		144	Improving Early Retention in ART Care: A Case Study of Takulandirani Welcome Service at Health Facilities Supported by Tingathe Program.	Chrissy Kayuni
	4 Improving Rational Use of HIV Determine Test Kits at 39 Facilities in Uganda Using Continuous Quality Improvement		Richard Kyakuwa Jjuuko	
	5	178	Rare Hematologic and Related Diseases seen at Botswana Baylor Children's Clinical Centre of Excellence Pediatric Hematologic Oncologic Program 2007-2023	Ludo Molwantwa

19:40	6	172	Enhancing PrEP Retention by Use of Multilevel Strategies Such as Peer-model and Patient-centered Approaches at the Baylor Uganda Site.	Victoria Ndyanabangi
19.40	7	145	Transformation of Pediatric HIV Clinic in the Context of Botswana's National Elimination of Mother-to-Child Transmission (MTCT) of HIV	Koketso Mokomane

	Screen	ID#	Title	Presenter
1 130 Related Composes 2 179 End line assemodels of casemodels of casem	1	130	Implementing Interventions to Detect and Follow up Obesity- Related Comorbidities for Children Who Are Overweight and Obese	Andrea Imsen
	End line assessment of the outcomes of Comprehensive models of care for young people Living with HIV at Botswana-Baylor Children's Clinical Centre of Excellence	Shimane Lekalake		
	The Role of Savings and Internal Lending Communities (SILCs) in Improving Care of Orphaned and Vulnerable Children in Lesotho: Lessons Learned from Karabo ea Bophelo	Thabang Hloele		
	4	176	Factors Associated with an Above Average Decline in Estimated Glomerular Filtration Rate Following Substitution with DTG Among People Living with HIV in Eswatini	Sandile Dlamini
	h 1193	Art Therapy, A Critical Intervention for Pediatric Mental Health: A Botswana Paediatric Oncology Success	Sewelo Sosome	
	6	Provision of Comprehensive HIV Prevention Services Using One- Stop Shop Approach Targeting Adolescents and Young People, Men, and Other At-risk Populations in Four Districts of Lesotho.		Motlatsi Letsika
	7	162	Monitoring Viral Suppression among Patients that Transferred Out from Botswana-Baylor Children's Clinical Centre of Excellence (BBCCCOE)	Koketso Mokomane

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Oral Abstracts

HIV Care and Challenges for Children and Adolescents

19: Results of HIV – Self Testing Pilot Program in an Environment with Structural Challenges: Youth in the General Population Show Satisfaction with the Physical Characteristics of Tests

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Abstract

Background: HIV self-testing face obstacles in Romania, including high costs and limited availability. There may also be a lack of emphasis on their importance in the media and culture. Social structures and policies are needed to encourage distribution and utilization, along with addressing physical barriers. This could increase the number of individuals who use this testing option.

Description: 500 Abbott CheckNow HIV self-testing kits were given to university students, with instructions on how to contact a counselor for a reactive result. Follow-up phone assessments were conducted within 14 days of the test to collect feedback on the user's experience, evaluation of instructions, and overall trust in the results.

Lesson learned: Based on feedback from 202 students who provided feedback, 55% did the HST. It was found that most of the participants were female and younger than 24. 12% had been previously tested for HIV, and all tests were negative in this group. The easiest phases in the testing process were preparation and reading the results, while a small proportion of users (2%) encountered difficulties in the blood collection through finger pricking. Users found the written and graphic instructions well organized and easy to follow. Overall, participants rated the testing experience as excellent, and a majority preferred the self-testing kits to point of care testing.

Next steps: According to users, the HST is convenient and easy-to-use. Some youths have saved the test for later use due to the perceived scarcity and high costs of the test in the market or at other centers. Some users said they needed a second safety lancet. It is not known whether the youth who did not respond to the phone used the HST or not. Structural obstacles must be addressed to increase access to affordable testing. Empowering individuals is key to tackling the HIV epidemic, so we plan to

include this HIV testing option in Baylor Romania VCT (voluntary counselling and testing) program for 2024.

Abstract Type

Program Description

Abstract Thematic Category

Healthcare Technology and Innovation

25: Emerging Dolutegravir Resistance in Children and Adolescents Living with HIV in Malawi

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Abstract

Background: In 2021, Malawi transitioned children and adolescents living with HIV (CALHIV) to dolutegravir-based ART. Most had zidovudine exposure and transitioned to abacavir/lamivudine/dolutegravir (< 30kgs) or tenofovir/lamivudine/dolutegravir (≥ 30kgs). Transitions often happened without recent viral load (VL) results. CALHIV VL suppression rates improved post DTG transition but remain below 85%, raising concerns about emergence of dolutegravir resistance.

Methods: National guidelines recommend HIV drug resistance (HIVDR) testing for individuals with confirmed virological failure (VL ≥1,000 copies/mL after enhanced adherence counseling) on dolutegravir-based regimens. We reviewed HIVDR testing applications and available genotype results between December 2019 and November 2023 from CALHIV 0-18 years on dolutegravir-based ART in Malawi's ART program. Genotyping was performed from DBS samples at National Health Reference Laboratory in Lilongwe, Malawi or National Health Laboratory Service, Johannesburg, South Africa. Drug resistance was defined as resistance score ≥15 (Stanford HIVdb version 9.5.1).

Results: Of 310 applications from CALHIV with confirmed virologic failure (all on 2NRTI+dolutegravir), 99 were approved and had genotype results; 31(31%) had dolutegravir resistance (table). Among 31 CALHIV with dolutegravir resistance, median age was 10 years (range 2-18). Four (13%) were <5 years and 16(52%) 10-18 years; 19(61%) were male. Median total time on ART was 75 months (range 21-182), median on current regimen 21 months (range 1-39); 25(81%) were on abacavir/lamivudine; 2(6%) on zidovudine/lamivudine and 4(13%) on tenofovir/lamivudine. Dolutegravir resistance mutations caused 12(39%) high, 17(55%) intermediate and 2(6%) low-level resistance. Two children (10%) presented with quadruple class resistance, including one with darunavir resistance.

Table. Genotypic results of 99 Malawian CALHIV with confirmed virological failure

Categories of genotypic resistance	Genotypes
No resistance detected (wild type)	26
Single-class resistance: NRTI only and NNRTI only	21
Single-class resistance: DTG only	3
Dual-class resistance: NRTI + DTG	5
Dual-class resistance: PI + DTG	1
Dual-class resistance: NNRTI + NRTI / NNRTI + PI / NNRTI + DTG	23
Triple-class resistance: NRTI+NNRTI+PI / NRTI+NNRTI+DTG	18
Quadruple-class resistance: NRTI+NNRTI+PI+DTG	2
Total	99

Conclusions: While access to HIVDR testing has remained limited in Malawi, dolutegravir resistance was confirmed among a large proportion of CALHIV with confirmed virologic failure on dolutegravir-based ART. Streamlined protocols are needed to detect dolutegravir resistance early and define practical, appropriate adherence support and switching strategies.

Abstract Type

Scientific Research

Abstract Thematic Category

Differentiated Service Delivery: Patient-Centric Service Delivery Models

32: Mortality Rates and Individual Characteristics Among Under-Five Children Living with HIV at Baylor-Foundation Uganda Clinic.

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Abstract

Background: A report by the Centre for Disease Control and Prevention in 2021 showed that Uganda's under-5 mortality rate was 42.1/1000 live births. Mortality rates for children living with HIV (CLHIV) under 5 years are not well-documented. We described mortality rate and characteristics of CLHIV under five at the Baylor Foundation Uganda clinic.

Methods: A retrospective electronic chart review identified children under five who were HIV-exposed or CLHIV, attending Baylor-Foundation Uganda clinic from January 2022 to December 2023. We used descriptive statistics to describe both mortality rates and characteristics of children registered as dead in the electronic medical records database.

Results: The under-5 mortality rate was 5% (99/2118), with 46% (46/99) being female and median age of 12 months (iqr=12). Among the deceased, 32% (32/99) were HIV-exposed, 38% (38/99) confirmed HIV-positive by DNA PCR, and 19% (19/99) by serology. Twenty five percent (26/99) had advanced HIV disease (AHD), and among these, 15% (4/26) were not on anti-retroviral therapy yet. At the time of death, 16% (16/99) of positive cases were not staged. Referrals from Mulago's admitting wards accounted for 67% (66/99) of the cases, with the malnutrition ward having the highest referrals (38/66).

Conclusion: The under-5 mortality rate for CLHIV at Baylor Foundation-Uganda was low over the two years. However, some children fall through the cracks. Early diagnosis and treatment for all admitted children under 5 are crucial.

Abstract Type

Scientific Research

Abstract Thematic Category

Doing More with Less: Enhancing Client Outcomes through Cross-Sector Engagement

58: Pediatric HIV Care in Malawi: An Analysis of Treatment Response Time and Its Determinants in Tingathe Supported Health Facilities

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Abstract

Background: Pediatric HIV management remains a critical global health concern in resource-limited settings like Malawi. Timely response to treatment is vital for improving health outcomes in these young patients. Despite the introduction of more robust drugs, improvements in viral suppression remain below target, and understanding factors associated with time to suppression may help optimize interventions. We aim to model the time to suppression (viral load <1000 copies/mL) and investigate the factors influencing time to viral suppression in children on Dolutegravir (DTG) in districts supported by Baylor College of Medicine Children's Foundation Malawi Tingathe program.

Methods: A retrospective longitudinal analysis of secondary de-identified data from the Laboratory Information Management System (LIMS) in 95 Baylor-Malawi supported sites in central and southern Malawi. The population included newly identified children living with HIV, aged 2-14 years, who were initiated on Dolutegravir (DTG) based antiretroviral therapy (ART) regimens between January 2021 and December 2023. The ART regimens analyzed included Tenofovir/Lamivudine/Dolutegravir (TLD), Zidovudine/Lamivudine+Dolutegravir (AZT/3TC+DTG), and Abacavir/Lamivudine+Dolutegravir (ABC/3TC+DTG), respectively. Eligible participants had at least one recorded HIV RNA-PCR test result within 6 to 9 months from the ART start date. Data analysis included descriptive statistics for each variable, survival analysis using Kaplan-Meier to visualize time-to-suppression, and Cox proportional hazards regression to model the relationship between time to-suppression and the independent variables (age, gender, and regimen). Data analysis was conducted using R.

Results: Of the 2192 children newly started on ART between 2021 and 2023, 977(470 female, 507 male) were included in the analysis. Of those included, 344(35%), 3(<1%), 267(27%) were on TLD, AZT/3TC+DTG, and ABC/3TC+DTG, respectively and 363(37%) were missing regimen type. The median time to suppression was 8 months from the ART start date, with 776 (79%) achieving suppression within the study period. While children 2-9 years old showed

lower suppression (78%) than those between 10-14years (83%), there was no significant effect on time to suppression. For 614 children with regimen information available, Children on ABC/3TC+DTG (P-value=0.04 and Hazard Ratio=1.15) were associated with faster suppression compared to those on the reference category: TDF/3TC/DTG. The likelihood ratio test, Wald test, and log-rank test all have p-value =0.03 indicating that the overall model, including all predictor variables, was mildly statistically significant in predicting time to suppression.

Conclusions: This analysis demonstrates that children on ABC/3TC+DTG were 15% more likely to achieve viral suppression faster, while age and sex were not significant in predicting response time. Further evaluation is required to better understand this finding and identify other factors that may influence viral load suppression and to refine targeted interventions to Improve pediatric VL suppression.

Abstract Type

Scientific Research

Abstract Thematic Category

Implementation Science: Putting Effective Interventions into Action

90: Description of Mother Infant Pairs among infants with Incident HIV infection in a routine program setting in Malawi

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Abstract

Background: Universal antiretroviral therapy and improved Prevention of Mother to Child Transmission (PMTCT) programming have significantly decreased but not eliminated incident infant HIV infection. We reviewed the medical records of infants with incident HIV infection to identify maternal and programmatic factors associated with and possibly contributing to HIV transmission.

Methods: Routine program data from 95 health facilities identified infants with a positive confirmatory DNA-PCR between April 2021 and January 2023. Adherence to PMTCT/EID guidance, including maternal HIV testing and ART initiation; and infant prophylaxis, testing and ART linkage were reviewed.

Results: Eighty-nine infants with confirmatory positive DNA-PCR results were reviewed. Median maternal age was 26 years (range 16-46) among 84 mothers with documented age. Thirty-six were adolescent girls and young women (AGYW) 16-24 years (Mean=20.7yrs, SD=2.2). Of the 89 infants, mothers' timing of HIV diagnosis was: prior to pregnancy 25% (22/89), at first ANC visit 12% (11/89); in 3rd trimester 7% (6/89); at maternity/postnatal 9% (8/89); during breastfeeding 39% (35/89) and unknown timing 8% (7/89). For 33 women with known HIV status at first ANC visit, 64%, (28/33) had interruption ART treatment interruption and 30% (10/33) were AGYW (16-24 years).

Nearly all infants received neonatal prophylaxis (93%, 44/47) and 86% (38/44) of infants completed 6-week course. Mean age at infant HIV diagnosis was 12 months (*SD*=6.6 months). Most (91%, 81/89) infants were diagnosed via a routine milestone test; 9% via targeted testing for presumed severe HIV disease. All 87 infants who started ART initiated dolutegravir or lopinavir/ritonavir-based ART.

Conclusions: In a routine program setting in Malawi, incident infant HIV infections occurred primarily among women diagnosed with HIV during pregnancy or breastfeeding, and among women with treatment interruption, many of whom are AGYW. Interventions are needed to address late incident infections and treatment interruptions.

Abstract Type Scientific Research

Abstract Thematic Category

Differentiated Service Delivery: Patient-Centric Service Delivery Models

94: Pediatric and Adolescent Clinical Tool (PACT) guides targeted adherence support to children and adolescents unsuppressed viral load in supported facilities in Malawi

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Abstract

Background: Viral load (VL) suppression among children and adolescents living with HIV (CALHIV) lags behind adults despite transition to dolutegravirbased ART. To optimize care for CALHIV, we designed and implemented the Pediatric and Adolescent

Clinical Tool (PACT), a guided chart audit to assess viral load status and identify adherence support needs. Audit results guided targeted community health worker (CHW) support and multidisciplinary case consultation. PACT was implemented at 95 health facilities in 5 districts supported by Baylor College of Medicine Children's Foundation Malawi, Tingathe Program. We describe factors related to detectable VL (DVL) and factors associated with viral re-suppression.

Methods: Clinical providers implemented PACT audit from April to August 2022, with client follow-up from September 2022 to July 2023. All CALHIV received standard intensive adherence counseling per national guidelines; CALHIV with DVL received individualized CHW follow-up guided by audit results using a conversation guide to identify and address common barriers. Factors associated with VL resuppression were evaluated by odds ratio (OR) estimates with a 95% confidence interval.

Results: Of 12970 CALHIV, 12% (1513) had a DVL, 32% had a suppressed VL (4177), and 56% did not yet have a VL result post DTG transition (7280). Among CALHIV with DVL (n=1513), 75% this was their first DVL on DTG (n=1135), 39% had two trained guardians (n=586), 89% completed age appropriate disclosure (n=1153), 41% were enrolled in orphans and vulnerable children (OVC) care (n=627), 52% had a plan to address adherence barriers (n=784), 55% had a guardian with a suppressed VL or HIV negative (n=837), 69% received support from a psychosocial counsellor (n=1049), and 52% were enrolled in teen club (n=786). Enrollment in teen club was associated with a suppressed follow-up VL result (OR: 1.34, 95%CI 1.08-1.68). Among 1316 CALHIV with followup VL, 73% (n=960) re-suppressed. Enrollment in OVC care was negatively associated with VL suppression (OR: 0.79, 95% CI 0.63- 0.998).

Conclusions: Guided systematic review using PACT identified common, addressable gaps among CALHIV with DVL leading to high rates of re-suppression. Individualized ongoing adherence support is important to achieve VL suppression as CALHIV experience dynamic barriers to adherence of varying complexity.

Abstract Type

Scientific Research

Abstract Thematic Category

Implementation Science: Putting Effective Interventions into Action

136: Factors associated with HIV status disclosure to sexual partners among young people living with HIV/AIDS at an urban HIV clinic, Kampala, Uganda

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Abstract

Background: HIV/AIDs remains of great public health concern globally. The disclosure rates of positive HIV status by young people living with HIV (YPLHIV) to their sexual partners are as low as 31%. However, information about disclosure to sexual partners among YPLHIV in most of Sub-Saharan Africa (SSA) including Uganda is scarce. We assessed the prevalence, factors associated with HIV status disclosure to sexual partners among YPLHIV in care at the HIV clinic at Baylor Uganda.

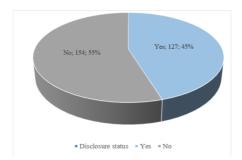
Methods: We conducted cross-sectional study, administered 281 semi-structured interviews to 281 sexually active YPHIV aged 18 to 24 years between February and April 2023 at the Baylor Uganda C.O.E HIV clinic. We determined the prevalence of disclosure using proportions and modified Poisson regression analysis to determine factors associated with HIV status disclosure to sexual partners.

Results: The prevalence of HIV status disclosure to sexual partners was 45.2%. Female gender (cR= 2.0, P<0.001), being married/cohabiting (cR=1.8, P<0.001) or divorced/separated (cR=2.2, P=0.002) were independently positively associated with disclosure to sexual partners as compared to those in were never married/single.

At multivariable analysis, YPLHIV were more likely to disclose their HIV status to their sexual partners if: they had one or no biological parents alive were compared to their counterparts (aPR=1.4, P=0.022), had 2 sexual partners compared to those with 3 or more (aPR= 1.7, P=0.013), or originated from the northern region of the country compared to the central region (aPR= 1.9, P=0.019).

Participants were less likely to disclose to their sexual partners if: they had an HIV negative sexual partner compared to their counterparts (aPR= 0.6, P<0.001), who had known their HIV status for >1 year prior to the study compared to those who had known in \leq 1 year (aPR= 0.2, P<0.001), did not know their viral load suppression status at the time of the study compared to those who knew of their suppressed VL (aPR=0.4, P<0.032), or were not aware that with an undetectable VL, one could not spread HIV to his/her sexual partner compared to those who were aware (U=U), (aPR= 0.7, P=0.049).

Figure 1: Pie chart showing prevalence of HIV status disclosure by YPLHIV to their partners



Conclusion: There was a low HIV status disclosure rate among YPLHIV to sexual partners at the clinic. Leveraging on existing peer support systems and healthcare providers to routinely counsel and health educate YPLHIV about disclosure to their sexual partners will improve disclosure rates. Emphasis on the need-to-know one's viral load and its effects on HIV transmission, and avoiding multiple sexual partners is crucial in improving disclosure rates, continuity of HIV care, and reducing HIV sexual transmission to sexual partners by YPLHIV.

Key words: Disclosure, HIV status, YPLHIV, Uganda, sexual partners

Abstract Type

Scientific Research

Abstract Thematic Category

Doing More with Less: Enhancing Client Outcomes through Cross-Sector Engagement

181: Pre-Exposure Prophylaxis Program at Botswana-Baylor Children's Clinical Centre of Excellence

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Abstract

Background: Botswana-Baylor Children's Clinical Centre of Excellence (BBCCCOE) launched the Pre-Exposure Prophylaxis (PrEP) program in April 2023. The target population were adolescents and young adults in discordant relationships. This initiative was part of a broader effort to achieve HIV epidemic control by 2030. Adolescent girls and young women account for 75% of new HIV infections in Botswana, necessitating focused interventions such as PrEP to provide education, treatment, psychosocial support, mentorship, and empowerment to maintain their HIV-negative status.

The objective of the PrEP program was to provide comprehensive HIV prevention services to adolescents and young adults, focusing on education, screening, and enrolment.

Description: All patients visiting BBCCCOE were screened on entry and eligible clients were referred for HIV testing. Those who tested negative were identified and invited to participate in PrEP. These clients received health education and counselling about PrEP; its benefits, possible risks and processes involved. If a patient agreed to PrEP, blood tests were conducted and Truvada (Tenofovir and Emtricitabine) dispensed. The client was followed up periodically and received health education at each visit. All clients were encouraged to have their partners screened and enrolled if they are eligible. Furthermore, clinicians were sensitized to discuss PrEP with patients they consult and refer eligible candidates for screening.

As of June 2024, the PrEP program at BBCCCOE has successfully enrolled 14 clients, focusing on adolescents and young adults in discordant relationships. Among these, 10 clients remain active while 4 have discontinued for various reasons including nausea and vomiting, diarrhoea, and lost to follow-up.

Lessons Learned: The initial implementation of the PrEP program in BBCCCOE demonstrated some success in terms of enrolment and retention. However, there have been reported challenges such as side effects and being lost to follow-up. The program has also identified critical

areas for improvement, including enhanced client education, more robust follow-up mechanisms, and strategies to manage side effects more effectively.

Table. Patient Enrolment and Retention in the PrEP Program at BBCCCOE (April 2023 - June 2024)



Next Steps: PrEP is an effective option in controlling HIV transmission among those who are sexually active. The next step would be to conduct a quality improvement project that would assess the strategies to increase uptake and retention. This would consist of enhancing community outreach efforts, implementing a structured follow-up system and developing protocols to manage side effects.

Abstract Type

Program Description

Abstract Thematic Category
Healthcare Technology and Innovation

Addressing Psychosocial Challenges and Stigma

54: HIV-Positive Emerging Adults' Psychosocial Struggles and the Support Networks That Help Them Cope Well (A Study of Baylor C.O.E)

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Abstract

Background: There are a lot of psychosocial challenges faced by young people living with HIV transitioning into adult life aged 18 to 24. We seek to understand individual, familial, and community-level factors affecting their well-being, drawing upon the socio-ecological framework. By focusing on this age group, the study addresses a gap in existing research predominantly focused on younger adolescents. The study aims to inform intervention strategies by providing insights into the unique challenges and support mechanisms crucial for the positive coping of emerging adults living with HIV at Baylor COE Malawi.

Description: In April 2024, a qualitative study was conducted at Baylor COE, focusing on emerging adults aged 18-24 (30, 15 males and 15 females) living with HIV. Participants were recruited from the clinic, with interviews conducted in Chichewa, the interviews were done in groups of five with two social workers, a male interviewing male and a female interviewing female so as to create a safe space where the participants were free to express themselves fully. Thematic analysis was performed on recorded interviews, exploring psychosocial challenges and support systems. The study aimed to understand the lived experiences of this population, informing interventions tailored to their needs.

Lessons learned: Using the socio-ecological framework, the key findings highlighted individual, family, and community-level challenges, as well as inter-level challenges cutting across. Individual level challenges included denial of status, adherence to medication, intimate relationship challenges(disclosure), misguiding faith based believes, and mental health challenges such as depression and anxiety. Family level challenges encompassed negligence from caregivers, poverty and internal family disputes. Community

level challenges included socializing with peers, school/work environment affecting adherence and lack of peer support groups. Inter-level challenges included public stigma and self-discrimination and stigma. Support systems aiding positive coping included economic empowerment, and social support networks. Overall, the findings underscore the multifaceted challenges faced by young adults living with HIV and the importance of holistic support systems in promoting positive coping and well-being.

Next Steps: The research study emphasizes the many difficulties that emerging adults with HIV at Baylor C.O.E. confront, highlighting the widespread effects of stigma and discrimination associated to HIV at several levels of their social ecology. These results highlight the urgent need for multi-level, youth-friendly initiatives that tackle the structural, financial, and emotional issues that are confronted. Subsequent endeavors ought to concentrate on executing programmes that are customized to the distinct requirements of young adults residing with HIV, including support networks for constructive coping. In addition, formal evaluation and early treatment for common mental health issues are demanded, along with addressing issues at the public policy level.

Abstract Type

Program Description

Abstract Thematic Category

Differentiated Service Delivery: Patient-Centric Service Delivery Models

74: Exploring Mental Health in the Wayuu: An Approach from Ancestry

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Abstract

Background: Baylor Foundation Colombia provides comprehensive health services to the Wayuu and migrant population in the municipalities of Uribia and Manaure, including psychology to strengthen the mental health of our patients. However, providing mental health services to these vulnerable groups presents challenges, as they are often unfamiliar with terms related to mental disorders.

In order to understand and incorporate the Wayuu conception of their health beyond the physical, to encourage research and improvement in the provision of psychology services, a qualitative community study was conducted on the concept of mental health for the Wayuu indigenous community.

Methods: Community sampling by convenience was used with 10 indigenous Wayuu, from the settlements of Tres de Abril, Villa Fausta, Aeropuerto,

Perroutalimana and Walerrapu. They were divided between 7 women and 3 men, who responded to recorded and transcribed semi-structured interviews. The information was processed using a thematic coding matrix to integrate ideas using AtlasTi software.

Results: The thematic analysis revealed that there is no concept of "mental health" in the Wayuu culture. During the process, the participants did not understand the terms that were referenced. After receiving an explanation about these concepts, 10 subjects affirmed that they did not talk about it in their communities. Without the existence of the concept of mental health, one cannot talk about psychological disorders. Therefore, mental illnesses do not exist in the Wayuu culture. From their cosmovision, there is the physical part of people, but there also coexists an immaterial part of individuals, which for them is vital energy.

Older participants refer to the concept of a healthy life from an ancestral perspective. According to this tradition, life must incorporate elements related to the positive aspects of well-being, such as spirituality, harmony, and healthy relationships among the individual, their family, the community, and nature. A healthy life is achieved through the balance between these spheres. Similarly, the disruption of this balance can lead to disorders. They attribute uncommon behaviors to a punishment coming from the imbalance between the different spheres.

Table 1. Semi-structured interview questions

Have you heard about mental health?	What do you understand by mental health?			
In your culture, what aspects make up mental	Is mental health discussed in your			
health?	community?			
Do you know about mental illnesses?	What are the causes of mental illness?			
Is there a relationship between the spirit and the mind?	What aspects make up a "healthy" person?			

Conclusions: Propose to the University of La Guajira, to strengthen the research processes of the concept of mental health for the indigenous Wayuu to contribute to the closer inclusion of the concept in the construction of a model with a differential approach for mental health interventions.

Strengthen Baylor Foundation Colombia's psychology care protocol by incorporating the identified concept of mental health, including appropriate terminology and building trust through cultural awareness.

Abstract Type

Scientific Research

Abstract Thematic Category

Beyond the Status Quo: Innovations for Integrated Care

106: Shared Secret: Exploring HIV Status
Disclosure to Intimate Partners among Young
People Living with HIV at Baylor Centre of
Excellence, Malawi.

<u>Chifundo Phalyce Chigwenembe</u>, Vincent Magombo, Chikabachi Daire, Maliness Banda, Symon Mtambo

Baylor Foundation Malawi, Lilongwe, Malawi

Abstract

Background: HIV status disclosure is one of the key strategies in reducing new HIV infections. It is also associated with better adherence to therapy and good clinical outcomes. Young people living with HIV (YPLHIV) are in dilemma on whether to disclose or conceal their status to their intimate partners. The consideration of people's perceptions and attitudes is crucial in understanding the factors that may affect the success of disclosure to intimate partners.

The purpose of this study was to explore the perspectives of YPLHIV regarding status disclosure to their intimate partners.

Methodology: This was an exploratory qualitative study conducted at Baylor Foundation Malawi Centre of Excellence clinic. YPLHIV ages 18 to 35 who were enrolled in care at Baylor Foundation Malawi were eligible. Purposive sampling was used to recruit YPLHIV to participate in in-depth interviews and focus group discussions facilitated by a researcher with qualitative research experience. Recruitment continued until data saturation was achieved. Qualitative data was transcribed and coded to identify emergent themes utilizing a thematic analysis approach. Ethical approval was obtained prior to commencing the study.

Results: 24 YLPHIV (15 females and 9 males) participated in the study through 13 direct in-depth interviews and two focus group discussions (12 participants each). We identified themes around relationship trust and vulnerability; emotional rollercoaster after HIV status disclosure; strategies used for HIV status disclosure to intimate partners; internal and external factors influencing disclosure; and barriers to disclosure. Both internal factors (planning to get married, being in a serious relationship, and level of trust in the partner) and external factors promoted disclosure. Some YPLHIV described that they were not ready, others were afraid of losing the partners, others did not know how to disclose, and others were afraid that their partners will be disclosing to the public. After disclosure, the partners had mixed reactions with others feeling relieved and happy whilst others were angry and sad. YPLHIV described various strategies for disclosure including intentionally exposing their partner to seeing their medications, and disclosure communication via phone calls, text messages, and face-to-face conversations.

Table 1. Identified themes and representative quotations from Direct in-depth interviews and focus group discussions with Young People Living with HIV (YPLHIV) ages 18-35 enrolled in care at Baylor Foundation Malawi, Centre of Excellence Clinic

Identified Themes	Subthemes	Representative Quotation(s)	
Relationship trust and vulnerability	Wanting to build a trust and future with the partners facilitated disclosure	"We were about to get married, and I wanted to build trust with my partner therefore I disclosed my status to him."	
	Being compelled by internal and external influences to disclose the status to the partner	"Some few months into the relationship, my partner wanted us to test for HIV and I was compelled to disclose that I was already on [antiretroviral therapy]."	
	YPLHIV- perceived readiness and self-efficacy influenced disclosure practices	"I am not yet ready to share my HIV status to other people, maybe later." Do you think it is easy?	
Emotional rollercoaster after HIV status disclosure	Both YPLHIV and their intimate partners had mixed reactions after disclosure.	"I was the happiest man on earth when I disclosed my status to her, and she accepted me as I am, and this woman has been supportive ever since".	
		"He was angry, and he immediately ended the relationship. He left me pregnant."	
Strategies used for HIV status disclosure to intimate partners	YLHIV utilized a variety of strategies for partner disclosure	"I intentionally exposed the medication so that my partner would become inquisitive, and I finally disclosed."	
partitions		"I was shy to disclose my status to her. I therefore sent a text narrating that I was born with HIV, and I am on ARVs."	
Barriers to HIV status disclosure to Intimate Partners.	Being afraid of losing their partners and being afraid that their partners will be disclosing to the public.	"I once disclosed my status to my previous partner, and he terminated the relationship. After that incident I decided to conceal my status to my current partner".	
		"After I told my ex- girlfriend that I was living with HIV, she disclosed my status to her friends, and they were mocking me. It was a bad experience"	

Conclusion: This study provides valuable insights into the lived experiences of Malawian YPLHIV facing decisions around HIV status disclosure to intimate partners. These results indicate that YPLHIV disclose their HIV status when they feel readiness, trust their partner, are in a serious relationship, and/or are pregnant or lactating. However, YPLHIV reported many barriers and fears around disclosure, and described an emotional rollercoaster leading up to disclosure and dealing with partners' reactions. The disclosure process has no standardized approach, and YPLHIV would benefit from support from healthcare workers. These results may inform policymakers to formulate guidelines for young people's disclosure of HIV status to intimate partners.

Abstract Type

Scientific Research

Abstract Thematic Category

Beyond the Status Quo: Innovations for Integrated Care

107: Caregiver Perceptions on Determinants of Retention in Care and Treatment Abandonment for Children with Cancer in Malawi: A Mixed Methods Study

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Abstract

Background: Treatment abandonment is a preventable contributor to poor outcomes for childhood cancer in low- and middle-income countries, with rates in sub-Saharan Africa sometimes exceeding 50%. Known to be a complex, multi-factorial phenomenon, interventions to prevent it are only modestly effective, and more data are necessary to design effective prevention strategies. This study aims to understand caregivers' perspectives on determinants of care retention for children with cancer enrolled in care at the Global Hematology Oncology Pediatric Excellence (Global HOPE) Malawi site.

Methods: We conducted an exploratory mixedmethods study to understand caregiver perceptions on barriers to care retention. We developed a quantitative survey to assess caregiver and child demographics and perceptions of barriers to care retention, and included an adapted, validated survey instrument to screen for family psychosocial stressors. Using an iterative process, we developed a semi-structured interview guide, informed by a literature review and five-level socioecological model to explore caregiver perceptions on factors contributing to care retention. Survey tools and interview guides were translated into Chichewa. A convenience sample of caregivers of children undergoing treatment for cancer were recruited. Interviews were recorded, translated into English, and transcribed. Two independent investigators coded transcripts using structured and emergent codes, and inductive thematic analysis is ongoing.

Results: Twenty-two caregivers were included. Caregiver and child demographics are summarized in Table 1. On psychosocial assessment, 82% of caregivers indicated their family is facing major financial problems, 63% reported anxious symptoms when thinking about their child's illness, 50% reported losing interest in being with friends/family, and 59% reported difficulty managing other household responsibilities. Through qualitative interviews, caregivers identified factors at the patient, family, healthcare center, and larger context that they perceived impacted care retention. Patientlevel factors included prognosis, treatment modality, toxicities, and history of seeking traditional medicine. Family-level protective factors included positive parental relationship with the child, parental psychosocial coping, parental self-efficacy, family support system, and faith. Family-level risk factors included lack of resources/transportation, lack of emotional support to family, family's experience with stigma, and family exposure to misinformation. Healthcare center-level protective factors included strong rapport between healthcare team and patient/family and clear communication on child's prognosis and treatment journey.

Table 1. Selected demographics of caregivers of children with cancer and their child (*n*=22)

Characteristic			
Caregiver Cha	% (n)		
Caregiver relationship to child	Mother	77% (17)	
	Father	14% (3)	
	Grandmother	9% (2)	
Caregiver marital status	Married/partnered	86% (19)	
	Separated/divorced/single	14% (3)	
	Did not complete primary school	55% (12)	

Caregiver highest level of education	Primary school	23% (5)
	Secondary school	14% (3)
	Tertiary degree	9% (2)
Child Characteristic		
Age (years) median (IQR)		9 (IQR 5-11)
Sex	Female	55% (12)
	Male	45% (10)
Cancer type	Leukemia	45% (10)
	Lymphoma	14% (3)
	Solid tumor	36% (8)
	Central nervous system tumor	5% (1)

*This is a preliminary abstract highlighting preliminary results. Data collection was also completed in Botswana; however, we were unable to include those results in this abstract due to delay in IRB renewal. If accepted, we hope to include Botswana data in the presentation, and we will include Botswana qualitative data to fully develop themes in time for the Network Meeting in November.

Conclusion: This study provides insights on caregivers' perceptions on factors impacting care retention in a low-resource setting and can inform urgently needed strategies to improve retention and ultimately survival outcomes. Enhanced emotional support targeting caregivers is one potential intervention suggested by our study. Interventions and policy changes to support care retention for children with cancer in these settings represent a tremendous opportunity to improve survival. This study will lay the groundwork for the development of actionable, targeted psychosocial, financial, and health system interventions aimed at improving retention care retention.

Abstract Type

Scientific Research

Abstract Thematic Category

Differentiated Service Delivery: Patient-Centric Service Delivery Models

151: Routine palliative care counselling: A critical component in navigating the common ethical dilemma of caregiver resistance in consenting for the provision of end-of-life counselling to Paediatric oncology patients in Botswana

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Abstract

Background: Paediatric Palliative care requires a critical understanding of the process of death and dying for children and their families. The psychological impact of death on children and their families in Botswana especially in paediatric oncology has not been adequately documented. It is a common practice in Botswana for caregivers to not have conversations about death with their children and not be forthcoming about the need to accept death as a inevitable especially when there is a poor cancer prognosis. The fear of talking about death may adversely affect a child's mental health and become an additional burden. Caregivers whose child has transitioned to palliative care often refuse to consent to full participation of a child in end-of-life counselling. Palliative care counselling dictates that a child must be aware of their illness and how it has progressed. This is essential in integrating holistic support for the child and family. However, caregivers' resistance to palliative care child counselling is a barrier to successful intervention and support and the and the aim is to introduce palliative care and death timely.

Description: Routine palliative care counselling was integrated at the point of diagnosis. This allowed the families to familiarize themselves with palliative care transitioning, death and the emotions evoked along this journey. It facilitated the grieving process and ensured that intervention on the spectrum of the grieving stages were addressed. Consistent and continuous sessions with the palliative care multidisciplinary clinic was involved from the initial stage of diagnosis. There were 20 repeated individual and family psychosocial sessions 5 group support counselling sessions and 10 palliative care clinic sessions.

Lessons Learned: Routine palliative care counselling sessions were found to have a positive influence in the caregiver's attitude in speaking about death with their children and family. This has allowed the family to create lasting memories with the child, insight on their last wishes, and timely planning for the event of death.

Next steps: The next would be to introduce the concept of palliative care at diagnosis for all patients and not only those with a poor prognosis.

Abstract Type

Program Description

Abstract Thematic Category

Healthcare Technology and Innovation

158: Enhancing HIV Awareness and Reducing Stigma among Adolescents: A Targeted Educational Intervention in Mwanza, Tanzania

<u>Denis Kagodo</u>, Neema Kipiki, Eunice Ketang'enyi, Lumumba Mwita

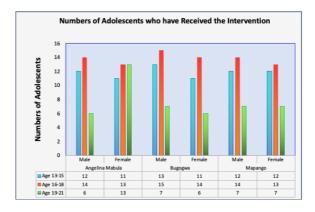
Baylor College of Medicine Children' Foundation, Mwanza, Tanzania, United Republic of

Abstract

Background: The 2023 National Aids Control Program (NACP) report states that 1% of Tanzania's youth, aged 15 to 19, are HIV positive (1.3% of girls and 0.8% of boys). This group, which is largely dependent on information from peer sources, is responsible for 60% of new cases of STDs, including HIV. Geographical difficulties, especially in isolated and rural places like Mwanza, and curriculum deficiencies—since HIV education is not given enough priority in existing educational programs—are to blame for the knowledge gap within this age group. This disparity emphasizes the critical need for focused educational outreach initiatives in schools, particularly in the Baylor Mwanza-supported Lake Zone region, to stop the spread of HIV and give young people correct prevention information. Baylor Mwanza has collaborated with nearby schools to educate young people, ages 10 to 19, about HIV/AIDS. In addition to offering resources to help students get healthcare, this involves educating students about HIV prevention, testing, and treatment. These initiatives have shown to be successful in closing the knowledge gap and saving lives.

Methods: Selected secondary school institutions in Mwanza, Tanzania, were the sites of the implementation of this initiative. As part of the program, kids received educational materials, took part in interactive debates, and attended structured school-related sessions where they learned about HIV transmission and prevention while lowering societal stigma. 198 students from Mapango Secondary School, Buhogwa Secondary School, and Angelina Secondary School participated in the program between March and June 2023 to assess the efficacy of the educational intervention.

Results: Initial assessments showed that only 42% of the 198 students had accurate knowledge about HIV transmission and prevention. Post-intervention, 85% of students correctly identified methods of HIV prevention and transmission. Additionally, there was a significant reduction in stigmatizing attitudes towards individuals living with HIV, with 78% of students expressing supportive attitudes post-intervention compared to 54% pre-intervention. The program also increased the number of students who felt confident discussing HIV-related issues with peers and family members.



Conclusion: The intervention program significantly improved secondary school students' understanding and attitudes toward HIV in Mwanza. The substantial increase in awareness and reduction in stigma underscore the effectiveness of education in preventing the spread of HIV. This success emphasizes the need to integrate comprehensive HIV education into school curricula, equipping young people with the necessary knowledge and skills to prevent HIV. Future initiatives should aim to sustain and expand these educational efforts, striving for lasting impacts and broader reach among Tanzania's youth.

Abstract Type

Scientific Research

Abstract Thematic Category

Education and Sustainability Initiatives

Morning Report: Clinical Conundrums – Navigating Complexities in Diagnosis and Treatment

6: Incidental Hepatitis B Surface Antigen Positivity in Infancy: Two cases from Lesotho

Teresa Steffy, Samhita Bhargava

Baylor Foundation - Lesotho, Maseru, Lesotho

Abstract

Clinical case description: Case 1: The patient is a 7-year-old HIV-negative female who presented in 2018 at 11 months of age for an adoption physical. She was asymptomatic and had routine testing significant HBsAg positivity. She was started on lamivudine (3TC) 3 mg/kg/day after her first positive HBsAg

result. She had serial HBsAg testing with one negative result in 2021, has tested positive since, and remains on 3TC. A single AST done in 2019 was 49 U/L. She had gross motor delay at 12 months of age that resolved by 18 months. Growth has been normal.

Case 2: The patient is a 7-year-old HIV-negative female who presented in 2016 at 3 weeks of age for HIV-exposed infant care. Initial HBsAg testing in 2017 at 3 months of age was done under unknown circumstances but the test result was confirmed at Baylor a few weeks later. She was started on 3TC 3 mg/kg/day. Baseline LFTs were drawn in 2018: AST 134, ALT 137. She had serial positive HBsAg but tested negative once in 2022 and again positive 3 months later. She again tested negative once in 2023 and has tested positive since then. ALT trend 62 -> 86 -> 51 and AST trend 73 -> 75 -> 75 (2019, 2022, 2024). GGT and ALKP have been normal. She had mild malnutrition and brief developmental delay in infancy and is now maintaining a normal growth velocity.

Discussion: Routine HBsAg screening in healthy children in Lesotho is not performed. Lesotho has standardized HBsAg screening in its antenatal care and HIV guidelines. For neonates and infants infected with hepatitis B virus (HBV), there is a 90% chance they will develop chronic HBV infection. Abandoned newborns and those who are born to women with an unknown HBV status are at particularly high risk. Hepatitis B vaccination is not administered at birth and is only available as part of the pentavalent vaccine. Hepatitis B immunoglobulin (HBIG) is not available in-country. HBV PCR and antibody tests are not routinely available and frequent stock-outs of supplies for liver function tests occur. HBV is known to be resistant to lamivudine and pediatric tenofovir formulations are unavailable.

Conclusion: The WHO released HBV diagnosis and treatment guidelines in adolescents and adults in April 2024 in response to a rising number of deaths from hepatitis, 83% of which were caused by HBV. These cases highlight healthcare access and quality issues that must be improved. Establishment of management guidelines for children, access to birth vaccination and HBIG, pediatric treatment formulations and effective stock management are necessary steps to address the growing hepatitis epidemic.

Abstract Type
Clinical Case Report

Abstract Thematic Category

Beyond the Status Quo: Innovations for Integrated Care

7: The Role of CT scan for Acute Pulmonary Tuberculosis Diagnosis: A Case Report

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¹Baylor Foundation - Lesotho, Maseru, Lesotho. ²Queen Mamohato Memorial Hospital, Maseru, Lesotho. ³Lesotho Ministry of Health, Maseru, Lesotho

Abstract

Clinical Case Description: A 74-year-old male with HIV [diagnosed and started on anti-retroviral therapy (ART) in 2007] presented with a two-week history of fever, night sweats, and bloody nasal discharge. His viral load had always been undetectable. His ART regimen was ABC.3TC.DTG as of May 2021. He had been treated for pulmonary tuberculosis (PTB) in 1999, 2003, 2006, and 2018 with a known history of a loculated left pulmonary effusion since his first available chest X-ray (CXR) in 2012. Tuberculosis prevention therapy was completed in 2014 then again post-PTB treatment in 2018. He was also chronically underweight, with a 20-pack-year smoking history and had previously worked as a miner.

On exam, Temperature was 36.3C, HR 65, RR 16, O2 95% room air, BP 133/78, weight 46.6 kg, height 1.74 m, BMI 15.4 kg/m² and mid-upper arm circumference 26.7 cm (normal). He was well appearing with exam notable for bloody nasal discharge. Same-day CD4 count was 250 cells/mm³ and urine LF LAM was negative.

Given the lack of cough, he was treated for acute sinusitis with 7 days of amoxicillin/clavulanate and given food supplements. TB investigation was done: Sputum (spot and early AM sample) was negative by GeneXpert. CXR showed left mid- to lower lung cavitary lesion with adjacent fibrotic bands, pleural thickening, and bilateral apical lung fibrotic changes. These changes were attributed to his past TB and smoking history. Full blood count showed a hemoglobin of 12.6 and platelets of 220. The patient's symptoms had fully resolved by the time of his chest CT three weeks after presentation. CT suggested that the cavitary lesion on CXR was an emphysematous area with fibrotic bands and adjacent pleural plaque. At his follow-up visit one month later, he had gained 2.2 kg. He was concluded to not have active TB.

Discussion: Lesotho is faced with a growing number of former miners, approximately 20% of the working population, many of whom have a smoking history or prior TB diagnosis. Lesotho also has 661 cases of TB in every 100,000 people. Relying heavily on CXR for TB diagnosis in these patients risks unnecessary TB treatment for cough related to other conditions. The literature supports CT scan to diagnose PTB, given its sensitivity of 91% and specificity of 76%. However, access to this imaging modality is limited by financial constraints of both the healthcare system and individuals in low-middle income countries.

Conclusion: This case highlights the need to consider the use of chest CT in PTB diagnostic algorithms, especially when patients have underlying chronic lung disease due to other etiologies.

Abstract Type

Clinical Case Report

Abstract Thematic Category

Doing More with Less: Enhancing Client Outcomes through Cross-Sector Engagement

18: Creative Social Work Techniques Can Be Used to Improve the Link to Care and Adherence for PLWHA

<u>Iuliana Costas</u>, Elena Melinte-Rizea, Ștefania Florentina Mihale, Ana Maria Schweitzer

Baylor Black Sea Foundation, Constanta, Romania

Abstract

Case description: The patient is a thirty-two yearsold woman living with HIV and HCV, under psychiatric medication. After being diagnosed with HCV, the patient was in a vicious circle of abusive relationships and shock. She was at high risk for inadequate adherence because of her social and psychological vulnerability, so she came for psychological counselling. She presented herself to the social worker after regularly failing to fulfil her part of the intervention agreement with the psychologist.

The objective of the social intervention was to provide her with an easy-to-use tool to relieve and cope with the psychological stress. From the start, the social worker chose to use alternative communication methods, as face-to-face verbal communication was not working in her case.

Methods:

- Colouring on a given material with a focus on the activity, not on the quality of the result.
- Drawing to express emotions.
- Diary combining drawing and writing to talk about her daily life, relationships.
- Transfer the drawing and writing technique into daily schedules (treatment, cooking, walks).
- Writing letters to her loved ones.
- Role-playing at the clinic.

Results:

- The patient had a tool to shift her attention from negative situations.
- She was able to connect with her emotions to identify her strengths, problems.
- She had a way to express her emotions towards herself and those around her.

- Improved adherence using a daily timetable created by her for all her medication
- She reached an undetectable HIV viral load.
- She was able to complete anti HCV treatment and achieve undetectable viral load.

Discussion: In classic social work practice, most techniques used in social intervention with adults rely on verbal, face-to-face communication. At the same time, people who find themselves in various situations of vulnerability use social services. Situations include illiteracy, poor education, cognitive decline, mental disability, psychological issues, violence, ethnic background, etc. Some cannot convey messages or express themselves verbally and need other ways to identify, share feelings, or discover things about themselves.

Conclusion: Most of the time, psychosocial interventions do not have the luxury of time, as achieving results can be a life-death situation. Therefore, the clinic can standardize alternative communication methods to address the individual particularities of our beneficiaries. The following steps include tailoring for specific situations of vulnerability, amount of time at disposal, etc. At Baylor Romania, we plan to expand the use of alternative methods to understand better their potential use for PLWHA in various situations of vulnerability.

Abstract Type

Clinical Case Report

Abstract Thematic Category

Beyond the Status Quo: Innovations for Integrated Care

50: Management of Streptococcus Pneumoniae with multiple resistance in an HIV infected Adolescent with Meningism yield desirable results at pediatric ward, Kamuzu Central Hospital, Malawi

Adamson Munthali, Mirriam Kansichi

Baylor Malawi, Lilongwe, Malawi

Abstract

Clinical Case description: I.T. is a 13-year-old male, on 13A for 6 Months, admitted to the Pediatric Ward at Kamuzu Central Hospital with 1-week history of Headache, Neckache and Fever. He developed confusion and neck stiffness 1 day prior to presentation. On physical examination, he was confused with a GCS of 8/15, mild neck stiffness with positive Brudzinski's sign. His temperature was 38 °C with saturation of 98% on room air and a pulse rate of 144 beats/minute. Anthropometric

parameters were consistent with moderate malnutrition. At this stage, differential diagnoses included Meningitis (Acute Bacterial, TB and Cryptococcal), Cerebral Malaria and HIV Encephalitis.

Investigations revealed CSF with 180 cells with 80% polymorphs, CSF culture and sensitivity showed resistance to: Ampicillin, Ceftriaxone, Trimethoprim/Sulfamethoxazole, Tetracycline Penicillin, and Oxacillin, only sensitive to Vancomycin and Clindamycin. CSF and Serum CrAG was negative, FBC; 26>11<326, Viral load, LDL, CD4; 56, Urine LAM, FASH and MRDT were negative. RBS was 116 mg/dl, Liver and Renal function was normal. Based on this, a diagnosis of Acute Bacterial Meningitis with multiple drug resistance was made. Vancomycin was added to management with resultant clinical resolution of meningism over a week and finally was discharged.

Discussion: Patients with resistant S. Pneumoniae with meningism have similar Clinical picture to those without resistance. Much as Ceftriaxone was insensitive for this case, it still played a role in treating resistant S. Pneumoniae when it was combined with Vancomycin because this combination improves bactericidal effect. Clindamycin was not chosen because it does not cross Blood Brain barrier. Rifampicin is also indicated if there is no progress by initial treatment, but active TB must be ruled out to avoid Rifampicin resistance.

Conclusion: This case highlights the need to timely initiate sensitive treatment to effectively treat resistant S. Pneumoniae to have best outcomes. Culture and sensitivity are key in making diagnosis of ABM with resistant S. Pneumoniae. Great improvement for this case was an indication of right treatment targeting resistant organism. Selecting drugs with good Blood Brain Barrier among drugs that are listed as sensitive is key for successful treatment of resistant S. Pnuemoniae presenting with meningism.

Abstract Type
Clinical Case Report

Abstract Thematic Category

Implementation Science: Putting Effective Interventions into Action

62: A Child Living with HIV in Malawi with Mixed Subtype Localized Scleroderma, Most Prominently Coup de Sabre

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Abstract

Clinical Case Description: An 11-year-old boy living with HIV presented for a routine ART refill. He was initiated on ART on 24th September 2017 when he was 4 years old, and he has a history of persistent viral suppression and good adherence to medications. He has a notable scar on his forehead that had been presumed to be secondary to a traumatic event. Upon further history, his mother described the formation of a small plaque on the top of his scalp that was initially diagnosed as a fungal infection when he was 4-years old. This lesion slowly progressed into a linear lesion with a clear depression in the forehead accompanied by skin darkening and lack of hair growth in the affected area. After this initial progression, the lesion has remained stable for many years. He also had plaquelike findings on his back. This history and exam findings fit a diagnosis of mixed subtype localized scleroderma, with linear morphea or Coup de Saber as the prominent manifestation. The rheumatology team at Texas Children's Hospital was consulted for further assistance. Radiograph of the head confirmed some bone involvement of the lesion. ANA, Anti-dsDNA, Anti-SCL70, and anti-centromere antibodies were all negative. Full blood count, kidney function, and liver function tests were unremarkable. Following discussions with the patient's family, the child was started on weekly methotrexate to prevent the possible progression of the disease.

Discussion: The overall incidence of juvenile localized scleroderma is 3.4 cases per million children (Zulian 1, 2019). Diagnosis of this condition in Africa seems to be exceedingly rare as only two case reports were found during our literature review (Makhakhe, et al, 2023; Abdelnour JGW, et al, 2019). This case is interesting in that the progression of the lesion occurred around the time of ART initiation. It has been shown that initiation of ART may induce the onset of certain autoimmune diseases. This could be due to a form of Immune Reconstitution Inflammatory Syndrome (IRIS). The reconstituted immune system can exacerbate a latent autoimmune condition, or it could precipitate the development of new autoimmunity in the setting of a higher functioning immune system (Hasan, et al, 2022).

Conclusion: This is the only known published case of a child living with HIV in Africa with mixed subtype localized scleroderma. The condition is rare, although likely underdiagnosed. We should be vigilant about diagnosing and treating autoimmune conditions in people newly initiated on ART to avoid the morbidities associated with progression of these diseases.

Abstract Type Clinical Case Report

Abstract Thematic Category

Beyond the Status Quo: Innovations for Integrated Care

146: Paediatric Nasopharyngeal Carcinomas at Botswana Baylor Children's Clinical Centre of Excellence (BBCCCOE)

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Abstract

Introduction: Nasopharyngeal carcinoma (NPC) although rare among children, is the most common nasopharyngeal tumor in the paediatric population. The relationship between NPC and HIV has not been clearly described in literature and more research into any possible association would help improve the management of the co-morbidities including earlier identification that would help avoid late or advanced stage presentations. The aim of the study was to review and describe characteristics of all cases of NPC in our setting.

Methods: A retrospective chart review of all solid tumors in children from 0 to 16 years in Botswana from 2015 until 2024 was conducted. Patient data was reviewed in an electronic database and analyzed using inferential statistics. An association with Human Immunodeficiency Virus (HIV) was also investigated.

Results: A total of 335 new paediatric solid tumor cases were noted and 6 (2 females and 4 males) were diagnosed with NPC since 2015. This comprised 1.7% of all cancers seen in BBCCCOE presenting between ages 11- 16 years. The commonest presentation was a neck mass (67%). Other presentations included headache, ear pain, decreased hearing, dysphagia and odynophagia. These symptoms would most often been present for 2-6 months across all patients prior to confirmation of diagnosis. Two patients were HIV positive, one with a VL <400, CD4 of 973 and the other with a VL<50 and CD4 641. Both were virally suppressed at the time of a diagnosis of NPC. The non-keratinizing undifferentiated subtype of NPC was found in 5 (83%) patients with 1 (17%) with a nonkeratinizing squamous cell carcinoma. An evaluation of staging at the point of diagnosis revealed that 1 (17%) was Stage II, 2 (33%) were Stage III, 1 (17%) Stage IVA and 2(33%) Stage IVB. All patients received induction chemotherapy with Cisplatin and 5-Fluorouracil followed by radiotherapy. The most common reported chemotherapy side effects were nausea and vomiting (100%) and mucositis (67%). Nephrotoxicity was observed in 2 (33%) patients, one of which one was HIV positive. Radiotherapy well

tolerated and none required gastrointestinal bypass for feeding. The overall survival after 12 months of chemotherapy was 5/6 (83%). Residual side effects from the cancer and the chemotherapy including hearing loss and blindness reported in 3/6 (50%) of the patients.

Conclusion: NPC is a rare type of cancer with a good overall survival in Botswana. While they may present at different stages of severity, the management would consist of chemotherapy and radiotherapy. In this cohort, chemotherapy was generally well tolerated with the one exception being HIV positive. Radiation therapy was also well tolerated.

Abstract Type

Scientific Research

Abstract Thematic Category

Beyond the Status Quo: Innovations for Integrated Care

148: Perianal Abscess in A Prolonged Neutropenia Paediatric Patient with A Rhabdomyosarcoma at The Botswana-Baylor Children's Clinical Center of Excellence

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Abstract

Clinical case description: A 2 year 3 months old male was referred to Botswana-Baylor Children's Clinical Centre of Excellence (BBCCCOE) from South Africa for the continuation of care following a diagnosis of an embryonal rhabdomyosarcoma (RMS). He initially presented at a South African hospital at 16 months old with a hard palate mass extending to the maxillary sinus and orbit. He was treated with chemotherapy consisting of ifosfamide. vincristine and actinomycin and completed 5 cycles. There was a marked reduction in size of the mass. During his stay he had a tracheostomy and percutaneous endoscopic gastrostomy tube(peg) inserted. He was sent to BBCCCOE for possible radiation but given there was no residual tumor; he was started on second line chemotherapy comprising vincristine, dactinomycin and cyclophosphamide from week 13.

On arrival to BBCCCOE, he clinical malnutrition with sparse hair. His weight was 9kg, height of 81.5cm (-2.5 standard deviation) indicating moderate malnutrition. His mid-upper arm circumference was 13.5cm. He had a slight infraorbital bulge but otherwise his systemic exam was unremarkable. He completed 36 weeks of chemotherapy. However, he

became neutropenic with fevers up to 41 degrees Celsius from week 32. The response to antibiotics was minimal with the fever returning 2-3 days. He developed diarrhea and vomiting on week 34 and further examination revealed an anal sore. A blood culture was positive for pseudomonas aeruginosa sensitive to all antibiotics. Given the persistent swinging fevers, a Computed Tomography (CT) abdomen was done and a large circumferential abscess extending to S1 was discovered. He was taken to the operation theatre for debridement and drainage. He is now stable, completing antibiotics and chemotherapy, after which he will receive an end of treatment scan.

Discussion: This case outlined the diagnostic challenges in identifying occult infections in neutropenic patients with fever. The cyclic nature of the fever made it difficult to diagnose and confirm. To our knowledge, there have been no previously reported cases of peri-anal abscesses reported in children with rhabdomyosarcoma in Botswana. While there been a few cases in adults, their presentations were different.



Fig 1 and 2: sagittal and coronal CT images of the abscess demonstrating the circumferential nature and extension to \$1 spinal level.

Conclusion: Patients with neutropenia and fever are at risk for gram-negative infections including abscesses. Early imaging, diagnosis and a multidisciplinary approach involving microbiology, radiology and paediatric surgical teams are essential in prescribing the most effective treatment.

Abstract Type
Clinical Case Report

Abstract Thematic Category

Beyond the Status Quo: Innovations for Integrated Care

Women's and Neonatal Health

47: An Innovative, Sustainable, Midwife Mentorship Program Within a Busy Community Hospital in Malawi: A Pilot Study

Rachel Macleod Spring, Sally Kuchawo, Rose Swai, Stephen Kumwenda, Modesta Nyando, Dziwenji Makombe-Mboma, Nomsa Kafumba

Area 25 Community Hospital, Lilongwe, Malawi

Abstract

Background: Area 25 Community Hospital, Lilongwe, Malawi provides quality care for mothers and babies. There is no designated Midwife Mentorship Program, which is prioritized by the Ministry of Health. Evidence suggests effective mentoring can improve staff retention, prevent burnout, increase job satisfaction, and contribute to positive clinical and organizational outcomes. Our aim is to improve clinical outcomes by enhancing midwives' knowledge, skills, and attitudes through the implementation of an integrated, sustainable mentoring program.

Description: Five senior midwives designed a program to provide training and support for a selected cohort of 14 midwife mentors. They received theoretical and mannequin-based instruction and were assessed prior to transitioning into active mentorship roles. Topics included obstetric emergencies, patient monitoring, neonatal resuscitation, accurate and clear communication, critical thinking, escalation of care, and attitude

changes. Mentees were paired with mentors in the same department. Each mentor was assigned 4-6 mentees, Mentoring took place both at the bedside and in the skills lab. Monthly mentors' workshops provided on-going training and support.

Monitoring and evaluation followed a results framework with indicators for knowledge and skills acquisition and clinical impact. Pre and post-tests, proficiency checklists, and questionnaires monitored progress. Mentor/mentee contact was tracked through logbooks. Focus group discussions provided qualitative information. Existing facility data on birth asphyxia evaluated the clinical impact.

Lessons Learnt:

- 1. Improved knowledge and attitudes among mentors and mentees: For mentors, the didactic curriculum was effective in achieving knowledge acquisition as evidenced by pre/post-assessment scores increasing from 71% to 86%. Mentors' ability to transfer knowledge and improve attitudes was demonstrated by increased utilization of SBAR (Situation, Background, Assessment, Recommendations) techniques from 67% to 88%. In fact, SBAR is now used routinely throughout the facility for both written and verbal handovers. In focus groups, mentees reported heightened job satisfaction due to personalized guidance and support.
- Improved skills among mentors and mentees: Scores for proficiency assessments of emergency obstetric

- scenarios among mentors rose from 54% to 91%. Mentees' scores increased from 46% to 87%
- Clinical impact on the incidence of birth asphyxia: The incidence of birth asphyxia decreased from an average of 37 cases per month, (5%) to 19 cases per month.
 (3%.) post-implementation.

Figure 1. Number and Percentage of Birth Asphyxia Cases



Next steps: The program cultivates a supportive and enriching learning environment, empowering individuals to reach their full potential. Permanent incorporation of the mentoring program into the facility's educational services will require on-going support from leadership. Workshops and skills lab trainings require a well-equipped accessible space. Mentoring encounters mainly take place within working shifts and extra hours. Expenses will be reimbursed. Mentor motivation and mentee participation rely on achieving improved outcomes. The mentors will be supported to champion improvement initiatives at a departmental and facility level. Minimum program adaptation will allow dissemination to other facilities.

Abstract Type
Program Description

Abstract Thematic Category
Education and Sustainability Initiatives

118: Improvement In Number of Women Screened for Cervical Cancer Among Women Living with HIV At Lungwena Health Center In Rural Malawi: A CQI Project.

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Abstract

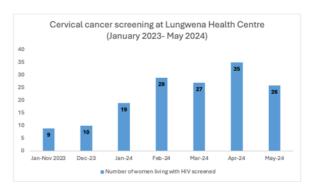
Purpose: Malawi has one of the highest cervical cancer death rates in the world with an estimated 51.5/100,000 deaths per year according to the WHO. Women living with HIV are at 6-fold increased risk of developing cervical cancer. Early detection and

treatment of precancerous lesions with screening can decrease mortality. To improve screening, a multifaceted CQI was initiated to achieve sustained improvement in the number of women screened for cervical cancer at Lungwena Health Centre situated in Mangochi District.

Methods: In December 2023, low screening rates for cervical cancer prevention (CECAP) with visual inspection with acetic acid (VIA) were identified and root cause analysis was conducted with facility staff to identify barriers to providing VIA for cervical cancer screening. The barriers included lack of VIA equipment including speculums, sponge holding forceps and vinegar, few trained providers to conduct screening, lack of client knowledge on cervical cancer and VIA, and no dedicated space to conduct screening.

To address the gaps: (1) Wednesday and Friday were designated as CECAP days (2) Client education with health talks was started at ANC, OPD and ART clinics every Wednesday and Friday (3) VIA equipment including speculums, sponge holding forceps and vinegar were obtained. (4) a facility CECAP duty roster was developed and enforced with one nurse assigned each day (5) support from Baylor CECAP nurses was planned Biweekly on Wednesday visits and (6) A dedicated spacious CECAP screening room was identified. CHWs were assigned to each ART Clinic to identify and escort women eligible for screening to CECAP services. Routine program data on screening performance and screening outcomes were analyzed pre and post CQI initiative.

Results: Pre-CQI intervention from Jan-Nov 2023 a total of 9 women had CECAP screening in 11 months. From Dec 2023-May 2024, 155 women had CECAP screening with an increasing trend in the number of women screened in subsequent months. One woman had a positive VIA lesion and was treated.



Conclusion: Increased CECAP screening is possible at Lungwena rural health facility in Malawi with coordination among the site level team and prioritization of the CECAP activity. Physical space, available equipment's, assigned providers and targeted client education can contribute to increased screening. Collaborative efforts are needed between providers to eliminate gaps in service delivery and additional staffing could potentially improve

screening further when trained providers are otherwise engaged or off duty.

Abstract Type
Quality Improvement

Abstract Thematic Category

Quality Improvement Initiatives

121: Situational Analysis of Factors Contributing to Low Uptake of Cervical Cancer Screening and Treatment Services in Local Entities Advancing and Driving Health Responses (LEADR) Supported Districts.

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Baylor Foundation Lesotho, Maseru, Lesotho

Abstract

Background: Lesotho has the second highest HIV prevalence rate in the world, with approximately 324 000 people living with HIV, 29.3% of which are females aged 15-59 years. Cervical Cancer (CaCx) is a slowly progressing disease and if identified early it can be treated to reduce morbidity and mortality. Further, CaCx is 3-4 times more prevalent in women living with HIV than it is in HIV negative women. Baylor College of Medicine Children's Foundation Lesotho (BCMCFL) supports 24 Health facilities in two districts with technical assistance and direct service delivery, through the HIV/TB care and treatment-focused LEADR project. The low performance for FY23 cervical cancer screening among Women Living with HIV (WLHIV), at 32% against annual target in LEADR supported sites, called for a root cause analysis and targeted interventions to improve screening and treatment.

Methods: An implementation science study using quantitative and qualitative cross sectional research methods was used to assess cervical cancer screening and treatment services. Structured questionnaires were administered to 124 patients and 23 clinicians at all LEADR supported health facilities. A descriptive analysis was applied. This was coupled with strategic planning and tailored interventions to further guide program performance. Strategies deployed to improve performance included capacity building of providers on cervical cancer screening and treatment, monthly data validation, reporting review, and data cleaning. Patient flow was also redesigned to reduce missed opportunities for screening and treatment services. Dedicated space for CaCx services was either identified or created in collaboration with health facilities management at some medium to high volume sites.

Results: Resource limitations, infrastructure, health workforce capacity, poor referral pathways, patient hesitancy, and long waiting times, were highlighted by clinicians as main contributing factors to low performance. Most (58.6%), of the patient respondents resided in rural areas. 57.1% do not perceive themselves at risk of having cervical cancer. A significant proportion of patients (83.6%) do not know that cancer can be cured if diagnosed early. In addition, 92.7% of the participants do not think cervical cancer screening saves lives. Following these interventions, cervical cancer screening among WLHIV improved to 101% of the annual target by the end of F24 Q2.

Conclusion: The cervical cancer program has many challenges ranging from technical, infrastructure and financial limitations. The main challenges faced in preventing, screening, and treating cervical cancer are lack of human and material resources, and inadequate mobilization activities. There is a need for the Ministry of Health to expedite the availability of resources for capacity building of providers and risk communication and community engagement activities. Educating communities on risk factors and available prevention and treatment services at health facilities will promote positive health-seeking behaviour.

Abstract Type
Scientific Research

Abstract Thematic Category

Implementation Science: Putting Effective Interventions into Action

122: Group Antenatal Care (G-ANC) Model to Improve Maternal and Child Healthcare Outcomes: Baseline Feasibility Assessment.

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Abstract

Background: Globally, significant challenges remain in maternal and child health care. In Lesotho, HIV prevalence among pregnant women is 24%, with elimination of Mother to Child HIV Transmission (eMTCT) remaining a challenge. Low first and fourth antenatal care (ANC) coverage, low early infant diagnosis (EID) and significant infant mortality rates persists. Through the USAID-funded Local Entities Advancing and Driving Health Responses (LEADR) activity, Baylor College of Medicine Children's Foundation Lesotho supports accelerating progress for eMTCT by addressing gaps in the eMTCT program. One strategy proposed is G-ANC. Expected outcomes include increasing HIV retesting among seronegative pregnant women, decreased

disengagement from care, improved EID services, improved experience of care and health literacy. An implementation plan, including a feasibility assessment, to identify challenges and how G-ANC might address them, was crafted by LEADR in October 2023.

Methods: In November-December 2023, 38 patients and three nurse midwives were interviewed at three health facilities using focused group discussions (FGDs) and key informant interviews (KIIs). Informed consent was obtained from all participants. Using a standardized guide, interviews were conducted by District Health Management-LEADR teams in collaboration with the Lesotho Network of AIDS Service Organizations, a community partner. Three FGDs lasting 45-60 minutes each and 3 KIIs lasting 30-45 minutes were conducted. Key issues were summarized into themes, and a descriptive analysis was applied.

Results: Clinicians reported challenges including healthcare worker shortages, migration within and outside the country, patients' lack of transport fare to health facilities, inadequate support from partners and in-laws and poor patient follow-up. Among patients, structural factors including stigma associated with pregnancy in adolescents or older adulthood, patients' beliefs, and use of alternative remedies contributed to poor attendance. Clinic factors including long travel and waiting time, inflexible appointment scheduling, clinicians' poor attitudes and lack of social support also featured. Positive responses to the possible benefits of G-ANC were recorded: clinicians delighted in the possibility of reduced workload, patients welcomed the reduction in waiting times, psychosocial and peer support and empowerment associated with the model.

Lessons learned: G-ANC is a viable alternative to the conventional method of ANC. It can provide social and peer support, empowering women to own and drive their ANC/PNC experiences. Other countries are already implementing this G-ANC to augment services at varying scales.

Way forward: BCMCFL is part of a national G-ANC task team consisting of Implementing Partners and Ministry of Health. The team is putting together an implementation plan and will support the introduction and roll out of G-ANC in Lesotho. Drawing from the results of the feasibility assessment, attendance at the Global G-ANC catalyzer International Conference 2024 in Kenya and a study tour to Uganda, the team is set to roll out implementation by July 2024.

Abstract Type
Program Description

Abstract Thematic Category

Differentiated Service Delivery: Patient-Centric Service Delivery Models

133: Characteristics and outcomes of neonates attended at Area 25 health facility in Lilongwe, Malawi

<u>Melvin Kunsembe</u>, Tariro Chimhanda, Ibe Iwuh, Tiwonge Mphangwe

Baylor Foundation-Malawi, Lilongwe, Malawi

Abstract

Background: Neonatal morbidity and mortality remains high in low- and middle-income countries (LMIC), especially in Sub-Saharan Africa (SSA). Malawi has a high neonatal mortality rate at 19 per 1000 live births (WHO 2022). The top causes of neonatal mortality are complications of prematurity, infections, birth asphyxia and congenital abnormalities reflective of global statistics. The Malawian Ministry of Health has a Public-Private Partnership (PPP) with Baylor Foundation-Malawi, which has enabled the establishment of a structured pediatric service at Area 25 health facility (A25HF). The primary objective of the PPP was to decongest referral facilities and reduce burden of disease and mortality. With the ongoing initiatives, we believe facility-based impact evaluation provides opportunity to identify determinants of neonatal morbidity and mortality. Our study objective was to determine the characteristics and outcomes of neonates over a one-year period.

Methods: This retrospective cross-sectional study included all neonates (<28 days old), inborn and out born, admitted to the neonatal ward from June 1, 2023, to May 31, 2024. Neonates missing outcome and other critical data points for characterization were excluded. Data were extracted from the hard copy Sick Neonate Register and patient files using a pre-tested electronic data collection form. Demographic data, clinical characteristics, and outcomes were recorded and entered in SPSS. Descriptive statistics and percentages were reported.

Results: there were 795 admissions recorded, 82 were excluded. Out of 713 admissions reviewed, 663 were inborn. Eighty five percent of neonates were born at gestational age (GA) ≥37 weeks with 72% delivered via spontaneous vaginal delivery. Gender distribution showed male preponderance of 51%.

The variations in birth weight were 79% between 2500-3999g and 16.4% less than 2500g. Ninety seven percent had an APGAR score of ≥7 at the fifth minute. Seventy two percent were HIV non-exposed while 23% had an unconfirmed status. The common diagnoses were infections (52%), respiratory distress (11%), birth asphyxia (8%), Jaundice (7%) and prematurity (7%)

Trend of neonates discharged home showed a noticeable increase from June 2023 (1%) to May 2024 (18%) while referrals show a declining trend. Outcomes showed 71% were discharged home, 28% referred to a tertiary facility and 1% died.

Conclusion: A25HF has a high-volume neonatal unit admitting conditions like volumes seen at other referral facilities but with a demonstrable low mortality. The trends indicate an increase in

discharges and a decrease in referrals which could be attributed to improved care at the initial facility, a transformative brainchild of the public private partnership (PPP).

Abstract Type Scientific Research

Abstract Thematic Category
Quality Improvement Initiatives

Innovative Approaches to HIV and Tuberculosis

24: The CHILD ICT Tool: A Simple Family Mapping Approach to Close the Pediatric Case Finding Gap

<u>Katherine R Simon</u>^{1,2}, Albert Kaonga¹, Steven Masiano¹, Elizabeth Wetzel^{1,2}, Elijah Kavuta¹, Carrie M Cox^{1,2}, Brigid E O'Brien^{1,2}, Rachael Manyeki^{2,1}, Linley Hauya¹, Dhrutika Vansia¹, Maria H Kim^{1,2}, Saeed Ahmed^{1,2}

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Abstract

Background: Nearly all women living with HIV (WLHIV) in Malawi are on life-saving ART, yet 26% of children <15 living with HIV (CLHIV) remain untreated. Addressing this treatment gap represents an opportunity for identifying undiagnosed CLHIV. We describe the implementation of a "Child Index Case Testing Tool" (cICT) designed to systematically screen WLHIV accessing HIV for untested children.

Methods: Community health workers screened WLHIV 15 years and above receiving care in 95 Baylor-supported ART clinics in Malawi from 1 September 2020 to 31 August 2023 with the brief (<5 min) tool and documented for each child 0-19 years: name, age, HIV status (infected, uninfected, exposed). Tool was filed with mother's Ministry of Health ART record for review at subsequent visits. De-identified data from tools was entered into SurveyCTO to determine WLHIV screened, children with new HIV status documented, and CLHIV identified. Data were described using counts (proportions) for categorical variables and means (standard deviations) for continuous or numeric variables.

Results: 101,273 women from 95 health facilities were screened which represents 92% of the cohort of WLHIV over 15 years of age. On initial screening, 75,275 women (74%) reported having at least one child <19 years of age, and 18,270 (24%) reported at least one untested child. A total of 193,454 children were identified: 36,965 (19%) had unknown HIV status, 19,664 (10%) were exposed infants; 128,371

(66%) were uninfected, and 8,454 (4%) were known CLHIV. By August 2023, 15,622 of 18,270 (86%) of WLHIV with untested children had at least one follow-up visit, and 13,595 (90%) had status of all listed children confirmed. 26,562 (72%) of the 36,965 children with unknown status at baseline had a documented HIV status by August 2023, with 442 children newly identified as CLHIV (yield 1.7%). 388 exposed infants were newly identified and linkage to prevention confirmed.

Conclusions: In a routine program setting, systematic documentation of children's ICT status using a brief ICT screening tool of WLHIV is a pragmatic approach to identify previously undiagnosed CLHIV.

Abstract Type

Scientific Research

Abstract Thematic Category

Implementation Science: Putting Effective Interventions into Action

35: Protease Inhibitor Stock-out in Sub Saharan Africa: Real-World Implications of Single-Drug Substitutions to Dolutegravir in Treatment Experienced Clients

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Abstract

Background: In October 2020, the Eswatini National AIDS Program (SNAP) faced a complete Protease Inhibitor (PI) stock-out. Those suppressed (<1000 copies/ml) on a PI were substituted to dolutegravir (DTG). The long-term outcomes of treatment experienced clients on PIs, following single drug DTG substitutions is uncertain. This abstract follows rates

of viral detection (≥50 copies/ml) and nonsuppression (≥1000 copies/ml) over 96-weeks.

Methods: Data was abstracted from the electronic medical record in all clients on second-line, PI-based, antiretroviral therapy (ART) registered at Baylor Children's Foundation-Eswatini who had a single drug substitution of DTG for a PI (N = 450). Time to event analysis to detect risk factors for viral detection after substitution was performed with Cox regression modeling. Overall viral suppression at 48 and 96 weeks, in clients maintained on DTG, was evaluated descriptively and risk factors for nonsuppression after those thresholds were assessed by logistic regression.

Results: The median age at time of DTG substitution was 22 (IQR 16, 33) years, 57% (259/450) were female, and 13% (60/450) had a CD4 of < 200 cells/ml. All had viral suppression at substitution and 393/450 (87.3%) were undetectable. Multivariate cox regression analysis demonstrated a reduced risk of a detectable viral load in adults (HR 0.57, 95% CI 0.37, 0.88), with tenofovir backbones (HR 0.61, 95%CI 0.41, 0.90), with undetectable VLs in the year prior to substitution (HR 0.43, 95%CI 0.29, 0.64), and an undetectable VL at DTG substitution (HR 0.45, 95%CI 0.28, 0.70). In cross-sectional analysis, among clients retained on DTG for over 48 weeks, 94% (95%CI 91, 96%) were suppressed and 85% (95%CI 81, 88%) were undetectable (n=408), these rates were unchanged at 96 weeks (n=383). The only factors that predicted an unsuppressed viral load at both 48 and 96 weeks were low level viremia (VL 50-1000 copies/mL) at DTG substitution and being an adolescent or young adult (15-24 years).

Conclusion: 96-week VL suppression rates nearing UNAIDS targets can be achieved after DTG substitutions in many treatment-experienced clients. However, we have identified risk factors for viral nonsuppression after one drug substitution that represent high-risk populations for treatment failure and future INSTI resistance.

Abstract Type
Scientific Research

Abstract Thematic Category

Doing More with Less: Enhancing Client Outcomes through Cross-Sector Engagement

49: An Assessment of Video Observed Treatment (VOT) as an Adherence Support Tool for DR-TB Patients in Eswatini: A Qualitative study.

<u>Babongile Blisset Nkala</u>¹, Alexander Kay^{1,2}, Debrah Vambe^{1,2}, Lindiwe Dlamini-Mdluli³, Siphiwe Ngwenya³, Sein Sein Thi³, Sijabulile Masina³

¹Baylor Children's Foundation Eswatini, Mbabane, Swaziland. ²Baylor College of Medicine, Department of Pediatrics, Global TB Program, Houston, USA. ³Eswatini National Tuberculosis Control Program, Manzini, Swaziland

Abstract

Background: In 2017, the World Health Organization endorsed and released guidance on using digital adherence technology (DAT) including video-observed treatment (VOT) support for persons with TB. Eswatini has been implementing VOT support for DR-TB clients since 2021. VOT has been demonstrated to be acceptable and feasible with high adherence in high-resource countries. However, there is limited evidence of its acceptability and feasibility in low to middle-income countries with a significant TB/HIV burden. In this study we aimed to assess DRTB patients' and Health Care Providers (HCPs) knowledge, attitudes, and perceptions concerning the implementation of VOT as a tool to support treatment adherence.

Methods: We purposively selected DR-TB clients and Health Care Providers from all 4 regions of Eswatini encompassing 6 DR-TB health facilities over a span of one year. The selected healthcare providers were involved in supporting DR-TB clients through VOT. We conducted in-depth interviews with eleven healthcare providers and twenty-two DRTB clients using interview guides to explore their perspectives and attitudes towards VOT. Their responses were recorded, transcribed, coded and a thematic analysis method was employed to identify emerging themes and analyzed using NVivo software.

Results: The results indicated widespread acceptance of VOT among both healthcare providers and DRTB patients. The HCPs expressed a sense of enhanced connection with their patients when observing them take medications via VOT. This method facilitated good adherence, bolstering confidence in treatment efficacy. However, challenges included the lack of timely data upload, leading to increased workload during video backlog periods. HCPs noted that while VOT was generally user-friendly for most patients, elderly individuals faced difficulties with smartphone technology, resulting in occasional poor-quality videos.

Patients reported that VOT was easy to use and provided a sense of close supervision by HCPs. It fostered a sense of self-independence and ownership over their health while ensuring privacy and confidentiality. Patients also found it convenient to report adverse events via video, expediting clinical responses. However, patients encountered issues with data outages, impacting their ability to submit videos promptly and causing delays in response to adverse events reported via the video.

Conclusion: VOT has demonstrated acceptability and feasibility in Eswatini, which is a middle-income country with a high burden of TB/HIV. It holds significant promise for enhancing treatment

outcomes for patients undergoing DR-TB treatment in resource-limited settings. Further studies with an extended follow-up duration are imperative to ascertain the impact of VOT on TB treatment outcomes.

Abstract Type

Scientific Research

Abstract Thematic Category

Healthcare Technology and Innovation

51: Improving HIV Case Identification Among Undiagnosed Populations in High Volume Sites Across Six Districts in Eastern Uganda, A Crosssectional Study from HTS Community of Practice (CoP), June 2024

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Abstract

Background: HIV case identification and linkage to care and treatment is critical for attainment of UNAIDS target for epidemic control by 2030. HIV case identification in Uganda remains sub optimal at 80.9% falling well short the goal of 95% (UPHIA, 2020).

The Ministry of Health (MOH) in Uganda recommends targeted testing through the optimization of high yielding modalities of index client testing for biological children, assisted partner notification (APN) and Social Network strategy (SNS) as optimal methods to increase HIV case identification. Although these are supposed to be high yielding modalities (up to 15%), in the Eastern region the yield was less than 5%.

We set out to improve case identification through optimizing high yielding modalities in 6 Districts in eastern Uganda.

Description: With support from USAID, The Local Partner Health Services Eastern activity (implemented by Baylor foundation Uganda) implemented a multi component intervention to increase HIV case identification in both adult and children population across 2 General hospitals and 16 health centers. The interventions included weekly mentorship to address knowledge gaps, bi-weekly cross learning through virtual meetings, Monthly monitoring of commodities to ensure availability at site and bi-weekly performance feedback meetings. The interventions have been implemented

from October 2023 to date. To measure the effect of the intervention, we compared the yield from the three intervention quarters with three quarters before the intervention.

Results: Between October 2023 to June 2024, the six districts have achieved 92% of the target for positives (2157/2351) as compared to 66% achieved between October 2022 to June 2023. Specifically, the Index client testing/APN achieved a yield of 16% while SNS achieved 5% compared to 12% and 3.7% achieved in the three quarters before i.e. January-September 2023. Achievement could have been higher if not for routine staff transfer that created knowledge vacuum in facilities.

Lessons Learnt: Improved collaboration and knowledge sharing through a community of practice (CoP) among the front-line workers in facilities improved both yield and quality of services by way of conforming to the HTS 5-C standards i.e. Counseling, Consent, Confidentiality, Correct results and Connection.

Next steps: To further improve case identification, it is imperative to scale up the collaborative (COP) to more sites so as to contribute to efforts aimed at achieving epidemic control by 2030. Continuous training and Capacity building of the sites is crucial since facility staff transfers do not take into consideration proficiency in HTS services.

Keywords: Index client testing, Assisted Partner notification, social network strategy.

Abstract Type

Program Description

Abstract Thematic Category

Implementation Science: Putting Effective Interventions into Action

155: Effect of Directly Observed Treatment Support (DOTS) on viral load suppression among children and adolescents: a cross-sectional analysis in Bunyoro Region, mid-western Uganda.

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Abstract

Background: Literature on antiretroviral therapy directly observed treatment (DOTS) support among children and adolescents living with HIV (CALHIV) optimized to the dolutegravir (DTG) regimens is scarce. The overall HIV viral suppression among children and adolescents on ART in Bunyoro region

was 80-82% in Jul-Dec 2022 and re-suppression after IAC in Jul-Sept 2022 was 66%, so we implemented DOTS in mid-western Uganda (Bunyoro region) among CALHIV who were on optimized ART regimens to improve adherence and resultant suppression.

Method: During Oct-Dec 2022, 204 CALHIV on DTG regimens with ≥2 consecutive non-suppressed viral load (VL) >1,000 copies/ml were enrolled on DOTS during their first or second intensive adherence counseling (IAC) session from 38 ART sites. Home locations of the CALHIV were mapped and treatment supporters from the same/neighboring village were identified, trained and assigned to the enrolled children. A total of 100 treatment supporters, mainly expert clients and village health teams (VHTs), each assigned to two non-suppressed children, observed daily treatment swallowing, offered adherence counseling, and improved caregivers' ART literacy. The three months of DOTS were phased; intensive (daily visits in first month), semi-intensive (alternate day visits in the second month) and wean-off (weekly visits during third month). Facility health workers made weekly follow-up phone calls and two physical home visits (a month apart) to assess whether treatment supporters adhered to the DOTS visit schedules and closing ART literacy gaps among Care givers. This was through triangulating records on

DOTS observation logs and Caregiver verbal reports of the DOTS visits.

Results: Of the 204 CALHIV, 114 (56%) were females, mean age of 11 years (SD=1.1). We excluded 12 (6%) children who dropped out during the intensive month and 6 (3%) whose repeat VL results were never returned to the health facility. The re-suppression rate among CALHIV on DOTS was 77% (143/186). Of the 43 CALHIV who remained non-suppressed, 16 (37%) were only partially on DOTS due to mobile/multiple caregivers, 12 (28%) had irregular visits from treatment supporters due to long distances, and 12 (28%) had Caregivers who reported HIV-related stigma.

Conclusion and recommendations: DOTS improved re-suppression among CALHIV. Selecting treatment supporters who are located near the non-suppressing children may potentially improve DOTS effectiveness.

Abstract Type
Program Description

Abstract Thematic Category

Implementation Science: Putting Effective Interventions into Action

Addressing Community Needs Together

82: Piloting of Community Watchers

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Abstract

Context: Malnutrition in children under 5 years of age (MNT) and maternal mortality are situations that often coexist with poverty, food insecurity, and limited access to health services, prevalent in the municipality of Manaure, La Guajira. In 2023, 494 cases of MNT were reported, representing a 65% increase compared to the previous year. The government has been promoting strategies that facilitate early detection and care of malnutrition in children under 5 years of age. Baylor Foundation Colombia (FBC) has launched an initiative that focuses on training community health workers to identify and refer cases of malnutrition in children under 5 and underweight pregnant women, with the expectation of reducing maternal and infant morbidity and mortality in La Guajira in the long term.

Description. The objective of the project was to implement an extramural intervention program, strengthening the local capacities of 118 rural indigenous communities in the municipality of Manaure, to identify and provide timely medical

attention to children and pregnant women. The implementation comprised 5 stages: 1. Sharing the initiative with the communities; 2. Selection of 43 watchers, one for every four nearby communities; 3. Training in integrated disease management and provision of tools; 4. Establishment of the Referral System through the health watchers; 5. Continuous monitoring of the intervention. Thanks to them, 74 children under 5 years of age and pregnant women were notified of the need for health interventions. This made it possible to detect the following diagnoses: 9 cases of acute malnutrition, 10 at risk of malnutrition, and 10 pregnant women without prenatal care. The medical and nutritional recovery of the reported users was achieved, where currently 20% are still under nutritional follow-up and the identified pregnant women were admitted to prenatal care.

Lessons learned:

- As members of the community, the watchers understand the cultural needs and dynamics, which facilitates the delivery of culturally appropriate health services.
- The watchers play a crucial role in the early identification of health problems and help to decongest health systems by providing basic care and referring only more complex cases.

 The watchers empower residents to take an active role in improving their own health.

Next steps:

- Present the results of the intervention as a replicable and successful strategy to other stakeholders in the territory.
- Expand the network of watchers to other territories of La Guajira.
- Document the community watch network protocol.
- Incorporate new public health topics (noncommunicable diseases, healthy eating, etc.).

Abstract Type

Program Description

Abstract Thematic Category

Differentiated Service Delivery: Patient-Centric Service Delivery Models

114: Perception of Teen Club Mentors on sustainability of the Teen Club Module in Dedza, Mchinji and Ntchisi, Malawi.

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Baylor Foundation Malawi, Lilongwe, Malawi

Abstract

Background: The Teen Club Model in Malawi plays a crucial role in addressing the unique needs of adolescents living with HIV, particularly in hard-toreach areas. Sustainability of teen club programing in such hard-to-reach areas is critical in enhancing the support system, emotional support, social support and community engagement of the adolescents living with HIV. Understanding mentors' perceptions of such programs is essential for enhancing their effectiveness and impact. The sustainability of such programs relies heavily on the perspectives and experiences of mentors who are at the forefront of implementation. The aim of this review is to explore the perception of teen club mentors on the sustainability of the teen club module to gain insight that can inform program improvements and ensure long-term success.

Methods: The study utilized a qualitative approach, conducting interviews and focus group discussions (FGD) with a diverse group of mentors from seven selected health facilities in the three districts. Each FGD had a teen club focal person, facility in-charge, nurse and a community mentor. A questionnaire on how the participants perceived their roles with regards to the sustainability of the teen club was administered. Likert and attitude scales were used in the questionnaire to measure the opinion towards the subject. The questions explored the best practices to run a sustainable teen club. Data analysis involved

identifying common themes and recurring patterns within the responses provided by the mentors in relation to sustainability factors.

Results: The findings of the study revealed key insights into mentor's perceptions of teen club programming. Mentors expressed a strong sense of fulfillment and satisfaction from their role regarding the sustainability of the teen club module. They identified strengths such as community support and effective participant engagement. All participants agreed that limited resources, turnover of trained staff and lack of training opportunities negatively affect teen club sustainability. Participants spelled out capacity building, community involvement and ownership, and staff commitment as key in sustaining the teen club in the facilities.

Conclusion: While teen club mentors view the model as sustainable, there are areas that require attention to ensure its long-term viability. Their perception offers valuable insights into the strengths and limitations of existing programs as well as opportunities for enhancement. By listening to teen club mentors, program administrators, policymakers can make informed decisions to improve the quality and impact of teen club programming and its sustainability. Addressing challenges and implementing recommendations are essential steps towards enhancing the effectiveness and resilience of teen club programs. Therefore, more research on challenges faced by teen club programming needs to be carried out to effectively inform policymakers.

Abstract Type

Scientific Research

Abstract Thematic Category

Differentiated Service Delivery: Patient-Centric Service Delivery Models

119: Accelerating TB Case Identification: A PHC Intergrated Approach, Bringing Services to the People in their Communities.

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Abstract

Background: Lesotho is among the 30 highest burden countries for Tuberculosis (TB) and Human Immunodeficiency Virus (HIV) associated TB in the world. The TB Global report (2023) estimated Lesotho TB incidence at 15,000, translating to 661 per 100 000. In 2022, Lesotho notified 5,599 TB clients, a 63% TB notification gap (irrespective of HIV status) against the estimated TB incidence (WHO Global TB Report; 2023). For the period April 2023 to March 2024, health facilities supported by Baylor College of Medicine

Children's Foundation Lesotho's (BCMCFL) USAID-funded Local Entities Advancing and Driving Health Responses (LEADR) in Mokhotlong and Butha-Buthe districts, as well as the BCMCFL Centres of Excellence in Maseru and Mohale's Hoek notified 802 TB clients. On average, this was 67 TB notifications per month. The major challenge noted by the National TB and Leprosy Program (NTLP) as contributing to low case identification is the difficult terrain in which some patients reside, making access to health services a huge challenge.

Description: The NTLP, through the District Health Management Teams in collaboration with BCMCFL and other implementing partners, embarked on integrated TB outreach activities to find people with TB who have been missed. This one-week event happened in March 2024 in Mokhotlong and in April 2024 ButhaButhe. This activity targeted hard-to-reach communities in catchment areas of selected health facilities as well as areas where there are mines. The week prior the activity, demand creation activities were done through community gatherings, radio, and loudspeakers. During implementation, multidisciplinary teams each spent a week in a particular area offering integrated services to communities with the main target being TB screening with four symptoms as well as chest X-rays.

Patients diagnosed with TB were initiated on TB treatment at the outreach site and linked to health facilities for follow up visits. Other services offered included HIV testing services, cervical cancer screening and treatment services, and general outpatient services.

Lessons learned: The number of patients diagnosed and initiated on TB treatment in a week, per district, was almost equal to the number both districts reported per month, in the past year. This demonstrates that there are a lot of people living with TB in the communities who are missed when we wait for them to come to the health facilities. Some people end up dying of TB, a disease that is curable, due to poor access to health care services. The table below summarizes the results per district.

Table 1. Summary of Integrated outreach TB Services results by district

	Total screened	TB Presumptive	Diagnosed with TB	Initiated on Rx
Mokhotlong	1912	320	47	43
Butha Buthe	972	511	63	63

Next steps: LEADR district teams will strengthen and intensify integrated outreaches to increase TB case finding especially among those in hard-to-reach areas. We will also advocate for availability of more X-rays with artificial intelligence to intensify use of both 4-symptom screening and screening with CXR for TB.

Abstract Type

Program Description

Abstract Thematic Category

Beyond the Status Quo: Innovations for Integrated Care

124: Community peer-led approach to improve access to pre-exposure prophylaxis among HIV high-risk populations in Bunyoro region, midwestern Uganda.

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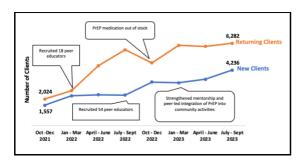
Abstract

Background: In June 2011, Uganda adopted the HIV combination prevention strategy that includes the use of pre-exposure prophylaxis (PrEP) to reduce new HIV infections and eradicate AIDS by 2030. PrEP uptake in the Bunyoro region was suboptimal at 14% in 2021 in part due to pill burden, poor access to facilities offering PrEP, and fear of being seen taking antiretroviral drugs (ARVs). We describe lessons learned from a community-based approach to improve PrEP uptake among HIV high-risk populations in Bunyoro, mid-western Uganda.

Description: The Baylor Uganda Project supports community peer educators (PEs) and health care workers (HCWs) to offer PrEP services to HIV at-risk populations. During October 2021–September 2023, we trained 54 community PEs on PrEP mobilization skills and 48 HCWs across 43 health facilities on PrEP as HIV prevention for key and priority populations; attached peers to mapped hotspots for routine mobilization, education, and PrEP prescreening; and provided PEs with bags to carry information, education, and communication materials focused on engaging individuals at the community, including HIV self-tests, and access to a toll-free telephone number for PrEP enrollment, while HCWs supervised PEs with quarterly mentorship.

Lessons Learned: Overall, 22,862 high-risk individuals, including 15,210 (66.5%) females, started PrEP for the first time. Among all high-risk individuals, 62.9% were sex workers, 20.6% were clients of sex workers, 0.7% were men who have sex with men, and 15.8% were other populations. During October 2021–September 2023, the number of clients per quarter newly starting PrEP increased from 1,557 to 4,236 and the number of returning clients increased from 2,024 to 6,282 (Figure 1). These increases were mainly due to the recruitment

of PEs and the integration of peer-led PrEP services into community activities.



Conclusion/Next steps: The use of committed, trained, and mentored community PEs with knowledge and skills in mobilization and PrEP service delivery working with HCWs can improve PrEP access and use among high-risk populations, especially key populations despite low uptake for MSM.

Abstract Type

Program Description

Abstract Thematic Category

Implementation Science: Putting Effective Interventions into Action

157: Extended Evening ART Clinic Improving Access to care for HIV Positive Clients a Case of Mangochi DHO, in Malawi

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Background: Malawi has made significant strides

Abstract

towards achieving the second and third 95-95-95 UNAIDS targets. These are to link people living with HIV to life-saving antiretroviral therapy (ART) and be sure that ART is successful resulting in viral suppression. Achievement of these targets can only be possible if clients remain on treatment. Differentiated Service Delivery (DSD) models are designed to deliver care by fitting ART into clients' busy lives in a variety of manners making ART service delivery client centred. One such DSD model is the Extended Evening Clinic which the Tingathe Program introduced in November 2021 to support clients unable to attend clinics during standard (7:30am-4:00pm) clinic hours. We describe lessons learned from implementation of the evening clinic model at a secondary care level facility (Mangochi District Hospital).

Description: Evening clinic is conducted weekly on Monday and Tuesday from 4pm - 8pm. Client demand is created through health talks that are provided during daytime clinic. The clinic is managed by a Ministry of Health (MOH) ART provider, Data clerk and two Baylor lay health workers who conduct viral load sample collection, provide screening and counselling services. The clinic offers similar services as provided during daytime ART clinic. MOH providers receive an allowance (about \$2.5) for extra hours worked while Baylor staff work in staggered shifts that allows them to work within defined 40 hours weekly. Client attendance is tracked using the health facility tally sheet and ART clinic visit data recorded in Electronic Medical Records. We reviewed routinely collected program data (Jan 2023 – Jan 2024) to describe characteristics of 220 clients that accessed 12 evening clinics between February 2024 - April 2024. Clients were categorized into 3 sub-groups; Regular attendees - attending ≥3 consecutive clinic visits, Intermittent attendees - attending <3 consecutive clinic visits and First-time attendees whom this was a first attendance. The categorization follows the minimum expected 3 client visits per 12 months.

Lessons Learned: A Total of 220 clients attended evening clinics with 75% (164/220) Regular attendees, 7% (16/220) Intermittent attendees, and 18% (40/220) first-time attendees. Women were 64% (141/220) 36% (79/220) were men; average age was 43 (Range 14 - 74). Treatment interruption rates were 18% (3/17) regular attendees; 41% (7/17) intermittent and 41% (7/17) first-time attendees. Clinic attendance averaged 18 clients per day (range 9-33).

Next steps: Most clients attending evening clinic were regular attendees, suggesting that evening clinic may be an important strategy to improve access to care for clients who prefer accessing clinic outside work hours. Evening clinic DSD model is an approach that should be considered to improve ART retention. Further analysis is required to determine the impact of this model on viral load coverage and suppression.

Abstract Type

Program Description

Abstract Thematic Category

Differentiated Service Delivery: Patient-Centric Service Delivery Models

174: Expanding a Permaculture Garden for Patient Education and Food Security: Cultivating Wellness and Sustainability

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Abstract

Background: This abstract explores the expansion of a permaculture garden as a multifaceted initiative to promote wellness and sustainability within a clinical setting. Faced with rising concerns over food insecurity and limited access to nutrient-rich foods among clinic patients, it prompted a decision to expand an existing garden into a larger educational resource.

Description: Through collaborative efforts involving UNICEF funding and Baylor Children's Foundation Malawi, the expanded permaculture garden offers hands-on sessions and interactive demonstrations on sustainable gardening practices, organic cultivation techniques, and the use of herbal plants. In addition, the garden serves as a supply of fresh produce that is nutrient dense for food-insecure clients and guardians of children admitted to Kamuzu Central Hospital without enough food.

Lessons Learnt: From October 2023 to April 2024, the permaculture gardening sessions covered 942 clinic clients, including adolescents and pregnant or lactating young women. Of these, 600 received seeds, while 53 obtained planting materials such as mint, strawberries, and lemon grass. The other 34 clients got the fresh produce from this garden were from food-insecure households. The other 15 clients did not have enough food while admitted to the KCH pediatric ward also benefited from the fresh produce.

Additionally, 294 clients reported establishing gardens at home, with 27 providing photographic evidence. Others, lacking access to phones or suitable devices, were unable to submit images. We

are still receiving this feedback as others' clinic visit dates have not yet arrived. Overall, integrating gardening principles into nutrition counselling and education has been associated with a reduction in undernutrition cases at the Baylor Clinical Centre of Excellence over the past two years.

For example, one of the clients is a young adult or mother, who, as a divorced single parent, faced the challenge of a malnourished infant and food insecurity. Inspired and educated in permaculture gardening, she took initiative and set up a backyard garden at her home. Today, her child's malnutrition is a thing of the past, as she has achieved food security and generates additional income by selling surplus vegetables, enabling her to afford essentials such as sugar, relish, and soap.

Next steps: This abstract highlight the transformative potential of incorporating gardening initiative through the principles of permaculture design into clinical settings, thereby addressing social determinants of health, promoting environmental management, and enhancing resilience among vulnerable populations. The plans are to maintain the garden and to continue distributing seeds and planting materials to the clinic clients.

Abstract Type

Program Description

Abstract Thematic Category

Differentiated Service Delivery: Patient-Centric Service Delivery Models

Advancements in Multisite Research

41: Integrase Inhibitor Resistance Among Children and Adolescents Living with HIV in sub-Saharan Africa: A Descriptive Case Series

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Abstract

Background: Introduction of dolutegravir (DTG)-based antiretroviral therapy (ART) for children and adolescents living with HIV (CALHIV) has dramatically improved regional rates of virologic suppression in sub-Saharan Africa. However, surveillance demonstrates emergence of HIV drug resistance (HIVDR) mutations to Integrase Inhibitors (INSTIs) in CALHIV at rates higher than in adults. We describe resistance patterns and associated clinical factors in CALHIV with documented INSTI resistance from Baylor International Pediatric AIDS Initiative (BIPAL) Centres of Excellence (COEs).

Methods: A retrospective review of electronic medical records from CALHIV 0-24 years old receiving care in COEs across 4 countries identified clients with genotypically confirmed INSTI resistance. Genotypes were performed on dried blood spot and plasma specimens by regional laboratories in line with national guidelines. Stanford HIVdb was used to

calculate drug resistance scores and predicted HIVDR.

Results: Genotypes for 9 clients with intermediate or higher DTG resistance from BIPAI COEs in Botswana (3), Eswatini (2), Malawi (1) and Tanzania (3) were included (67% (6/9) male; 33% (3/9) female). At genotype, mean age was 13.7 yrs (range 3.6-22.1), average time on ART 9.3 yrs (range 2.3-17.6) with an average of 3.5 yrs on INSTI (1.5-6.8) for 8/9 clients with known INSTI start date. Clients averaged 6 detectable viral loads (VL) (>1000copies/ml) prior to identification of DTG HIVDR. Two (22%) had Raltegravir exposure and 8/9 were on DTG at genotyping. One received antituberculosis treatment while taking INSTIs. NRTI backbones at genotyping: 56% (5/9) TDF-3TC, 33% (3/9) AZT-3TC and 11% (1/9) ABC-3TC. NRTI mutations included M184V (9/9), M41L (4/9), D67N (2/9), and T2151 (2/9); NNRTI G190A (3/9); PT 154L (2/9) and L74V (2/9); and INSTI E138K (5/9), T66A/I (4/9), G118R (4/9), G140A (2/9), Q148R (2/9), R263 (K), S147G (2/9) and N155H (2/9).

Conclusion: In this cohort of CALHIV, INSTI resistance was identified in nine patients across four countries. All individuals had resistance to at least 2 major ART drug classes and intermediate or higher-level resistance to INSTIs; two were resistant to all available Protease Inhibitors. Routine viral load monitoring and genotyping for CALHIV with treatment failure must be prioritized in third line programming and HIVDR surveillance activities.

Abstract Type
Scientific Research

Abstract Thematic Category

Implementation Science: Putting Effective Interventions into Action

44: Screening Rates and the Prevalence of Hepatitis B among children and adults living with HIV in Africa: A BIPAI Network study

Rebecca Mercedes¹, Sandile Dlamini², Michael Scheurer¹, Florence Anabwani², Eunice Ketang'enyi³, Lilian Komba⁴, Jason Bacha⁴, Moliehi Lephosa⁵, Akash Devendra⁵, John Farirai⁶, Rankin Kachingwe⁷, Brigid O'Brien⁷, Jacqueline Balungi Kanywa⁸, George Akabwai⁸, Benjamin Shneider¹, Daniel H. Leung¹, Heather Haq¹

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Abstract

Background: Hepatitis B virus (HBV) is a major cause of morbidity and mortality globally with 1.1 million deaths in 2022. The World Health Organization (WHO) Africa Region accounted for 63% of new HBV infections while the screening rate was only 4.2%. HBV screening is imperative for understanding and addressing disease burden through infection prevention and treatment, especially among people living with HIV (PLWH). The 3-dose HBV vaccine series (HEPB3) has been implemented across the WHO Africa region; however, birth dose vaccination rate is only 18%, leaving most infants vulnerable to vertical transmission. Our aim was to determine HBV screening rates and prevalence among PLWH at 6 HIV Centers of Excellence (COEs) in sub-Saharan Africa.

Methods: This was a multi-national retrospective review of all PLWH newly enrolled into HIV care, currently including 6 Baylor International Pediatric AIDS Initiative COEs (Uganda, Malawi, Eswatini, Lesotho, Mwanza and Mbeya, Tanzania) from 2003-2022. HBV screening and prevalence rates were based on HBV surface antigen (HBsAg) testing within 90 days of enrollment into HIV care. Differences in screening and prevalence rates were assessed using chi-square test.

Results: In total, 41,548 PLWH were included. Overall, the screening rate was 20.1% and varied by country (2.2%-47.3%, Table 1). Females had higher screening rates than males (23.9 vs 14.7%, p<0.001). Screening increased over time (p<0.001) as most countries began integrating HBV screening into their national HIV guidelines. Older age was also associated with increasing screening, with the highest rates among those ≥20 years old (48.4%, p<0.001). Among the 8,355 screened for HBV, 4.5% were HBsAg+ and prevalence rates varied by country (0.7%-6.3%, Table 2). There was a higher prevalence of HBV among men vs women (5.4% vs 4.2%, p=0.042). HBsAg+ prevalence decreased from 6.1% to 2.0% in PLWH born before 1996 vs after 2002 (p=<0.001). Older age at enrollment was also associated with higher HBV prevalence.

Table 1. Factors associated with screening for hepatitis B infection among those people living with HIV

	Screened for Hepatitis B	Not screened for Hepatitis B	
Sex	N=8,355 (20.1%)	N=33,193 (79.9%)	P-value
Sex			<0.001
Female	5,833 (23.9%)	18,567 (76.1%)	
Male	2,522 (14.7%)	14,626 (85.3%)	
Year of enrollment			<0.001
Before 2010	2,502 (12.9%)	16,915 (87.1%)	
2010 to 2015	2,526 (18.0%)	11,478 (82.0%)	
2016 to 2022	3,327 (40.9%)	4,799 (59.1%)	
Age at enrollment			<0.001
0 – 4 years	1,690 (9.5%)	16,177 (90.5%)	
5 – 9 years	910 (12.3%)	6,503 (87.7%)	
10 – 14 years	588 (13.0%)	3,954 (87.0%)	
15 – 19 years	553 (25.3%)	1,636 (74.7%)	
≥ 20 years	4,614 (48.4%)	4,923 (51.6%)	
Country			<0.001
Eswatini	3,768 (47.3%)	4,194 (52.7%)	
Lesotho	1,207 (20.2%)	4,755 (79.8%)	
Malawi	132 (2.2%)	5,859 (97.8%)	
Tanzania	675 (14.8%)	3,887 (85.2%)	
Uganda	2,573 (15.1%)	14,498 (84.9%)	

Conclusion: HBV screening rates among PLWH across these COEs vary widely but remain far below the WHO target of 90%. This may be due to lack of national guidelines, resources, and/or healthcare worker recognition of the importance of HBV screening. Further investigation into factors associated with low screening rates is needed to support local and international efforts to advocate for improved HBV screening among PLWH, especially children, as an important step towards HBV elimination. HEPB3 implementation and/or more universal screening instead of targeted testing may explain the drop in HBsAg+ prevalence. HBsAg+ prevalence among those born after 2003 remains significant (2%) despite all study countries including routine HEPB3 by 2003. Notably, none had HBV birth dose during the study period. This is a call to advocate for increased screening, enhanced adherence to HEPB3, and implementation of HBV birth dose vaccine.

Abstract Type Scientific Research

Abstract Thematic Category

Doing More with Less: Enhancing Client Outcomes through Cross-Sector Engagement

102: Low-level viremia leads to increased risk for virologic failure in children and adolescents living with HIV on antiretroviral therapy in sub-Saharan Africa (CLOVES): a multicenter, retrospective cohort study

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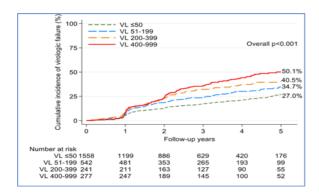
Abstract

Background: A viral load (VL) of 1000 copies/mL marks the cutoff for defining virologic failure (VF) in children and adolescents living with HIV (CALHIV) in many low and middle-income countries. However, evidence in adults suggests that low-level viremia (LLV), or VL between 50-999 copies/mL, increases risk of later VF. There are fewer studies that address LLV in CALHIV.

Methods: A retrospective chart review was performed on data collected from October 2004 to December 2022 from the Baylor College of Medicine Children's Foundation – Tanzania sites in Mbeya and Mwanza. CALHIV (0-19 years of age) on antiretroviral therapy (ART) for ≥6 months with at least one VL <50 copies/mL plus ≥2 subsequent VLs were included. Data analysis was performed with two VF categories, VL ≥1000 copies/mL and ≥200 copies/mL. Multivariable Cox regression modeling was performed to evaluate the association between LLV and VF; hazard ratios (HR) with 95% confidence intervals (CI) are presented.

Results: A total of 2618 CALHIV were included in the outcome analysis with a median age of 13.2 (IQR 9.7, 16.7), and 52.5% were female. Most participants (81.9%) were on 1-line dolutegravir (DTG)-based regimens. LLV was found in 40.5%. When defining VF as \geq 1000 copies/mL, those with a history of LLV had a HR of 1.63 (1.38, 1.91) for VF. When stratifying by LLV (50-199, 200-399, and 400-999), all levels were associated with an increased risk for VF with HR of 1.39 (1.13, 1.69), 1.69 (1.33, 2.16), and 2.03 (1.63, 2.53), respectively. When defining VF as \geq 200 copies/mL, HRs for VF rose to 3.85 (3.33, 4.46) for any LLV and 1.41 (1.15, 1.72), 7.99 (6.68, 9.57), and 9.37 (7.85, 11.18) for LLV of 50-199, 200-399, and 400-999, respectively.

Figure 1. Kaplan Meier plot showing incidence of virologic failure (VL ≥1000 copies/mL) by low-level viremia category.



Conclusion: LLV in CALHIV is associated with a greater risk of VF that increases with higher levels of LLV.

Abstract Type

Scientific Research

Abstract Thematic Category

Differentiated Service Delivery: Patient-Centric Service Delivery Models

140: Development and Validation of a Clinical Predictive tool for Viral Non-Suppression in Children and Adolescents Living with HIV: A prospective Study Analysis

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Abstract

Background: Despite the successful introduction and increased access to ART over the years, the overall mortality rate is still high among individuals living with HIV and not sparing children and adolescents living with HIV (CALHIV). Nearly 84,000 children less than 15 years and 540 000 adults more than 15 years died of HIV-related causes in 2022. Viral load non-suppression contributes greatly to increasing mortality rates among CALHIV and affects the last 95" objective of the Joint United Nations Program. To guide future differentiated service delivery strategies and improve outcomes in CALHIV, developing a non-viral load predictive tool is necessary. The main aim of the study is to derive and validate a clinical prediction tool to predict viral nonsuppression in CALHIV on ART 12 months from the study entry point.

Program Description: The study is currently implemented at Baylor Foundation clinics in Eswatini, Lesotho, and Tanzania. To develop and validate a tool for predicting viral load nonsuppression, we are prospectively enrolling children and adolescents living with HIV (CALHIV) at ART initiation or at the time of viral load assessment. Participants complete a psychosocial screening survey. We are also collecting data on HIV comorbidities, anthropometric measurements, demographic information, laboratory and psychosocial variables. Our goal is to derive and validate a clinical prediction tool that includes both clinical and psychosocial factors to predict HIV nonsuppression in CALHIV. We hypothesize that using a combination of clinical and psychosocial data will more accurately predict viral non-suppression, reflecting a myriad of factors influencing adherence. This approach aims to identify target areas to guide future differentiated service delivery (DSD) strategies and improve outcomes in CALHIV.

Lessons learned:

- Comprehensive Technical Training: A robust initial training of the study team, including clinicians involved in the routine clinical care of the participants, followed by refresher sessions is important for effective project implementation. This approach increases the knowledge and confidence of the study team thereby reducing participant refusal rates.
- Expansion of study sites: Additional study sites significantly increased participant enrollment, assisting in meeting the project's weekly targets.
- Data quality improvements: Involving all study team members in data quality exercises leads to improved data accuracy and consistency.
- Participant engagement: Providing an overview of study objectives to potential participants before enrollment increases enrollment rate.

Next steps:

- Ongoing data collection: Continue data collection, ensuring adherence to the project's timelines.
- Monitoring and Quality
 assurance: Continuously monitor the study
 implementation at all sites to the collection
 of high-quality, consistent data across all
 sites.
- Integration of developed tool into clinical practice: We envision that this tool will be integrated into routine clinical practice to help identify at-risk patients and tailor interventions, aiming to significantly improve outcomes for CALHIV on ART.

Abstract Thematic Category

Beyond the Status Quo: Innovations for Integrated Care

Advancing Healthcare Through Quality Improvement

46: Sustaining Viral Suppression Among Clients with Previous Persistent High Viral Loads at Baylor COE: A Retrospective Analysis

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Abstract

Introduction: Antiretroviral therapy (ART) has greatly transformed the management of HIV. Achieving viral suppression is one of the most effective ways of improving the quality of life for PLHIV and minimizing transmission. However, maintaining viral suppression remains a challenge, particularly among individuals with previous high viral loads. This study aims to assess the incidence of viral rebound among clients who underwent a quality improvement (QI) intervention designed to enhance viral load (VL) suppression for persistent high viral loads.

Methods: Using a cross-sectional cohort study design, we extracted EMR viral suppression data for clients who virally suppressed following a VL suppression QI project at Baylor COE between 1st August 2021 and 30th March 2024. The cohort consisted of clients who previously experienced persistent high viral loads (defined as two or more consecutive viral loads > 1000 / ml) and became suppressed in the period under study. Demographic information and latest viral load results were queried using SQL at the 31st month of the program.

Findings: An initial 107 clients underwent the *High viral load must fall* initiative, over a period spanning 31 months from 1st August 2021 to 30th March 2024. Among these clients, 82% had initially experienced viral suppression (n=88). A spot check of current viral load status of the 88 clients who initially suppressed, identified 12.5% (n=11) clients who experienced viral rebound. Half of the clients (n=6) with rebound were aged between 20 and 25 years. 0 to 10yr and 11 to 15year olds represented 8% (n=1) each. 16- to 20-year-olds accounted for 34% (n=4) of the rebounds.

Factors associated with viral rebound included lack of self-efficacy and inadequate caregiver support (67%), depression (8.3%), privacy & confidentiality issues in boarding school (16.6%) and behaviour problems (8.3%).

Lessons learnt: These findings highlight the importance of tailored QI initiatives in achieving and sustaining viral suppression among individuals with prior persistent high viral loads. Strategies such as

personalized adherence counseling, long term follow-up and continued psychosocial support after suppression play a critical role in preventing viral rebound and optimizing long-term treatment outcomes.

By addressing adherence barriers and providing ongoing comprehensive support, healthcare providers can empower clients to achieve and maintain selfefficacy, optimal viral suppression, ultimately improving quality of life and reducing the risk of HIV transmission.

Abstract Type

Quality Improvement

Abstract Thematic Category

Quality Improvement Initiatives

69: Quality Improvement to Improve the Completeness of Laboratory Request Form Documentation and Conform to ISO 15189:2022 Standards

<u>Lindokuhle Dlamini</u>, Florence Anabwani-Richter, Bhekisisa Mavimbela, Phepsile Lukhele

Baylor College of Medicine Children's Foundation, Mbabane, Eswatini, Mbabane, Swaziland

Abstract

Purpose: Accurate and complete documentation in laboratory forms is critical for ensuring high-quality patient care and adherence to ISO 15189:2022 standards. At our clinic, we identified a significant gap in this area, with 95% of laboratory request forms (LRFs) being incompletely filled, leading to delays in turnaround times for laboratory specimens. This quality improvement project (QIP) aimed to reduce the proportion of incomplete LRFs from 95% to 20% over 6 months, thereby enhancing our compliance with ISO standards and improving overall laboratory efficiency.

Methods: The project was implemented in three phases: assessment, intervention, and evaluation. In the assessment phase, of 125 LRFs audited for completeness, only 5% had all requisite parameters filled and 95% were incompletely filled. Of these LRFs, 90% had no documented facility name and code, 67% lacked a patient cell phone number, 38% had no clinical information and 23% had no national identity number. Root cause analysis was conducted to identify gaps leading to incomplete LRFs. Key issues that emanated from fast tracking of patients

and knowledge gaps on LRFs contributed to processing delays of laboratory specimens.

The intervention phase focused on process improvement. Comprehensive training sessions were held for physicians, nurses, and laboratory personnel, including demonstrations of commonly omitted or incorrectly documented information on LRFs and examples of correctly completed forms. A standardized checklist was introduced to guide staff in completing LRFs accurately. Additionally, prepopulated LRFs were developed as a job aid, displayed in strategic locations throughout the clinic.

To ensure sustained improvements, a random audit of 10 LRFs was conducted daily to monitor compliance and identify ongoing training needs. Data from these audits were analyzed weekly to track progress and identify any areas requiring further intervention. Immediate feedback was provided to staff to address ongoing issues and reinforce correct practices.

Results: Following implementation of this QIP, the rate of incomplete LRFs decreased significantly. Within the first month, the proportion of correctly completed LRFs improved from 5% to 80%. Continued monitoring and feedback led to further improvements, with the rate of correctly completed forms reaching 87% by the end of the third month. Staff reported increased confidence in completing LRFs accurately and delays in laboratory processing decreased.

Discussion: This quality improvement project successfully reduced the incidence of incomplete LRFs from 95% to 13%, significantly enhancing our clinic's compliance with ISO 15189:2022 standards. Key to this success was comprehensive staff training, continuous monitoring, and immediate feedback. The approach of combining education with practical demonstrations and regular audits can serve as a model for other healthcare facilities aiming to improve documentation practices in LRFs and adherence to international standards. Future efforts will focus on maintaining these improvements and exploring additional areas for quality enhancement in laboratory processes.

Abstract Type
Quality Improvement

Abstract Thematic Category
Quality Improvement Initiatives

101: Assessing and Improving Health Outcomes among Adolescents and Youth in Baylor Foundation Eswatini through Clinic-Based Health Risk Screening: A Quality Improvement Initiative. Nkosibonile Nkambule, Thembela Mavuso, Thobile Bhembe, Lindokuhle Mpulubusi, Kholiwe Mbhamali, Wonder Nxumalo, Sandile Dlamini

Baylor Foundation Eswatini, Mbabane, Swaziland

Abstract

Background: Despite comprehensive efforts to improve health outcomes for adolescent and youth, inadequate health risk screening often leads to missed opportunities for early intervention and prevention. To address this gap, a Quality Improvement (QI) Intervention was conducted through administering a confidential health risk screening questionnaire to adolescent and youth aged 12 to 24, across three facilities in Baylor Foundation Eswatini. This study aimed to assess the effectiveness of a clinic-based health risk screening intervention in improving adolescent and youth health outcomes by investigating health risk factors, identifying potential areas for intervention, and facilitating access to necessary healthcare services.

Methods: From March 2023 to April 2024, a QI intervention was conducted at three Baylor Foundation Eswatini healthcare facilities, targeting adolescents and youth aged 12 to 24 who attended the clinics for healthcare services.

Data collection involved the administration of a paper-based confidential health risk questionnaire to adolescents and youth every six months, which covered key health risk factors, such as personal and family assets, school attendance, food insecurity, sexual health, social-emotional health, and violence. The completed questionnaires were then digitized by entering the data into a spreadsheet in Zdrive for analysis. Health indicators were developed and tracked using the electronic medical record system (EMRXL) including pregnancy rates, infant seroconversion rates, contraceptive use, Sexual Transmitted Infections (STIs) prevalence, Human Immuno-deficiency Virus (HIV) disclosure rates, and attendance at Teen Health sessions and Teen Clubs among these vulnerable population.

The data was analyzed using descriptive statistics and regression analysis to identify patterns and relationships between health outcomes and intervention activities. Results were presented using graphical representations, such as line graphs, bar charts, and scatter plots, for enhanced clarity and communication.

Results: Over the course of 12 months, the health risk questionnaire identified significant risks among 958 adolescents and youth, including 15-20% early sexual debut, 8-10% gender-based violence, 10-15% substance use, 5-8% bullying, and 10-15% mental health issues. Despite resource constraints, 190-380 individuals were referred to necessary healthcare services, while 180-360 were not referred. The

intervention improved collaboration among healthcare providers by 90%.

The intervention significantly reduced adolescent pregnancy rates by 38%, STIs prevalence by 25%, infant seroconversion rates to zero, while increasing HIV disclosure rates by 8%, contraceptive use by 17%, and viral suppression by 7%. Attendance at Teen Health sessions and Teen Clubs among adolescents and youth increased significantly.

Conclusion: The intervention demonstrated the effectiveness of clinic-based health risk screening initiatives in improving health outcomes among adolescents and youth. This intervention can serve as a model for addressing complex health issues among similar populations in other settings, emphasizing the importance of early risk identification, targeted healthcare services, and awareness-raising. Future research should focus on assessing the sustainability, scalability, and cost-effectiveness of such interventions.

Abstract Type
Scientific Research

Abstract Thematic Category
Quality Improvement Initiatives

105: Improving infant prophylaxis coverage through continuous quality improvement (CQI) interventions for HIV-exposed infants at a remote site, in Mangochi Malawi

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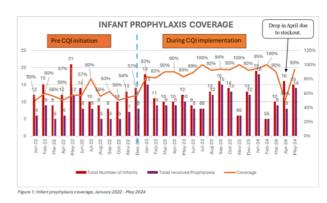
¹Baylor College of Medicine Children's Foundation, Lilongwe, Malawi. ²Malawi Ministry of Health, Mangochi, Malawi. ³Baylor College of Medicine, Houston, Texas, USA

Abstract

Purpose: Achieving maternal HIV viral load suppression with antiretroviral therapy (ART) and providing six weeks of neonatal prophylaxis to infants can prevent HIV transmission from mothers to infants (PMTCT). Malawi guidelines recommend differential neonatal prophylaxis with dual, or triple-drug infant therapy based on timing of maternal HIV diagnosis and maternal viral-load. In late December 2022, we conducted a Strengths, Weakness, Opportunity, and Threats (SWOT) analysis to address low coverage of neonatal prophylaxis at a Baylor-supported remote site in Mangochi district, with a cohort of 2,440 clients on ART. We describe implementation of CQI strategies to improve infant prophylaxis coverage for HIV exposed infants.

Methods: In early January 2023, a root cause analysis of barriers to infant prophylaxis coverage was conducted and CQI best-practices implemented using the Plan-Do-Study-Act improvement model. Barriers included antiretroviral (ARV) drug stockouts, missed enrolment of HIV exposed infants at birth, and inadequate maternal retention in care. Facility discussions were conducted with the facility Incharge and Early Infant Diagnosis (EID) focal person to develop change ideas with a plan to review monthly performance. Change ideas consisted of increased frequency of health education talks on adherence from monthly to weekly at ART and antenatal clinics (ANC), Healthcare workers (HCWs) orientation on PMTCT guideline protocols, availed guideline documents at facility, flagged mastercards for PWLHIV missed at ANC to be offered prophylaxis during their next clinic visit where eligible and assigned Community Healthcare Workers (CHWs) to follow up women whose infants were missed on missed prophylaxis. Data review cycles were conducted monthly from January 2023- May 2024 to review progress, looking at the proportion of infants started on infant prophylaxis against total cohort size.

Results: During the CQI period intervention (January 2023–May 2024), 180 of 205 infants were started on prophylaxis (88% coverage), an improvement from 57% coverage pre CQI initiation (January-December 2022) where only 84 out of 147 infants received prophylaxis. Of the 25 infants not started on prophylaxis, 9 were home deliveries who had not received prophylaxis at ANC, 5 mothers had interrupted treatment during pregnancy, and 11 were missed due to ARV stockout.



Discussion: The CQI initiative improved infant prophylaxis coverage by 31%. Collaborative efforts between facility In-charge, EID focal person and facility departments engaging in monthly discussions for progress review was critical to success, as was continued supervision and mentorship for all HCWs at the facility and increased health talks from monthly to weekly. Despite improvement, challenges remain with late enrolment into HIV Care Clinic (HCC), poor retention among pregnant mothers and ARV stockouts. Expanded efforts to capture all women for infant prophylaxis at ANC and monitor stock levels to avoid stockout is ongoing in addition

to current activities to achieve 100% coverage in infant prophylaxis.

Abstract Type
Quality Improvement

Abstract Thematic Category

Quality Improvement Initiatives

117: Optimizing molecular testing for Tuberculosis diagnosis through Leadership engagement and continuous quality improvement interventions in Eastern Uganda.

<u>Ssekiswa Lwanga Zimwanguyiza</u>¹, Winnie Akobye¹, Eddy Okwir¹, Richard Jjuuko Kyakuwa², Joshua Clark¹, Denise Birungi², Dithan Kiragga²

¹USAID LPHS-E, Mbale, Uganda. ²Baylor foundation Uganda, Kampala, Uganda

Abstract

Purpose: World Health Organisation (WHO) recommends molecular testing as a preferred diagnostic test for tuberculosis (TB) to increase surveillance for multidrug-resistant TB (MDR-TB). To achieve this recommendation, the Ministry of Health (MOH) Uganda through the National TB and Leprosy Program (NTLP) introduced and scaled up the use of Gene-Xpert, True NAT, and TB LAMP to detect Mycobacterium tuberculosis (MTB) and resistance to rifampicin (RIF).

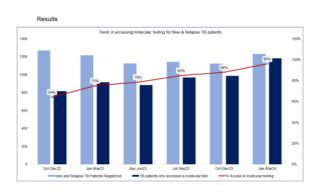
The Eastern region has 20 Gene Xpert, 07 True NAT, and one TB LAMP testing

facilities serving 161 Diagnostic and treatment units (DTUs). The region has a well-established hub system that transports sputum samples from all DTUs to the TB molecular testing facilities. In the October -December 2022 quarter, data revealed that molecular testing for notified TB cases in the Eastern region was at 64% compared to the expected 100%. This sub-optimal performance was associated with knowledge gaps among health workers on molecular testing eligibility, limited engagement of the District Health officers (DHOs) in tracking TB performance, no platform to share weekly TB molecular performance, and documentation gaps within primary TB data sources. Baylor Uganda set out to use a continuous quality improvement (CQI) approach to increase the percentage of presumptive TB cases accessing TB molecular testing at 161 facilities in Eastern Uganda.

Methodology: Baylor Uganda supported targeted coaching to 161 (DTUs) in Eastern Uganda to build health worker competencies and confidence to request for molecular TB testing, engaged facility CQI teams to monitor weekly TB indicators, site-specific TB data review, and reporting through the weekly National surveillance platform. Through a meeting, DHOs were engaged to track and monitor TB

performance in their respective districts. Data validation/triangulation meetings mid-quarter were supported to reconcile TB data primary tools, and district-based TB WhatsApp platforms were created to openly share TB data, positive TB results for treatment initiation, and timely response to quality gaps. A regional dashboard tracking TB molecular testing for all levels was developed to guide targeted support. Limitations to this approach were non-reporting through some facilities' weekly National surveillance system, delayed update of Primary TB tools, and lack of technique to induce samples from children.

Results: Access to molecular TB testing improved from 64% to 96% in six quarters.



Discussion: Access to molecular testing for presumptive TB cases improved from 64% to 96% and MDR-TB case notification improved from five to 15 cases as of January-March 2024. This improvement was attributed to weekly data review and sharing of results through the WhatsApp platform, engagement of DHOs in the accountability and tracking of TB performance, and coordination meetings that guided triangulation of results. Baylor Uganda continued to engage the biostatistician to address reporting and documentation challenges and rolled out Simple One Step stool analysis (SOS) to 12 gene-X-pert sites to aid TB investigation in children.

Abstract Type

Quality Improvement

Abstract Thematic Category

Quality Improvement Initiatives

149: Improving Functionality of Health Facility Quality Improvement Committees; Experiences from Bunyoro Region, Uganda.

Andrew Ndawula, Roger Ssebunya, Betty Nsangi, Denise Birungi, Dithan Kiragga

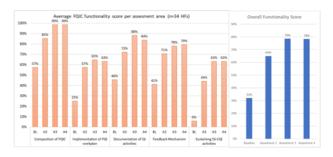
Baylor Foundation Uganda, Kampala, Uganda

Abstract

Purpose: Facility Quality Improvement Committees (QIC) provide an infrastructure that supports the health system to deliver quality health care while minimizing resource waste. In October 2022, we conducted a baseline assessment of 34 Health Facility QI Committees (FQICs); only 50% were fully constituted, 24% had a QI workplan, 41% documented QI activities and had a feedback mechanism respectively, 6% had evidence of leadership supporting 5S-QI activities and overall functionality score was 32%. We aimed at improving the functionality of FQICs at 34 Health Facilities (HFs) in Bunyoro region in Uganda from 32% in November 2022 to 80% by September 2023.

Methods: During April to September 2022, we used guidance from Uganda's Health Sector Quality Improvement Framework and Strategic Plan (NQIF&SP) to develop a standard FQIC assessment tool assessing five areas that defined FQIC responsibilities including presence of a complete FQIC chaired by HF in charge, implementation of a work plan, implementation of activities that sustain 5S-CQI, documentation of QI efforts, and utilization of feedback mechanisms for the voice of the customers. Overall functionality was calculated by determining the average of scores from the five areas and pretested the tool in ten HFs in one district. In November 2022, 14 health workers were selected and trained as mentors with each responsible for 3 HFs. Selected mentors received a three-day physical orientation on QI methodology, and composition and responsibilities of FQICs as guided by NQIF&SP followed by a virtual orientation on use of the FQIC assessment tool. Quarterly, data on functionality for each of 34 FQICs was collected using the standardized FQIC assessment tool and FQICs were coached to close identified gaps. HFs were also provided with daily monitoring cleanup checklists, 5S M&E assessment tools, action plan templates and QI journals to improve documentation and monitoring of FQIC activities. Results of the assessment were analyzed using Microsoft excel.

Results: Composition of FQICs, implementation of QI workplans, documentation of QI activities, utilization of feedback mechanisms and sustenance of QI activities improved from 57% to 99%, 25% to 63%, 46% to 84%, 41% to 79% and 6% to 63% respectively; overall functionality improved from 32% to 78.4%. Facilities with leadership that spearheaded implementation of QI workplans and use of provided inputs improved better.



Discussion: Increasing need for efficiency in the HIV services requires functional Quality Management infrastructure for improvement in performance of HFs and patient care. National QI policies such as NQIF&SP for Uganda provide frameworks for development of Quality Management tools such as the standardized FQIC assessment tool which provide organizations, governments and HFs with methods of monitoring QIC functions and coaching. We have scaled up this methodology to support District QI Committees which are mandated to support FQICs.

Abstract Type

Quality Improvement

Abstract Thematic Category

Quality Improvement Initiatives

159: Implementing a new impact measurement strategy for FBA Vision Screening Program

Andrea Imsen, Agustina Perez

Fundacion Baylor Argentina, Neuquen, Argentina

Abstract

Purpose: Fundacion Baylor Argentina (FBA) Vision Screening Program was established in 2017 with the goal of providing a comprehensive pediatric vision-screening program.

From November 2017 to March 2024 the program screened a total of **6298** children for visual acuity, **938** children received an ophthalmological consultation and **530** received prescription eyeglasses.

As part of a quality improvement process, FBA adapted the impact measurements for the program in 2023.

Methods: Foundation's technical team aimed to measure the program 's impact to help the program and its stakeholders to understand the progress of their efforts. We shifted from measuring school performance to general quality of life.

The team selected the "PedsQL" tool designed specifically for children as part of a new impact measurements strategy.

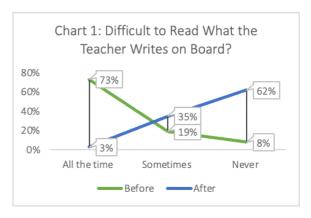
The tool was first implemented in June 2023 and administered the same baseline (before children received prescription lenses) and endline (at least 12 weeks after children received prescription lenses) survey to measure changes in children receiving prescription lenses only. In addition to measuring quality of life, the program also asked 3 vision specific questions.

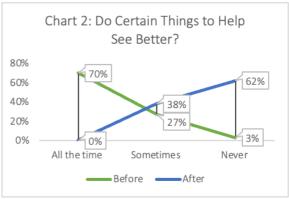
Results: For 2023 year, 1,566 children were screened for vision at schools and clinics from them 123 children received prescription eyeglasses, and a resounding 86% of children reported an improved quality of life 12 weeks after receiving their prescription lenses.

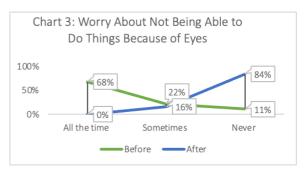
Results for all 3 vision specific questions posed indicate immense improvement 12 weeks after children received their eyeglasses. When asked if it was difficult to read what the teacher writes on the board, 73% reported it was difficult "all the time" before they received their glasses and only 3% reported it was difficult to see the board "all the time" after receiving their prescription lenses.

Children were also asked if they worry about not being able to do things because of their eyes and 68% reported that they worried about this "all the time" before receiving their glasses and 0% reported a worry after receiving their eyeglasses. This question brought a lot of insight for the technical team as it indicates that not only is vision a potential sensory challenge for some children it can also bring with it an emotional or psychological toll of worry that can be corrected with a simple health intervention.

The stark improvement in PedsQL scores and in these 3 questions indicate that the Foundation's Vision Screening Program has overwhelming positive value for the beneficiaries in varied quality of life domains.







Discussion: After our first year of experience with the tool we had positive results and helped us to communicate and increase the program 's strategic decision-making. We would recommend other teams to move away from measuring only outcomes to impacts as it strengthens your organization's ability to tell your story to potential stakeholders.

Abstract Type
Quality Improvement

Abstract Thematic Category
Quality Improvement Initiatives

Poster Presentations

Category 1: Providing Comprehensive Maternal, Newborn, and Child Care

9: Enhancing Maternal and Child Health Services to Prevent Mother-To-Child Transmission Of HIV/AIDS: Challenges and Quality Improvement Strategies at Baylor Children Foundation, Mwanza COE

<u>Eunice Ketang'enyi</u>, Nicholaus Martine, Gabriel Zacharia, Lumumba Mwita

Baylor College of Medicine Children's Foundation, Mwanza, Tanzania, United Republic of

Abstract

Introduction: Maternal and child health services play a critical role in preventing mother-to-child transmission (PMTCT) of HIV/AIDS. Despite progress, challenges like limited access, stigma, and financial constraints persist. Global efforts in PMTCT and pediatric HIV programs have stagnated, necessitating increased focus on closing gaps for mothers, infants, children, and adolescents.

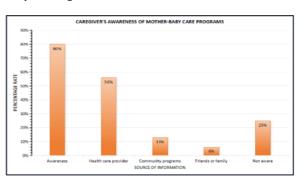
Purpose: The Option B+ approach, combined with Mother-Baby Care Programs (MBCP), is crucial in regions with high HIV prevalence, such as Mwanza COE. These initiatives aim to improve services for HIV-positive pregnant and lactating women through various interventions, including pre-exposure prophylaxis (PrEP) and family planning services. They ensure early HIV testing, index testing, optimized ART regimens, and support for infants diagnosed with HIV. This report evaluates the quality of these programs, focusing on mother-baby pair services at our COE which currently operates in partnership with Bugando Medical Center. It addresses gaps in awareness and utilization and suggests improvements for service delivery. Emphasizing increased awareness campaigns, stigma reduction, financial support, and expanded healthcare infrastructure, the report aligns with long-term quality improvements to enhance health outcomes.

Methodology: This study employed a qualitative descriptive design using open-ended questionnaire to gather insights from breastfeeding mothers and participants with children under five years old. The focus is on collecting detailed descriptions and perceptions regarding awareness and utilization of mother and childcare programs, as well as identifying challenges and suggesting improvements.

Results: Out of 100 respondents, 75% were aware of mother and childcare programs, with half learning about them from postnatal and COE healthcare

providers. However, only 80% reported using these services, revealing a gap between awareness and utilization. Challenges cited included financial constraints (62%) and stigma and discrimination (20%). Participants suggested addressing these through increased awareness campaigns, stigma reduction, and improved financial support.

Figure 1. Caregiver's Awareness and Satisfaction on Mother Baby Pair Programs



Discussion: The study underscores significant awareness of mother and childcare programs among participants yet exposes a notable gap between awareness and utilization of these services.

Challenges like resource limitations, AIDS-related stigma, and financial constraints hinder effective program use. Participants emphasized the need for increased awareness campaigns, stigma reduction efforts, and financial support to overcome these barriers. The strategy entails increasing awareness, enhancing healthcare infrastructure, empowering local communities with socioeconomic strengthening, leveraging technology, and advocating for supportive policies.

Moreover, moderate dissatisfaction with service quality and suggestions for improvement signal a pressing need for expanded coverage, improved quality, and ensured availability of essential medications.

By comprehensively embracing a multifaceted strategy that combines these efforts, we can greatly enhance the quality of maternal and childcare services in the Lake zone and across Tanzania. This, in turn, will result in better health outcomes for vulnerable populations.

Abstract Type
Quality Improvement

Abstract Thematic Category
Quality Improvement Initiatives

30: Comprehensive Breastfeeding Support Program: Enhancing Maternal and Child Health at Baylor Foundation Eswatini, Center of Excellence (COE) at Mbabane.

<u>Nkosibonile Nkambule</u>, Kholiwe Mbhamali, Thembela Mavuso

Baylor Foundation Eswatini, Mbabane, Swaziland

Abstract

Background: Despite well-established benefits of breastfeeding, exclusive breastfeeding (EBF) rates at Baylor Foundation Eswatini Center of Excellence (COE) at Mbabane remain below optimal levels, particularly among HIV-positive mothers. The EMRXL (electronic medical records system) data extracted from the COE reveals that the clinic had an EBF rates of 40% as of March 2024. The low rates of EBF at the clinic are due to the lack of formalized support system, inadequate knowledge, funding, and inadequate healthcare providers training. A comprehensive package of services was implemented with the primary objective to increase EBF rates from 40% to 50% within twelve months among lactating mothers and their infants receiving care at the COE.

Description: The program commenced in March 2024 and will continue until March 2025, is being implemented at Baylor Foundation Eswatini COE in Mbabane. This facility serves as a hub for maternal and child health (MCH) services with a focus on HIV positive mothers and infants. The program's focus is on providing personalized breastfeeding support and education by nurses and mentor mother to pregnant women, lactating mothers, and their infants during the first six months of the child's life. Individual and group counselling sessions are prioritized to provide support throughout the six-month period. An integrated care model is employed in the program, which includes capacity-building trainings for a mentor mother and six nurses on breastfeeding support and management. Additionally, breastfeeding education materials are distributed to pregnant and lactating mothers during antenatal and postnatal visits.

Lessons Learned: Personalized breastfeeding support proved to be an effective strategy in improving knowledge about breastfeeding practices and self-efficacy among mothers, demonstrated by the steady increase in EBF rates from 40% in March to 41% in May 2024. Additionally, integrating multiple interventions into a comprehensive care model was successful in addressing the root causes of low EBF rates, such as fear of mother to child transmission. Furthermore, capacity-building initiative for mentor mother and nurses resulted in significant improvements in their knowledge and skills as demonstrated by the post-training evaluation

indicating 100% of nurses felt more confident in providing breastfeeding support at the COE. While the program is still ongoing and full results are not yet available, the lessons learned so far provide valuable insights into the effective strategies for improving breastfeeding practices and outcomes.

Next Steps: To continue improving MCH outcomes, the program will focus on key areas for improvement. These include expanding mentor mother program to provide personalized support to more breastfeeding mothers, improving healthcare providers' skills in breastfeeding support through capacity-building initiatives for clinical team and doctors, establishing partnerships with local organizations to ensure sustained support of breastfeeding mothers and develop a sustainable plan to integrate the program's activities into routine patient care.

Abstract Type

Program Description

Abstract Thematic Category

Beyond the Status Quo: Innovations for Integrated Care

33: Psychosocial Needs of PBFWLHIV

Valentine Banda, Fraser Tembo

Baylor college of Medicine, Lilongwe, Malawi

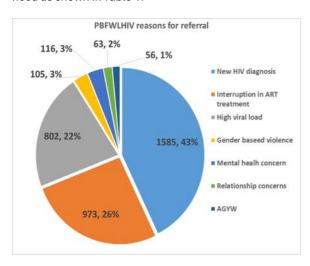
Abstract

Introduction: Prevention of mother to child transmission (PMTCT) efforts have significantly decreased transmission of HIV to infants, however gaps remain. Pregnant and breastfeeding women living with HIV (PBFWLHIV) who have a detectable viral load are at risk of transmitting HIV to their infants. HIV adverse outcomes are common to clients who are psychologically affected. At Baylor-Malawi supported health facilities, PBFWLHIV at high risk of adverse HIV outcomes including women with a new diagnosis of HIV, treatment interruption, detectable viral load, survivors of gender-based violence or any mental health concern are referred for psychosocial support (PSS) that include psychological assessment and treatment for any identified psychosocial needs. In this abstract we describe the psychosocial (PS) needs of PBFWLHIV who received PS services from Baylor supported health facilities in five rural districts in Malawi.

Methods: Clients were supported in person or through phone utilizing clinic-based phones. Health care workers referred PBFWLHIV to 20 psychosocial counselors (PSCs) who were physically based at high volume facilities via WhatsApp group to notify that there was a client in need of service and then the PSC called the facility phone to speak with the client. Routinely collected program data from February 2022- February 2023 was analyzed.

Results: From February 2022- February 2023, PSCs completed 29,400 counseling sessions, including 13% (n=3700) \PBFWLHIV. Ninety-nine percent (3700/3731) of PBFWLHIV referred to PSCs were counseled with 79% (n-2923) of sessions conducted on the phone with clients from all 96 facilities throughout the 5 supported districts. Forty-two percent (n=1538) were 10–24-year-old adolescent girls and young women (AGYW).

PBFWLHIV were referred to PSC for; new HIV diagnosis (n=1585, 42.8%), interruption in ART treatment (n=973, 26.3%); high viral load (n=802, 21.7%), gender based violence (n=105, 2.8%), mental health concern (grief, worry, depression, suicidal, or other mental health issues) (n=116, 3.1%); relationship concerns (n=63, 1.7%) and AGYW (n=56, 1.5%). Over 3000 PBFWLHIV (n=3078, 83%) counseled had an identified psychosocial health need as shown in Table 1.



Conclusion: Many PBFWLHIV in Malawi experience psychosocial health needs and phone-based PSC allows increased access to PS services. Awareness and attention to common experiences of PBFWLHIV should be part of routine care to mitigate common barriers to good adherence and retention in care. Further evaluation and follow-up are needed to assess effect of treatment on identified needs and on overall outcomes for women and babies.

Abstract Type

Program Description

Abstract Thematic Category

Differentiated Service Delivery: Patient-Centric Service Delivery Models

36: A Comparison of the Effectiveness of Two Nutritional Supplements on Children with Malnutrition at Baylor Qacha's Nek Satellite Center of Excellence (Q-SCOE) <u>Rets'elisitsoe Mahlaha</u>1, 'Mamokoena Nts'oeu¹, Samhita Bhargava², 'Manchakha Ts'osane¹, Sarah Nkunyane¹

¹Baylor Foundation Lesotho, Qacha's Nek, Lesotho. ²Baylor College of Medicine, Houston, USA

Abstract

Background: Lesotho is working toward eliminating malnutrition through the Ministry of Health. Close to 90% of Q-SCOE clients live with food insecurity and malnutrition. Challenges include poverty and caregiver absence, either for work in South Africa or abandonment. We provide nutritional products to malnourished clients. Super Cereal (SC) is supplied by the government. We were supplied with Fortified Porridge (FP) for six months starting from January 2024. The two products are nutritionally comparable. SC is yellow and requires cooking with boiling water. FP is white, simply mixed with warm water, and clients report that it tastes better than SC. We hypothesized that clients would gain more weight with FP than with SC. This is an ongoing pilot study to compare weight gain between FP and SC.

Methods: The study is taking place from September 2023 – September 2024. From a population of 181 malnourished clients, 34 between 4 and 17 years of age were sequentially enrolled at the time of their clinic appointments until the target number was reached (17 clients in each group). SC was supplied to the first 17 who came before FP was available. FP was supplied to the 17 enrolled when it became available. Age selection was adapted as required for FP (exclusively for ages of 4 and 17). Baseline weight was obtained. Weight change was tracked nonconcurrently for each product. Since SC was available at the beginning of the study, data were collected for the 17 clients in that group from September 2023 - March 2024. Data collection for the 17 clients enrolled on FP began when it became available in January 2024.

Results: Baseline data for the study population is summarized in the attached table. The mean weight gain for the SC group was 1.5 kg. Data collection for clients that were placed on FP will be completed in September 2024. All clients have so far adhered well to their follow-up visits.

Table 1. Baseline Data of the Study Population

	Super Cereal	Fortified Porridge
Female	12	11
Male	5	6
Mean age (years)	11	12.3
Mean baseline weight (kg)	26	25.9

Conclusions: Data collection for SC is complete, while FP is on-going. All data will be analysed at the

end of the data collection period in September 2024. Statistical significance of the results will be determined. If there is a significant difference between FP and SC, the study can potentially be repeated with a larger sample size. We developed and implemented a questionnaire to collect qualitative data from enrolled clients about the program's challenges and successes. We will use the information that we collect to improve our nutrition services and to advocate with the Lesotho government for the most effective nutritional products.

Abstract Type

Scientific Research

Abstract Thematic Category

Quality Improvement Initiatives

52: Childhood Burn Injuries in a Tertiary Hospital in Suriname: A Descriptive Study

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Abstract

Background: Burn injuries are a leading cause of death and disability among children globally, with up to 90% occurring in low- and middle-income countries. The aim of this study was to determine the etiology and demographic variables of childhood burn injuries admitted through the emergency department of the Academic Hospital Paramaribo (AZP) in Suriname.

Materials and Methods: This is a 3-year retrospective, hospital-based descriptive study at AZP, the largest of six hospitals in Suriname serving the urban Paramaribo District with pediatric referrals from across the country. The study included children aged 0-16 years who were admitted to the pediatric ward of the AZP for burn injuries from January 2021 to December 2023. Information obtained from chart review included age, sex, mechanism/location of injury and other demographic information such as ethnicity and residential district. Ethical clearance was obtained through the medical ethics review committee Suriname.

Results: 114 children (68 boys, 46 girls; range 2 months to 16 years) had severe burn injuries requiring admission. The highest number of burn injuries occurred in the age group 0-2 years (55%). Of the 114 admissions, a cause has been processed in the system for 103 admissions. Of the 103 known causes, 80% (82/103) involved contact with hot

liquids, 14% (14/103) exposure to smoke, fire and flames, 3% (3/103) exposure to electrical current and 2% (2/103) exposure to hot household appliances. The other 2 recordings concerned contact with hot air and gases and exposure to an explosion of a pressurized device, respectively. 74% (84/114) of the burn injury patients belonged to the Marroon and Creole ethnicities. Only a small portion of the registered addresses were valid. Of these 90% (58/64) came from the districts of Paramaribo, Wanica and Brokopondo.

Conclusion: This study provided useful information on the characteristics of childhood burn injuries in Suriname and illustrates the potential association between the high rates of scalding injuries and regions where cultural practices involving hot water may be more prevalent. Furthermore, our findings may aid in identifying high-risk demographics and guiding the formulation of targeted, culturally sensitive burn prevention education to mitigate the incidence and morbidity of pediatric burn injuries in Suriname.

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Abstract Type

Scientific Research

Abstract Thematic Category

Beyond the Status Quo: Innovations for Integrated Care

61: Prevalence of Hearing Loss at Primary Health Care Clinic (Baylor Clinic)

Tandzile Dlamini

Baylor Eswatini, Mbabane, Swaziland

Abstract

Background: There is a lack of information on the prevalence of hearing loss in Eswatini, particularly in all primary health care settings. According to the 2007 Housing Census, out of the 171347 people with disabilities in Eswatini, 18389 (11%) have hearing impairment. On the 3rd of March 2014, in commemorating the International Ear Care Day 2014, the former Honourable Minister of Health, Senator Sibongile Ndlela- Simelane, reaffirmed His Majesty's Government's commitment to using the primary health care strategy to address several national concerns, including hearing impairment.

Objectives: The aim for this study is to ascertain the following:

- Prevalence of hearing impairment amongst patients who came in the audiology clinic at Baylor clinic Mbabane.
- The characteristics and nature of hearing impairment in patients at Baylor clinic Mbabane.

Methods:

- A cross-section design was used for patients in Baylor clinic.
- Non-probability purposive sampling was used to determine the degree of hearing in patients at Baylor clinic, with the use of pure tone audiometry in all patients.
- A total of 317 patients had their hearing assessment (June 2023 – June 2024) from age 2 – 70 years.

Results: Prevalence of hearing loss amongst Baylor clinic patients was 17%. Most of the hearing losses were conductive hearing losses with 8% and sensorineural and missed hearing loss at 5%. Patients with OM were 27% and TM perforation were 11%.

Conclusion: The etiology of hearing loss in PLHIV is likely multifactorial and is due direct effects of HIV replication leading to sensorineural hearing loss, frequent infections of the upper airways and sinuses resulting in conductive hearing loss. The characteristic of the hearing loss was mainly conductive hearing loss (8%) which is most likely due to a conductive component in the middle ear, i.e. ear infections. This study represents the first attempt to determine the prevalence of hearing loss in a primary health clinic in Eswatini.

Abstract Type

Scientific Research

Abstract Thematic Category

Doing More with Less: Enhancing Client Outcomes through Cross-Sector Engagement

89: Prevalence, Indications, and Fetal Outcomes of Caesarean Sections at an Urban Community Hospital in Lilongwe, Malawi in 2023

Mwai Kalebe, Nomsa Kafumba

Baylor Foundation, Lilongwe, Malawi

Abstract

Background Area 25 Health Centre (A25 HC) serves a growing population in Lilongwe, Malawi. An operating theatre was opened for the health facility in 2019. This promoted access to Caesarean Section (CS) for the low-income population that area 25 serves and helped with decongesting the labour ward at the

referral central hospital. Availability of CS when medically needed improves both maternal and neonatal outcomes (WHO, 2015). This Audit aims to objectively quantify the indications for CS at A25 and analyse the outcomes for 2023.

Description: Caesarean section is the commonest procedure performed at A25. This procedure was mostly performed on women between the ages of 20-34(74.6%) in 2023. They were a total of 7710 deliveries in 2023 with 1082 CS. The data to establish the effect of CS at A25 in 2023 was collected from theatre anesthetists' register and labour ward register where patient information is recorded following admission, delivery or referral. The data was then analysed using excel spreadsheet to compile and come up with different percentages.

The most common indications for primary CS were fetal distress (51.4%), followed by cephalopelvic disproportion (25.6%). The least common indications for primary CS were immunosuppression, bad obstetric history and cord accident (1.1%). The most common indication for secondary CS was failed trial of labour after CS (TOLAC) due to fetal distress (39.4%). There were 5 (0.5%) Caesarean hysterectomies of which 2 were secondary to placenta accreta and 3 from ruptured uterus in women on TOLAC. None of the elective CS had bad neonatal outcomes. However, the emergency CS recorded 23(3.1%) bad outcomes. These included cases of birth asphyxia, early neonatal death, macerated and fresh stillbirths.

Lessons Learned: Overall, the CS rate for Area 25 HC lies within the WHO recommended standard. Most common indication for CS in both the primary and secondary CS was fetal distress. The prevalence of bad neonatal outcomes was low in 2023 among CS deliveries. All of which were recorded on emergency CS. Despite these bad outcomes recorded, CS did contribute majorly to the positive outcomes that A25 HC had in 2023.

Next Steps: Going forward there is need for the facility to improve on CS data recording and documentation. Discussions initiated during the audit planned for information reconciliation by all members involved following delivery before patient information is recorded in the registers. The aim is to improve and ease future quality improvement programmes and resource planning. As well as improve the quality of data that is kept for the facility.

Abstract Type

Program Description

Abstract Thematic Category
Quality Improvement Initiatives

127: Well-child Visits Program in Remote Locations, Fundacion Baylor Argentina

Andrea Imsen, Mercedes Sciuto

Fundación Baylor Argentina, Neuquen, Argentina

Abstract

Background: High-quality well-child visits can improve the health of children and support caregiver behaviors to promote their child's health. Baylor Argentina 's pediatric programs in Añelo and Rincon de los Sauces recommend regular well-child care visits from birth to 16 years of age to assess developmental milestones, hearing, vision, nutrition, sleep, and for injury and disease prevention. These visits provide an opportunity for additional ageappropriate preventive services such as immunizations, screening and monitoring to detect developmental delays and follow up with early intervention services as needed.

Description: The well-child care program follows the growth and development of children from birth to 14 years old living in Añelo and Rincon de los Sauces, two remotes towns in Neuquén province with limited access to health care services. As part of the well child visit, the Foundation's pediatricians review the child's development, check blood pressure and nutritional growth, perform vision and hearing screening, as well as laboratory screening such anemia detection. These visits provide an opportunity to review and discuss important areas of childhood health, to provide anticipatory guidance, and allow pediatricians to establish a relationship with caregivers.

Lessons Learned: Since the inception of the Baylor Argentina well-child care program in Añelo in February 2018 and Rincon de los Sauces in 2022 through March 2024, we have performed 6620 well-child care visits. In addition, 6620 immunizations records were reviewed and updated. The prevalence of patients that are currently being followed for conditions identified through our screening, such as respiratory diseases, hypothyroidism among others, was 40%. The prevalence of anemia in children under 4 years old was of 38%. The prevalence of obesity or overweight children was 59%, which is higher than the national data from Argentina.



Next steps: We have successfully expanded our program reach to rural parts of Argentina. Through screenings performed through our well-child care program we had early disease detection and provided timely treatment giving our children the best chance for proper and successful treatment. We plan to continue developing our outreach strategies and to expand our program to other communities of influence with vulnerable children, as well as strengthening strategic partnership with key stakeholders.

Abstract Type

Program Description

Abstract Thematic Category

Beyond the Status Quo: Innovations for Integrated Care

130: Implementing Interventions to Detect and Follow up Obesity-Related Comorbidities for Children Who Are Overweight and Obese

Andrea Imsen

Fundacion Baylor Argentina, Neuquen, Argentina

Abstract

Background: Childhood obesity is one of the most critical public health concerns of the 21st century and obesity prevention, in addition to treatment, is an important public health priority. Last data from Argentina reported that 41.1 % of children and adolescents between 5 and 17 years of age are overweight and obese. Children and adolescents with obesity have increased prevalence of comorbidities, and a greater risk for obesity in adulthood. Obesity puts children and adolescents at risk for serious short- and long-term adverse health outcomes later in life and also is associated with low self-esteem and poor emotional health.

Description: From January 2023 to May 2024, FBA conducted 8 outreach activities in Añelo, one of our remote communities of influence, for detection of obesity and obesity related comorbidities in children from 4 to 14 years old. During this period 352 children were seen. Based on BMI percentile criterion children were diagnosed with obesity (BMI ≥ 95 percentile) or overweight (BMI 85-95 percentile). Children 10 years and older diagnosed as overweight or obese were invited to join Baylor's program on a first intervention visit with an obesity-specific history and review of systems, family and social history, physical examination and laboratory testing. This evaluation provided an opportunity to assess the etiology and evaluate obesity-related comorbidities such as the presence of risk factors for T2DM or NAFLD, dyslipidemia, abnormal glucose metabolism, and abnormal liver function.

Lessons learned: Based on BMI percentile criterion 64% of children screened were diagnosed as either overweight or obese. Obesity was diagnosed in 46% of children, whereas 18% were overweight. Our main aim was to identify children who were at the highest risk of developing comorbidities. The prevalence of dyslipidemia, a risk factor for cardiovascular disease, was found in 28% of obese and overweight children. Abnormal glucose metabolism and insulin resistance was identified in 8% of this cohort, whereas endocrine comorbidities were present in 6% and increased triglyceride levels occurred in 22%. Steatosis was present in 40% of obese children. All obese children with comorbidities were characterized with poor nutrition habits, so they started on a follow up program for appropriate management and/or specialist referrals as necessary. Also 17% of children that maintained treatment for at least 6 months were found to have an improved body mass index score.



Next steps: We need to continue obesity management through a multidisciplinary team, with a comprehensive approach that should be child-focused, family-based and lifestyle treatment. We are also interested in adopting motivational interviewing approach, that has shown promising results in terms of self-reported behavior changes for obesity prevention. And, to perform a systematic review of the association between food insecurity and obesity.

Abstract Type
Program Description

Abstract Thematic Category

Beyond the Status Quo: Innovations for Integrated Care

135: Trends Among Non-Citizen Children at Botswana-Baylor Children's Clinical Centre of Excellence

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Abstract

Background: Botswana received recognition in 2021 by being awarded the silver tier by World Health Organization (WHO) for targets achieved in the Prevention of Mother to Child Transmission (PMTCT). Since the end of 2019, antiretroviral treatment (ART), that was only previously free of charge to citizens of Botswana, became free to all residing in the country. This has led to more non-citizens, documented and undocumented including pregnant women and children, being initiated on ART.

The aim of this study was to describe the diagnostic and treatment characteristics among children 5 years and under (U5) non-citizen children at Botswana Baylor Children's Clinical Centre of Excellence (BBCCCOE).

Methods: A retrospective chart review was conducted on all non-citizens U5 at BBCCCOE between June 1st 2023 and May 31st 2024.

Results: A total of 18 children (7 males [39%], 11 females [61%]) from 18 mothers were identified. Of the 18, 2 (11%) of their mothers were diagnosed in the first and second trimesters of pregnancy, 4 (22%) during the third trimester, 2 (11%) during labour, 5 (28%) during breastfeeding and 5 (28%) more than 2 years after delivery.

Of the 18 children, 5 (28%) were diagnosed within the first 3 months after birth while 13 (72%) were diagnosed after 3 months of birth. 14 children (78%) tested HIV positive after presenting with an opportunistic infection with 10 (56%) during hospital admissions. 4 (22%) children were diagnosed through the routine 6-week PCR testing for all HIV exposed babies in Botswana.

8 of the 18 children (44%) reported adherence issues over the past year with 3 (38%) with families citing finances as the main reason for sub-optimal adherence. 2 (11%) had a history defaulting ART but a total of 15 (83%) achieved viral suppression over the last year.

Discussion: The results appear to suggest that a large proportion of the mothers of the children in the study were diagnosed with HIV in third trimester or later (89%) and did not receive a minimum of 4 weeks of ART before delivery. Furthermore, about three quarters of the children (72%) were tested for HIV after 3 months of age and diagnosed through opportunistic infections (78%). However, the small sample size means that further research including more sites around the country and statistical analyses would be necessary to explain these findings further.

Conclusion: Free access to ART has helped increased the number of non-citizens on treatment. However, addressing their challenges through health education and linkage to care may potentially play a further role in aiding Botswana in receiving the gold tier in PMTCT.

Abstract Type
Scientific Research

Abstract Thematic Category

Doing More with Less: Enhancing Client Outcomes through Cross-Sector Engagement

Category 2: Creative Strategies to Address the Challenge of Adolescents Living with HIV

8: Through the Looking Glass: Empowering Youth Community Advisory Boards in Tanzania as a Sustainable Youth Engagement Model to Inform Policy and Practice Engagement Model to Inform Policy and Practice

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Abstract

Introduction: Youth population, aged 10–24 years, is largely concentrated in low and middle-income countries (LMICs), making up 90% of global demographic. Prioritizing youth engagement is critical for community well-being and driving positive change, as it empowers young people to actively shape their futures. Involving youth in research and health promotion efforts not only leads to improved health outcomes but also encourages change by fostering active participation and leadership.

However, current methods of youth engagement often lack direction and sustainability, limiting their effectiveness and long-term impact. To address these shortcomings, a three-lens approach—viewing youth as beneficiaries, partners, and leaders—has been identified as essential. This comprehensive model ensures that youth are not merely passive recipients but active contributors and decision—makers in the interventions that affect their lives. To gather insights, we utilized established Youth Community Advisory Boards (YCABs), deriving responses directly from the youth themselves.

Methodology: The methodology involved gathering input from YCAB members on the top five challenges faced by young people in their communities through a *Google Forms* distributed in May 2023. Responses were collected via smartphones, tablets, or paper, translated, and coded for analysis. Results were

presented back to the YCABs in September 2023, followed by a discussion on potential solutions to the identified challenges.

Results: The survey achieved response rates of 90% (84/93) for challenges and 78% (71/93) for solutions. The top challenge reported was unemployment and financial instability (45%), followed by gender-based violence (13%), sexual reproductive health issues (8%), and alcohol and drug use (8%). Other important challenges included physical and mental health, malnutrition, relationships, education, and societal and environmental norms. Proposed solutions included job creation, improved education, expanded legal systems, youth-friendly healthcare services, and increased social support. While most challenges and solutions align with the National Accelerated Action and Investment Agenda for Adolescent Health and Well-being (NAIA-AHW) 2021/22-2024/25, some were not addressed. It is essential to ensure youth representation in policy-making processes, and appointing a YCAB member for this purpose could serve as a sustainable model.

Figure 1. Mwanza Youth Community Advisory Board (YCABs) members during one of the discussion sessions



Conclusion: The study emphasizes the critical role of youth engagement in research and health promotion efforts globally. It highlights the importance of involving youth in decision-making processes and fostering their leadership and agency. Innovative initiatives like youth community advisory boards (YCABs) demonstrate the potential for youth-driven approaches to bridge research gaps and shape

health agendas. Empowering young people as agents of change holds promise for creating a brighter and healthier future. Addressing the identified challenges through a comprehensive and sustainable approach is crucial for supporting youth development and promoting health outcomes. By treating youth as beneficiaries, partners, and leaders, programs can drive community transformation and ensure the long-term success and well-being of the global youth population.

Abstract Type

Scientific Research

Abstract Thematic Category

Beyond the Status Quo: Innovations for Integrated Care

10: Long-term Impact of Camp Program on Viral Load Suppression for Adolescents at Baylor Clinic Mwanza, Tanzania

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Abstract

Background: HIV-infected children and adolescents (CALHIV) face numerous challenges, including bereavement, poor health outcomes, poverty, limited educational and vocational opportunities. Psychosocial aspects of HIV/AIDS, inadequate educational attainment and coping challenges, significantly impact these adolescents. Youth with HIV/AIDS often experience more emotional and behavioral issues compared to their peers (Mellins & Malee, 2013). Baylor Tanzania, Mwanza Center of Excellence (COE) camp program for adolescents with HIV from 2016 to 2019, served over 100 participants. Studies show that camps are perceived as opportunities for belonging, self-expression, and escape from traumatic environments. Also, youth camps foster caring connections, provide a sense of reprieve, and enhance knowledge and skills (Gillard, Witt, & Watts, 2011). Additionally, camps aim to normalize social experiences and improve general outlook through psychosocial support and teambuilding activities. While many organizations provide such interventions, evidence of their impact on clinical outcomes is limited. This study aims to provide insights into the long-term impact of camp programs on clinical outcomes at the Baylor Mwanza, Tanzania.

Methods: We traced and analyzed 58 electronic chart records of our former campers from 2018 and 2019: 30 from the 2018 camp and 28 from the 2019 camps. The 5 days camp comprised of selected group of CALHIV age 10 to 14 who were fully disclosed with a mixture of participants with high viral

load and others with other social issues. More focus was on those with high viral load, every participant had a baseline viral load before enrollment and among 58 campers 19 participants had a high viral load before going to camp. One of the best practices among other fun things while at camp was the group direct observed therapy (DOT) approach.

Results: Out of 58 participants, 19 participants had high viral load 17 (90%) participants had viral load suppression, 5% did not suppress and 5% was not tested due to family relocation. To-date, 40(69%) of former campers still attend Baylor clinic, and are leading other youths as role models. 11(19%) former campers have been transitioned into young adults and youth clinics and still striving well. Of these, 95% are self-employed or in college within Tanzania.

Figure 1. Camp vibes with one of the campers participating in a talent show.



Figure 2. Campers with facilitators in a participatory session during Camp Matumaini.



Conclusion: The camp program positively impacted adolescent behavior and outlook by providing strategies to enhance ART adherence and achieve viral load suppression. The camp's welcoming and dynamic setting allowed adolescents to engage in enjoyable and stimulating activities, while also fostering the development of life skills and building self-esteem. Although the camp likely contributed to better adherence and viral load suppression, it is

essential to recognize that other factors may also play a role in these improvements.

Abstract Type
Scientific Research

Abstract Thematic Category

Quality Improvement Initiatives

11: Assessing the Effect of Empowerment Interventions on Medication Adherence among HIV-Positive Adolescents at Baylor Mokhotlong, Lesotho

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Abstract

Background: Globally, HIV positive adolescents face challenges with medication adherence and achieving viral suppression. In Lesotho, HIV prevalence among people aged 15-59 years is 25%, with many adolescents in the Mokhotlong district orphaned by HIV or left with inadequate parental support. In addition, they struggle with child marriage, teenage pregnancy, and heading families. The Baylor Mokhotlong Satellite Centre of Excellence (SCOE) serves 344 clients, 36.9% of whom are adolescents, and 24% of these adolescents struggle with suboptimal adherence (<95% or >105% based on pill counts) and detectable viral loads (DVL) (≥50 copies/mL). Historically, the SCOE was focused on helping caregivers administer HIV medication to the adolescents. This project instead focused on empowering the adolescents to administer their HIV medication themselves through empowerment counseling sessions with a goal of improving medication adherence.

Description: Thirty-one (31) Mokhotlong SCOE adolescents with suboptimal adherence participated in a series of counseling sessions known as Ongoing Adherence Counselling (OAC) (for suboptimal adherence) and Enhanced Adherence Counselling (EAC) (for DVL). During those sessions, 77% adolescents reported that the primary contributing factor to their suboptimal adherence was a lack of treatment support. During EAC and OAC, the session hosts (social worker and the counselor) provided the adolescents with education on adherence and motivation enhancement and assisting them to develop user-friendly adherence management strategies. These sessions included elements of empowerment such as fostering self-awareness, self-acceptance and self-control, to enhance decision-making skills. Praise and rewards were

given through motivational gestures such as high fives and fist bumps, along with extended check-up intervals (multi-month dispensing). Adherence trends were monitored monthly over six months, from October 2023 to April 2024. Adolescents with detectable viral loads underwent repeat monitoring, as per Lesotho national antiretroviral treatment (ART) guidelines. Patients' electronic medical records (EMR-X) were utilized for routine data collection that was analyzed using Microsoft Excel.

Lessons learned: Due to incorporating empowerment strategies within OAC and EAC sessions, 61% (19/31) of adolescents' pill counts improved, while 32% (10/31) had no change. The remaining 2 participants exhibited fluctuating adherence outcomes between levels considered good and poor.

Next steps: Targeted counseling and empowerment strategies can improve medication adherence among HIV-positive adolescents without treatment supporters. We plan to integrate empowerment strategies among all adolescents, both those with and those without adequate support, in order to enhance their resilience and independence.

Abstract Type
Program Description

Abstract Thematic Category
Education and Sustainability Initiatives

26: A Quality Improvement Initiative to Reduce Risk of HIV in Incarcerated Adolescents at a Juvenile Training Center in Maseru, Lesotho

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Baylor College of Medicine, Maseru, Lesotho

Abstract

Background: Incarcerated adolescents are at substantial risk of acquiring HIV due to injection drug use, tattooing/body piercing, lack of access to condoms and Pre-Exposure Prophylaxis (PrEP), sexual abuse, and limited HIV testing services. In Lesotho, the HIV prevalence is 22.7% in the general population, compounding the HIV transmission risk among detainees. Worldwide, one third of young people demonstrate accurate knowledge on HIV prevention. The Lesotho Ministry of Health (MOH) recommends that all inmates be screened for HIV every 3 months. The WHO has set a target that 95% of HIV-infected individuals know their HIV status by 2025. The aim of this initiative was to increase the number of incarcerated individuals aged 10-24 years who know their HIV status from 63% to 95% by June 2025.

Methods: This quality improvement initiative was created by a Baylor community outreach nurse and an adolescent psychologist in May 2023 as an HIV risk reduction program. As of May 2024, we plan to apply quality improvement methodology to track the number of incarcerated adolescents who know their HIV status. A risk assessment survey was developed by a study team member and administered to 112 participants who were chosen based on age. Surveys were analyzed for baseline data. Interventions included HIV screening, distribution of hygiene packs, and a 2-day training that included education on sexual/reproductive health, PrEP services, mental health, and peer-led healthy communication workshops. Participants in the training included inmates (n=25), prison officers (n=8), vocal persons (n=3) and an implementing stakeholders' team (n=7).

Results: 58 adolescents were screened for HIV and 4 tested positive. Baseline survey results showed that 63% of responders knew their HIV status and 52% had tested for HIV in the past three months.

Moreover, 36% of inmates used condoms and/or PrEP, 26% reported access to PrEP, 33% reported access to condoms, 36% shared sharps, 43% reported unprotected sex, and 4% reported sexual abuse.

Discussion: Baseline data identifies significant gaps in knowledge of HIV status and access to HIV preventative measures. Routine screening is not performed at the juvenile center, though the MoH guidelines recommend this. A limitation is that there is no follow-up data to measure whether our interventions led to improvement, because initially the program was not designed using a quality improvement framework.

Next Step: We plan to administer the risk assessment survey and test inmates at 3-month intervals starting June 2024 to determine if our interventions have led to an improvement in the percentage who know their HIV status and use PDSA cycles to test additional change ideas. This will include measuring our interventions, incorporating routine HIV screening, and expanding educational and behavioral strategies that can mitigate the risk of HIV in the inmate population beyond Maseru.

Abstract Type
Quality Improvement

Abstract Thematic Category

Quality Improvement Initiatives

86: Community Adolescent Treatment Supporters (CATS) care program description.

Njabuliso Gcebile Nkambule

Baylor Foundation Eswatini, Mbabane, Swaziland

Abstract

Background: Baylor Foundation Eswatini is implementing a program peer to peer adherence support program for adolescents living with HIV (ALHIV) aged between 10 and 24 years. It has engaged 25 Community Adolescents Treatment Supporters (CATS) age between 18 to 24 years in 21 health facilities to support ALHIV achieve optimum health outcomes through breaking barriers to adherence and retention, as well as develop their resilience through stigma and discrimination reduction initiatives.

Description: The CATS care program is a "caring of the carers initiative" that acknowledges that though engaged as CATS in the program, The CATS is still primarily a client in the organization, and they still experience the same challenges experienced by the peers they support which often led to poor adherence and psychosocial challenges.

- Psychosocial support: The support includes building resilience and addressing identified mental health challenges affecting their life and ability to support their peers.
- Caseload management: to avoid burnout, CATS are supported to manage their work
- Capacity building: through low or no cost structures
- Transition/ exit plans: From engagement CATS are prepared for exiting the program by age 24 through the development of individualized care and exit plans which include entrepreneurial empowerment sessions, encouragement to go back to high school, tertiary education or get vocational training.
- Caregivers Engagement: Since CATS are also clients in the program, their parents/ caregivers are engaged semi-annually to ensure they still receive the care and support that any young adult would receive at home.

Lessons Learned:

- CATS care is an essential part of continuous engagement and improvement in the CATS/ ALHIV program.
- Due to their age, being CATS is the first job for most CATS in the program and the capacity building component in the CATS care program needs to be strong in order to effectively develop professional ethics in the CATS preparing them for future employment when they turn 24.
- There is improvement and consistency in the standard of service delivery by the CATS compared to when the program started in 2022. This is often reflected in the feedback received during clients care givers engagement meeting and during program verification sessions.

 The mental health challenges experienced by all adolescents living with HIV are also experienced by CATS and they are also prone to defaulting, thus the need to support and develop resilience.

Next Steps:

 For a holistic care plan, especially in preparation for CATS transitioning, should be implemented, this should include the facilitation of business startups and linkage to tertiary or vocational training.

Abstract Type

Program Description

Abstract Thematic Category

Differentiated Service Delivery: Patient-Centric Service Delivery Models

92: Sustained high Teen Club attendance rates among adolescents living with HIV in Malawi

Carrie M Cox^{1,2}, Albert Kaonga¹, Golden Kang'oma¹, Anne Kantepa¹, Joseph Magaleta¹, Valentine Banda¹, Brown Chiwandira³, Elizabeth Wetzel^{1,2}, Saeed Ahmed^{1,2}, Katerine R Simon^{1,2}

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Abstract

Background: Retention and adherence challenges among adolescents living with HIV (ALHIV) are well described and comprehensive client-centered strategies to address them are critical. Baylor College of Medicine Children's Foundation-Malawi (BCM-CFM) developed the teen club model in 2006, a differentiated service delivery (DSD) model to provide age-appropriate care to ALHIV. In March 2023, tropical cyclone Freddy struck Malawi, destroying homes, crops and displacing many people across the country. We describe Teen club client attendance trends in the year following Cyclone Freddy at facilities supported by BCM-CFM Tingathe program in Malawi.

Materials and methods: We reviewed routine program attendance data from 76 facilities from March 2023 - March 2024 to describe patterns of teen club attendance. In accordance with national ART guidelines, after confirmation of full disclosure of HIV status, adolescents over 10 years old are offered enrollment in Teen Club (TC). TC is a weekend, adolescent comprehensive clinic including ART, sexual and reproductive health services and psychosocial support alongside peer support and guardian engagement. Adolescent responsive services are provided with support from program

supervision teams every 12 weeks at weekend Teen Clubs to minimize potential stigma and disruptions with school and other life routines.

Results: Over 30,000 Teen Club appointments with or without ART refill were scheduled at supported Teen Clubs from March 2023-March 2024 with 51% of appointments for females and 49% for males. Teen Club appointments were 55% 10–14-year-olds; 37% 15–18-year-olds and 8% 19–24-year-olds. Eightyseven percent (27328/31395) of scheduled appointments were attended. Of the 4206 adolescents who missed their appointments, 3756 had missed their ART refill date. By the next teen club session, 89% (3360/3756) of those who missed their ART refill had returned to care.

Conclusion: High attendance rates for adolescents living with HIV at scheduled teen club sessions are possible at scale in Malawi and remained high even when adolescents were faced with major life disruptions including natural disasters. Further qualitative evaluation to better characterize adolescents' experience in the model as well as viral load suppression and outcomes are needed.

Abstract Type

Program Description

Abstract Thematic Category

Differentiated Service Delivery: Patient-Centric Service Delivery Models

99: Empowering Self-Disclosure: Lessons from a Peer-Led Intervention for Adolescents and Young Adults Living with HIV (AYALWH) in Tanzania.

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Baylor College of Medicine Children's Foundation, Tanzania, Mwanza, Tanzania, United Republic of

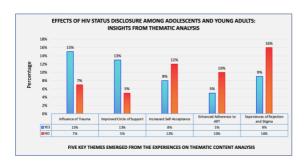
Abstract

Background: Among adolescents and young adults living with HIV (AYALWH) in Tanzania, readiness to disclose their HIV status, and deciding how to disclose their diagnosis are often sensitive matters such as fear of violence and rejection. There is limited information on their self-disclosure experiences. This study reports the prevalence and experiences of HIV self-disclosure among AYALWH within the Sauti ya Vijana (SYV) program. SYV is a peer-led, group-based mental health and life skills intervention for individuals aged 13-24 years, incorporating evidence-based psychotherapy to address issues such as coping, stigma, disclosure, self-acceptance, support networks, medication adherence, and future aspirations

Methods: We used a cross-sectional analysis of AYALWH enrolled in SYV from March 2023 – July 2024. Self-disclosure was assessed from the enrolment questionnaire with a question on having ever disclosed their HIV status. Frequency described the prevalence of self-disclosure and thematic content analysis was employed to analyze self-disclosures and trauma narratives shared by AYALWH.

Results: Data were collected from 664 adolescents and young adults living with HIV (AYALWH), with a median age of 13-24 years, to investigate the prevalence and impact of disclosing their HIV status. The participants' responses were gathered across three waves using questionnaires. The results showed that 135 participants (20.3%) reported having disclosed their HIV status, while 529 participants (79.7%) reported not having disclosed their status.

The thematic content analysis revealed five key themes. First, the influence of trauma narration on mental health was noted by 146 participants (22%), who experienced improvements in self-acceptance and reductions in internal stigma. Second, 120 participants (18%) reported an improved circle of support and strengthened family bonds. Third, increased self-acceptance and overall mental health well-being were observed in 132 participants (20%). Fourth, 101 participants (15%) experienced enhanced adherence to antiretroviral therapy (ART) due to open communication about their HIV status. Lastly, 165 participants (25%) reported experiences of rejection, increased stigma, fear of violence, and negative repercussions.



Conclusion: SYV empowers adolescents and young adults living with HIV (AYALWH) by providing selfdisclosure skills and a safe space for peer-led discussions. Sessions like role plays, steps of disclosure, and trauma narratives based on CBT and interpersonal psychotherapy help youths decide to whom they might disclose their status. This approach enhances ART adherence, mental health outcomes, and overall well-being among study participants. Our findings suggest that structured peer-led interventions can play a crucial role in supporting AYALWH in navigating their disclosure journeys safely and positively. Furthermore, it shows that selfdisclosure among AYALWH often leads to an overall strengthened circle of support, improved mental health, and better adherence to ART.

Abstract Type Scientific Research

Abstract Thematic Category

Doing More with Less: Enhancing Client Outcomes through Cross-Sector Engagement

137: Enhancing HIV Care for Adolescents: The Impact of multidisciplinary team in management of CALHIV at the Mwanza Centre of Excellence

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Baylor College of Medicine Children's Foundation, Mwanza, Tanzania, United Republic of

Abstract

Background: As of 2023, approximately 1.7 million people are living with HIV in Tanzania, including around 140,000 young people aged 15-24 (UNAIDS, TACAIDS). Children and Adolescents Living with HIV (CALHIV) face numerous challenges beyond medical management, such as psychosocial issues, nutritional needs, and adherence to antiretroviral therapy. The Mwanza Centre of Excellence addresses these challenges through a multidisciplinary team approach, involving paediatricians, nurses, psychologists, social workers, nutritionists, and peer educators. This comprehensive care model aims to improve health outcomes, enhance quality of life, and support the overall well-being of CALHIV.

Description: At the Mwanza Centre of Excellence (COE), a collaborative multidisciplinary team of nurses, clinicians, adolescent coordinators and pediatricians provides comprehensive care for children and adolescents living with HIV/AIDS. This multidisciplinary team meet every week to discuss and address clients' challenges such as high viral loads, social issues and complex cases. After each meeting clinic visits, discussed clients with their contacts and action plan are referred to peer educators for additional support and follow up. This team of peer educators serve as advocates, reducing stigma and enhancing patient outcomes. They provide adolescents referrals and escorting them to other supportive services including sexual reproductive health, mental health clinics, and community care groups as needed; this ensures ongoing patient support.

Lessons Learned: Integrating young people living with HIV/AIDS in management and support to their peers has significantly enhanced trust and rapport among adolescents, improving overall care outcomes. Addressing medical, psychological, and social needs through a holistic care approach ensures comprehensive patient support, leading to better treatment adherence and overall well-being. Creating supportive community environments and

offering educational resources have been instrumental in reducing stigma and empowering adolescents in managing HIV/AIDS effectively. However, challenges with funding have limited the availability of these essential programs. Regular peer follow-up and advocacy efforts are also pivotal in monitoring patient progress, increased awareness and support for HIV/AIDS prevention and treatment. These lessons underscore the value of a patient-centered approach that integrates medical expertise with peer support and community engagement to optimize care outcomes for adolescents living with HIV/AIDS.

Next Steps: The provision of peer counseling services at the Mwanza COE is currently limited by insufficient funding, leaving many youths without necessary support. As the number of HIV-infected children thriving on treatment and reaching adolescence increases, the demand for peer educators will grow. With adequate funding, these essential services can be reinstated. Furthermore, peer educators can also be used as advocates for HIV/AIDS prevention, helping to spread awareness about the disease. They can also provide support to patients, helping them to cope with the social and emotional aspects of living with HIV.

Abstract Type

Program Description

Abstract Thematic Category

Doing More with Less: Enhancing Client Outcomes through Cross-Sector Engagement

163: Symptoms of Depression in HIV Positive Youth at Botswana-Baylor Children's Clinical Center of Excellence

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Abstract

Introduction: Depression is a common mental health disorder reported in young people living with HIV (YPLHIV). The symptoms of depression are usually one or more of the following with 4 or more for 2 weeks a criterion for diagnosis.

- Sadness, (with or without crying)
- Anxiety
- Lack of energy and/or motivation
- Temper outbursts and/or violent episodes
- Easily irritated
- Sleeping too little or too much
- Little or no appetite, or eating too often

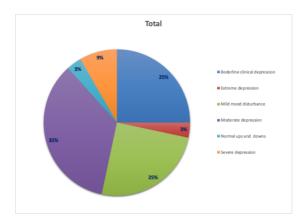
- Withdrawal from friends and family
- Loss of interest in activities usually enjoyed
- Feelings of fear
- Feelings of extreme guilt or shame
- Inability to concentrate
- Poor memory
- Increased use of alcohol or drugs
- Worsening grades
- Skipping school or classes
- Self-critical remarks
- Feelings of helplessness to change a situation
- Feelings that things will never get better
- · Comment(s) about death or dying
- Writing, drawing, or listening to music about hopelessness, guns, or death
- Threatening suicide (even in a joking manner)

The aim of this study was to examine the severity and gender characteristics of depression in HIV-positive individuals at Botswana Baylor Clinical Centre of Excellence (BBCCCOE) using the widely known Beck Depression Inventory (BDI).

Methods: 60 participants, between 16 to 32 years referred to the psychology department at BBCCCOE for various reasons over the last 6 months, were randomly selected to complete the BDI. On completion, all participants scores were statistically described. An independent t-test was also conducted to compare the BDI scores between males and females.

Results: The BDI scores for the 60 participants ranged from 0 to 63, with a mean score of 21.46 (SD = 7.88). The median score was 19.5 and the mode was 19. The results also indicated no significant difference between males and females t-statistics = 1.466, p = 0.148.

17 participants (28%) had low levels of depression; 15 (25%) with mild mood disturbance and 2 (3%) with normal ups and downs. 36 (60%) had moderate levels; 15 (25%) with borderline clinical depression and 21 (35%) with moderate depression. 7(12%) had significant levels; 2 (3%) with extreme depression and 5 (9%) with severe depression.



Discussion: The results appear to indicate that a significant proportion of the sample population experienced moderate depressive symptoms. These findings highlight that mental health interventions may be necessary in this group. Furthermore, there did not appear to be a statistically significant difference in depression scores between male and female participants implying that gender did not influence depression rates in this sample.

However, this would warrant the need for further research with a larger sample size from more sites and additional diagnostic tools to help comprehend these results further.

Conclusion: Depression is a common and treatable mental illness that may manage appropriately if screening, counselling and medical therapy are implemented efficiently.

Abstract Type Scientific Research

Abstract Thematic Category

Doing More with Less: Enhancing Client Outcomes through Cross-Sector Engagement

179: End line assessment of the outcomes of Comprehensive models of care for young people Living with HIV at Botswana-Baylor Children's Clinical Centre of Excellence

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Abstract

Background: Botswana Baylor Children's clinical Centre of Excellence (BBCCCOE), United Nations Children's Education Fund (UNICEF) and the Ministry of Health, Botswana, conducted the Impact Evaluation of Comprehensive models of care for Adolescents and Young People Living with HIV (AYPLHIV) aged 13-18 years in Botswana. The project

was implemented from January 2018 to June 2022. The intervention model used a three-pronged approach: enrolment of AYPLHIV into Teen Clubs (TCs), training of health care workers on quality, adolescent-friendly HIV care, treatment and support services, and lastly, training parents and caregivers on how to better support their children living with HIV.

The aim was to measure the effectiveness of the interventions on clinical, psychosocial and behavioral outcomes of AYPLHIV in six selected districts in Botswana. The main objective was to establish the relevance, feasibility and sustainability of the project within Botswana.

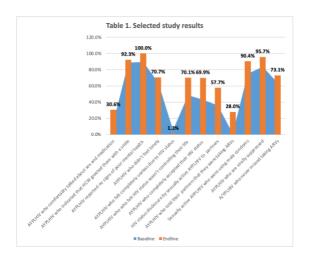
Methods: A longitudinal two-point (baseline and end line) design was used with samples representative of AYPLHIV on ART. This was collected from each of the six districts.

Primary data was collected from April 2023 to July 2023 using structured interviews with a standardized survey tool. Secondary data sources included databases (trackers), monthly and quarterly project reports, health facility registers and chart reviews.

218 participants were selected using the baseline estimates of 20% lost to follow-up using the McNemar test, utilizing 80% power, an effect size of 2.5, and a 95% Confidence Interval. A multi-stage sampling approach utilizing a probability proportional to size was used to select the AYPLHIV in the six project districts.

Data analysis was based on the evaluation framework. Quantitative data from both primary and secondary data sources were analyzed using SPSS version 26. Both descriptive and inferential analysis were utilized to report the results. Audio recordings were transcribed, translated into English from Setswana, and coded by two independent coders in NVivo.

Results: The end line evaluation showed that the Differentiated Service Models of Care for AYPLHIV in Botswana project was relevant, feasible, acceptable, and implementable. The project further demonstrated its capacity to promote retention to care, viral load suppression, and increase the uptake of integrated Sexual Reproductive Health, HIV and Mental health services.



Conclusion: Based on the results and outcomes, the next step would be to advocate that this comprehensive model of care be implemented by the Government of Botswana across all District Management teams in Botswana.

Abstract Type
Scientific Research

Abstract Thematic Category

Implementation Science: Putting Effective Interventions into Action

Category 3: Innovation and Community Engagement to Improve Patient Care

21: When All You Have is One Session: How Can We Tailor Health Education Content for Students in the General Population. The Experience of Baylor Foundation Romania

<u>Mariana Constantinescu</u>, Elena Melinte-Rizea, Ana Maria Schweitzer, Ștefania Florentina Mihale, Iuliana Costas

Baylor Black Sea Foundation, Constanta, Romania

Abstract

Background: Educating young people about preventing the transmission of HIV and hepatitis B & C is crucial to curb the epidemics. Limitations on time in schools make it challenging. We wanted to identify the impact of one education session on improving knowledge, perceived disease vulnerability and stigmatizing attitudes towards people living with HIV/hepatitis by comparing the before-and-after assessments.

Methods: During November 2022-May 2024, two educators from BBSF provided health education. They visited six institutions and conducted one-hourlong sessions for each group, structured as initial assessment, interactive education, final assessment. Young people were encouraged to ask questions and express their health concerns. The educators used this opportunity to debunk myths and reduce the stigma and discrimination.

Results: The data collected from the anonymous survey (n = 784 pre-education, n= 425 posteducation) revealed that 68% of the respondents were female, with ages ranging from 14-19. About 46% of the participants were hearing about HIV/Hep for the first time, while 1 in 7 had previously tested for the viruses. Personal acquaintance of someone living with hepatitis was 21%, and only 6% for HIV.

Regarding stigma attitudes, students showed accepting and positive attitudes towards PLWH/HEP. More than 90% of the respondents were willing to befriend such individuals and 80% believed that they should not face any restrictions in their professions. Most respondents did not blame people for getting the infection and did not expect them to come from a disadvantaged environment. The session alleviated concerns regarding personal safety when interacting with them (chi 13.32, p<.01).

The study found statistically significant differences in knowledge about transmission through various means. Participants showed high levels of understanding regarding condom use and sexual transmission risks, with 98.8%-99.5% correctly answering related questions. The sessions effectively increased awareness about transmission through medical and cosmetic instruments, kissing, mosquito bites, cutlery use, going to the pool, and that PLWHA can have healthy children.

The education session effectively increased awareness about the pervasive risks of HIV/HEP transmission in society and that anyone can become infected, thus changing their perceived vulnerability (chi 38.6, p<.01). Additionally, the participants rated the perceived severity of HIV transmission as high, with an average rating of 3.4 out of 4 before the sessions.

Conclusions: One health education session significantly increases knowledge and perceived vulnerability. We have learned that prioritizing content about other transmission risks besides sexual ones can decrease personal fear and potential stigmatizing attitudes. Interestingly, stigma, perceived severity, and the association between condomless sex and risk of transmission had good levels among the students before the intervention. This can be an indication of improved access to

information among younger people. This initiative helped our team tailor content for future health education sessions.

Abstract Type

Scientific Research

Abstract Thematic Category

Education and Sustainability Initiatives

38: The Role of Savings and Internal Lending Communities (SILCs) in Improving Care of Orphaned and Vulnerable Children in Lesotho: Lessons Learned from Karabo ea Bophelo

Thabang Hloele, John Mtimcolo, Samhita Bhargava

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Abstract

Background: Karabo ea Bophelo (KB) is a five-year USAID-funded activity to prevent new HIV infections among orphans and vulnerable children (OVC) and adolescent girls and young women (AGYW) in Lesotho. It started in October 2019 and ends in September 2024. It has two main components, DREAMS (Determined, Resilient, Empowered, AIDSfree, Mentored and Safe) and Orphans and Vulnerable Children (OVC) and is implemented in all ten districts of Lesotho. OVC interventions target 73,972 children 0-17 years of age who are either HIV positive, HIV- exposed, living with disability, experiencing violence, children of female sex workers, of people living with HIV, and orphans. DREAMS targets 34,378 AGYW aged 15-24 years.

Description: Savings and internal lending communities (SILCs) are self-managed, informal microfinance groups of 15 to 25 members. SILCs are designed to financially empower poor people who lack access to formal financial services and microfinance programs. The amount of savings is set by members. The maximum savings amount is set as five times the minimum amount, and members can access the maximum loan at twice or three times their cumulative savings. SILCs have two components, a loan fund and a social fund. The loan fund allows members to access loans payable with interest while the social fund is given to members during emergencies. A savings cycle is 8 to 12 months, with members getting a share-out after every cycle is completed. SILCs are used by KB as part of a household's economic-strengthening package to empower caregivers of OVC.

Lessons learned: 27,215 caregivers joined and benefited from SILC groups between 2021 and 2023, with savings of M8,277,213.90 in the loan fund and M568,270.60 in the social fund. 7,813 members addressed their emergency needs through accessing social funds and 250 members established income-

generating activities. Caregivers met the basic needs of 1,386 OVC and increased their household financial safety net. For some households caring for HIV-positive children with treatment challenges, SILCs helped with getting a loan and social fund which were used for the child's transportation (n=150), food parcels (n=990) and other commodities (n=546) to aid in medication adherence. Through the solidarity enforced by SILCs, members have helped one another in caring for children.

Next Steps: A KB follow-up project will run for another 5 years. To ensure continuity beyond the project time frame, SILC members are trained to be self-reliant by field agents who conduct vigorous monitoring for the first group cycle and subsequently allow group autonomy. KB has introduced the "Private Service Provider" model, which will enable the current field agents to continue to monitor SILC groups in exchange for a payment by the SILC for each service rendered.

Abstract Type

Program Description

Abstract Thematic Category

Doing More with Less: Enhancing Client Outcomes through Cross-Sector Engagement

42: Leveraging Community Health Workers to Increase HIV -Testing Services for Men 15 Years and Above in Budaka District, Eastern Uganda.

Sam Ebiot¹, Rhona Barusya², Kizito Katulege³, Richard Jjuuko¹, Winnie Akobye², Jennifer Bakyawa², Rogers Ssebunya¹, Alex Mugume², Muliraam Amuza⁴, Dithan Kiragga¹

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Abstract

Background: HIV testing among men 15 years and above remains low at 76.1% according to the Uganda Population-based HIV Impact Assessment Survey, 2020. In Budaka district, only 66% (1,269/1930) of males aged 15 years and above were tested for HIV in the July -September 2023 quarter, with only 21% (11/52) positive cases. This sub-optimal performance was associated with findings of an RCA that showed that men aged 15 years and above were unlikely to seek for HIV testing services from facility because of pre-occupation with work, long waiting time at facility and the long distance to facility. We demonstrate the efforts of leveraging the community health workers (CHWs) at the 10 facilities in Budaka district to conduct daily testing for HIV among men aged 15 years and above at the community.

Description: Baylor-foundation Uganda supported quality improvement initiative between July-December 2023. The program identified and, deployed 22 CHWs at 10 facilities, in Budaka district. The CHWs were offered hands-on training on how to conduct an HIV test at the facilities of attachment, with support from certified HIV testers. By place of origin, CHWs were assigned villages to conduct HIV testing services on daily basis. Mobilization for men at men spots, like betting rooms, boda boda stages, and football playing grounds was done through designed messages for HIV testing. The Village Health Team members moved door to door sharing HIV testing messages and referring men to designated testing points at the community. The CHWs screened all men using the HIV screening tool, offered HIV testing to all eligible men, and documented all tests into the HTS cards that were transcribed into the HTS register at the facility each day. The positive men were physically escorted to the facility where a verification test was done by a qualified health worker before ART initiation. Data was analyzed weekly and shared with all facility stakeholders.

Lessons Learned: With the engagement of the CHWs, 121% (3,768/3,121) of the targeted men 15 years and above were tested for HIV, and 267% (64/24) of the targeted HIV-positive men were identified and linked to ART.

Community health workers when trained, can provide daily HTS services at community hence offering an opportunity for HIV testing services at community, especially for men.

Next Steps: The results from this intervention show that HTS services provision at community should be provided on daily basis. Other community HIV testing approaches like; mobile outreaches, hot spot testing, homebased testing, workplace HIV testing, focused community campaigns and HTS at faith-based settings do not provide daily HIV testing at community hence giving room to missed opportunities especially for men.

Roll out the intervention to other districts of operation and Baylor-foundation Uganda sister projects.

Abstract Type

Program Description

Abstract Thematic Category

Doing More with Less: Enhancing Client Outcomes through Cross-Sector Engagement

91: High rates of virologic resuppression achievable among children with high viral load utilizing Virtual Center of Excellence (vCOE) model at health facilities in Malawi

Carrie Cox^{1,2}, Gift Kaunda¹, Anne Kantepa¹, Alick Mazenga¹, Rachael Manyeki^{1,2}, Elizabeth Wetzel^{1,2}, Teferi Beyene^{1,2}, Chrissy Chikoti¹, Samuel Chilala¹, Haswel Jere¹, Felix Joshua¹, Elijah Kavuta¹, Ian Khruza¹, Robert Majoni¹, Julia Moorman^{1,2}, Emmanuel Navaya¹, Peter Nyasulu¹, Atusaye Tesiwa¹, Maureen Langa¹, Saeed Ahmed^{1,2}, Katherine R Simon^{1,2}

¹Baylor College of Medicine Children's Foundation Malawi, Lilongwe, Malawi. ²Baylor College of Medicine, Houston, USA

Abstract

Background: Virologic suppression (VLS) rates for children and adolescents living with HIV (CALHIV) have improved with optimized ART regimens yet still lag behind adult VLS. Challenges include ART dosing and administration knowledge gaps, inconsistent caregiver engagement, lack of disclosure, stigma, and long treatment histories. We describe VLS among CALHIV with high viral load (HVL) who received enhanced adherence counseling (EAC) through a multidisciplinary decision-guided case conference model called virtual COE, "vCOE" designed to support care to CALHIV from 95 health facilities supported by Baylor College of Medicine-Children's Foundation Malawi Tingathe Program.

Description: From October 2022, CALHIV 0-19 years old with detectable viral load received EAC utilizing a job aid that guides supportive conversation about common ART adherence barriers. Community health workers (CHWs) met families and CALHIV at home or by phone to identify common barriers and plan individualized solutions. Clinical providers virtually presented findings at vCOE to a multidisciplinary team of experienced pediatric ART providers (nurse, physician, pediatricians) to refine clinical skills and child's care plan. Consultant recommendations were reviewed with families and CHWS provided supportive follow-up with subsequent VL collected per national guidelines. The progress of each health facility's cohort through the HVL cascade was reviewed during vCOE and a dashboard was utilized to identify sites needing additional support. In accordance with national guidelines children with persistent HVL after EAC were referred to the national third-line committee for genotype assessment.

Lessons Learned: Between October 2022 and April 2024, 26% (3673/14221) of CALHIV in care were identified and flagged for vCOE. EAC sessions were completed for 93% (3414/3673) and of those 95% (3241/3414) had vCOE multidisciplinary discussion. A follow-up VL after EAC was available for 70% (2582/3673) with 75% (1930/2582) suppressed, 17% (430/2582) HVL and 9% (222/2582) results pending. Third line applications were sent on 22% of those with follow-up HVL.

Next Steps: VLS is achievable for CALHIV with HVL on optimized regimens with guided, intentional EAC addressing common ART adherence challenges with

individualized adherence plans. Coordination of available resources to address complex barriers and facilitate accessible genotyping for children who do not suppress remains critical.

Abstract Type

Program Description

Abstract Thematic Category

Quality Improvement Initiatives

93: Virtual and In-person Counselling Services Expand Access to Psychosocial Counselling for Children and Families Affected by HIV in Malawi

<u>Carrie M Cox</u>^{1,2}, Albert Kaonga¹, Valentine Banda¹, Alick Mazenga¹, Michael Udedi³, Katherine R Simon^{1,2}

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Abstract

Background: Children, adolescents and families affected by HIV experience psychosocial needs that are often not attended to comprehensively and new care strategies are needed. We designed an innovative low-resource model of phone-based psychosocial counselling (P-PSC) to expand access to psychosocial providers. We describe psychosocial counsellor (PSC) visits with children from 96 health facilities in 5 districts supported by Baylor College of Medicine Children's Foundation Malawi Tingathe program.

Description: Phone-based and in-person psychosocial counselor visits were provided to children and families referred by health care workers or by self-referral. All children with a new HIV diagnosis, treatment interruption, high viral load (HVL) or mental health concern and anyone requesting psychosocial counselling were referred via WhatsApp group from the facility phone using anonymous client information. Routine program reports were analyzed to describe paediatric visits with psychosocial counsellors.

Lessons Learned: From February 2022 to February 2024, 6845 paediatric visits were conducted representing 13% of all psychosocial counsellor visits (n=56074). Nearly 60% of visits were with adolescents ages 10-14 years (n=3986, 58%), 24% (n=1668) with children 5-9 years and 17% (n=1191) with 0-4-year-olds. Reasons for referral to psychosocial counsellors included: HVL/poor adherence (53%, n=3658); treatment interruption 21% (n=1431); new initiation 12% (n=840); intimate partner violence 2% (n=119); worries 1% (n=40); poor child/parent relationship 1% (n=39) and other 10% (n=718). Issues identified included ART knowledge

gaps, child neglect, social support needs, and mental health needs among others. PSC visits were 58% on phone and 42% in-person with children seen from 95 of 96 supported health facilities, as one health facility lacks mobile phone connectivity.

Next Steps: Psychosocial counselling to children adolescents and families is possible even at remote health facilities in Malawi with a combination of inperson and phone-based sessions. Further evaluation of outcomes and follow-up of children seen is underway to optimize referral and follow-up care.

Abstract Type

Program Description

Abstract Thematic Category

Beyond the Status Quo: Innovations for Integrated Care

95: Improving Tuberculosis case finding among children through GeneXpert Multiplexing: A case study of Kabarole district, Uganda

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Abstract

Background: In Uganda, Tuberculosis (TB) case finding continues to be a challenge with more than half (50%) of the annual childhood TB cases undiagnosed in 2022. In July 2023, the Ministry of Health Uganda piloted GeneXpert Multiplexing (GX-M) for TB testing using the stool based, one Step assay to complement existing TB diagnostic methods and improve TB case finding among children. We evaluated the uptake of GX-M in improving TB Case finding among children under fifteen and its diagnostic yield in Kabarole district, Uganda.

Methods: We conducted a before and after assessment of GX-M uptake and diagnostic yield at Fort Portal regional referral hospital (FPRRH) hub from October 2022 to May 2024. Testing using GX-M method was done by trained health care providers. Additionally, the GeneXpert MTB/ Rif platform was used to test and confirm all TB cases from samples including sputum, stool, pleural fluid and aspirates from different health facilities in the region.

We abstracted data for the evaluation period from the laboratory electronic information management system inform of spreadsheets, cleaned and exported to SPSS (v22) for analysis. We analysed de-

identified data before and after introduction of GX-M for percentage of children tested and MTB diagnostic TB yield.

Results: <u>Before GX-M:</u> 301 samples (all sputum) were analysed between Oct 22 – July 2023. 159 (52.82%) of the samples were from males, The median age of the children was 10 (6.2-13.1) years. The TB diagnostic yield was 0.33% (1 of 302) and MTB Rif Resistant yield was 0%.

After GX-M: 386 samples were analysed between Aug 2023-May 2024. 262 (67.88%) of the samples were sputum, 119 (30.82%) stool and 5 (1.3%) other sample types. 197 (51.0%) of the samples were from males, The median age of the children was 7.2 (3.30-11.70) years. The TB diagnostic yield was 1.8% (7 of 386) and MTB Rif Resistant yield was 42.86% (3 of 7).

Conclusions: GX-M increased TB case finding among children in Kabarole district by 29.14%, the diagnostic yield by over 445% and subsequently the MTB Rif Resistant yield. We recommend scale up of GX-M for TB Case finding among children to all the GeneXpert sites in the Rwenzori region.

Key words: TB diagnosis, Children, Stool

Abstract Type
Scientific Research

Abstract Thematic Category

Implementation Science: Putting Effective Interventions into Action

112: Engaging Hard to Reach Men Through Community-based Health Services in Four Districts of Lesotho: A Descriptive Study.

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Abstract

Background: In sub–Saharan Africa where the majority (82%) of people living with HIV reside, countries including Lesotho have made significant strides to achieving the UNAIDS 90-90-90 2020 targets. However, there is disparity in this achievement with adolescents, children and men lagging behind, necessitating the need to develop specific interventions for these populations.

Since October 2023, Baylor College of Medicine Children's Foundation Lesotho (BCMCFL) through the CDC funded CoHip-SEC project, has been providing community-based comprehensive HIV prevention services in four districts of Lesotho: Leribe, Berea, Quthing and Qacha's Nek. Nonmedical and medical interventions provided include social behaviour change interventions for HIV and

GBV prevention; HTS, PrEP, SRH, sexually transmitted infections (STI) screening and treatment, family planning), TB and COVID-19 response, GBV response, and ART initiation and linkage to health facility services.

The primary intention of community-based health services is to promote access and convenience of health services, especially to men, a sub population known for low utilisation of facility-based health services in Lesotho. To reach men, the project implements targeted approaches including demand creation and provision of health services at workplaces and social events that are male dominated. This is a description of the proportion of men reached and services provided to them through community-based interventions.

Results: Of the total of 25,557 clients seen during the implementation period (October 2023-April 2024), 11,219 (44%) were men, the majority (22%) in the 20-25 age group. Out of 708 clients who were assessed for eligibility for HIV testing, 267 (38%) were men. Men comprised the majority (60%) of clients elicited during index testing. Among 20 clients who reported experiences of gender-based violence (GBV), 10% of them were men while the rest were females. For PrEP initiation and STI treatment, men contributed a lower percentage compared to women at 36% and 21% respectively. Of the 5,748 clients who received condoms during the reporting period, 4,171 (73%) were men. A total of 1,827 men were enrolled in evidence-based intervention (EBIs) groups.

Conclusion and Recommendations: Current community interventions are not specific to a particular population group; the results indicate that women have higher utilization of health services. The results highlight that men are the most elicited population during index testing offered to HIV positive clients. This implies a significant HIV risk among men and possible undiagnosed HIV. Targeted mobilization and provision of comprehensive community-based male-friendly health services should be expanded in workplaces, institutions of higher learning and in other places or events that men frequent. Index testing through active tracking and testing of male sexual partners and engagement of men in EBIs should also be strengthened. Consistently reaching men may have long term impact in their communities, therefore, the current efforts and results should not be undermined.

Abstract Type
Program Description

Abstract Thematic Category

Differentiated Service Delivery: Patient-Centric Service Delivery Models

126: Perceptions of Skilled Birth Attendants on the Utilization of Artificial Intelligence (AI) Augmented Fetal Heart Rate Monitoring at Area 25 Community Hospital

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Baylor Foundation Malawi, Maternal and Neonatal Health Program Area 25, Lilongwe, Malawi

Abstract

Background: Malawi has a high stillbirth rate of 16.3 per 1000 births and birth asphyxia accounts for 24% of neonatal deaths. Regular fetal heart rate (FHR) monitoring during labor has the potential to reduce fresh stillbirths and birth asphyxia through early detection and management of fetal distress however fetal monitoring in low-resource settings is often inadequate.

To mitigate this challenge, through a public private partnership with Baylor Artificial Intelligence augmented Continuous Electronic fetal heart rate monitoring (AI-CEFM) was introduced at Area 25 community hospital in 2020 and has since resulted in a significant reduction of intrapartum stillbirths to 0.02%. AI-CEFM uses software to aid in initial interpretation of fetal heart traces augmenting the low health worker to patient ratio which is currently stands at 34 nurses and 2 physicians per 100, 000 people in Malawi.

Despite the relevance of AI-CEFM, studies have shown that user experience is key. This study therefore aimed to explore the perception of skilled birth attendants on AI-CEFM at Area 25 Hospital in Malawi.

Methods: A qualitative design was used to collect data among nurses and physicians working in Labour ward with minimum 3 month working experience. Convenience sampling was used to select participants of the study from Labour ward for a period of 7 days. Data was collected using 14 semi structured interviews and a focus group discussion consisting of 4 clinicians and 6 nurses in labour ward. The data was analyzed using excel spread sheet and thematic analysis.

Results: Most participants found AICEFM beneficial citing it reduces birth asphyxia, workload and stress. Some participants felt that it prolonged labour due to the limited mobility of women. The main challenges of the use of AI FHM included lack of orientation and training in operating the tool, discomfort experienced by women who had to remain in the same position for extended periods, and inaccessibility of the system during power outages. Despite these challenges, a majority of participants indicated that they would recommend the use of AI FHM to other low-resource settings in Malawi.

Conclusion: The study findings highlight that it is crucial to consider on-job training when new innovations are introduced in labour ward to ensure optimal utilization of the tool. Health Education in antenatal clinic must include talks on how fetal monitoring is done at the facility to alleviate any anxiety women may have regarding the new technology.

Abstract Type
Scientific Research

Abstract Thematic Category
Healthcare Technology and Innovation

144: Improving Early Retention in ART Care: A Case Study of Takulandirani Welcome Service at Health Facilities Supported by Tingathe Program.

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¹Baylor Children's Foundation Malawi, Lilongwe, Malawi. ²Ministry Of Health, Department of HIV and Viral Hepatitis, Lilongwe, Malawi. ³Baylor College of Medicine, Houston, Texas, USA

Abstract

Introduction: Malawi's implementation of "test and treat" in 2016 rapidly expanded access to lifesaving Antiretroviral therapy (ART) for people living with HIV (PLHIV). Challenges with retention in care continued after expanding ART access. By 2020, <70% of PLHIV newly initiated on treatment at 95 Tingathesupported health facilities remained on treatment within the first 3 months. To address retention challenges, Baylor Malawi implemented the Takulandirani welcome service (TWS), a client-centered approach to counseling PLHIV to help them fit ART in their daily life. We describe retention in care at 3 months after ART initiation (early retention) before and after TWS implementation.

Methods: The Takulandirani Welcome Service strives to create a supportive relationship in which a community health worker (CHW) works with a client to identify and address potential barriers to ART adherence and retention, and link clients to the best service delivery model including community ART distribution, multi-month scripting, and alternative hour clinic. By normalizing and acknowledging client challenges with ART, TWS strives to engage and empower clients to utilize practical solutions to address barriers. CHWs were trained on TWS counseling utilizing job aids to guide the process and track planned actions over the first 6-9 months of ART care until initial VL results are known. VL is first drawn after 6 months on ART. The service was introduced in July 2021 in 95 health facilities supported by Baylor College of Medicine-Children's Foundation Malawi Tingathe program (Baylor-Tingathe) in 5 districts of

Malawi. We compared routine program early retention data pre-TWS intervention (January 2020 – June 2021) and post-TWS intervention (October 2021 – December 2023). Analysis was done through the Chi-Square test (which excluded the mixed cohort) analysis in SPSS version 27.

Results: From all 95 sites, 55,549 clinic visit records from the pre- and post-intervention periods were reviewed. After discarding 2,494 records due to data gaps, the analysis focused on a final set of 53,055 records. From a descriptive perspective, there was a modest increase in early retention from 76.1%±19.1% to 83.4%±16.7% when comparing pre- and post-intervention periods (Figure 1). Chi-square test analysis confirmed a significant correlation between the implementation of TWS and the improved early retention rates, (p-value <0.001).



Conclusion: We observed an improvement in early retention during the period following the implementation of the TWS in a routine program setting which provided client-centered counseling and actively linked clients to preferred service delivery models. There is an ongoing investigation to evaluate the characteristics of clients and facilities with lower retention rates to identify and deliver tailor-made interventions to further improve early retention.

Abstract Type

Program Description

Abstract Thematic Category

Quality Improvement Initiatives

164: Use of Motorbikes by CHWs Improves Client Tracing Outcomes in the Facilities with Motorbikes in Baylor Malawi Supported Districts.

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Abstract

Introduction:

• Efforts are made to keep PLHIV (clients) in care by improving tracing outcomes.

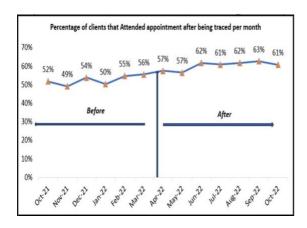
- One major barrier is tracing clients from far and hard to reach areas.
- It has been difficult to trace clients that come from far or hard to reach areas using push bikes.
- However, the Program provided motorbikes to 72 selected facilities to help them in tracing clients who cannot be reached by push bikes.
- Motorbikes were introduced in these facilities in April 2022.
- This evaluation is aimed at assessing the impact of motorbike tracing on client tracing outcomes.

Methods:

- The Program routine data were analyzed from 72 Baylor supported sites which have motorbikes.
- The Program data were collected from the Tingathe tracing registers which track tracing efforts and outcomes.
- The analysis was done to compare the tracing outcomes, six months before the introduction of the motorbikes (October 2021 – March 2022) and six months after the introduction of the motorbikes (April – September 202)
- The analysis was also done to compare the tracing outcomes between 2022 and 2023.
- The analysis was also done to compare the tracing success before and after the introduction of the motorbikes.
- The data were analyzed using Microsoft excel.

Results:

- A total of 83322 clients were followed up pre-intervention (six months before April 2022) where on average 53% of clients that were traced using push bikes returned to clinics.
- 6 months after introduction of motorbikes in April 2022 a total of 80541 clients were followed up during the intervention period.
 On average 60% of clients that were traced using motorbikes returned to clinics
- On average 68% of the clients that were traced came back to the facility after being traced in 2023 as compared to the 63% in 2022
- Further looked at the proportion of clients who were reached after being traced.
- On average 70% of the clients were reached after the introduction of motorbikes as compared to the 60% before the introduction



Conclusion:

- While sites were using motorbike tracers, 10% more clients were found than prior using motorbike tracers
- Clients who were found returned to care

 Further evaluation of client outcomes and cost are ongoing to assess further the effect of motorbike tracing intervention.

Acknowledgements:

- We would like to acknowledge the support from Baylor college of medicine Central office team.
- We would also like to thank Baylor College of Medicine Children's Foundation Malawi, and the United States Agency for International Development (USAID) for funding for the Tingathe Program.
- Finally, we would like to thank the Malawi Ministry of Health.

Abstract Type
Scientific Research

Abstract Thematic Category
Quality Improvement Initiatives

Category 4: Communicable Diseases: Ongoing Challenges

23: Routine Assessment of Life Satisfaction
Patient Reported Outcomes (PROs) among People
Living with HIV/AIDS (PLWHA) Indicate
Maintenance of Overall Care Results at the Baylor
Clinical Center of Excellence in Constanta,
Romania over Four Years

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Baylor Black Sea Foundation, Constanta, Romania

Abstract

Background: Since 2018, the psychosocial team at the Baylor Center of Excellence has been conducting routine assessments of patient-reported outcomes (PROs) every 18 months. This helps us to evaluate the quality of care and better understand the needs of our patients. The self-report includes questions about general health perception, physical functioning, role, social functioning, and current and past months' quality of life. Additionally, we ask about hopefulness and personal fulfillment to get a complete picture of our patients' well-being.

Methods: The study involved 306 PLWHA who were assessed three times through electronic or face-to-face administration. The patients were given personalized feedback after each assessment, and based on their results, they were referred to the clinic's psychosocial team for mental health support interventions. All the data collected were analyzed using SPSS v24, and descriptives and non-parametric tests for repeated measures were used to evaluate changes in the data over time.

Results: The patients assessed with HIV/AIDS had a median age of 34 (with a standard deviation of 9.97), and nearly half of them were female. After their initial evaluation, over 60% received personalized psychosocial interventions. Our observations reveal a significant increase in scores for general health perception, physical functioning, and current and previous quality of life between the first two evaluations, which was sustained through the third evaluation. However, there were no noticeable differences in outcomes for the role and social functioning items, personal fulfillment, or hopefulness, and gender did not seem to play a role in the results. Interestingly, patients who did not require intensive psychosocial support showed a consistent score increase with each evaluation, while those who required interventions maintained a similar level of functioning across all evaluations.

Conclusions: Regularly assessing PROs can catch the potential need for psychological support early and provide valuable information about the level of care.

Abstract Type
Scientific Research

Abstract Thematic Category

Beyond the Status Quo: Innovations for Integrated Care

27: Improving the Rational Use of Antibiotics Through Diagnostic Stewardship in Mid-Western Uganda.

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Abstract

Purpose: Antimicrobial resistance (AMR) has many enablers, including misuse of antimicrobials. At Fort Portal Regional Hospital (FRRH) in Western Uganda, in March 2022, only 8% of eligible patients were tested for antimicrobial resistance (AMR). The hospital spent 47% of its essential medicines' expenditures on the injectable antibiotic Ceftriaxone alone, far above the national recommendation of <15%. Ceftriaxone, a third-generation cephalosporin, is frequently used in emergency departments as a preliminary antibiotic therapy. However, its overuse can result in reduced effectiveness and the development of pathogen resistance.

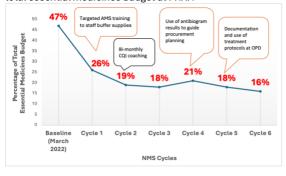
Root causes of the overuse of Ceftriaxone include the lack of prescription audits as well as antibiograms guiding prescriptions. In addition, stock challenges, and capacity gaps contributed to the misuse. We aimed to provide better guidance to healthcare workers and streamline the use of antibiotics at FRRH to fight antimicrobial resistance, reduce waste, and cut costs. To this extent, in April 2023, we implemented a program to increase AMR testing among eligible patients at FRRH and use of data to inform procurement planning.

Methods: We conducted a root cause analysis in March 2022 to identify the causes of low AMR testing and high antibiotic expenditure at FRRH. Our analysis not only revealed inadequate knowledge and lack of supplies for AMR testing but also found a lack of local

prescription guidelines. As one consequence, 47% of the essential medicines budget was spent on one antibiotic, ceftriaxone, alone. From March 2022 to April 2023, we, therefore, executed a continuous quality improvement (CQI) project to increase AMR testing, train personnel, provide testing materials and laboratory supplies, improve the screening process for AMR testing eligibility, and develop an antibiogram to guide local prescription practices.

Results: During the CQI project, 8 staff members from the microbiology laboratory were trained, and provided with critical reagents for AMR testing. They screened 1137 patients, of whom 344 were found eligible for AMR testing. By April 2023, AMR testing had increased from 8% to 30%. Data from the AMR testing was used to develop a hospital-specific antibiogram which indicated 98% resistance to Ceftriaxone, among other resistance patterns for other antibiotics. Consequently, the hospital revised its use of Ceftriaxone. We also oriented clinicians on the antibiogram to inform their prescription patterns. Consequently, the expenditure for ceftriaxone was reduced from 47% to 16% of the essential medicines budget.

Figure 1. Expenditure on Ceftriaxone as a percentage of total essential medicines budget at FRRH



Discussion: After identifying the problem of increased AMR and its associated cost at FRRH, this innovative CQI project integrated improved AMR testing with better training for healthcare workers and a better allocation of resources. Our initial data suggest that these measures can be easily implemented at similar sites to improve public health and reduce costs.

Abstract Type
Quality Improvement

Abstract Thematic Category
Quality Improvement Initiatives

34: Pediatric Dolutegravir Optimization: 18 Month Follow Up of Viral Load Suppression

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Abstract

Background: In August 2021, Eswatini began optimizing children on first line Antiretroviral Therapy (ART) and under 20kg to pediatric dolutegravir (pDTG)-based treatment. All children with viral load (VL) ≤ 400 copies/mL were optimized to ABC/3TC/DTG. Those with VL 401-999 received adherence counseling then repeated VL. Those with VL ≥ 1000 copies/mL accessed genotypes and those results informed an optimized NRTI backbone with pDTG. All new pediatric clients were initiated on ABC/3TC/DTG. Since starting pDTG, some children have now transitioned to 50mg DTG based ART per national weight-based dosing guidelines.

Methods: This is a retrospective review of routinely collected data from all children on first line ART optimized to pDTG based ART from August 2021 until January 2023 at Baylor College of Medicine Children's Foundation-Eswatini. Data were extracted from electronic medical records and imported into STATA 17 for analysis. McNemar's Test using 95% confidence intervals (p<0.05) was used to determine significance in viral suppression (≤400 copies/mL).

Results: Between August 2021 and January 2023, 368 children accessed pDTG, 58 as new initiations and 310 through optimizations. Of the newly initiated with VL data, 41/58 (71%) remain active in care. They are 51% female with average age at DTG initiation of 19 mos. VL suppression is 87.8% (36/41) at average 16 months post pDTG initiation. Of the children optimized to pDTG with VL data, 255/310 (82%) remain active in care. They are 54% female with an average age of 56 months at time of DTG initiation. Majority (99%) were transitioned from ABC/3TC/LPV/r to a pDTG based regimen, 251 to ABC/3TC/LPV/r and 4 to AZT/3TC/LPV/r based on genotype results. VL suppression increased from 91.3% pre switch (233/255) to 94.9% (242/255) at average 18.5 months post switch (23-124wks) (p=0.06). When both groups were combined and stratified by age, VL suppression was >90% for all ages except for the 24mos-36mos group who were at 72%.

Conclusion: Many children have benefited from the introduction of pDTG, however improvement in viral suppression observed was not statistically significant. Some of our youngest clients still struggle with adherence despite improved formulations. Focus must still be on improving this group through innovative programming.

Abstract Type
Scientific Research

Abstract Thematic Category

Beyond the Status Quo: Innovations for Integrated Care

39: HIV Drug Resistance Trends Among 294
Treatment Experienced Children and Young Adults
(0-24) in the First Decade of a National Pediatric
HIVDR Program

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Abstract

Background: Treatment-experienced clients are failing antiretroviral therapy (ART) throughout Sub-Saharan Africa. The resulting HIV Drug resistance mutations (DRMs) present an urgent need for access to genotyping, and robust treatment options, to provide successful individualized lifelong treatment in our most vulnerable clients living with HIV. This abstract looks at early resistance trends in our treatment experienced pediatric and young adult clients in Eswatini (0-24 years).

Methods: This is a retrospective review of electronic medical records and genotype results from Baylor Children's Foundation-Eswatini and referrals from other facilities in Eswatini. All genotypes are from treatment-experienced clients, 0-24 years old, with at least two detectable viral loads on Protease Inhibitor (PI) or Dolutegravir (DTG)-based ART. Genotypes were done through the National Reference Laboratory in South Africa using dried blood spot (DBS) specimens in alignment with National Treatment Guidelines. Stanford HIVdb Program was used to calculate predicted activity of ART.

Results: Genotypes were performed in 294 clients between January 2014 and January 2024 (44% (128/294) female; 56% (166/294) male). Fifteen percent (44/285) showed intermediate level or higher resistance to LPV/r; 9% (4/44) of those also showed intermediate or higher resistance to DRV/r. Most common PI mutations were I54V (33), V82A (32), M46I (31). Integrase Strand Transfer Inhibitor (INSTI) resistance testing was performed on 33 samples. Six percent (2/33) had intermediate or high level DTG resistance due to the following mutations: E138AK(2), G140A(1), Q148R(1), R263K(1). Intermediate or high resistance to Rilpivirine (RPV) was observed in 30% of genotypes (85/285) despite no clients being on nonnucleotide reverse transcriptase inhibitors (NNRTI) at the time of sample collection. Most common nucleotide reverse transcriptase inhibitor (NRTI)

mutations were M184V (130), M41L (28), D67N (25), T215Y (24).

Conclusion: Trends in DRMs in Eswatini give insight into future effective ART for treatment-experienced clients and may inform national policies regarding sequencing of ART moving forward. Pediatric surveillance resistance testing is needed in Eswatini and the region to inform national ART optimization guidelines and advocacy for access to novel treatment options for our most vulnerable clients.

Abstract Type

Scientific Research

Abstract Thematic Category

Implementation Science: Putting Effective Interventions into Action

53: Hepatitis B Contact Tracing and Screening in HIV Coinfected Patients at Baylor Foundation Malawi-Centre of Excellence.

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Abstract

Background: Hepatitis B virus (HBV) is increasingly seen as an important public health concern in Malawi. Recognizing this, the Malawi Ministry of Health published the "Guidelines for the Prevention and Management of Hepatitis B and C in Malawi" in 2023. This guideline recommends testing all household contacts and sexual partners of those diagnosed with HBV. As this is a new recommendation, very little is known about infection rates in this population as well as whether they have other risk factors or symptoms of hepatitis B infection. It is also unclear if individuals will be receptive to hepatitis B testing. We would like to carry out this routine activity and disseminate the lessons that we learn to policy makers in Malawi.

Methods: This is a pilot cross-sectional observational study currently awaiting IRB approval in Malawi. No sampling will be necessary since the number of potential participants is quite small. Enrolled and consented participants will be given a short questionnaire to identify HBV symptoms, exposure history, and vaccination history. As outlined in national guidelines, HBV testing will be offered free of charge regardless of consent to enroll in the study. De-identified data of consented individuals will be analyzed in a basic descriptive analysis.

Lessons Learnt: We have identified 7 clients of Baylor Foundation Malawi who are coinfected with HIV and hepatitis B. To our knowledge, very few contacts of these 7 clients have been tested for HBV. We estimate that each will have an average of five

contacts who qualify for testing under the Malawi Ministry of Health guidelines. We have ensured that necessary reagents and clinical support is available to provide both screening for identified contacts as well as long term care for anyone who is identified to be HBV positive.



Next Steps: Before implementation of this activity, we hope to have IRB approval in both Malawi and Baylor College of medicine which would allow us to disseminate the lessons that we learn. We will contact each of the coinfected clients and recommend that they bring their household contacts to the Baylor Foundation clinic for the recommended testing. After giving their informed consent, we will give each a short questionnaire to identify symptoms, exposures, and vaccination history. Anyone who declines inclusion in this study will still be offered testing as this is a guideline recommended test. Anyone who tests positive for hepatitis B, will be enrolled in care at the Baylor Foundation clinic for routine follow up and care per the Malawi guidelines.

Abstract Type

Program Description

Abstract Thematic Category

Beyond the Status Quo: Innovations for Integrated Care

57: Viral Load Suppression Rates in 1 and 2 Drug Switches Following DTG Optimization

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¹Baylor College of Medicine Foundation - Malawi, Lilongwe, Malawi. ²BIPAI, Houston, USA

Abstract

Background: Malawi was among the first countries to transition people living with HIV (PLHIV) to dolutegravir-based antiretroviral therapy (ART). Many children and adolescents living with HIV (CALHIV) in Malawi had prior exposure to abacavir, zidovudine, or both and underwent transition from NNRTI-based 1st line or PI-based 2nd line ART to dolutegravir involving a single-drug switch. We compared post-transition viral load suppression rates among CALHIV with one versus two drug switches to dolutegravir-based ART.

Methods: We conducted a retrospective review of routine data from clients receiving ART at a pediatric and adolescent ART clinic in Malawi who had been transitioned to dolutegravir. Data was included if there was at least one viral load before and after transition. Suppression was defined as less than 1000 copies/mL in accordance with national guidelines. Fisher's exact test was used to test for associations between the number of drugs switched and the viral suppression rate. A p-value of < 0.05 was considered significant.

Results: A total of 2,443 CALHIV were included. 1,260 clients had a one-drug switch, and 1,183 clients had a two-drug switch. Of the 1,260 clients with a one drug switch, 640 were on PI as 2nd-line at time of switch. We found no association between number of drugs switched and post-transition suppression rate when considering all clients who were transitioned. Significant or near significant differences can be seen when considering clients on 2nd-line ART. In this analysis, the clients who had a one-drug switch had higher viral suppression rates. This can be explained by an intentional two-drug switch for some 2nd-line clients due to concerns for NRTI resistance and virologic failure.

Table 1. Viral suppression rates among those who had onedrug switch as compared to those who had a two-drug switch for all clients and for those who were on 2nd-line prior to transition.

Viral Suppression	One-drug switch		Two-dru	g switch		
Rate	all	2 nd -line	all	2 rd -line	all	2 rd -line
Prior to DTG transition	89.5% (n=1,260)	84.7% (n=640)	89.7% (n=1,183)	60.0% (n=125)	p = 0.947	p < 0.001
First VL after transition	87.4% (n=1,260)	84.7% (n=640)	87.2% (n=1,183)	78.4% (n=125)	p = 0.903	p = 0.086
Second VL after transition	88.4% (n=1,150)	87.1% (n=574)	87.8% (n=1,118)	79.5% (n=117)	p = 0.698	p = 0.041
Third VL after transition	89.3% (n=782)	85.9% (n=305)	88.3% (n=898)	75.0% (n=52)	p = 0.588	p = 0.061

Conclusion: Overall, there were no significant differences in viral suppression rates in CALHIV who underwent one versus two drug switches after optimization to DTG-based regimens, including for CALHIV on second line therapy at time of switch. Broader access to genotyping will be an important tool to determine future therapy for CALHIV with persistent viremia after DTG transition.

Abstract Type

Scientific Research

Abstract Thematic Category

Implementation Science: Putting Effective Interventions into Action

67: Viral Load Trends in Children and Adolescents During the DTG Era: Strides Towards HVL <50 Copies in Mwanza and Mbeya Centers of Excellence

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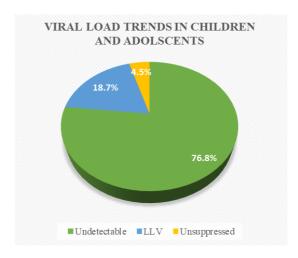
Abstract

Background: The UNAIDS 95-95-95 targets are designed to end HIV by ensuring that 95% of individuals know their HIV status, receive antiretroviral therapy (ART), and achieve viral suppression. As of 2023, significant progress has been made globally, with 29.8 million out of 39 million people on HIV treatment. Advances in treatment, such as the introduction of dolutegravir (DTG) and single-dose regimens, have enhanced the accessibility and effectiveness of ART. However, while adults have made significant strides toward viral suppression, progress among children and adolescents remains slower. In Tanzania, despite improvements in ART coverage and viral suppression among individuals aged 15 years and older, children aged 0-14 years lag behind, with only 47% achieving viral suppression. This study aims to assess viral load trends among children and adolescents in the DTG era, focusing on the progress toward achieving undetectable viral loads in this demographic.

Methods: To understand the viral load trends among children and adolescents, this retrospective study analyzed data from Mwanza and Mbeya Centers of Excellence from 2022 to 2023. The study aimed to determine the prevalence of children with undetectable viral loads (HVL < 50 copies), those with viral suppression (50 < HVL < 1000), and to identify factors associated with achieving undetectable HVL. The study evaluated 2,070 patients, assessing their social and clinical progress. Factors such as age, treatment duration, and regimen type were analyzed to understand their impact on achieving viral suppression.

Results: Of the 2,070 patients evaluated, the cohort consisted of 973 males (47%) and 1,097 females (53%) with a mean age of 11 years. Among the patients on DTG, 27 (1.3%) did not have HVL results due to being lost to follow-up or having a treatment duration of less than six months. Among those with HVL results, 1,569 (76.8%) achieved undetectable HVL, 382 (18.7%) had low-level viremia (LLV), and 92 (4.5%) were not virally suppressed. Significant factors associated with undetectable HVL included being aged between 5-9 years (P-value = 0.000, OR = 1.2,

CI: 1.096-1.366) and being on a DTG-based regimen for more than one year (P-value = 0.01, OR = 3, CI: 1.739-7.576).



Conclusion: The study highlights substantial progress in achieving viral suppression among children and adolescents on DTG-based regimens, with a significant proportion achieving undetectable viral loads. Age and duration on DTG were key factors associated with better viral suppression outcomes. Despite these advancements, a small percentage of patients remained unsuppressed, indicating ongoing challenges. To achieve the UNAIDS 95-95-95 targets, tailored interventions focusing on younger children and sustained treatment adherence are essential. This study provides crucial insights to guide efforts in enhancing ART coverage and adherence, ultimately improving viral suppression rates among children and adolescents living with HIV.

Abstract Type Scientific Research

Abstract Thematic Category

Implementation Science: Putting Effective Interventions into Action

88: Despite Successful Treatment, TB Survivors Have Persistent Inflammation, Lipid Peroxidation, and Decreased Redox Capacity and Carotenoid Levels

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Abstract

Background: Post-treatment of tuberculosis (TB) can leave behind epigenetic scars that lead to continued immune perturbations and accelerated cellular aging. Similar patterns are noticeable in individuals recovering from HIV and schistosomiasis, indicating a potential shared post-infectious epigenetic disruption. Carotenoids neutralize lipid peroxidation, an activator of epigenetic-mediated immune perturbations via the nucleosome remodeling and deacetylase complex (NuRD) and are inversely correlated with premature epigenetic aging. Therefore, we hypothesized that TB survivors with persistent inflammation would have decreased carotenoid levels and an increase in detrimental epigenetic marks.

Methods: Our investigation enlisted participants from a TB-recovered cohort in Eswatini, alongside healthy individuals residing in the same households, over a period from 2013 to 2020. The study tracked 167 post-TB patients and 275 control subjects, conducting assessments over 12 months. Biomarker analyses were performed at baseline and at the end of TB therapy, evaluating inflammation, redox capacity (Trolox assay), oxidative stress, DNA methylation, and immune function. We employed high-performance liquid chromatography (HPLC) to quantify carotenoid concentrations in plasma from TB, HIV, and Schistosomiasis patients, pre- and post-treatment.

Results: The results indicate enduring inflammation, decreased redox capacity and heightened lipid peroxidation, in participants newly diagnosed with TB. Approximately 43% of TB survivors continued to demonstrate high inflammation levels, as evidenced by C-reactive protein (CRP) exceeding 3 mg/dL, irrespective of HIV status, gender, or age. Carotenoid levels were also decreased among successfully treated TB patient participants compared to healthy controls. Notably, these parameters did not return to baseline levels even after successful therapy. Lipid peroxidation (oxidized LDL) induces atherosclerosis and remains 2 times above the upper limit of normal in 61% of "cured" TB patient participants (HHC 1.7, TB 16, TB EOT 9.6; p<0.0001). Similarly, carotenoids, a lipophilic dietary reducer of lipid peroxidation, normalized in only 30% of cured TB survivors.

Conclusion: These findings suggest a potential link between carotenoid deficiency and post-infectious persistent inflammation and DNA methylation perturbations. Addressing inflammation and restoring carotenoid levels may mitigate post-TB premature epigenetic aging in TB survivors, with potential implications for HIV and Schistosomiasis as well.

Abstract Type
Scientific Research

Abstract Thematic Category

Quality Improvement Initiatives

113: Improving Rational Use of HIV Determine Test Kits at 39 Facilities in Uganda Using Continuous Quality Improvement

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Abstract

Purpose: Determine HIV 1 and 2 screening test is an essential health supply used as part of the HIV testing algorithm in Uganda. The Uganda Population-based HIV Impact Assessment of 2022 highlighted that 14.1% of adults 15 years and older living with HIV didn't know their HIV status.

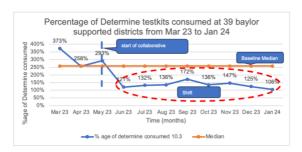
In March 2023, program data for three Baylor-Uganda supported regions within the national district health information system (DHIS2) database revealed a 373% discrepancy between determine HIV test kits consumed and actual tests conducted. This variation was due to documentation gaps in primary data sources, incomplete HMIS 105 reports, poor accountability for test kit balances from community outreaches, no review meetings for supply chain commodities, and limited supervision for supplies.

Baylor Uganda set out a continuous quality improvement collaborative to improve Determine HIV 1 and 2 screening tests rational use at 39 facilities in Uganda.

Methodology: A continuous quality improvement learning collaborative approach was used to guide improvement at 39 facilities between March 2023 and January 2024. Working with facility quality improvement teams at health centers, and the logistics sub-committees at hospitals, focused CQI monthly coaching was supported by Baylor Uganda. Indicator definition, a data collection tool, and a coaching guide were developed. A regional stakeholders meeting was conducted virtually using Echo-Zoom, with political and District health team leaders. A team of district-based coaches were identified and provided for an orientation on the key outputs expected. Weekly feedback meetings via Zoom were supported, and a WhatsApp group was created to share any quick updates, learnings, and consultations while in the field. The coaching teams worked with facility teams to conduct site-specific root cause analysis, developed a standard operating procedure for triangulating the completion of determine stock data, assigned linkages and referral assistants to support complete documentation of the primary data tools. The logistics sub-committees were supported to review the HIMS 105 reports before signing by the facility in charge, logbooks were

introduced to account for balances of test kits used at outreaches and monthly data analysis and sharing of feedback to the facility teams to address identified gaps. The data from the CQI database was validated against the data submitted to the DHIS2.

Results: There was a reduction of Determine HIV 1 and 2 test kit rational use from 373% in March 2023 to 107% in January 2024.



Discussion: Engagement of work improvement teams to routinely review supply chain data, leveraging on WhatsApp technology for quick feedback and enabling use of accounting logs were key learnings to improve rational use of determine 1 and 2 HIV test kits.

Abstract Type

Quality Improvement

Abstract Thematic Category

Quality Improvement Initiatives

176: Factors Associated with an Above Average Decline in Estimated Glomerular Filtration Rate Following Substitution with DTG Among People Living with HIV in Eswatini

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Abstract

Background: Dolutegravir is known to result in a physiologic decrease in estimated glomerular filtration rate (eGFR) of 16-19mL/min/1.73m² due to inhibition of tubular creatinine secretion. This

analysis evaluated adults in Eswatini transitioning from TDF/3TC/EFV (TLE) to TDF/3TC/DTG (TLD) to determine whether the observed reduction in eGFR is aligned with published literature and to identify risk factors for eGFR reductions of greater than 20%.

Methods: This is a retrospective observational cohort study of electronic medical record data at Baylor College of Medicine Children's Foundation-Eswatini among adults living with HIV who were on TLE prior to a transition to TLD. We calculated eGFR using the 2021 CKD-EPI equation pre-TLD and at least one month post TLD initiation, to evaluate the difference in eGFR. A paired t-test was conducted to determine whether DTG was associated with a change eGFR. Bivariate and multivariate logistic regression was used to identify risk factors for an eGFR decrease of more than 20%.

Results: Among 814 clients who switched from TLE to TLD, the mean eGFR decrease was 16mL/min/1.73m2 (13.6%) (p<0.001) at an average of 49 weeks post TLD switch (14mL/min/1.73m² (12.3%) for males and 16.7mL/min/1.73m² (14%) for females). There were 219 clients (27%) with an eGFR decrease of more than 20%. The mean eGFR decrease in this group was 29.32%. On bivariate logistic regression, risk factors for a decline of over 20% included increased time on TLE (OR 1.08, 95%CI 1.04, 1.13) female sex (OR 1.7, 95%CI 1.2, 2.5), increasing age (OR 1.02, 95%CI 1.01, 1.04), an underweight body mass index (BMI) (OR 2.1, 95%CI 1.3, 3.2), and an obese BMI (1.9 OR, 95%CI 1.2, 2.8). On multivariate analysis, the risk factors were similar, with the exception that obesity was no longer associated with a decline in the eGFR of over 20%.

Discussion: After switching to TLD, the mean change in eGFR observed in Eswatini aligns with published reports. This post-marketing data is reassuring and confirms observations from clinical trials. Identifying risk factors for a greater than expected change in eGFR can help clinicians to better monitor those who might be at higher risk for larger than average reductions in eGFR.

Abstract Type

Scientific Research

Abstract Thematic Category

Beyond the Status Quo: Innovations for Integrated Care

Category 5: Hematology and Oncology

4: Factors Influencing Guardian's Health-Seeking Decisions for Children with Burkitt Lymphoma in Malawi <u>Hellen Mbutuka</u>¹, Rezine Mzikamanda¹, Gugulethu Mapurisa², Eric Umar³, Nmazuo Ozuah⁴

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Abstract

Introduction: Unlike upper-income countries, where over 90% of children with Burkitt Lymphoma (BL) survive, survival rates in Sub-Saharan Africa are low (30% to 50). In Malawi, a significant number of children are diagnosed at an advanced stage of the disease. This delayed presentation contributes to over 70% mortality due to the disease's progression. Despite its rapid and aggressive progression, early diagnosis and treatment of BL can lead to successful outcomes. Investigating factors influencing health-seeking decisions is crucial to bridge the existing gap and improve survival rates.

Methods: This qualitative study explored health-seeking decision-making of guardians caring for children with BL at Kamuzu Central Hospital in Lilongwe, Malawi. The research used purposive sampling to select 20 participants for face-to-face, in-depth interviews. Interview guides were pretested to ensure consistency and relevance. Informed consent was obtained, and confidentiality was maintained to protect participants' rights and wellbeing. Data was analyzed using thematic analysis, guided by the health-seeking behavior model, which explored key themes in the data.

Results: Thematic analysis revealed knowledge and awareness, negative perceptions and attitude, symptom interpretation, perceived capacity to selfmanage, severity of symptoms, social support, financial barriers, guardian satisfaction and access to care were key factors in shaping health-seeking behaviors for guardians of children with BL. All Respondents believed the illness wasn't severe, leading them to manage at home. Financial status consistently emerged as a crucial determinant in the health-seeking behaviors of guardians who sought care from a health facility. The interpretation of symptoms by guardians was influenced by their limited knowledge and awareness.

Conclusion: Significant barriers to health-seeking decision-making exist in Malawi. Understanding and addressing these barriers is paramount to improving BL outcomes in children in limited-resource settings. There is a need for targeted initiatives, such as financial support programs, to alleviate the economic burden on affected families, increased advocacy, and cancer awareness campaigns.

*This research was conducted in accordance with the approved protocol **P.12/22/3921** from the Institutional Review Board (IRB) at **College of Medicine Research and Ethics Committee** (COMREC)

Abstract Type
Scientific Research

Abstract Thematic Category

Beyond the Status Quo: Innovations for Integrated Care

12: Comparative Uptake of Cervical Cancer Screening at Baylor, Self Sample Collection vs Via, Baylor Clinic, Center of Excellence Malawi.

Mirriam Kansichi, Menard Bvumbwe, Maureen Langa

Baylor College of Medicine Children's Foundation Malawi, Lilongwe, Malawi

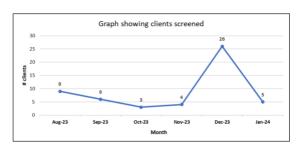
Abstract

Introduction: Cervical cancer is the leading cause of cancer deaths among women in Malawi and low-income countries, despite the potential for prevention through organized screening. Screening is one of the important components of women's healthcare worldwide. However, the uptake of the service using Visual Inspection with Acetic acid (VIA) has generally been low in Malawi including the Baylor Clinical Centre of Excellence (COE). This study aimed at comparing the uptake of cervical cancer screening using Human Papilloma virus (HPV) testing using self-collected sample versus VIA testing.

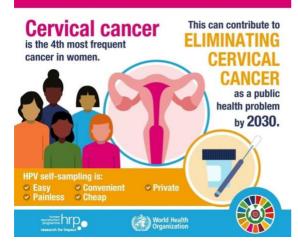
Methods: This was an observational study, comparing number of clients undergoing cervical cancer screening at Baylor College of medicine COE using VIA versus "HPV testing with self-collected sample" over a period of 6 months, between 1st August 2023 and 31st January, 2024.

Over the observation period, monthly data was collected from cervical cancer screening register for clients undergoing cervical cancer screening.

Results: We observed a peak in cervical cancer screening uptake in December 2023. The first 4 months hovered below 10 clients per month. But after introducing HPV testing with self-collected samples, the month of December had a spike as we registered 26 clients, 4 times higher than the average numbers of the preceding 4 months. We also observed a decline in January 2024 after HPV testing was suspended due to cartridge stock out.



HPV SELF-SAMPLING IMPROVES SCREENING FOR CERVICAL CANCER



Conclusion: The introduction of HPV testing with self-collected samples demonstrated a significantly higher number of cervical cancer screenings compared to VIA testing in December 2023. These findings underscore the importance of considering factors such as accessibility, acceptability and effectiveness when implementing cervical cancer screening programs. The higher uptake observed with HPV testing suggests its potential as a preferred method for cervical cancer screening, possibly due to procedure simplicity, convenience, higher sensitivity and acceptability. Further research and policy considerations are warranted to assess cost effectiveness, feasibility and optimization of cervical cancer screening strategies to improve women's access to cervical cancer screening services.

Abstract Type Scientific Research

Abstract Thematic Category

Beyond the Status Quo: Innovations for Integrated Care

13: A Provider-focused Approach to Improving Cervical Cancer Screening Rates in Women Living with HIV at the Baylor Foundation Lesotho Center of Excellence in Maseru, Lesotho

Samhita Bhargava^{1,2}, Andreas Boy Isaac², Hape Khooa², Katleho Mahamo², <u>Esther Makhalanyane</u>², Nomazizi Maqalika², Pheelo Mothepu², Lwamba Nyembo², Tlali Phatela²

¹Baylor College of Medicine, Houston, USA. ²Baylor Foundation Lesotho, Maseru, Lesotho

Abstract

Purpose: Cervical cancer (CaCx) is the most common cancer and leading cause of cancer-related death among women in Lesotho. Women living with HIV (WLHIV) are six times more likely to develop

CaCx than those who are HIV negative, and Lesotho has an HIV prevalence of 27% in women 15-49 years of age. The World Health Organization has established a target for each country to screen 70% of women for cervical cancer by 2030. The aim of this initiative is to increase the cervical cancer screening rate in WLHIV between 25-49 years at the Baylor Foundation Lesotho Center of Excellence (COE) from 14% to 70% in 12 months.

Methods: A multidisciplinary team convened to improve the CaCx screening process using the Model for Improvement. The national guidelines were reviewed to identify the target population. The baseline screening rate was obtained from EMRx, manual chart review revealed reasons for missed screens, and the data was analyzed using a Pareto chart. A key driver diagram established change activities, including a provider training and checklist for the triage physician. Both change ideas were tested in a PDSA cycle. A pretest assessed provider knowledge and level of confidence in counseling patients on cervical cancer screening. A training was organized to fill knowledge gaps. A posttest evaluated knowledge retention and interest in repeat trainings. Measures to assess the efficacy of the checklist included % of patients identified as due for cervical cancer screening at triage, % of patients booked in EMRx, and % with a documented cervical cancer screen in relation to the number of eligible patients.

Results: From September 1, 2023- November 30, 2023, 630 WLHIV between 25-49 years were seen and 68 WLHIV were screened for cervical cancer, revealing an average baseline monthly screening rate of 14%. Lack of referral contributed to 92% of missed screens. There are 22 providers who referred patients for cervical cancer screening. Average pretest score was 61% (n=17, SD 6.6). All 22 providers participated in the training (14 participated in-person, 8 were absent and reviewed the slide deck independently). Average posttest score was 80% (n=19, SD 10.6). Self-efficacy in cancer counseling increased from 41% to 74%. Most providers requested that a refresher training occur every 6 months (n=8) or every 12 months (n=8). Data collection for the checklist intervention is ongoing. As of May 2024, the cervical cancer screening rate in the target population has increased to 29%.

Discussion: Our quality improvement efforts increased provider knowledge and confidence in counseling on cervical cancer screening. The early increase in the screening rate may be a trend or a shift. Next steps will be to analyze the utility of a checklist, introduce job aids, and present screening performance data at each data review meeting.

Abstract Type
Quality Improvement

Abstract Thematic Category
Quality Improvement Initiatives

16: Lived Experiences of Parents and Guardians Providing Home Care for Their Terminally Ill Child in Malawi

Mercy Chepchumba Butia¹, Constance Nyasulu¹, Rizine Mzikamanda¹, Marilyn Hockenberry², Nmaz Ouzuah¹

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Abstract

Introduction: Parents and guardians who provide home care for a terminally ill child face significant emotional distress, uncertainties about the future, and income loss due to constant caregiving. These challenges can affect the parents'/guardians' overall well-being and quality of life. This study explores the experiences of parents and guardians providing home care to terminally ill children with cancer in Malawi, and to identify effective coping strategies they used. This study aimed to shed light on the unique circumstances faced by parents and guardians in low-income settings, caring for a terminally ill child in the home.

Methods: We used a qualitative descriptive design, with data collected using a semi-structured interview guide. Participants were biological parents or guardians providing home care for terminally ill children for 2 months or longer from the time of diagnosis. Fifteen participants were interviewed.

Results Majority of parents/guardians (95%) reported that caring for their children at home improved their quality of life. Parents/guardians showed their children love by providing the support they needed and making sure they were close to them. Most expressed that they faced many challenges during the provision of home care including economical, physical, emotional, and social support. Lack of community support and hopelessness despite all efforts made was commonly reported. Parents/guardians shared coping strategies that included accepting the condition of the child and seeking social and spiritual support from the community.

Conclusion: Home care can enable parents/guardians to maintain a sense of control, presence, and semblance of everyday life. It contributes to managing and alleviating the burden and distress during the last phase of life of terminally ill children. These findings support the need for government and support organizations to address these challenges faced by parents/guardians of terminally ill children.

Abstract Type Scientific Research

Abstract Thematic Category

Beyond the Status Quo: Innovations for Integrated Care

98: Improving HPV Vaccine Awareness and Uptake: Impact of the Mwanza Youth Community Advisory Board's Educational Initiatives

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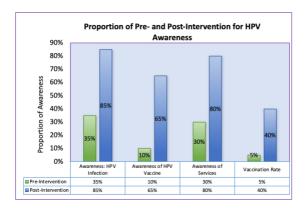
Abstract

Background: Cervical cancer is a major cause of mortality among women in Tanzania, with over 10,800 cases and 6,800 deaths reported in 2022. Human Papillomavirus (HPV) is a critical public health issue, especially in developing areas like Mwanza, where cervical cancer rates are high. Although the HPV vaccine is an essential preventive measure, its awareness and uptake are still low. The Mwanza Youth Community Advisory Board (MYCAB) plays a crucial role in health education and advocacy among the youth. This study evaluates the effectiveness of MYCAB's initiatives to raise awareness and promote the feasibility of the HPV vaccine among Mwanza's youth.

Methods: This Quality Improvement (QI) initiative employed a mixed-methods approach, including focus group discussions and interviews followed by online surveys, with 30 MYCAB members and local youth aged over 14, from diverse backgrounds such as college students, self-employed individuals, and small-business owners. Pre- and post-intervention surveys assessed HPV vaccine knowledge, feasibility, acceptability among members, delivery strategy, target population, and vaccination rates. Focus groups and interviews provided qualitative insights into community perceptions and challenges regarding the HPV vaccine. These insights guided iterative improvements in health education and advocacy efforts by MYCAB to enhance vaccine uptake and awareness among Mwanza's youth.

Lessons Learnt: The intervention led by MYCAB resulted in a significant increase in awareness about HPV and the benefits of the vaccine. Pre-intervention, only 35% of participants had heard of HPV, and a mere 10% were aware of the vaccine; 30% said the HPV vaccine is given in their local health facilities, 20% knew the target population and 5% got vaccinated when she was 16. Post-intervention, awareness rose from 35% to 85%, with 65% of participants expressing a positive attitude towards vaccination. Awareness of the target population rose from 20% to 80%, Vaccination rates among the

surveyed youth increased to 40%. Qualitative data highlighted that peer-led discussions and culturally sensitive materials were crucial in overcoming misinformation and doubts.



Next Steps: MYCAB's efforts have substantially improved awareness and acceptance of the HPV vaccine among the youth in Mwanza. The success of this intervention underscores the importance of community-based, youth-led educational programs in public health initiatives. However, reinforcement of basic knowledge about HPV vaccine in specific community groups is needed. Also, expansion of such programs could further enhance vaccination rates and contribute to the reduction of HPV-related diseases in the region.

Abstract Type
Quality Improvement

Abstract Thematic Category
Education and Sustainability Initiatives

100: Scale-up Screening of Cervical Cancer Extends Services for Women Living with HIV at Baylor College of Medicine Children's Foundation Malawi Supported Health Facilities

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Abstract

Background: Malawi has among the world's highest incidence and mortality from cervical cancer (CC) accounting for 37% of all new cancer diagnoses in women in 2020. Women living with HIV (WLHIV) have six times increased risk of developing CC. Malawi National CC prevention (CECAP) guidelines recommend screening women 25-49 years of age. Visual inspection with acetic Acid (VIA), is the most common screening technique used. Screening and early treatment of pre-cancerous lesions can prevent

CC, but screening services are limited. We scaled up CECAP screening and treatment services through intensive programmatic support at health facilities (HF) supported by Baylor College of Medicine Children's Foundation Malawi Tingathe (Tingathe) program to increase access to prevention services in 5 supported districts.

Description: We describe the impact of expansion of CECAP programming from 25 HF with direct Tingathe CECAP nurse support in 2023 to an additional 44 facilities in 2024. HFs with large cohorts of WLHIV and two trained CECAP providers were identified for expanded support. HF level engagement sessions were conducted to identify and address barriers to CECAP provision to allow strengthened implementation of services. Gaps in basic equipment and supplies were identified and addressed through procurement. Active linkage, referral and demand creation systems were put in place to help improve clinic flow, screen more WLHIV and submit timely reports. Each HF was assigned a monthly screening target and Tingathe CECAP nurses were assigned newly identified HFs to support. Ministry of Health district CECAP coordinators conducted routine supervision and mentorship to support all HFs to provide quality services. Routine Tingathe CECAP program reports from April 2023 to March 2024 were analyzed to measure the impact of strategies before and after implementation.

Lessons Learned: From April-September 2023 preexpansion, 15359 women completed CECAP screening, and from October 2023-March 2024 postexpansion, 17510 women were screened representing an additional 2121 women, a 6% increase with minimal additional resources. Newly introduced sites (n=44) contributed 3253 (19%) of total women screened after interventions. VIA+ screening rates pre- (2.4%) and post-intervention (2.5%) were unchanged. Same day treatment linkage for women with treatment-eligible lesions remained high pre- and post-intervention at 98% (321/327) and 96% (364/379). Throughout both pre- and postintervention, follow-up for untreated women was done during subsequent ART refill visits, and women with treatment ineligible lesions were referred for specialist consultation. With mentorship, supervision, and engagement integrated in routine ART care, gaps in CECAP service provision can be quickly identified and addressed to utilize available human resource to deliver lifesaving CECAP services to WLHIV.

Table 1. WLHIV CECAP screening and treatment for WLHIV before and after interventions

			CECAP Screening			CECAP same day treatment of eligible lesions			
	Period	Number of sites supported by Baylor-Tingathe CECAP nurse	WLHIV Screened	VIA+	96VIA+	WLHIV with treatment eligible lesions	Received same day Treatment	% WLHIV with eligible lesions who had same day treatment	
Before	April 2023 - June 2023	25	7956	204	2,6%	182	179	98%	
	July 2023-September 2023	25	7403	162	2.2%	145	142	98%	
	Suboverall	174.00	15359	366	2.4%	327	321	98%	
After	October 2023-December 2023	25	8013	193	2.4%	166	162	98%	
	January 2024-March 2024	25	9497	240	2.5%	213	202	95%	
	Suboverall		17510	433	2.5%	379	364	96%	

Next steps: Continued engagement to monitor, identify and address common gaps is ongoing with

continued mentorship to maximize same day treatment. Continued expansion of services to additional facilities will allow broader access to CECAP services.

Abstract Type

Program Description

Abstract Thematic Category

Doing More with Less: Enhancing Client Outcomes through Cross-Sector Engagement

168: Curating Memories for Paediatric Oncology Palliative Care Patients: An Essential Healing Space for Bereavement

<u>Sewelo Sosome</u>¹, Obokeng Rampaleng¹, Thutego Nkone¹, Charles Kamanda¹, Kamusisi Chinyundu^{1,2}, Abhilash Sathyamoorthi³, Mogomotsi Matshaba^{4,2}

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Abstract

Background: Illness and death can be emotionally difficult experiences. Palliative care is critical for the holistic support of patients who have life threating illness. Conversations about death are usually daunting and uncomfortable especially with a child. Key component in psychodynamic intervention for patients on palliative care suggests that the fear and anxiety associated to death stems from a need to preserve their significance and memory in one's life. Grieving the prospect of not having 'enough' time to create and shared memories.

According to the WHO, 98% of children require palliative care with a majority of this population living in Africa. Integrated comprehensive care in end-of-life support seeks to aid children and family's communication and adaptation of their grieving process. curating memories is beneficial in easing the psychological process of death. Research has shown that memory making facilitates acceptance after loss.

Description: A writing activity, art session, picture taking, memory book and videos are incorporated in therapy sessions for nine children on palliative care. The experience of nine caregivers who had lost a child on palliative care were also included. These caregivers provided insight during the grieving and bereavement counselling sessions on how curating memories positively impacted their grieving process. The activities implemented began when a child was transitioned to palliative care until their time of death in the ward or at their home. These activities fostered deliberate conversations by children and caregivers

to communicate their cherished moments together and how they wish to be remembered. They included activities on fond lessons learned from each other that those remain will hold onto to navigate life after death. This ensured that a memory capsule was created for each family, preserved and accessible to family members as they navigate their journey of grief.

Lessons Learned: Patients and caregivers were able to reflect and communicate their fondest memories of each other. The were also able to play a role in sharing how and where they wanted their final resting place to be.

The activities helped lesson the burden of grieving alone and expressing their fears and anxiety around death through open communication. Memorabilia that were created, proved to be essential for families on their grief journey. The families were now able to remember a child they lost to cancer in a positive light.

Figure 1. A: "handprints;" B: "What heaven looks like for me;" C: Art piece by Dad of a fallen shero.







Next Steps: The next steps will be to train healthcare providers to aid and incorporate memory capsules for children and families at the beginning of diagnosis and not only as an end-of-life intervention.

Abstract Type

Program Description

Abstract Thematic Category

Beyond the Status Quo: Innovations for Integrated Care

175: Enhancing Pediatric Care and Emotional Wellbeing: The Vital Role of Play Therapy in Hospital Setting

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Abstract

Background: In hospital settings, emotional, psychological, and developmental needs of children need attention. This abstract explores the significance of play therapy in hospitals and its impact on patient outcomes and holistic healing, aiming to reduce stress and enhance emotional growth among hospitalized children.

Description: At Kamuzu Central Hospital (KCH), Baylor College of Medicine Children's Foundation Malawi conducts play therapy sessions facilitated by a trained therapist. Various games, both individual and group activities, are used, including *bawo*, chess, puzzles, and art and crafts. These sessions help children express emotions, develop coping mechanisms, and create a supportive environment conducive to independence and self-control.

Lessons Learned: In the year 2023 alone (January to December), play therapy reached about 1,159 sick children admitted to the pediatric ward of KCH. For instance, Nuni Asani, a 6-year-old girl who is autistic and nonverbal, was admitted to the pediatric ward; she was always sad, and not able to interact or play with other children. When she was engaged in play therapy sessions, she was not responding, and the caregiver reported that even at home, she does not play with other children. After one week, during the play sessions, she smiled and said "ndinakosowani," meaning "I missed you." Upon hearing this, her mother could not believe it since she was nonverbal and the only word she used to speak was "mama." After a few days, she was also seen trying to play with other children, who were given some toys for group play. In another case, Prince Landilani, a 4-year-old boy, was admitted to KCH with orthopaedic injuries; his legs were connected to the bed for 2 months. He was usually crying due to pain, and we started engaging him in play therapy sessions. After 3 days of engaging him in play therapy, as he saw the play therapist entering the ward, he sat up on his own, very happy, and he said "aphunzitsi abwera," meaning 'the teacher is here' continuously. Everyone was shocked by what had happened there, since he was always crying in pain and was never happy. In addition, the mother reported that every time we leave him with some car toys, there is less complaining of pain throughout the day.

Next Steps: This abstract underline the importance of integrating play therapy into pediatric care protocols to enhance the well-being and resilience of hospitalized children. Future plans include assessing the impact of play therapy on a larger scale, permanent employment of play therapists, and expanding the initiative to Baylor clinical centre of excellence among under-five cohort.

Abstract Type
Program Description

Abstract Thematic Category

Differentiated Service Delivery: Patient-Centric Service Delivery Models

178: Rare Hematologic and Related Diseases seen at Botswana Baylor Children's Clinical Centre of Excellence Pediatric Hematologic Oncologic Program 2007-2023

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Abstract

Background: Rare diseases (RDs) are defined as diseases that affect less than 65 per 100,000 people. Many Rare Hematologic and Related Diseases (RHRDs) are listed among the more than 5,000 RDs globally. RHRDs are often associated with significant morbidity and mortality because they are difficult to recognize, often diagnosed late and costly to treat. The Botswana Baylor Children's Clinical Centre of Excellence (BBCCCOE) Paediatric Hematology Oncology (PHO) department is one of the few departments in Botswana that manages RHRDs seen in the nation.

The aim of this study was to review the total number of cases, assess trends and describe characteristics of patients with RHRDs the PHO program.

Methodology: A retrospective chart review using the BBCCCOE audit protocol guidelines was conducted. All patients diagnosed with RHRDs from 2007 were included. There was no age-based exclusion criteria for bleeding disorders as the BBCCCOE PHO program is the only recognized Haemophilia treatment centre in Botswana. Descriptive data and measures of central tendency were used. Demographics, vital status, diagnosis and outcome or disposition were analyzed.

Results: A total of 260 patients were enrolled in BBCCCOE PHO program from 2007-2023 with 63.5% (165) being males. Of the 260, 25.8% (n=67) patients were diagnosed before 2017 with the remainder 74.2% (193) being diagnosed between 2018-2023. Between 2018 and 2023 there was a steady annual incidence 20-40 RHRD cases per year. The commonest RHRDs seen were Haemophilia 23.1% (60), ITP 16.5% (43) and 10.4% SCD (27) and others. RHRDs with fewer than 10 patients included von Willebrand Disease, Hereditary Elliptocytosis, Hereditary Spherocytosis, Hernier Syndrome, Diamond Blackfan Syndrome and primary myelofibrosis. There were a number of undiagnosed pancytopenia, bicytopenia and monocytopenias. The median age of diagnosis was 6.5 years (range 0-48 years) and none of the patients had undergone genetic testing. Out of the 260, 83% (218) were on active follow up, 7% (19) died, 1.2% 3 lost to follow up and 7.7% (20) discharged.

Conclusion: The total number of patients and new RHRD cases in Botswana was low as expected with

more males than females since hemophilia (a X linked disorder) was the commonest RHRD. Extremely rare RDs were diagnosed and many cytopenias were undiagnosed. Most patients, in this cohort, continued with active follow up with a relatively low number being lost to follow up or died.

However, a well characterized cohort study that will incorporate genetic testing and use validated tools will be required to aid in developing strategies that will improve patient outcomes for RHRDs in Botswana. Furthermore, it is necessary to prioritize RHRDs to strengthen universal health coverage and align with the World Health Organization initiative on RDs.

Abstract Type Scientific Research

Abstract Thematic Category

Beyond the Status Quo: Innovations for Integrated Care

183: Art Therapy, A Critical Intervention for Pediatric Mental Health: A Botswana Paediatric Oncology Success

<u>Sewelo Sosome</u>¹, Obokeng Rampaleng¹, Michelle Groth¹, Thutego Nkone¹, Charles Kamanda¹, Abhilash Sathyamoorthi¹, Mogomotsi Matshaba^{1,2}

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Abstract

Background: Art Therapy is a contemporary intervention where children, through the expression of art, are able to process their emotions. A diagnosis and discussion on the prognosis of a cancer in children can be psychologically complex and requires a specific set of skills.

Low- and middle-income countries are often resource limited and lack adequate child psychologists or specialised psycho-oncology specialists. Under these limitations, psycho-oncology art therapy would be an effective tool in supporting patients and their families with cancer.

Description: Ten children who experienced stress, depression, anxiety, self-esteem issues and challenges in managing pain were selected. An art therapist and social worker conducted the therapy sessions, and this consisted of three phases using emotion cards, artwork process with paints and crayons, and a post-art discussion and assessment.

- Emotion cards: The child, is asked how they are feeling by identifying a flash card that represents their emotions e.g a sad face. This will then prompt further probing on the reasons for experiencing that emotion.
- Artwork: The child creates an art piece guided by their feelings. This may be a based on the emotion identified in the emotion cards or a figurine that displays where they most experience the feeling.
- Post-art session: The therapist discusses the artwork with the child and validates his or her feelings while attempting to enquire further about the child's experience of illness and selecting the suitable psychosocial intervention.

Lessons Learned: Red was the colour chosen to represent pain among 80% of the children and almost all (90%) were able to localize the site of their tumor spots and associate the chest as where they experienced feelings.

Some children, while being neutral in their pictures, recognized their parents/ caregivers 'sadness' feeling in their artwork signifying that they did not what to really feel or make of it at that point.

An audit of the sessions revealed that most children were able to label their feelings and depict them in their drawings. The artwork and its interpretations served as a vital diagnostic tool for the art therapist and social worker to assist the child in the most appropriate way.

Figure 1. A: "My pain spots;" B: "Where it hurts the most; where I wish I could experience calm."





Next Steps: Art therapy, while not new to chronic medical conditions, is novel to children in Botswana with cancer. The next step would be to educate healthcare providers beyond the pediatric oncology department on the benefits and technique of art therapy.

Abstract Type Program Description

Abstract Thematic Category

Healthcare Technology and Innovation

Category 6: Preventive Care

15: Increasing Uptake of Integrated COVID-19 Vaccination in Western Uganda Through Community Dialogues and Sensitization

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Abstract

Background: COVID-19 vaccination has been greatly hampered by infodemics. Community Dialogues and Sensitization (CDS) is one of the ways to demystify misinformation and disinformation at community level though not well explored. We implemented CDS to improve COVID-19 vaccination coverage in Kyenjojo district, Western Uganda.

Description: We conducted community dialogues and sensitization and analyzed vaccine coverage using two data points between June-July and August-September 2023 in 10 purposively selected subcounties of low full vaccination coverage in Kyenjojo district. Trained community leaders, Village Health Teams, healthcare workers, and opinion leaders conducted 10 community sensitizations in 09 villages. We descriptively and qualitatively analyzed the effect of CDS on COVID-19 vaccine uptake and demand for COVID-19 vaccination.

Lessons Learnt: In the period June-September 2023, a total of 1,193 people got vaccinated against COVID-19. 96.9% of them were vaccinated after implementation of CDS as compared to 3.0% prior to implementation. Community Dialogues and Sensitization elicited contextually relevant strategies including integration of C-19 messaging, integrated door-door routine mobilization and customization of messages through timely delivery, scheduling, and targeting prevailing myths and misconceptions. Health systems demand creation strategies also emerged including expanded integrated screening and health talks at facility.

Next Steps: Community dialogues and sensitization significantly advanced integrated demand creation through synergies in contextualizing community and health systems strategies. This offers an opportunity for the community members to air out the concerns and challenges that hinder health seeking and suggest solutions to the challenges. Not only is this suitable for COVID 19 vaccines, but it should also be done in other areas of service delivery as it promotes ownership, sustainability and increases chances of project success.

Abstract Type
Program Description

Abstract Thematic Category
Education and Sustainability Initiatives

22: Assessment of Anti-Pneumococcal Vaccination Health Beliefs Among Patients Living with HIV and Viral Hepatitis in Constanta, Romania

Ana Maria Schweitzer, Mihaela Bogdan, Anca Elena Cîrjilă, Florentina Stoian, Elena Melinte-Rizea, Alexandra Florentina Androne, Iuliana Costaș, Valentina Borcan, Iuliana Ciocea

Baylor Black Sea Foundation, Constanta, Rwanda

Abstract

Background: We assessed the awareness of antipneumococcal vaccination (APV) among over 800 patients with HIV and viral hepatitis. As APV was optional in Romania at the time of this assessment, we wanted to determine if a sensitization program is necessary to prevent pneumococcal comorbidities in our setting.

Methods: We assessed HIV/AIDS and hepatitis patients' attitudes toward APV. Demographic and risk information was collected through a questionnaire distributed via electronic and face-to-face means. SPSS v24 was used to analyze the data, focusing on perceived susceptibility, severity, benefits, barriers, cues to action, and self-efficacy.

Results: 404 PLWHA (53.22% female, 62% urban) and 402 PLWHEP (61% female, 67% urban) were enrolled. Approximately 90% of patients were enrolled for over a year, and more than 50% in both groups had never heard of VAP before. The most common risk factor was smoking (55,75%), history of upper respiratory tract infections (27% PLWHA, 34% PLWHEP), age over 65 (20.82% PLWHEP), hepatitis coinfection (15.35% PLWHA), cardiac disease and diabetes (12% PLWHA, 24% PLWHEP). All patients perceive pneumococcal-associated pneumonia as severe; they show relatively high belief in the benefits of vaccination and report moderate levels of selfefficacy and barriers associated with accessing the vaccine. We have recorded low levels of perceived susceptibility and very low levels of cues to action in the environment. Comparatively, PLWHA considers themselves significantly more vulnerable to pneumonia, and PLWHEP expects more barriers in accessing APV and seeing less information about the vaccine in their settings.

Conclusions: Patients may not get the AP vaccine because they don't know about it, don't feel at risk, and don't have reminders to get it. To help,

healthcare professionals can explain the risks to patients, provide more reminders, and boost patients' confidence to get vaccinated. A campaign to raise awareness and personalized counseling can also help patients remember the importance of getting the vaccine.

This evaluation took place at the right time as in November 2023 APV was included as part of The National Vaccination Plan, as one of the 100% compensated vaccines for adults diagnosed with chronic diseases, including HIV or viral hepatitis. Therefore, the data collected can be transferred into actions in order to increase the number of PLWHA, PLWHEP getting the AP vaccination.

Abstract Type Scientific Research

Abstract Thematic Category

Implementation Science: Putting Effective Interventions into Action

60: Improving Uptake of TB Preventive Treatment (TPT) in Hlathikhulu SCOE

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Abstract

Purpose: Tuberculosis (TB) remains one of the leading causes of death among people living with HIV globally. TB preventive therapy (TPT) is believed to reduce TB mortality by 37%. It has a greater impact if TPT is coupled with ART. As such, the Eswatini Ministry of Health (MoH) implemented a TPT surge to increase TPT uptake in Eswatini among people living with HIV. In collaboration with this TPT surge, Baylor Hlathikhulu Satellite Centre of Excellence (SCOE) set a goal that 95% of all clients accessing ART services at the clinic receive TPT at least once in their lifetime. Prior to the surge, TPT coverage was 65% at the SCOE.

Methods: This project was a quality improvement initiative to increase TPT coverage at the Baylor Hlathikhulu SCOE for all clients accessing ART services. Using our electronic medical record system (EMRx) clients of all ages that were active in care in the clinic but that had never taken TPT were identified. These patients were then called to come for TPT initiation. TPT was offered as part of routine care and clients were educated on side effects. Using both the patient file and the booklet we were also able to identify a few more patients who had been missed using EMRx alone. Alarm clocks and pill boxes were distributed to all patients with known

adherence issues receiving TPT to assist with adherence and not further delay prescription of these medications. Daily fixed dose isoniazid, cotrimoxazole and pyridoxine was prescribed for newly diagnosed patients. For patients with known adherence issues, isoniazid and pyridoxine was TPT of choice as it would be taken daily at the same time as their ART for 6 months. Rifapentine, isoniazid, and pyridoxine taken once weekly for three months was prescribed for all patients with good adherence history on multi month dispensing.

Results: At the beginning of this project, 321/495 (65%) of active clients had completed TPT in their lifetime. Out of the 495 clients, 199 of them were males and 296 were females. After 9 months of the project, TPT lifetime coverage went from 65% to 95% 473/495. Children aged 1-5 years increased from 7/24 (29%) to 13/17 (76%), those aged 6-9 years increased from 10/28 (36%) to 33/36 (91%), adolescents 10-19 years increase from 136/209 (65%) to 169/173 (98%) and adults aged 20 and above increased from 175/250 (70%) to 257/269 (96%). When the project was closed in 9 months, 179/199 (90%) males had taken TPT, and 284/296 (96%) females had taken TPT.

Discussion: By setting clinic goals our team was able to surpass national targets in only 9 months' time. This project not only exposed our staff to the process of quality improvement initiatives, but also ensured that our clients continue to receive some of the most ethical high-quality care in the country.

Abstract Type
Quality Improvement

Abstract Thematic Category
Quality Improvement Initiatives

80: Vaccination in the Wayuu Population of the Region Towards an Intercultural Immunization System

<u>Carmen Judith Garcia Díaz</u>, Jaquelin Patrica Lopez Fonseca

Fundación Baylor Colombia, Riohacha, Colombia

Abstract

Background: Immunization is the best tool for preventing diseases preventable with vaccination; within indigenous cultures, there is distrust of vaccination, preventing universal immunization coverage. Within the Wayuu culture, resistance to vaccination is due to misinformation and lack of trust. At the Baylor Foundation, we implemented the education and vaccination process that would counteract misinformation and inspire confidence in our population using methods specific to their culture.

Objective: The objective of this program was to adopt special and specific measures to reduce resistance to immunization in the Wayuu indigenous population based on educational goals:

- Inform parents and caregivers about the importance of vaccinating children and the benefits that vaccines provide not only to individuals but also to the entire community, and
- II. Educate about the safety of vaccines, including data on their effectiveness over time and against new variants, and the lack of significant side effects.

Description: The program was implemented in coordination with the Pabón López Armed Hospital (in Manaure), the Municipal Health Secretary, and the Baylor Colombia Foundation and its promoters. The activities undertaken were as follows: Training of nursing assistants in vaccination, establishment of a cold storage room in the IPS (Health Providing Institution) for the preservation of vaccines, initiation of vaccination for IPS users and door-to-door in dispersed rural areas.

Lessons learned: In 2023, a total of 5,217 users were vaccinated: 3,745 children, 494 pregnant women, and 978 adults. More than 230 communities benefited, respecting their customs. The Vaccination Program has been well-received by parents, and the Baylor Foundation was recognized by municipal and departmental health secretaries for achieving high vaccination rates in La Guajira.

Next steps: The goal for 2024 is to complete vaccination schedules for all members of Wayuu families and to vaccinate 7,000 users in Indigenous communities. This will be achieved through house-to-house sweeps and by establishing dialogue with indigenous leaders to ensure immunization against preventable diseases. Additionally, the plan includes defining agreements with EPS (Health Promotion Entities) present in the municipality to administer vaccines to their members. The foundation's health promoters will also disseminate the health benefits that indigenous cultures have received. Furthermore, the program aims to share its experiences in national and international forums focusing on the health and well-being of indigenous cultures.

Abstract Type

Program Description

Abstract Thematic Category

Differentiated Service Delivery: Patient-Centric Service Delivery Models

81: Strengthening Oral Health to Improve the Quality of Life of Vulnerable Populations

<u>Eliana Marcela Villera Florez</u>, Ana Maria Galvis Serrano

Fundación Baylor Colombia, Riohacha, Colombia

Abstrac

Background: The Wayuu indigenous people reside on the Guajira peninsula, comprising 20% of Colombia's indigenous population. They largely endure conditions of poverty, inequality, and restricted access to healthcare services. Currently, Wayuu oral health poses a significant public health challenge, with 88.7% of the population affected by decayed, missing, or filled teeth. The prevalence of dental caries and other oral diseases like gingival inflammation stands at 52%. These issues stem from unhealthy diets, harmful alcohol consumption, and inadequate oral hygiene due to resource constraints. Similar challenges are faced by 35 associations of fishermen and their families in the Atlántico department. Recognizing oral health as pivotal for overall well-being, Baylor Foundation Colombia (FBC) has undertaken a series of interventions aimed at reversing the effects of neglect and enhancing quality of life within these populations.

Description: Oral health in the indigenous Wayuu and Raizal cultures is influenced by their customs and beliefs, which must be integrated with Western medicine. Harmonizing these two traditions requires a process of coordination. Providing a differential care model tailored to the traditions and needs of these communities is essential. Therefore, in 2023, FBC conducted several oral health care sessions in the departments of Atlántico and La Guajira aimed at these vulnerable populations. This process began with identifying individuals with oral health issues, who were then referred to a general practitioner for consultation and subsequently received dental care. The interventions were accompanied by oral health education and concluded with the distribution of dental prostheses and oral health kits.

Lessons Learned:

- 541 dental evaluations were performed, 263 dental procedures were performed, and 180 dental prostheses were delivered.
- Prioritizing preventive care over curative care requires developing oral health programs and initiatives that incorporate an intercultural approach and respect the traditional cosmovision of oral diseases, aiming to generate positive impacts.
- Dialogue spaces facilitate the exchange of knowledge between communities and modern medicine.

Next Steps:

 Continue searching for solutions to improve the quality of life for vulnerable communities through the implementation of oral health programs.

- Continue providing oral health education to raise awareness about the importance of maintaining healthy habits and visiting the dentist
- Facilitate knowledge dialogues to understand ancestral oral cleaning practices, bridging them with Western culture to generate new insights.
- Identify the psychological aspects influencing the facial aesthetics of patients upon receiving dental prostheses.

Abstract Type

Program Description

Abstract Thematic Category

Differentiated Service Delivery: Patient-Centric Service Delivery Models

87: Impact of Routine HIV Risk Screening on Oral Pre-exposure Prophylaxis Uptake Among Adolescent Girls and Young Women in Baylor College of Medicine Children's Foundation Malawi Supported Health Facilities

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Abstract

Introduction: In sub-Saharan Africa (SSA), adolescent girls and young women (AGYW; aged 15-24 years) account for nearly two-third of all new HIV infections. AGYW are a priority population in SSA in need of effective means for HIV prevention. Currently, pre-exposure prophylaxis (PrEP) is one of the promising available HIV prevention strategies for AGYW at risk of HIV. However, in Malawi, PrEP uptake among AGYW was estimated at 26% in 2022. We describe the progress of PrEP uptake among AGYW in Baylor College of Medicine Children's Foundation Malawi (BCM-FCM) supported health facilities, where Ministry of Health (MOH) guidelines on HIV risk assessment and PrEP provision and other approaches; Facility staff PrEP orientations, and standardized oral PrEP health talks were implemented to facilitate awareness, and use of PrEP as an HIV prevention method.

Methodology: From October 2022, all AGYW attending antenatal clinic and outpatient clinic were assessed for PrEP eligibility using Malawi HIV rapid testing and PrEP guidelines which recommends PrEP referral for all HIV negative clients with substantial risk to HIV prevention services at the 95 BCM-CFM supported health facilities. All eligible AGYW were educated on PrEP eligibility, effectiveness,

adherence, and protection against other sexually transmitted infections. Demographic information including age and sex were recorded in PrEP registers for all AGYW who received oral PrEP. Routinely collected program data from October 2022 to December 2023 was analyzed using descriptive statistics to describe the uptake of PrEP among AGYW.

Results: A total of 4274 AGYW were initiated on PrEP. Of these, 33% (n=1417) were 15-19 years and 67% (n=2857) were 20-24years (Figure 1). Overall, the mean age was 20 (Standard Deviation [SD]: 3). Out of 4274 who AGYW started oral PrEP, 84% (n=3596) were not pregnant and 16% (n=678) were pregnant and breastfeeding. Overall, there was an increase of cumulative numbers of AGYW starting oral PrEP from 182 in October 2022 to 1727 in December 2023. The number of AGYW initiated on PrEP in October to December 2023 was nine times the number in October to December 2023 and in each quarter, there was an increase in uptake.

Figure 1. AGYW Newly initiated on PrEP across 95 BCM-CFM supported facilities



Conclusion: Implementation of routine screening for HIV risk according to MoH PrEP guidelines among AGYW attending antenatal and outpatient clinics had an impact on the cumulative number of AGYW starting oral PrEP. Overall, there was an increase of PrEP uptake among AGYW over time. A high number of AGYW who started PrEP and/or older (≥20 years). Younger and/or pregnant and breastfeeding AGYW may require a combination of counseling and other innovations including supporting guidelines to utilize this intervention.

Abstract Type

Program Description

Abstract Thematic Category

Implementation Science: Putting Effective Interventions into Action

96: Scaling up Pre-Exposure Prophylaxis (PrEP) – Lessons Learnt from Baylor College of Medicine Children Foundation Malawi Supported Health Facilities.

Haswell Jere¹, <u>Ndumezi shaba</u>Shaba¹, Fraser Tembo¹, Mustafa Mkwanda³, Carrie M Cox^{1,2}, Katherine R Simon^{1,2}, Tapiwa Tembo¹, Rachel Manyeki¹, Ian Khruza¹, Elizabeth Wetzel^{1,2}

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Abstract

Background: Pre-exposure prophylaxis (PrEP) is a groundbreaking effective HIV prevention method that involves HIV-negative individuals taking antiretroviral medication to reduce their risk of acquiring HIV.

Despite its proven effectiveness, the uptake of PrEP has been challenging owing to different barriers including lack of knowledge among clients and health systems challenges like lack of trained staff, lack of mentorship programs and poor client flow among other factors. The aim of the project was to increase uptake of PrEP services in 95 Baylor College of Medicine Children's Foundation Malawi-Tingathe program (Tingathe) supported health facilities in Malawi.

Program Description: Tingathe supports PrEP service delivery at 72 health facilities. Despite the approval and availability of PrEP medicine in the country, there was low uptake of PrEP services in the program. Building on the formal trainings provided to selected staff by ministry of health and other partners in 2022, the program engaged in facility level orientations, mentorship, health talks aided by prerecorded audios to increase client's awareness, setting daily and weekly targets for each facility and changing client flow to improve uptake of PrEP services in the program. Routine program PrEP reports disaggregated based on age and gender were analyzed to compare uptake trends between Sept-Dec 22(Q1 FY23) and Sept-Dec 23(Q1 FY24) to assess the impact of the interventions outlined.

Results / Lessons Learnt: A total of 12528 clients were cumulatively initiated on PrEP medicine from Q1 FY23 to Q1 2024 with a mean age of 30 and standard deviation (SD) of 11. Out of the clients that started, 7836 (63%) were female and 4692 37% were male. Among these, 68% (8544/12528) were above 24 years while 32% (3984/12528) were 20-24 years. There was a steady increase in the number of clients accessing PrEP services from 944 clients in Q1 FY 23 to 4847 clients in Q1,2024 representing a 500% increase.

Next Steps: Continuous mentorship, facility based public awareness raising through health talks and prerecorded audio messages, changing client's client flow to aid easy access to PrEP service points and mentorship of staff were effective in achieving increased PrEP access in the program. The Program has adopted and replicated these practices in new and old Prep sites to sustain the achievements.

Abstract Type

Program Description

Abstract Thematic Category

Implementation Science: Putting Effective Interventions into Action

115: Provision of Comprehensive HIV Prevention Services Using One- Stop Shop Approach Targeting Adolescents and Young People, Men, and Other Atrisk Populations in Four Districts of Lesotho.

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Baylor Foundation Lesotho, Maseru, Lesotho

Abstract

Background: Globally, many countries have succeeded in reducing numbers of new HIV infections and the recent UNAIDS report (2023) showed a 38% reduction from 2010 to 2022. Sub-Saharan African countries have made a significant contribution to this reduction and Lesotho has achieved an overall reduction of 57% (UNAIDS, 2023). However, disparities by age and sex are still evident, with adolescent girls and young women (AGYW) having disproportionally higher HIV incidence compared to adolescent boys and young men (ABYM). Men and Children are also left behind in achieving the first 95% of the UNAIDS target. Therefore, specific interventions such as communitybased health services with different approaches are necessary to close the gap.

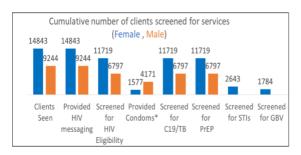
Baylor College of Medicine Children's Foundation Lesotho (BCMCFL) has been implementing the CDC-funded CoHip-SEC project since October 2022. The project has combined biomedical, behavioural, and structural interventions within supported communities to meet the HIV prevention needs of adolescents and young people (AYP) and men. The project targets AYP, men, children, and other underserved populations in the districts of Leribe, Berea, Quthing and Qacha's Nek whose challenges include high HIV incidence, high pregnancy rates among teenagers and difficult terrain with hard-to-reach villages.

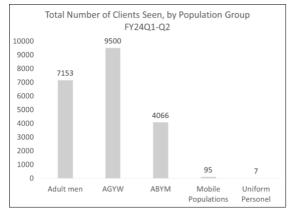
Project implementation: Implementation activities include evidence-based interventions targeted at youth and men for HIV prevention and gender-based violence prevention, using peer to peer approaches. Evidence based interventions are complemented by comprehensive integrated HIV and sexual reproductive health (SRH) services using the one stop shop approach. Lay cadres, professional counsellors and nurses offer all targeted HIV testing services, HIV prevention and ART initiation, SRH services including STI screening and treatment and family planning, TB and COVID-19 screening and COVID-19 vaccination.

Results: Of the total clients served, 88 (0.4%) were newly identified as HIV positive and initiated on ART while 497 (2%) were initiated on PrEP. A total of 295 were treated for STIs and 20 clients experienced GBV, with all provided with a minimum package of services and actively linked to health services and other allied services.

Lessons Learned: Comprehensive community-based HIV prevention services offered using the one stop shop approach reaches all targeted populations and their needs who would otherwise not access health facilities. The approach is also an opportunity to engage men and adolescents into health services as they often do not present to health facilities.

Figure 1. Total number of clients seen and screened for services by gender and population group for the period of FY24 Q1-Q2 (October 2023 to March 2024)





Next Steps: The next step is to recommend for the scale-up of the one stop shop approach for all community-based HIV services in Lesotho to promote the integration of HIV/TB/SRH services an important step towards ending HIV as a public health threat.

Abstract Type

Program Description

Abstract Thematic Category

Beyond the Status Quo: Innovations for Integrated Care

120: Improving Pre-exposure Prophylaxis Continuity (PrEP_CT) Among HIV High-risk Populations Through KP/PP Gatekeepers: A Programme Evaluation at Kagadi Hospital, Midwestern Uganda.

<u>Daniel Musasizi</u>, Samuel Engulu, Joshua Makiika, Andrew Ndawula, Rogers Ssebunya, Betty Nsangi, Dithan Kiragga

Baylor foundation Uganda, Kampala, Uganda

Abstract

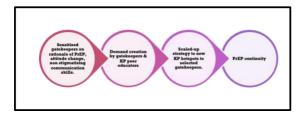
IRB #: 2009-090

Background: Pre-exposure prophylaxis (PrEP) is antiretroviral medicine taken by high-risk HIV negative populations to reduce chances of HIV acquisition. By January-March 2022, PrEP continuity among key and priority populations (KP/PPs) at Kagadi hospital was suboptimal at 30% (359/1185) compared to then quarterly target of at least 85% (1007/1185). KP/PPs served at this facility included sex workers (SW), clients of sex workers (CSW), adolescent girls and young women (AGYW) and discordant couples (DC).

Health facility support supervision visits revealed that; migratory nature of KPs (sex workers), pill burden, distance to PrEP facilities, non-supportive KP/PP gatekeepers- (owners/runners of bars, lodges, brothels where often KPs stay/hang in large numbers) as among the barriers to PrEP continuity. We made a PrEP programme evaluation about the involvement of KP gatekeepers to improve PrEP continuity among the above sub-populations served by Kagadi hospital in Bunyoro region.

Description: PEPFAR MER.2.6; defines PrEP continuity (CT) as the number of individuals excluding those newly enrolled, that return for a follow up visit or PrEP re-initiation to prevent HIV during the reporting period: the numerator is number of individuals that returned for a follow up or PrEP reinitiation during the reporting period, no denominator applies, reporting frequency is quarterly at facility level. To improve PrEP continuity, we worked with the KP/PP services providers at Kagadi hospital, reviewed findings from facility supervision reports and prioritised leveraging on existing KP/PP gatekeepers. KP gatekeepers supported demand creation superimposing the KP peer educators' roles, supported in tracking transfer outs and ins boosting community-facility linkage which have improved and sustained PrEP continuity at Kagadi hospital.

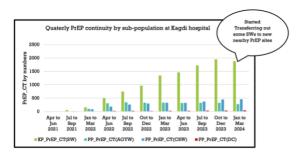
Figure 1. Activities implemented under the KP/PP Gatekeepers'



Health care providers and gatekeepers were oriented by the Baylor-Uganda KP/PP technical teams on routine tracking of KP/PP transfers (in and out) as well as sharing this information with KP facility peer educators.

Lessons Learned: Overall PrEP continuity improved from 30% (359/1185) in Jan-Mar 2022 to 266% (2679/1006) in Jan-Mar2024. Although the project did not have KP/PP sub-category targets, there were noticeable improvements i.e. 156 to 1880 clients (SW), 99 to 276 clients (AGYW), 82 to 460 clients (CSW) and 8 to 41 clients (DC) respectively. Figure 2 below shows quarterly improvements by subpopulations.

Figure 2. Quarterly trends of PrEP continuity by subpopulations at Kagadi hospital



Next steps: Involvement of KP/PP gatekeepers in PrEP services can improve PrEP continuity, hence should be scaled up to other PrEP offering institutions and adopted among other HIV prevention services.

Abstract Type

Program Description

Abstract Thematic Category

Implementation Science: Putting Effective Interventions into Action

172: Enhancing PrEP Retention by Use of Multilevel Strategies Such as Peer-model and Patient-centered Approaches at the Baylor Uganda Site.

Rebecca Nabukenya¹, Fiona Nakiyingi¹, Shallon Kabs Kesande¹, Violet Korutaro¹, Mahnaz Motevali Oliner², Adeodata R. Kekitiinwa¹, Patricia Nahirya Ntegge¹

¹Baylor College of Medicine Children's Foundation Uganda, Kampala, Uganda. ²Johns Hopkins University, Baltimore, USA

Abstract

Pre-exposure prophylaxis (PrEP) success depends on adherence and retention in care. Baylor Uganda has been conducting PrEP studies to evaluate the safety and effectiveness in preventing HIV transmission in key population women. Studies have demonstrated that retention rates are higher in the immediate period following enrolment into PrEP studies but decrease over time. Given that, various strategies are needed to ensure the continued involvement of participants that are retained on PrEP.

Description: We adopted multilevel strategies, such as the peer model and patient-centred approaches from the recruitment period, throughout the study, and through COVID-19 pandemic.

The Peers at both, the site and community levels, assisted in the mobilization, recruitment and follow-up of participants; helped to dispel myths, address misconceptions and provide accurate information about the benefits and importance of PrEP. They also took active role in assisting the team by conducting peer-led activities such as mapping the location of participant's home and work, and documenting participants' contact details.

Conducting home visits to provide support and health education that was asked for; creating a welcoming and cozy waiting area, including a "Meetthe-Peer Corner" and "Children's Corner"; involving the Community Advisory Board (CAB) to connect the participants to agencies who provide legal support for women; utilizing various communication channels; and organizing annual meetings to maintain contact with participants are example of patient-centered approaches used at the site.

During the COVID-19 lockdown, staff and participants were transported to and from the site; visits were expedited to ensure safety for both; phone contacts were increased to address any issues.

Lessons Learned: Our strategies resulted in an impressive retention rate of up to 90%. Despite challenges, such as mobility and change in contact details, the proactive Peer navigation showed to improve retention and in retaining highly mobile participants. The peer-model had some limitations such as having peers changing their address hence making it difficult to connect them with some participants since they worked within the locality.

Positive attitude of research staff; continued contact by site community team during regular clinic visits, calling to those unresponsive; active involvement of the CAB members; and offering gifts as a way of showing the research team's appreciation, all used as patient-centered approached to create a friendly, trusted environment.

Facilitators such as flexible appointment scheduling, reminders, and processes to conduct time-efficient

follow up visits, all also contributed to the retention strategies.

Next Steps: The multilevel strategies for successful recruitment and retention in the PrEP research studies, including improved communication and the implementation of the peer model, has demonstrated success in HIV prevention research studies. The peer model, especially, has proven to be essential in

retaining highly mobile participants, emphasizing its significance in our research efforts.

Abstract Type

Program Description

Abstract Thematic Category

Doing More with Less: Enhancing Client Outcomes through Cross-Sector Engagement

Category 7: Clinical Operations and Quality Improvement Efforts

45: Optimising Data Capture for Viral Load and Early Infant Diagnosis into African Laboratory Information System Using a Quality Improvement Project at Baylor Foundation Uganda COE.

<u>Gerald Agaba Muzorah</u>¹, Jacqueline Balungi Kanywa², Moses Matovu², Annet Nalugo¹

¹Baylor Foundation Uganda COE, kampala, Uganda. ²Baylor Foundation Uganda COE., kampala, Uganda

Abstract

Purpose: Ministry of Health Uganda in 2019, adopted a new Africa Laboratory Information System (ALIS) for real-time data capture of point-of-care results for the Viral Load (VL) and Exposed Infant Diagnosis (EID) cascade. This system provides timely data to guide decisions in the management of pregnant mothers and their exposed infants. Data review on VL and EID from the ALIS in the month of January 2024 showed underutilization of the system to capture VL and EID results at 61% and 38% respectively as compared to the expected 95% national target.

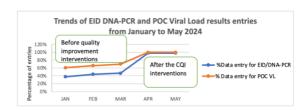
Baylor Foundation Uganda set out to use continuous quality improvement approach to improve data capture for VL and EID into ALLIS to guide management of pregnant mothers and their exposed infants for eight weeks starting April 2024 to May 2024.

Methods: A work improvement team (WIT) comprising of doctors, nurses, laboratory staff, counsellors, and social worker was established to address this sub optimal performance, at a meeting, the team used a fishbone analysis to identify the root causes, as: having two parallel reporting systems of ALIS and the Electronic medical records that was prioritised by clinicians over ALIS, capacity gaps on use of ALIS, no reminders to capture VL and EID data real time, work overload among staff, a backlog of 216 VL results captured into the paper based registers and no performance review meetings for VL and EID data from ALIS.

With support from the clinic management, the Laboratory team conducted a training on the use of ALIS, assigned a staff to enter

VL results backlog into ALIS, reminders were set up for clinicians to enter all results real time, supported weekly data analysis and sharing of VL and EID data from ALIS at the weekly staff performance review meetings.

Results: Over the course of 8 weeks, coverage of VL testing and entry into ALIS increased from 61% to 100%. EID coverage increased from 38% to 98%. We also looked at average turnaround time between requesting and entering results in ALIS, which reduced from 2 days to less than 2 hours, the number of pregnant mothers who received VL testing services increased from 37 in march to 91 on average by end of May 2024 and DNA-PCR tests increased from 65 2024 to an average of 104 per month in the same by end of May 2024.



Discussion: Use of continuous quality improvement activities improved data entry into the ALIS. That has managed to improve management of pregnant mothers and their exposed infants and Integration of ALIS into the clinic EMRx system will further improve national level data entry.

Abstract Type

Quality Improvement

Abstract Thematic Category

Quality Improvement Initiatives

48: Moving Towards EMTCT: Does the Infant Vaccination Visit HIV Screening Help to Address Gaps in Identifying New EID as Well as Infants That Missed Milestone Testing?

<u>Elijah Kavuta</u>¹, Carrie Cox^{1,2}, Elizabeth Wetzel^{1,2}, Alex Kabwinja¹, Rachael Manyeki^{1,2}, Victor Guzani¹, Katherine Simon^{1,2}

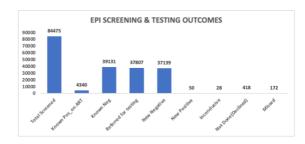
¹Baylor College of Medicine Children's Foundation Malawi, Lilongwe, Malawi, Lilongwe, Malawi. ²Baylor College of Medicine, Houston, Texas, USA

Abstract

Background: Elimination of Mother to Child Transmission (EMTCT) programming has decreased perinatal HIV transmission, however progress has stalled. Despite high rates of antenatal and maternity HIV testing and linkage to care, perinatal HIV transmission in Malawi persists, with nearly 50% of new HIV cases in children having mothers who interrupted treatment or acquired infection later in pregnancy or during breastfeeding. Malawi national guidelines have recommended routine opt-out testing at antenatal and maternity and were revised in 2022 to include routine testing for breastfeeding women at infant's 6-9-month vaccination visit to capture testing for women who acquired HIV infection during the breastfeeding period. We describe lessons learned from early implementation of this new guidance in 5 districts supported by Baylor College of Medicine Children's Foundation Malawi Tingathe program.

Description: Community health workers (CHWs) screened women attending infant vaccination clinics at 95 health facilities for HIV testing eligibility between April 1, 2023, and March 31, 2024. A tally sheet was used to track screening. For all women living with HIV (WLHIV) on ART, linkage to ART was confirmed, VL milestone testing verified, and infant EID enrollment and testing completion confirmed. All women untested since the infant turned 6 months old were offered HIV testing. Women diagnosed during screening were linked to ART and infants enrolled in early infant diagnosis program (EID) If the mother had died the infant was tested. Women who received a negative HIV test result were linked to HIV prevention services.

Lessons Learnt: Overall, 84475 women attended vaccine clinics with 6–9-month-old infants, and 93.2% (78690/84475) were screened. Over half of women screened (40833, 51%) were not eligible for testing including WLHIV (1752) and those recently tested HIV negative while the baby was 6-9m old (39131). The 37807 (45%) eligible screened women referred for testing included 37139 negative, 50 positive and 28 inconclusive results; 418 women who declined testing and 172 missing outcomes. All fifty newly identified WLHIV were linked to ART and their babies enrolled in EID (100% linkage); 108 infants previously enrolled in EID but with missed testing milestones received catch-up testing.



Next Steps: EPI screening implementation is a very low cost and low effort as existing staff incorporated this alongside other facility activities, and the women and infants were already at clinic for vaccinations. We implemented this at scale in a large geographical area in a short period and can help prevent new infections for both current and future babies by linking women to prevention and care. Further analysis and follow up for infants testing outcome is ongoing.

Abstract Type

Program Description

Abstract Thematic Category

Differentiated Service Delivery: Patient-Centric Service Delivery Models

63: Enhancing Quality of Care, Education and Teamwork Through Weekly Nursing Meetings at Baylor Foundation of Eswatini, Centre of Excellence (COE) Mbabane.

Kholiwe Mbhamali, Nkosibonile Nkambule

Baylor Foundation Eswatini, Mbabane, Swaziland

Abstract

Background: Baylor Foundation Eswatini is committed to improving the health and wellbeing of children and families in Eswatini, by providing direct healthcare services, education, and enhanced research. Nurses at Baylor Foundation Eswatini noticed a gap in information sharing between each other where it happens that a nurse may have undergone training or workshop and there is no platform to share the information gained from that workshop also there was a gap in skill sharing and debriefing, so nurses suggested a weekly meeting platform. The aim of the platform is to improve communication, information sharing, teamwork and collaboration amongst nurses.

Description: The platform was introduced in January 2024 at Baylor Foundation Eswatini COE at Mbabane and is ongoing. The platform is scheduled weekly on Thursday at 14:45 pm to 16:00pm at COE with nurses from COE and satellite clinics joining virtually. The platform focuses on discussing issues related to nurses' scope, review training reports, capacity building such as developing of quality improvement projects, receive nursing department update from the

nurse manager. The meeting also helps to nurses identify gaps in patient care and improve resolutions or difficult cases faced by nurses. From the start of the program in January, 10 meetings have been attended successfully with all nurses present. In each meeting there is a chairperson who ensure venue availability, prepares agenda, speakers and virtual platform is organized. During meeting one nurse is responsible to capture, record and share minutes before the next meeting. Agenda is discussed and shared two days before meeting.

Lesson Learned: The initiative has improved communication amongst nurses making it simpler to work in a high-quality healthcare service they are now able to write in EMRL (electronic medical records system) in a uniform and has reduced errors in documentation of patient files. This has resulted to create an open platform to share views and opinions leading to good decision making. The capacity building initiative has shown a significant improvement in nurses' knowledge and skills as they are now able develop quality improvement projects, abstract and research papers. In addition, the program has resulted to strengthened nurses code of conduct as they are part the decision making. Furthermore, the platform has increase development of leadership skills amongst nurses as they take lead in the meetings.

Next Steps: Based on the lesson learned, the forum will expand the capacity building by including the whole nursing team to close information gaps between nurses and the support staff. The capacity building initiative aim to involve external partnership for mentorship such as professional nursing association and educational institution to further share best practices.

Abstract Type
Program Description

Abstract Thematic Category
Education and Sustainability Initiatives

64: Leave Management System for a Workplace: A Case Study of Baylor College of Medicine Children's Foundation of Malawi

Andrew Kunje, Allieth Chikoti, Alexander Kabwinja, Chesiyao Kazembe, Carl Mkwapatira, Emmanuel Chipiko, Phoebe Nyasulu, Tapiwa Tembo

Baylor College of Medicine Children's Foundation Malawi, Lilongwe, Malawi

Abstract

Background: Most organizations have adopted a leave management system; a process of tracking employees leave requests accurately to manage employees' time-off efficiently without compromising operations. A well-implemented leave management

system transcends mere record-keeping and becomes a fundamental step for sustaining employee satisfaction and a balanced work environment. Leave management could be manual (paper-based) or electronic using software technologies. For organizations like Baylor College of Medicine Children's Foundation Malawi (BCM-FCM) with over 1200 employees located in six districts, an efficient leave management system is critical to ensure leave requests are systematically managed to maintain proficient health service delivery. We describe the BCM-CFM leave management system that makes leave requests and approval efficient.

Description: BCM-CFM uses a dual leave management system comprising of manual and electronic systems. The manual system is used at district level for employees whose workstations are the health centers they support. The electronic system is used by employees who are centrally located at the head office and at district level. Both systems are guided by the leave policy. The manual system supports 1,003 employees and is managed by a Human Resource personnel based at the district level whose tasks include collecting paper-based leave forms and sent to the central office for filing. The electronic system is managed through ARUTI (an electronic Human Resource management system) where a total of 279 employees has self-service accounts. Both systems strive to benefit the organization through centralized leave tracking, accessibility to employees, clear communication, integration with the HR system and availability of leave data.

Lessons Learned: BCM-CFM has been able to deploy a dual leave management system since 2022. The systems enable the organization to track leave data, observe trends in leave applications at different times of the year against the available number of employees to inform future operations, efficiently manage employee leave, maintain uninterrupted operations, plan for workforce availability, and enhance employee well-being and ensure compliance with the leave policy. The manual system is accessible offline and easy for employees to understand but is unable to track and report leave data in real time. The electronic system offers easy accessibility to employees and provides a direct link to the Human Resource management systems including payroll but requires stable internet connection.

Next Steps: A well-structured leave management system is key for managing employee well-being and organization operation efficiency. BCM-CFM dual system has provided leave data to inform operations and fully migrating a from dual system to an electronic system could be feasible with availability of stable internet connection and a brief training for employees. The organization will strive to improve the robustness of the system through training, implementation of leave policies and consolidation

of all leave-related processes into one centralized platform.

Abstract Type

Program Description

Abstract Thematic Category

Healthcare Technology and Innovation

66: A Localized Mentorship Approach to Enhance Infection Prevention and Control at Points of Entry in Western Uganda

Evaristo Ayebazibwe¹, Geofrey Baluku Kisunzu1¹, Michael Muhoozi¹, Celestin Bakanda¹, Daniel Eurien¹, Harriet Itiakorit¹, Arafat Bwambale², Philly Isingoma³, Rogers Kisame¹, Harriet Mayinja⁴, Peter J Elyanu¹

¹Baylor College of Medicine Children's Foundation, Kampala, Uganda. ²Kasese District Local Government Uganda2, Kampala, Uganda. ³Butema Health Center III, Hoima District Local Government Uganda, Hoima, Uganda. ⁴Ministry of Health, Kampala, Uganda

Abstract

Background: Infection prevention and control (IPC) measures are critical at points of entry (POEs) to prevent the spread of cross border infectious diseases. In Western Uganda, POEs are particularly vulnerable due to high cross-border movement and limited resources. Despite existing guidelines, IPC practices often fall short of national standards as per the Ministry of Health (MOH) scorecard. IPC mentorship is part of the Border Health security and Global Health Security programs implemented under Baylor Uganda with support from Center for Disease Control in 6 border districts in Western Uganda. We aimed to improve IPC scorecard compliance for each POE from 40.2% to 75% over 6 months using district-based mentorships.

Description: Through site assessments, priority areas for improvement were identified. Of the 11 indicators on the IPC scorecard, the worst performing indicators were identified (hand hygiene, IPC committee, personal protective equipment, isolation, and waste management) for interventions.

District Mentors were selected based on expertise in IPC. They were provided with training on IPC guidelines, mentorship techniques, and the use of the scorecard. They received essential IPC materials to support screening infrastructure for the poorly performing indicators. Mentors also received a stipend that included a daily allowance and transportation costs. They provided on-site support during two scheduled visits to each POE between January to June 2023.

Monitoring and Supervision included performance assessment and mentorship feedback. Performance

was measured by IPC scores and review of daily surveillance screening reports. Mentorship was measured through Mentorship Logs which reviewed baseline performance and corrective actions taken, as well as progress and challenges in executing corrective actions.

Lessons Learnt: Two mentors were trained for each POE. Average IPC scores increased from 40.2% to 72.8%. Individual indicator scores improved as follows: availability of personal protective equipment increased from 17% to 83%; hand hygiene from 37% to 79%; IPC committee from 29% to 61%; isolation from 34% to 71%; and waste management from 25% to 68%. One more POE initiated daily surveillance reports. Addressing challenges such as PPE shortages, resistance to change, data collection issues, and infrastructure limitations was crucial for our success. To sustain these improvements, we plan to integrate POE mentorship into district-based support supervision. Strategies that we can implement to improve our approach include instituting IPC communities of practice among POEs and sharing capacities with counterpart POEs (e.g., doing IPC simulation exercise).

Next Plans: By integrating QI Approach, mentorship, innovative interventions, and data-driven decision-making, we achieved high compliance with IPC standards. Resources that would be required to replicate this model in other regions include funding for training mentors, their daily stipends, and for the essential IPC supplies that they bring to each site.

Abstract Type

Program Description

Abstract Thematic Category

Education and Sustainability Initiatives

68: A Quality Improvement Project on Reducing Patient Waiting Times in a Resource-Constrained Clinic

<u>Florence Anabwani-Richter</u>, Sandile Dlamini, Makhosazana Dlamini

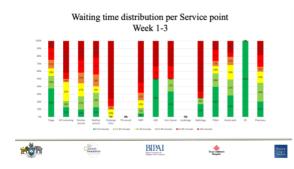
Baylor College of Medicine Children's Foundation, Eswatini, Mbabane, Swaziland

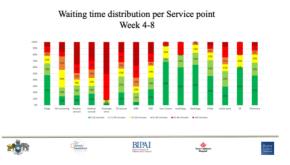
Abstract

Purpose: Patient waiting time longer than 120 minutes was highlighted as a barrier to accessing clinic services in the 2023 Baylor Foundation Eswatini Patient Satisfaction Survey. The clinic team initiated a quality improvement project aimed at reducing patient waiting times by 50% in a 12-month period. This project encompassed all processes in patient flow, including registration, triage, consultation, laboratory check-in and drug dispensing.

Methods: Over an 8-week period, data was collected on current patient waiting times, patient volume by service point, appointment lengths and other factors contributing to waiting times using the REDCap Patient Waiting Time Tracker. Practical and theoretical training for all EMRx users was conducted, and staff utilized two parallel systems (EMRx and REDCap) for real-time documentation. Data collection was aimed at identifying bottlenecks and causes of prolonged waiting times. Mean waiting time at each service point was calculated as the total waiting time for all patients waiting to be serviced at that particular service point, divided by the number of patients waiting for services at the service point. Weekly trend comparisons of the mean waiting time was done to detect an improvement (reduction) in waiting time or lack thereof. Furthermore, waiting time in each service point was subdivided into 10 minutes waiting time categories and proportions of patients in each category were calculated to compare the proportions of patients in each waiting time category. The analysis of the collected data was guided by the Plan-Do-Study-Act (PDSA) model, which allowed for continuous monitoring and iterative adjustments until the desired improvements were achieved.

Results: The results of this project demonstrated a reduction in patient waiting times, with fewer patients waiting longer than 60 minutes across all service stations over 8-weeks, despite staff constraints. This reduction in waiting times contributed to an increase in access to service points. However, the project faced several challenges, including challenges in synchronizing times across all work computers with the server and the time-consuming nature of double documentation in EMRx and REDCap. Other limitations were staff constraints, power outages, patients skipping the triage stations, REDCap database downtime, internet connectivity disruptions, missing departments in the EMRx patient flow, and missing departmental indicators. To address these challenges, several remedial actions were implemented, such as hiring more clinical staff, daily staff reminders, monitoring the backup generator on-site, mandating triage as the first step in clinic flow, adding missing departments to the patient flow in EMRx, and obtaining daily feedback.





Discussion: Based on these findings, the project team recommended integrating patient waiting time indicators into the EMRx system to streamline documentation and improve synchronization across systems. This integration is expected to sustain the improvements achieved and further enhance patient satisfaction by maintaining reduced waiting times in the long term.

Abstract Type
Quality Improvement

Abstract Thematic Category
Quality Improvement Initiatives

116: Using Echo-Zoom Technology to Improve HIV Recency Testing at 99 Health Facilities in Eastern Uganda.

Richard Kyakuwa Jiuuko^{1,2}, Rhona Barusya², Nathan Okiror², Sam Ebiot², Boaz Mutakangarana², Eddy Okwir², Rogers Ssebunya¹, Winnie Akobye², Alexander Mugume², Dithan Kiragga¹

¹Baylor, Kampala, Uganda. ²Baylor LPHSE, Mbale, Uganda

Abstract

Purpose: Uganda's Ministry of Health recommends recency HIV testing for all newly diagnosed HIV-positive individuals above 15 years of age. In Jan-Mar 2023, 63% of newly identified HIV-positive persons above 15 years in Eastern Uganda received a recency test as opposed to the expected 100%. This suboptimal performance was associated with facilities having no recency focal persons, poor client flow to recency testing points, knowledge gap on the use of the community recency testing protocol, shortages of consent forms, and occasional stockouts of the recency test kits.

Baylor Uganda set out to use Echo-Zoom technology to facilitate a continuous quality improvement (CQI) collaborative learning among 99 supported health facilities in the Eastern Uganda to increase the percentage of newly diagnosed HIV-positive clients above 15 years testing for HIV recency from 63% to a minimum of 87% by FY24 Q2.

Methods: A CQI learning collaborative for recency was established between March 2023 to March 2024 targeting 99 recency-trained facilities. Through Zoom technology, the leadership of the districts and facilities were oriented on the support indicators. District-based CQI coaches were identified, oriented, and offered coaching bags to support monthly coaching at facilities alongside the program technical officers. Data from the coaching was collected using the CQI documentation journals and validated with the data submitted into the DHIS2. At the facility level, work improvement teams for recency were formed, and focal persons were identified and given clear roles and responsibilities. Linkages and referral assistants supported the physical escort of newly identified clients to the testing point, on-site coaching on using the community recency SOP and pre-packaging recency kits in the community testing packs and supporting weekly stock analysis to avoid stockouts of recency kits were additional activities supported by the facilities.

To enable cross-learning across facilities, a slide deck to guide site-specific presentations was developed, and a schedule for when site-specific presentations were made was shared with the facility teams. Baylor Uganda supported a Zoom link to facilitate biweekly presentations and discussions on the progress of recency testing, innovations, and challenges. Network coverage to some facilities and other competing activities were the biggest limitation of the intervention.

Results: Recency testing among newly diagnosed HIV-positive persons improved from 63% as of FY 23 Q2 to 87% by FY24 Q2.

Discussions: Leveraging Echo-Zoom technology provides an opportunity for cross-learning that is peer-driven support fosters timely interventions. There is a need to scale up these innovations to cover 100% of the facilities and support targeted mentorships for recency.

Abstract Type
Quality Improvement

Abstract Thematic Category

Quality Improvement Initiatives

131: Caregivers' and Clients' Satisfaction About Healthcare Services Provided at Baylor Center of Excellence (COE) Clinic in Lilongwe-Malawi

<u>Louis Kaluso Nyasulu</u>, Joseph Mhango, Mirriam Masambuka

Baylor College of Medicine Children's Foundation, Lilongwe, Malawi

Abstract

Background: Baylor Malawi's mission is to improve the health and lives of children and families through high-quality, high impact, high ethical, state-of-theart comprehensive care and treatment, training of health professionals and clinical research. Baylor conducts regular caregivers' and clients' satisfaction surveys in order to get feedback from clients which would be used to improve clients' experience and quality of care. In 2023, Baylor conducted caregivers' and clients' satisfaction survey in orders to assess caregivers' and clients' satisfaction level about the health care services provided at the COE. This abstract aims to present results of the study and lessons learnt.

Description of Study Methodology: This was a cross-sectional study which was done in 2023 at Baylor COE. A questionnaire with both closed and open-ended questions was administered to 437 study participants (220 clients and 217 caregivers). Descriptive analysis was used to determine proportions of clients or caregivers holding a particular perception and point estimates. Thematic analysis was used to analyze perceptions of clients and caregivers. The analysis was based on the section of the questionnaire that addressed the satisfaction of the services.

Results and Lessons Learnt: The study involved 316 (72.3%) females and 121 (27.7%) males. Ninety-seven percent of the participants had been coming to clinic for at least one year. Clinic hours were not convenient to 6% of the respondents and always convenient to 65% of the respondents. The location of the clinic was convenient to 93.9% of the respondents. Mode of transport to clinic: 76% used minibuses, 6% used personal cars, 11% walked. Thirty-two percent of the respondents reported that it took over 2 hours for them to be seen by the doctor. It took less than 30 minutes for 90% of the respondents to get medication after meeting the doctor. Almost all respondents (99%) reported that the procedure for taking medication was explained to them. Almost all respondents (99.5%) reported that they would recommend Baylor clinic to others. Charts below show results of perceived level of clarity of explanation of service provider regarding child's medical condition and their courtesy.

Figure 1. Perceived clarity of providers' explanation

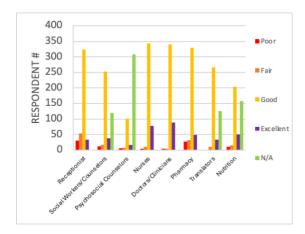
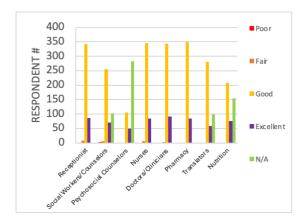


Figure 2. Perceived courtesy of service providers



Conclusion: We found that majority of clients and caregivers (99.5%) were satisfied with the quality of healthcare services provided at Baylor Malawi COE clinic, location of the clinic, and clinic opening and closing hours. Almost all respondents would recommend Baylor to others. However, caregivers and clients were dissatisfied with the amount of time taken to be seen by the doctor from the time of arrival. The study proposes a quality improvement (QI) project to find out reasons for long waiting time and provide corrective measures.

Abstract Type

Program Description

Abstract Thematic Category

Beyond the Status Quo: Innovations for Integrated Care

145: Transformation of Pediatric HIV Clinic in the Context of Botswana's National Elimination of Mother-to-Child Transmission (MTCT) of HIV

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Abstract

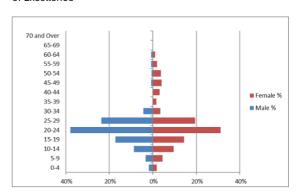
Introduction: According to Ministry of Health data, Botswana has achieved a remarkable milestone by reducing the mother-to-child transmission (MTCT) rate of HIV to less than 1%. As the MTCT rates decrease, the demographic landscape of paediatric HIV clinics is changing, necessitating a re-evaluation of clinic operations and patient management strategies.

The aim of this study is to analyse the age distribution of patients at Botswana-Baylor Children's Clinical Centre of Excellence (BBCCCOE) to understand the shifting demographics and propose transformative strategies that would align with the current healthcare needs in the context of national elimination of MTCT.

Methods: A cross-sectional analysis of the age distribution of patients attending BBCCCOE was carried out. The data was visually represented using a population pyramid to identify age-specific trends.

Results: The age distribution analysis revealed a significant skew towards older children and adolescents, with the majority of patients aged between 15-29 years. Notably, there was a marked decrease in the younger age groups (0-9 years), reflecting the success of the MTCT elimination program. Males constituted a larger proportion of patients in the 20-24 and 25-29 age groups, suggesting potential gender-specific healthcare needs

Figure 1. Age and Gender Distribution of Pediatric HIV Patients at the Botswana-Baylor Children's Clinical Center of Excellence



Conclusion: The demographic shift towards older children, adolescents and young adults at BBCCCOE highlight the need for tailored healthcare services that address the unique challenges of these newer age groups. This would include an increased emphasis on adolescent and young adult health services, mental health support, and sexual and reproductive health education.

The decrease in younger patients underscores the success of Botswana's MTCT elimination efforts, indicating a potential need for reallocation of

resources towards long-term management strategies for adolescents and young adults living with HIV. Furthermore, adding a family or internal medicine physician to BBCCCOE clinic team may aid in the implementation of comprehensive care, ensuring continuity and a holistic approach to the emerging adult demographic.

Abstract Type Scientific Research

Abstract Thematic Category

Healthcare Technology and Innovation

162: Monitoring Viral Suppression among Patients that Transferred Out from Botswana-Baylor Children's Clinical Centre of Excellence (BBCCCOE)

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Abstract

Introduction: Viral suppression (<200 copies/ml) is a key indicator in the management of HIV due to its role reducing HIV transmission rates and improving patient well-being. BBCCCOE has widely been regarded as the lead organization that manages children, adolescents, and young adults living with HIV and while viral suppression rates at the centre is 91%, higher than the national average of 76%. However, viral loads of clients after transferring out has, so far, not been assessed.

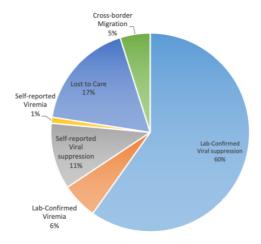
This study aimed to assess viral suppression among patients who transitioned out of BBCCCOE between 2021 and 2022.

Methods: A comprehensive list of all patients who transferred out from BBCCCOE between the years 2021 and 2022 was retrieved and the most recent viral load was recorded using the National Integrated Patient Management System (IPMS). Missing viral load results were followed up with via telephone. Those who were unreachable by telephone were classified as lost to care.

Results: A total of 102 patients transferred out from BBCCCOE between 2021 and 2022. The majority of patients (N=61, 59.8%) achieved lab-confirmed viral suppression with a smaller number with viremia of more than 200 copies/ml (N=6, approximately 6%).

An additional 11 (N=11, approximately 11%) self-reported viral suppression and only 1 (N=1, approximately 1%) self-reported viremia. 18 clients (N=18, 17.6%) who were lost to care and 5 (N=5, 4.9%) had relocated across borders.

Figure 1. Viral Suppression Statuses Among Patients Transferred Out from BBCCCOE (2021-2022)



Conclusion: The results seem to point out that the combined rate of lab-confirmed and self-reported viral suppression was approximately 70.6% (N=72) now below national average. This falls short of the UNAIDS 2025 target of 95% viral suppression rate. Furthermore, the reliability of self-reported viral suppression is somewhat debatable.

The 17.6% (N=18) who were lost to care and the 4.9% (N=5) who engaged in cross-border migration (N=5, 4.9%) also raised a concern in the continuity of care and treatment.

The results appear to highlight the importance of strengthening patient referral systems (at National and regional levels) to improve the continuity and retention to care.

Although Botswana has surpassed the UNAIDS targets as a national cohort, the challenges identified here advocate that ongoing vigilance, disaggregation of data by age groups and more research are necessary to help achieve better patient outcomes and successfully adapt to the evolving needs.

Abstract Type
Scientific Research

Abstract Thematic Category

Differentiated Service Delivery: Patient-Centric Service Delivery Models

Notes





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