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COUNTRY CASE STUDY - HIV IN EMERGENCY CONTEXTS: ACCESSING HIV SERVICES DURING FLOODING IN MALAWI

INTRODUCTION

The rains came in January 2015, as they usually do in the southern part of Malawi, but this time was more severe. Sudden, heavy rainfall caused flooding, affecting more than half a million people. Due to the widespread impact of the floods, the President of Malawi declared a State of Disaster in 15 of Malawi's 28 districts. Given the high number of people living with HIV in this region, the floods had the potential to interrupt access to treatment, care, and support services. UNICEF supported the government's rapid response and mobilized funds,

resources, and partners to deliver health, nutrition and HIV services to affected areas.

Lessons gathered from this experience will inform future HIV programming and may provide insight for other countries affected by similar crises, particularly as the effects of climate change become more pronounced and impact the health and well-being of children. As shown in Malawi, having adaptable programmes and preparing in advance are crucial to a robust humanitarian response and to mitigating disruptions in the delivery of health services during an emergency.

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HIV EPIDEMIC AND HEALTH LANDSCAPE IN MALAWI

Malawi faces the challenges of a serious generalized HIV epidemic, Approximately 1 million Malawians are living with HIV, of whom 130,000 are children.ⁱ AIDS accounts for 12% of deaths among children under the age of five.ⁱⁱ HIV prevalence broadly reflects population density, with the highest prevalence rates in the most populated Southern region (15%), where the flooding was most severe compared to the Central (8%) and Northern (7%) regions.ⁱⁱⁱ

In recent years, despite having one of the most severe health worker shortages in the world,^{iv} Malawi has made considerable progress in tackling the epidemic. The number of new annual HIV infections has decreased from 89,000 in 2004 to 42,000 in 2014.^v There are 83,000 adolescents living with HIV in Malawi, representing 8% of the total population living with HIV.^{vi} 43% of adolescents¹ have comprehensive knowledge of HIV and nearly one-third have been tested for HIV.^{vii} Estimated antiretroviral treatment (ART) coverage among people in need of treatment is 67% of adults² and 30% of children (0-14).³ In addition, 64% of HIV infected pregnant and breastfeeding women are on life-long ART;^{ix} the success of this approach, testing and treating HIV-positive pregnant and breastfeeding women for life (known as Option B+), has resulted in a reduction of mother to child transmission rates (at 6 weeks of age) from 14% in 2009 to 7% by 2014.^x

The Case for Risk-Informed Programming

Proactive planning and flexible programming in the face of predictable, yet severe flooding ensured that pregnant women and children living with HIV continued to access HIV services. Data for the three most flood-affected districts from the first quarter of 2015,⁴ showed little difference in the uptake of HIV testing and counselling (HTC) while some key indicators, such as access to family planning among new users, increased in two of the districts. Although ART

IMPACT OF THE FLOODS

At the time of the State of Disaster declaration, there were:

- **638,000** people affected countrywide
- **174,000** people displaced in the 3 most flood-affected districts
- An estimated **52,137** people living with HIV in need of ART, including **9,215** pregnant women and **842** children residing in the 3 most flood-affected districts
- **79** confirmed deaths attributed to the flooding
- **64,000** hectares of farmland lost to flooding
- An unknown number of people were stranded in locations accessible only by boat or helicopter
- **153** people missing
- **106** emergency-related deaths
- Cholera increased, with **504** cases and **7** deaths

initiation decreased, as is expected during an emergency, the effective response helped to mitigate the deleterious effects of the flooding on access to critical HIV services.

¹ aged 15-19 years

² aged above 15 years

³ These data are not available for adolescents

⁴ Based on quarterly supervision visits to Nsanje, Chikwawa, Phalombe, and Zomba districts

RESULTS

- Antenatal care (ANC) initiation was not disrupted, despite concerns regarding user fees.
- HTC and sexual transmitted infection (STI) Screening increased in Nsanje and Chikwawa districts.⁵
- Retention in care among pregnant women living with HIV remained static in Chikwawa and Phalombe districts. However, compared to previous quarters, retention declined in Nsanje, the district most affected by the floods.
- Follow-up of HIV-exposed children did not differ significantly pre- and post-flooding
- Treatment drop-outs among pregnant women living with HIV showed no increase in Chikwawa and Phalombe districts, although the number of pregnant women with HIV who did not return to clinics for treatment spiked in Nsanje district during the flood period.
- Family planning uptake increased among new users, possibly due to the outreach efforts. In the 4 districts supported by a UNICEF partner, just over half of clients were new contraceptive users.
- Education on HIV prevention, care and treatment reached 153,298 displaced persons, including adolescents, in the three most affected districts, exceeding the target of 100,000.

⁵ Given the emphasis placed on outreach services, it is possible that these services were able to meet unmet demand by the displaced population as well as neighbouring communities.

LESSONS LEARNED: ADAPTATIONS FOR SUCCESS

Malawi's agility in response to the flooding was due to features embedded in the HIV programme and increased investment in **risk-informed planning**. This primarily meant relying on existing systems and making small adjustments to accommodate the requirements of an emergency situation. Specifically, it entailed:

- prioritizing resources and services that could feasibly and rapidly be deployed;
- community outreach to people displaced by the floods;
- integrated coordination and programming;
- advance forecasting and procurement of buffer stocks prior to the rainy season; and
- focusing on the most vulnerable.

In turn, some of the innovative approaches called for during the emergency could be incorporated to improve routine health and development programming once the emergency subsides.

Know your Programme and Prioritize the Response

In the three most flood-affected districts of Chikwawa, Nsanje, and Phalombe there were an estimated 52,137 people living with HIV in need of ART, including 9,215 pregnant women and 842 children.^{xi} Having epidemiological and programme data at the local level was key to defining priorities and providing outreach to people on treatment. Ensuring that people already on ART continued to access their medication was the first priority because treatment interruption can lead to new infections and drug resistance. The second priority was to continue to provide HTC and enrol new patients (those who tested positive) into care and treatment.

Mobile Services for People Forced to Move

Non-governmental (NGO) partners focused on providing HIV-related information for displaced people living in camps⁶ through counselling and edutainment,⁷ and linked with the district health facilities to provide HIV testing and counselling, family planning, STI screening and treatment and condoms. At the same time, UNICEF supported the district health teams to establish mobile clinics to provide health and nutrition services, which are typically only used in Malawi during health campaigns or emergency situations. Providing essential care closer to the displaced population was a critical part of the response.

Mobile clinics were primarily staffed by Health Surveillance Assistants (HSAs) and community health workers (CHWs) who provided a wide range of health services at the camps, including HTC, ART, malaria, nutrition, and maternal, new-born, and child health (MNCH) services. Having a cadre of both health staff and CHWs trained in HIV to conduct community outreach and provide community-based services was integral to the effectiveness of the response. As a result, this model already in place prior to the floods was easily adaptable and transferrable to an emergency context - ANC services within the camps included HTC and ART initiation for pregnant women who tested positive and nevirapine prophylaxis for HIV-exposed infants. Pregnant women were referred to the nearest health facility for labour and delivery. As most camps were located near health facilities, the rates of skilled birth attendance were unaffected. Given concerns about confidentiality and stigma, UNICEF provided smaller tents where clients could receive a range of services in privacy.

Adults identified as HIV-positive were enrolled in pre-ART and referred to the nearest health facility for CD4 screening, or initiated on ART using WHO clinical staging.⁸ Most people already on treatment had lost their health cards when they escaped the

floods. Although they verbally shared their HIV status and ARV regimen with the healthcare worker, they were given confirmatory HIV tests to avoid misdiagnosis of ARVs.

Mobile clinics and outreach services became even more vital as user fees are implemented by some non-profit, private health facilities. Displaced pregnant women reported being asked to pay for health care when national policy mandates that ANC is free of charge.⁹ Efforts to resolve the issue during the flood were not successful.

Build on what you have, Build on your strengths

The Ministry of Health (MoH) relied on the strength of the existing, decentralized HIV management information system to facilitate monitoring response efforts. Facility level data on the number of people on treatment was immediately available when the flooding started. Obtaining data on the number of people living with HIV who were affected by the floods and measuring access to services was more challenging. To assist data collection, UNICEF and the District Health Offices (DHOs) put in place mobile clinic activity reporting forms (see Annex 1) to monitor service delivery. Temporary registers were improvised from notebooks to record the number of people receiving ARVs at health facilities and mobile clinics until permanent registers could be obtained from the central warehouse.

⁶ The term camps is used loosely. This could describe a group of 5-50 families who pitched tents in a town or near commercial centres, or the more typical camp with rows of tents and a camp manager.

⁷ Entertainment (such as through games, films, or shows) that is designed to convey specific educational messages.

⁸ Adults are female, non-pregnant and breastfeeding women and males above 5 years old. Children less than 5 years old did not receive CD4 screening or WHO staging, but required universal treatment.

⁹ The Church Hospital Association of Malawi (CHAM) operates a network of health facilities throughout rural areas. CHAM and the Government of Malawi have an agreement whereby certain services, such as maternal/child health are offered for free at CHAM facilities, with reimbursement by the government. However, problems with reimbursement have led some CHAM facilities to implement user fees. Addressing this issue is part of the broader health sector reform underway, along with providing universal health coverage.



Malawi's health passports are an important mechanism for following pregnant women and children. However, many displaced persons lost their health passports during the floods and were subsequently denied health services. UNICEF advocated with the DHOs, who in turn delivered a strong message to HSAs and facilities to continue to provide services. UNICEF also printed thousands of health passports specifically for women and children, preventing the passports from becoming a scarce, marketable product and removing them as a barrier to services.

Emergencies bring opportunities for doing things better

Integrated service delivery, a necessity during the emergency, underscored the potential benefits of such integration for general HIV programming. During the flood, integrated coordination and programming was critical to reduce costs and provide comprehensive support to displaced people. UNICEF's Health, Nutrition and HIV sections provided joint financial support to district health officers, HSAs and NGOs, supporting the

delivery of an integrated package of services at health facilities and in the camps and nearby communities. Given the relatively low coverage of early infant diagnosis through PCR testing in the first year of life, it is imperative to identify opportunities for assessing children's exposure to HIV. UNICEF has been supporting the integration of HIV and Nutrition as an important way to optimize both treatment for malnutrition and increase HIV diagnosis. Generally, children with moderate and severe acute malnutrition with no complications are routinely tested for HIV by HSAs and, if HIV positive, started on ART. As malnutrition typically presents itself after children cease exclusive breastfeeding, rapid HIV tests are used. During the emergency, there was a spike in mortality at nutrition rehabilitation units (NRUs), particularly among HIV-infected children. Between January and June 2015, in the three most flood-affected districts, a total of 757 children were admitted to the NRUs, with complicated cases of Severe Acute Malnutrition. Seventy-seven per cent of admissions were tested; 26 per cent (151) were HIV positive. Sixty-one per cent (92 of 151) HIV-positive children tested for HIV in the NRUs were initiated on ART.

Special Focus on Adolescents

Adolescents comprise 24% of Malawi's population,^{xii} and their vulnerability is heightened during emergencies. Factors that negatively affect them in non-disaster times become more amplified. As a result, adolescents may be at elevated risk of acquiring HIV, as disruptions in their routine and living conditions may make them more susceptible to engaging in high-risk behaviours or stopping treatment, if HIV-positive. For example, girls living in vulnerable situations, perhaps without parents,¹⁰ may turn to transactional sex for money or food.

UNICEF's response immediately focused on meeting the needs of adolescents, and adolescent girls, in particular. Dialogue sessions for adolescents on sexual and reproductive health were offered outside of school hours—in the late afternoon or early evening—to ensure participation. As a preventive measure, UNICEF's NGO partner, Youth Net and Counselling, aired radio messages encouraging girls to call their national toll-free hotline for counselling on avoiding unprotected and/or transactional sex. Theatre/edutainment and counselling sessions with adolescents were used to provide information on a range of topics, including sexual violence, accessing HIV and sexual and reproductive health (SRH) services, the importance of ARV adherence, and condom use. Adolescent condom distribution agents were trained and supported to provide peer education and distribute condoms. In addition to communication and counselling interventions, UNICEF constructed gender-sensitive water and sanitation facilities to reduce the vulnerability of adolescent girls.

Baylor, another UNICEF partner, provided targeted support to adolescents living with HIV. Through existing Teen Club lists, adolescents on HIV treatment were located and their situation after the flooding was assessed. Field officers followed up to trace them through word of mouth, physically, or by mobile phone to ensure that they did not default from treatment and to remind them to go to clinics.

Leadership and Coordination: Working through the cluster system

At the onset of the floods, UNICEF quickly worked with national and district officials to identify gaps in service delivery. The Cluster system¹¹ was activated to ensure effective coordination and implementation of the response. An HIV sub-cluster of the Health Cluster was established to ensure a comprehensive and appropriate HIV response.

At the same time, UNICEF established a Situation Centre to collect real-time information and produce daily and later weekly Situation Reports. Local and international NGOs were given emergency partnership agreements, with a turnaround time of 3 days. Partners engaged in regular HIV programming were supported to ensure continuation of prioritized interventions in the affected areas.

Within one week, field offices operated by UNICEF staff were established, enabling staff to be close to the centre of the emergency and better positioned to reach affected populations. Field office staff also supported the District Clusters and provided daily reports to the UNICEF Situation Centre.

Preparedness and safe storage of supplies

Adequate planning and procurement **prior to** the rainy season was a key factor in ensuring that drugs and supplies were readily available when the flood hit. First, a schedule for drug deliveries was approved in December 2014, prior to the rainy season.

¹⁰ It was reported that parents went back and forth to villages leaving their children in camps where they were assured to have housing and food.

¹¹ The **cluster approach** aims to improve the predictability, timeliness, and effectiveness of humanitarian response, and pave the way for recovery. Clusters are groups of humanitarian organizations, both UN and non-UN, in each of the main sectors of humanitarian action, e.g. water, health and logistics. They are designated by the Inter-Agency Standing Committee (IASC) and have clear responsibilities for coordination. (<https://www.humanitarian-response.info/en/coordination/clusters/what-cluster-approach>)



As a result, all health facilities had adequate stock levels at the start of the emergency. Second, as part of the coordination response, an HIV supplies and logistics officer from the MoH participated in the assessment visits, given that stock-outs of ARVs are common in emergency situations. The MoH representative ensured that continuity of treatment was forefront in the minds of all partners responding to the crisis.

In Malawi, ART and HIV-related commodities are stored at health facilities, rather than at a district or central warehouse. Decentralized distribution and storage meant that flooded roads did not impact the distribution of ARVs because drugs were already on hand at the health facilities. This helped to ensure continuity and accessibility of services. However, precautions were not always taken to ensure waterproof storage. For example, one clinic was destroyed in the flooding and others were damaged because of heavy rainfall. The U.S. Government is currently assisting the MoH to put in place secure storage units in facilities.

Capitalizing on effective communication channels previously in place also helped to prevent stock-outs. Flood-affected districts used the MoH-operated toll-free supply hotline for HIV commodities to report stock damages and request additional stocks. Stocks were then delivered from the national stores to the districts to replace damaged stocks and ensure sufficient supplies. Similarly, communication between partners working in the camps and UNICEF field staff resulted in condoms being available.

Most areas affected by the flooding could only be accessed by 4x4 vehicles and some were completely inaccessible by road. The World Food Programme (WFP) coordinated helicopter drop-offs of food and supplies to these areas. Healthcare workers were also affected; many lost their homes during the flooding and were themselves displaced. Although only one clinic was completely destroyed as a result of the floods, other clinics were affected by a lack of human resources. In these cases, UNICEF supported the deployment of healthcare workers from non-affected areas to provide mobile services at the camps.

POST-DISASTER/ EARLY RECOVERY

Bringing people back into treatment

Since data from the first quarter of 2015 showed a decline in retention in Nsanje district, UNICEF supported the DHO to reach out to people who did not return for their ARVs or scheduled visits to the clinic. Health care workers reviewed the treatment registers and identified 206 people who had missed appointments. HSAs went into the communities to visit people who stopped attending the health facility to reengage them in care. Of those reported as lost to follow-up, 53% were brought back into treatment. A total of 49 people were not found as they resided in Mozambique (Nsanje borders Mozambique and Mozambicans frequently cross the border to receive health services).

Assess Your Response: Learning from Adolescents

In an effort to improve planning for future crises, UNICEF supported an NGO partner, Pakachere, to better understand the experience of adolescents during an emergency and in post-disaster/early

recovery period. A qualitative assessment was conducted through focus group discussions (FGDs) with 160 adolescents in four districts (Nsanje, Chikwawa, Phalombe, Zomba). Males and females participated in separate FGDs, according to age (10 – 14 years and 15 – 19 years). The findings indicated a number of challenges, including lack of clothing or supplies to go to school during the emergency period, difficulties in managing menstrual hygiene, and being denied access to government HIV and health services.^{xiii}

Both males and females in the four districts reported that girls engaged in transactional sex in exchange for money, food, soap and other items. Some of the men involved in exploitation included camp managers and community leaders who were responsible for the distribution of relief items. Upon receipt of the report, UNICEF immediately informed the National Protection Cluster and activated a response plan that: i) shared the study results with district and local leadership; ii) offered support to affected adolescents, including referrals to Victim-Friendly Support Units; and iii) informed the wider humanitarian community to ensure that all current and future humanitarian assistance considers distribution mechanisms that do not expose girls and women to sexual exploitation and abuse. Subsequently, control mechanisms were put into place.



LESSONS LEARNED AND RECOMMENDATIONS:

Risk-Informed Programming Enables an Effective Emergency Response

- 1) **Government leadership and coordination** is critical to ensure an integrated and effective response. In districts where UNICEF had worked with District Youth Officers and HIV Coordinators, the response was more coherent and harmonized.
- 2) **Distribute supplies in advance** of the rainy season and ensure current inventory is up to date to reduce waste and procurement of excess drugs and supplies.
- 3) **Develop tools**, such as assessment and reporting forms, which can be used during an emergency, **before** the crisis occurs.
- 4) **A strong community health cadre** made it easier to deploy community health workers from the facilities to communities.¹¹ Having a flexible HRH structure was crucial to rapidly setting up mobile clinics and providing outreach services.
- 5) **Mutual learning can improve BOTH humanitarian responses and development programming.**
Emergency responses require innovations that can be incorporated into routine service delivery, also known as Risk Informed Programming. For example, integrating and expanding testing for children was reinforced during the floods and underscored missed opportunities in the routine and treatment cascade for infants and children.
- 6) Ensuring the emergency response is **sensitive to the needs of vulnerable populations**, such as adolescents and women, is critical to prevent abuse related to either the crisis or the response.
- 7) **Go back** to the affected populations. Was the assistance provided what they needed? How is their current situation? Lessons learned from the emergency can often be incorporated into regular programming.

¹¹ Due to severe health worker shortage in Malawi, community health workers are based in health facilities (not communities) to fill the gap in human resources for health.

CONCLUSION

January 2016: Rather than flooding, Malawi is experiencing a widespread drought and a food insecurity crisis; an estimated 2.8 million people require food assistance. The current crisis is compounded by poor economic growth and broader development challenges. UNICEF is drawing upon the lessons learned during the flooding and post-recovery period, particularly the increased vulnerability of adolescent girls, to implement multi-sectoral interventions based on integrated approaches. Interventions are largely based on existing risk-informed programmatic work

with revised targeting to focus on communities hardest hit. Targets are continuously verified to ensure transparency and accountability to communities.

Malawi will continue to experience crises that exacerbate the risk of HIV infection and treatment interruption. As a humanitarian and development partner, UNICEF recognizes its responsibility to mitigate the effects of these crises and remains committed to ensuring that the rights of women and children are realized, regardless of the circumstances.



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ANNEX 1: MOBILE CLINIC REPORTING FORM (SAMPLE)

MOBILE CLINICS ACTIVITY REPORTING FORM					
	Date of mobile clinic	27-Feb	27-Feb	2-Mar	2-Mar
	Name of camps visited	Mitole	Ngundu	Namachete	Namandwa
1	Population at the camp	69	157	625	196
2	Under five population	22	92	93	46
3	# of OPD attendance	56	84	172	130
4	# of 0-23 months children immunized	0	10	3	23
5	# of children 6-59 months screened with MUAC	17	35	93	107
6	# of children 6-59 months with SAM referred to OTP	0	4	12	1
7	# of children 6-59 months with MAM referred to SFP	4	2	1	9
8	# referred to HC	1	2	0	10
9	# of HIV/AIDs screened	0	0	0	0
10	# of ART distributed	0	0	0	0
11	# of ANC conducted	1	3	17	6
12	# of FP materials distributed	0	0	0	0
13	# of Malaria rapid testing conducted	0/S	0	31	0
14	# of Malaria positive cases	0	0	16	0
15	# of Health promotion conducted (disaggregated by methods)	52	2	2	2
16	# Family planning clients	0	4	14	9
17	# of Diarrhea cases	4	15	6	16

ENDNOTES

ⁱ UNAIDS, UNICEF, WHO, 2015 Global AIDS Response Progress Reporting; and UNAIDS 2014 HIV and AIDS Estimates, July 2015.

ⁱⁱ World Health Statistics 2015 http://www.who.int/gho/publications/world_health_statistics/EN_WHS2015_Part2.pdf?ua=1

ⁱⁱⁱ UNAIDS, MoH, NAC, Modes of Transmission Study 2012

^{iv} World Health Statistics 2015 http://www.who.int/gho/publications/world_health_statistics/EN_WHS2015_Part2.pdf?ua=1

^v UNAIDS, UNICEF, WHO, 2015 Global AIDS Response Progress Reporting; and UNAIDS 2014 HIV and AIDS Estimates, July 2015.

^{vi} Ibid.

^{vii} Ibid.

^{viii} Ibid.

^{ix} Ibid.

^x Ibid.

^{xi} Ministry of Health, Quarter 1 2015, Integrated HIV Program Report.

^{xii} United Nations Population Division (UNPD), 2014 World Population Projections, September 2014

^{xiii} Pakachere Institute and UNICEF. Assessment of the State of Adolescents and their Needs Post-Disaster. A programme assessment in 4 districts of Malawi: Nsanje, Chikwawa, Zomba & Phalombe. 2016.