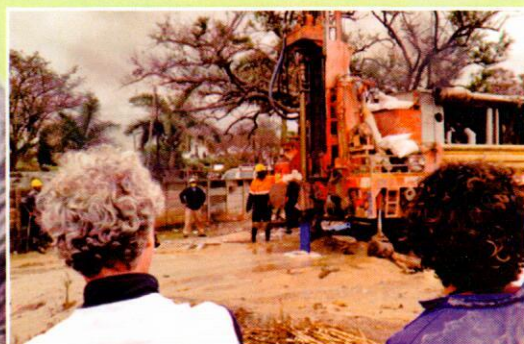


MEDECINS SANS FRONTIERES (MSF) REGIONAL SCIENTIFIC DAY

Harare, 25th October 2022



Agenda,

Speakers

and Abstracts

2022





# Agenda

Harare, 25th October 2022

All times in Central African Time

Director of Ceremony: Brian Hove

- 8.00 – 9.00 **Registration + Morning tea + music**
- 9.00 – 9.10 **Welcome Remarks – MSF Country Representative, Mrs. Abi Kebra Belaye**
- 9.10 – 9.25 **Keynote address – Ministry of Health and Child CARE, Group Captain, Dr. Munyaradzi Dobbie, Chief Director Public Health**

## SESSION 1: Facilitator – Dr. Chido Dziva

### Youth & Adolescents | 9.25 – 10.20

- 9.25 – 9.40 Fernando Chenene & Lucy Ramirez, Cuamm, Mozambique: *An outreach intervention against loss to follow-up (LTFU) among HIV-positive adolescent and youths: data from Mozambique*
- 9.40 – 9.55 Jihane Ben Farhat, Epicentre, France: *Young people living with HIV are the most at risk of being undiagnosed and virally unsuppressed in Sub-saharan Africa*
- 9.55 – 10.10 Jean- François Veran, MSF BRAMU: *Unveiling Contraceptive Knowledge, Perception and Practice among Adolescents in Mbare: A Community Based Study*
- 10.10 – 10.20 Questions & Answers
- Musical Interlude
- 10.20 – 10.35 Tea break

## SESSION 2: Facilitator – Dr. James Smith

### Population on the move | 10.35 – 11.20

- 10.35 – 10.50 Ouanekpone Koina Stella Elodie, MSF, CAR: *Adherence to two HIV programs in a conflict-affected setting: lessons learnt from CAR*
- 10.50 – 11.05 Kefilwe Kempe, MSF, South Africa: *Utilisation of digital health promotion tools for social work service promotion for undocumented migrants in Tshwane, South Africa*
- 11.05 – 11.20 Questions & Answers
- Musical Interlude

## SESSION 3: Facilitator – Dr. D. Tobaiwa

### Bridging the gap in Human resources for health | 11.20 – 12.25

- 11.20 – 11.35 Dr Charles Tolno, MSF, Guinea: *Mixed-methods study of differences in the model and effect of community health programs supported by different actors, Guinea, 2021*
- 11.35 – 11.50 Mounia Amrani, MSF, South Africa: *The Covid-19 Nurse Aide Programme in Southern Africa; A strategy to improve the provision of basic patient care on COVID-19 wards*
- 11.50 – 12.15 Panel discussion
- 12.15 – 12.25 Questions & Answers
- 12.25 – 12.30 Musical interlude

## SESSION 4: Facilitator – Engineer Douglas Chari

### Environmental Health | 12.30 – 12.55

- 12.30 – 12.45 Ignations Takavada, MSF, Zimbabwe: *An assessment on the effectiveness of the sanitary seal in protecting boreholes from contamination: A case of Mbare Suburb, Harare*
- 12.45 – 12.55 Questions & Answers
- Musical Interlude

- 12.55 – 13.00 **Closing Remarks: Petros Isaakidis**
- 13.00 – 13.30 **Networking and exhibition + Music**
- 13.30 **Lunch**



## An outreach intervention against loss to follow-up among HIV-positive adolescents and youths: data from Mozambique

F. Di Gennaro<sup>1,2</sup>, C. Marotta<sup>1</sup>, L. Ramirez<sup>1</sup>, H. Cardoso<sup>1</sup>, A. Chivite<sup>1</sup>, V. Cinturao<sup>1</sup>, D.F. Bavaro<sup>2</sup>, C.M. Dezi<sup>3</sup>, M. Lazzari<sup>1</sup>, T. Mireille<sup>3</sup>, C. Fernando<sup>1</sup>, N. Chimundi<sup>1</sup>, G.D.A. Helga<sup>3</sup>, A. Atzori<sup>1</sup>, I. Chaguruca<sup>1</sup>, F. Tognon<sup>4</sup>, G. De Menegh<sup>1</sup>, F. Del Greco<sup>1</sup>, E. Namarime<sup>1</sup>, L.J.F.J. Luís<sup>5</sup>, D.S.M. Moisés<sup>6</sup>, A.C. Mudumane<sup>7</sup>, M. Guerra João Stole<sup>8</sup>, E. Occa<sup>1</sup>, G. Putoto<sup>4</sup>, A. Pozniak<sup>9</sup>, A. Saracino<sup>2</sup>

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### Introduction

Patients lost to follow-up (LTFU) at different stages of the HIV cascade may increase HIV transmission, mortality, and morbidity. In Mozambique, 52% of the population under 18 years and around 120,000 adolescents are living with HIV. Latest estimates show that retention in care after 3 years on antiretroviral therapy (ART) is around 44%. We aimed to describe the profile of adolescents and youths living with HIV who discontinued ART and/or were LTFU, to explore the barriers to continuation of care, and to evaluate the effectiveness of a community outreach intervention.

### Methods

From 1 June 2019 to 1 December 2021, an intervention was piloted in Sofala Province, Mozambique, with the aim of reintroducing to care adolescents and youths who were LTFU or had discontinued therapy. With the support of four local activists' associations, phone calls were made to all patients who were LTFU or who had discontinued therapy to encourage them to return to consultations. In addition, during the phone call, a questionnaire exploring barriers to continuation of care was applied. Patients were identified through eight local HIV health services in Sofala Province that were supported by Doctor with Africa CUAMM.

### Ethics

This study was approved by the Ethical Review Board of Sofala Province according to the existing norms in 2019. All participants provided oral consent.

### Results

Overall, 4104 phone calls or home visits to adolescents and youths between 10 and 24 years living with HIV were included in the study (67% female; median age 19 years [IQR 15-21]). Among women, 15% were pregnant and 14% were lactating. Among the whole sample, 698 (17%) contacts were classified as LTFU and 3406 (83%) as discontinued therapy. 86% of contacts re-engaged with HIV care at the health facilities. The patients that were LTFU were slightly older ( $p < 0.003$ ), less likely to be a student of any level ( $p < 0.001$ ), had lower income ( $p < 0.001$ ), were less educated ( $p < 0.001$ ), and had a greater number of partners ( $p < 0.001$ ) compared to those who discontinued therapy. Multivariable logistic regression showed a greater probability of being re-engaged for those who use a condom "sometimes/always" compared with those who never used a condom (odds ratio [OR] 23.9, 95% CI 15.7-36.5) and for those who have received telephone contact (OR 1.38, 95% CI 1.02-1.87); lower values were obtained for smokers and drinkers (OR 0.11, 95% CI 0.06-0.22 and OR 0.04, 95% CI 0.03-0.06, respectively) and for number of attempts ( $>1$  vs one attempt OR 0.44, 95% CI 0.31-0.63).

### Conclusion

In this cohort, women who were pregnant and/or breastfeeding, those with low schooling, and those with low income were more likely to be LTFU. Our study showed how the involvement of activists can facilitate the return to facilities for those who were LTFU or who discontinued treatment in this context, and that integrating activists could support HIV treatment adherence.



## Models for community health programmes supported by different actors: mixed methods study, Guinea

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I. Savané<sup>1</sup>, F. Lomboto Longange<sup>1</sup>, C. Tolno<sup>2</sup>,  
F. Kabongo<sup>2</sup>, E. Briskin<sup>3</sup>

<sup>1</sup>Médecins Sans Frontières (MSF), Kouroussa, Guinea; <sup>2</sup>MSF, Conakry, Guinea; <sup>3</sup>MSF, Luxembourg City, Luxembourg

### Introduction

Guinea's Ministry of Health has proposed a standardised national community health programme, including health promotion, case management, and referral; historically however the system has been implemented piecemeal by various actors. MSF has been present in Kouroussa, northern Guinea, since 2017. MSF activities there have been focussed on community healthcare, through training and support for community health workers, or "recos". Before exiting, MSF conducted a mixed-methods study to understand differences in the models and effects of MSF community health programmes, as compared to those implemented by other actors.

### Methods

We implemented an explanatory, sequential, mixed-methods study in Kouroussa and in three other zones, Mandiana, Téliimélé, and Boussou; sites were selected to represent a diversity of situations, and those outside Kouroussa are supported by non-MSF actors. During the quantitative phase, 137 recos and 13 supervisory community health agents were interviewed about their demographic and professional details, availability of tools, the package of activities, activity levels, and practical knowledge. A qualitative phase, including 24 focus group discussions and 65 individual interviews followed, aiming to better understand the community and local health professional perceptions of community health programmes in each of the four zones. Quantitative data were analysed using R (Vienna, Austria) to calculate descriptive measures; differences were compared between zones using chi-square and t-tests. Qualitative data audio recordings were translated and transcribed, read, and re-read to identify codes and themes.

### Ethics

This study was approved by the MSF Ethics Review Board and by the Comité National de la Recherche, Guinea.

### Results

Overall, recos in Mandiana and Téliimélé were primarily involved in health promotion and referral, while recos in Kouroussa (supported by MSF), and some in Boussou, additionally conducted case management. In Kouroussa, recos conducted a median of 16.5 malaria consultations per month, compared to 8.0 in Boussou, 2.1 in Téliimélé, and 0 in Mandiana ( $p < 0.0005$ ). The zones where recos conducted case management were those where medicines were more available, with 92% of recos in Kouroussa possessing anti-malarials at the time of visit, compared to 38% in Boussou, 3% in Téliimélé, and 7% in Mandiana ( $p < 0.0005$ ). Qualitative data revealed that for recos to expand from health promotion into case management, medicines must be available, and in Kouroussa the community emphasized the importance of free care. Moreover, qualitative data showed the primary motivation for recos was their loyalty to their community, and that recos were better accepted and more effective when they came from the same community they served, or were a "child" of the village.

### Conclusion

To consistently achieve stated national ambitions of having recos that conduct case management, including in Kouroussa after MSF exits, medicine availability must be assured through appropriate resourcing. Additionally, our data suggest that each community should continue to have the power to choose their own reco.



## The Covid-19 nurse aide programme in southern Africa: improving provision of basic patient care on Covid-19 wards

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H. Mutubuki<sup>4</sup>, M. How<sup>2</sup>

<sup>1</sup>Médecins Sans Frontières (MSF), Johannesburg, South Africa; <sup>2</sup>MSF, Brussels, Belgium; <sup>3</sup>MSF, Rio de Janeiro, Brazil; <sup>4</sup>MSF, Harare, Zimbabwe

### Introduction

During the second wave of Covid-19 in January 2021 in Lesotho, MSF carried out an exploratory assessment at hospitals providing care for Covid-19 patients. We observed healthcare teams were understaffed and overworked, with an absence of nurse aides or patient care assistants to provide basic care (helping patients to eat and drink, dress, toilet, changing bedlinen). Hence nurses and medical doctors would prioritise skilled tasks, such as medication administration, over more basic care, normally performed by nurse aides. Such basic care is essential to patient experience, quality of care, and dignity. As part of Covid-19 care, training nurse aides on proning or repositioning oxygen masks of hypoxic patients could potentially reduce morbidity and mortality. To date, MSF has never implemented formal training for nurse aides, relying instead on on-the-job training, with significant variations in the delivery of training and what tasks are fulfilled.

### Methods

A pilot programme was implemented in Lesotho during February and March 2021. 16 nurse aides were trained and supervised by MSF. Further programmes were initiated during the third wave of Covid-19 in Zimbabwe (two hospitals) and South Africa (three hospitals) in 2021. Specific training materials and implementation tools were developed to support deployment of this innovative strategy. As part of programme monitoring, nurse aide and staff surveys covering satisfaction with the programme impact, the experience of staff and patients, and training received were carried out at the end of the interventions. At two sites, nurse aides and their supervisor recorded data for a sample of their daily tasks and the time spent performing each task.

### Ethics

This innovation project does involve human participants and their data. Permission was granted by the Medical Director of MSF Operational Centre Brussels, Médecins Sans Frontières.

### Results

100% of medical staff surveyed (nurses, doctors, and nurse aides) from all six hospitals reported satisfaction with this programme for improving the provision of basic patient care during the waves of Covid-19. Qualitative data highlighted the programme helped support basic patient care, to reduce workloads of nurses and doctors for these tasks, and to improve patient dignity. Nurse aides reported overall satisfaction with their training, especially for bedside and practical sessions. A hands-on nursing supervisor was reported as crucial for success. Showing potential for handover, the Ministry of Health continued employing nurse aides at one hospital in South Africa, and a partner non-governmental organisation took over the group trained in Lesotho.

### Conclusion

These short programmes supported the surge workload of Covid-19 waves. While the role of nurse aides exists within MSF projects, scope exists to develop formal training packages covering essential patient care. Training can be adapted to extend such roles in the context of other outbreak scenarios, such as cholera or Ebola virus disease, and to support provision of holistic patient care. There is interest in repeating the programme in the southern Africa region, and to share the model as a strategy to support medical human resources.

## Unveiling access barriers to contraception among adolescents in Mbare, Zimbabwe: a community-based study

J. f. Veran<sup>1</sup>, C. Nyatsambo<sup>2</sup>, M. Muirimi<sup>2</sup>, B. Hove<sup>3</sup>, K. Kuwenyi<sup>3</sup>, A. Mohamed<sup>3</sup>, R. Chitungo<sup>3</sup>, C. Kagogoda<sup>3</sup>, J. Maria Marx<sup>4</sup>, J. C. Cubides<sup>4</sup>, R. Ortuño<sup>3</sup>, O. Abdalla<sup>3</sup>

<sup>1</sup>LAPA/UFRJ; <sup>2</sup>City of Harare Department of Health, Harare, Zimbabwe; <sup>3</sup>Médecins Sans Frontières, Harare, Zimbabwe; <sup>4</sup>Médecins Sans Frontières, Brazil Medical Unit, Rio de Janeiro, Brazil

### Background

MSF established an adolescent and youth-friendly clinic in Mbare suburb, Harare, Zimbabwe, in collaboration with the City of Harare health, to respond to the need of sexual and reproductive health services including contraception. Low utilisation of services related to contraception were observed. This study aimed to assess barriers to the contraception services that MSF is offering in Mbare.

### Methods

24 focus group discussions (FGDs) for adolescents of over 14 years, health providers, teachers, and parents and 21 in-depth interviews (IDIs) for adolescents between 11 and 14 years were conducted. Participants were recruited following a purposive, non-probability sampling approach in which participants were selected based on the characteristics of a population and the objective of the study. Data was fully transcribed and translated, encoded (open, axial and selective) with the help of NVivo methodology, then analysed.

### Ethics

The study was approved by both MSF Ethical review Board and the Medical Research Council of Zimbabwe. The data were collected by two experienced and fully trained teams, consisting of a psychologist and a social worker. Non-verbal communication was systematically depicted to detect eventual signs of emotional distress.

### Results

We found that the main barriers to access to contraception were parents refusing to acknowledge the sexual activity of their children. Without questioning the ability of these young girls to effectively "negotiate" sex, there is often a more basic reality behind a conquering and affirmative posture. The quest to survive and the desire to gain access to consumption goods is often the lack of the most basic elements that pushes young girls to get involved in a relationship where negotiation of the use of a condom is rarely a part; the overvaluation of the morning-after pill in place of true contraception, and the competing worries faced by those living in a context marked by a multiform and omnipresent violence that permeates sexuality and gender relation.

### Discussion

The MSF adolescent clinic in Mbare, although designed to be a place of rest, retreat, and comfort, does not adequately address the problems of the youth in Mbare. Better understanding of the tensions felt by adolescents in Mbare, rather than assuming the "normal" adolescent problems, may help overcome practical barriers to contraception access.



### Kefilwe Rose Kempe

Kefilwe Rose Kempe is a Social Work graduate from North-West University with 8 years working experience. She practiced social work in different fields including foster care, substance abuse, gender-based violence, social security and diversion programmes. She joined Médecins Sans Frontières (MSF) in August 2019 as a Community Social Worker for the Rustenburg sexual and gender-based violence project and later joined MSF Tshwane migrant project as a Social Work Supervisor from February 2019 to date. She is passionate about her work and committed to helping others discover their own potential.



### Ann Moore

Ann Moore received her PhD in sociology with a specialisation in demography from the University of Texas at Austin in 2004. She has co-authored both quantitative and qualitative work on reproductive health issues in sub-Saharan Africa, South Asia, Southeast Asia, Latin America and the United States. Substantively, she has focused on abortion experiences and access, domestic violence and reproductive health, adolescents, unsafe abortion, and maternal mortality. She has served on the boards of directors for the National Network of Abortion Funds and for Student Pugwash, USA. Dr. Moore is a member of the Population Association of America, the International Union for the Scientific Study of Population and the Union for the Study of African Population. Since 2008, Dr. Moore has been an Adjunct Assistant Professor in the Department of Sociology at the University at Albany–State University of New York.



### Doris Burtcher

Doris Burtcher holds a PhD in Medical Anthropology and started her extensive research and fieldwork experience in 1992 in sub-Saharan Africa, the Middle East and Central Asia. Since 2001, she has worked as a medical anthropologist with MSF and has undertaken fieldwork within MSF and other non-governmental organisations. Doris currently works as a medical anthropology referent in the MSF Vienna Evaluation Unit, Austria, providing technical support to different projects and contexts in the MSF movement. Since 2005, she has been a lecturer at the Medical University of Vienna, teaching medical anthropology and qualitative methodologies. Her main fields of interest include female sexual and reproductive health, HIV/AIDS, tuberculosis, antibiotic use, misuse and resistance, malnutrition, mental health, health-seeking behaviour, sexual and gender-based violence, and neglected diseases.



### Charles Tolno

Charles Tolno is the MSF Deputy Medical Coordinator in Guinea. He holds a master's degree in Nutrition and Population Health. He has more than 10 years of experience in humanitarian work.



### Mounia Amrani

Mounia Amrani is a paediatrician with training and experience in public health and international health. She has worked in various humanitarian contexts such as Zimbabwe, DRC, Lebanon and Tchad as a field worker with a focus on migration, HIV/TB, under 5 children, Sexual Reproductive Health, outbreaks and Primary Health Care. Mounia is now the regional medical team leader for MSF based in Johannesburg and supporting MSF's projects in South Africa, Zimbabwe, and Mozambique.



### Jean-François Veran

Jean-François Veran holds a doctoral degree in Anthropology from the École des Hautes Études des Sciences Sociales (France) and since 2008 is Associate Professor at the Federal University of Rio de Janeiro (Brazil). He joined MSF in 2010 and worked as a health promoter in Haiti, Guatemala, and Honduras, and then as Anthropology Advisor in the Brazilian Medical Unit of MSF Brazil until 2013.

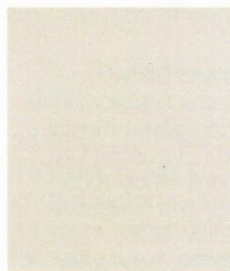
Since 2020 he is the founder and director of the Laboratory of Applied Anthropology (Paris and Rio de Janeiro). In 2020, he published the book *Médecins Sans Frontières and Humanitarian Situations, An Anthropological Exploration* (co-edited with Doris Burtscher and Beverley Stringer). This book explores the interaction between anthropology and humanitarianism, focussed on MSF.



### Ignations Takavada

Ignations Takavada is a Water and Sanitation Engineer. He has 13 years of experience in civil, irrigation, water and sanitation engineering and management, including nine years of water and sanitation infrastructure designs and construction. Ignations currently works with MSF as the Environmental Health Supervisor.

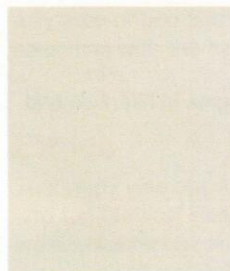
He holds a master's degree in Water Resources and Engineering Management with the University of Zimbabwe.



### Fernando Chenene

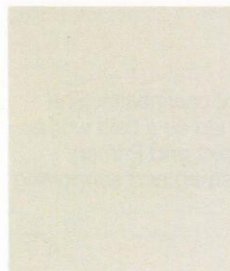
Fernando Chenene is a general practitioner with a post-graduate degree in Public Health, with more than 22 years of experience in public health and clinical programmes for adults and children. He worked for the National Health Service in Zambesia province then for non-governmental organisations operating in the HIV and AIDS Programmes in the areas of prevention, care and treatment as well as home-based care, orphaned and vulnerable children and community mobilisation programmes.

Currently he is the Project Manager of the HIV project at the youth friendly clinics supported by Doctors with Africa in Sofala province.



### Lucy Ramirez Li

Lucy Ramirez Li is a medical doctor with a master's degree in Public Health, who came to Africa as a United Nations volunteer working in a provincial hospital. Since then, she has worked on the donor's side with various organisations as well as providing technical assistance to the National Health System in the areas of maternal child health, primary health care, human resources for health, and health system strengthening. Currently she is working as the Medical Coordinator of Doctors with Africa, CUAMM.



### Ouanehpone Koïna Stella Elodie

Ouanehpone Koïna Stella Elodie is a nurse by profession. She has 12 years of experience with MSF in hospital supervision and since 2018 as a supervisor for HIV/TB/Hep C activities. Currently she is the Flying National HIV/TB/HEP C Support to MSF Batanga and Kabo projects in the Central African Republic.





## HIV programme adherence in a conflict-affected setting: lessons learnt from the Central African Republic

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### Introduction

The Central African Republic (CAR) has the highest HIV prevalence in the region, with an estimated 2.9% of adults infected with HIV. However, less than 50% of the people living with HIV (PLHIV) in CAR received antiretroviral therapy (ART) in 2020. Consequently, HIV remains one of the leading causes of mortality. Furthermore, it is well-known that conflict impacts adherence to HIV programmes. MSF Spain in collaboration with the Ministry of Health (MoH) has been supporting HIV diagnosis and care programmes in Kabo and Batangafo since 2008. Batangafo has regularly been exposed to inter-community clashes between herder- and farmer-affiliated armed militias. Kabo, a town that lies closer to the border with Chad, has often been destabilised by episodes of banditry and cross-border smuggling due to the heavy presence of armed groups in the area. The aim of this study was to identify the main demographic and clinical factors associated with HIV adherence in the two supported cohorts.

### Methods

Descriptive and survival analyses were conducted on routinely collected programmatic data collected from the HIV cohort in Batangafo between 1 January 2017 and 31 December 2021 and in Kabo between 1 January 2020 and 31 December 2020.

### Ethics

This research fulfilled the exemption criteria set by the Médecins Sans Frontières Ethics Review Board for a posteriori analyses of routinely-collected clinical data and thus did not require MSF ERB review. It was conducted with permission from the Medical Director, Operational Centre Barcelona-Athens, Médecins Sans Frontières.

### Results

Sex ratio and mean age at ART initiation were similar across projects (mean age 32.3 (standard deviation [SD] 10.4) in Batangafo vs. 33.2 (SD 10.9) in Kabo), however women tended to be younger in Kabo ( $p < 0.001$ ). In Kabo, PLHIV were diagnosed with more advanced WHO stages ( $p < 0.001$ ), lower CD4 count ( $p < 0.001$ ), and lower body mass index ( $p < 0.001$ ) than in Batangafo; loss-to-follow-up (LTFU) was also more common in Kabo (hazard ratio [HR], 1.70 CI 95% 1.1-2.5). Combined project data revealed several factors associated with LTFU: male sex (HR 1.30;  $p = 0.07$ ), younger age (HR 1.45;  $p = 0.05$ ), and more advanced stage (stages 3-4 vs. 1-2 HR 1.4;  $p = 0.05$ ) at initiation.

### Conclusions

Despite similarities in care, PLHIV in Kabo presented with more advanced disease indicators and had poorer adherence. Increased stigma and cross-border movement may be contributing factors. Targeted interventions should be put in place to combat stigma in the community and facilitate access to care in case of instability. This includes reinforcing health promotion and community engagement, decentralisation and patient support, education and counselling, with special attention on those we have identified as at higher risk of LTFU, namely, males, younger PLHIV, and patients with more advanced WHO stages.



## An assessment on the effectiveness of the sanitary seal in protecting boreholes from contamination: a case of Mbare Suburb, Harare

I. Takavada<sup>1,2</sup>, Z. Hoko<sup>1</sup>, W. Gumindoga<sup>1</sup>, A. Mhizha<sup>1</sup>, J. Nuttinck<sup>2</sup>, G. Faure<sup>2</sup>, D. Malik<sup>2</sup>

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### Background

Zimbabwe is projected to suffer water stress by 2025. Water availability is decreasing in the capital Harare, particularly in high density settlements where people rely mainly on boreholes. Anthropogenic pollution and poorly constructed boreholes lead to high levels of bacteriological contamination of borehole water sources, posing an increased risk of diarrheal disease for beneficiaries. To mitigate the risk of recurrent diarrheal out- breaks, Médecins Sans Frontières piloted the incorporation of borehole sanitary seal in accordance with the local geology while drilling new boreholes in Harare. This study compared physical, chemical and bacteriological parameters between boreholes with two different sanitary seal types and no sanitary seal in Harare's Mbare suburb.

### Methods

14 boreholes were classified into three categories based on the installed sanitary seal. Water quality analysis were conducted to describe physical, chemical and bacteriological parameters across three categories. The three categories included 4 boreholes with no seal, 6 with 3–6 m seal (random seal) and 4 with 18–25 m seal (proper seal; done in accordance with local geology). Water samples were collected between February 2019 to January 2020 in 3 sampling periods and analysed according to APHA standards.

### Results

Groundwater vulnerability assessment to map pollution risk of the study areas showed 80% of the study area had high vulnerability. Results of water quality analysis revealed that only boreholes with 18–25m sanitary seal satisfied the WHO guidelines for drinking water.

### Conclusions

This study suggests that local geology should be considered to install borehole sanitary seals for contaminated shallow water aquifers in urban settlements.



## Utilisation of digital health promotion tools for social work service promotion for undocumented migrants in Tshwane, South Africa

N. Nkhoma<sup>1</sup>, K.R. Kempe<sup>1</sup>, N. Kayuni Chihana<sup>1</sup>, A. Leone<sup>1</sup>

<sup>1</sup>Médecins Sans Frontières, Tshwane, South Africa

### Introduction

Digital health promotion methodology was applied to a social work service promotion campaign that focused on creating awareness of the birth registration process for migrants as well as what should be done when documents are lost. Migrants that do not have proper documentation are at risk of denial of access to their basic rights, including access to health care services. Undocumented migrant children face the risk of statelessness. The campaign facilitated linkage and referral for migrants in need of social work services in Tshwane, South Africa.

### Methods

A geotargeting approach (similar to purposive sampling) on Facebook was applied whereby the target audience was selected based on the locations where Médecins Sans Frontières (MSF) is operational in Tshwane, as well as characteristics that were common to migrants from 12 African nationalities. In collaboration with the Social Work team, eight images were created. The images were set up in such a way that if anyone wanted more information, all they had to do was to click on the image and start a chat. These images were displayed throughout the campaign. The images were displayed an average of 9.50 times per person during the 4 weeks when the campaign was running. Qualitative content analysis from the comments and the messages received was employed.

### Results

Between 4 October to 29 October 2021, 56,869 people were reached with the images on Facebook. A total of 350 comments were received. These comments included queries, responses to queries by the MSF team, and some referrals. A total of 94 conversations were started through Facebook Messenger. From the queries that were received through the comment section and the messenger section, 36% were referred to the MSF social work unit, 42% received their information in the comment sections, and 22% were unresponsive after being asked for more information.

### Ethics

This is a description/evaluation of an innovation project and does not involve participant data. Informed consent was obtained for all referrals made to the Social Work team. The campaign was conducted in accordance with the Facebook ethical guidelines and principles; thus, content was approved before it was launched.

### Conclusions

The campaign demonstrated that the digital health promotion tools can also be utilised to include social work service promotion, as a means of providing migrants information and access to services that will facilitate their successful integration into South African systems. There is a great need for ongoing sensitisation and service promotion campaigns for migrants. Moreover, the campaign also provided insight into needs from different migrant communities and informed what activities the project can include and what campaigns can be conducted in future. Moving forward, the Facebook campaigns can be used as a social listening and needs assessment tool as well.



## Young people living with HIV are the most at risk of being undiagnosed and virally unsuppressed in sub-Saharan Africa

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### Introduction

Understanding age and gender disparities within the HIV cascade of care is critical to focus interventions efficiently. We assessed age and gender groups with the lowest HIV diagnosis and treatment coverage and at the highest risk of unfavourable outcomes in five highly prevalent HIV settings.

### Methods

We performed a pooled data analysis from five population-based cross-sectional surveys conducted in Ndhiwa (Kenya) in 2012, KwaZulu-Natal (South Africa) and Chiradzulu (Malawi) in 2013, and Nsanje (Malawi) and Gutu (Zimbabwe) in 2016. Participants were tested for HIV at home. Participants were asked about previous HIV diagnosis and antiretroviral treatment (ART), tested for HIV at home and for viral load if HIV-positive.

### Ethics

This study was approved by the local ethics review boards in each country and the central institutional ethics review boards.

### Results

Among the 26,740 participants aged 15-59 years, 5,221 (19.5%) were HIV-positive and 69.9% women; median age was 36 [IQR 28-44] years. Of all HIV-positive individuals, 72.8% were diagnosed, 53.5% were on ART, and 56.7% were virally suppressed. Among those diagnosed, 78.7% were on ART; among those treated, 88.5% were virally suppressed. Young adults had the highest risk of being undiagnosed: men 15-24 years (adjusted odds ratio [aOR] 29.1, 95% CI 13.4-63.1), women 15-24 years (aOR 8.7, 95% CI 5.4-14.0); men 25-34 years (aOR 9.8, 95% CI 5.9-16.4). A smaller proportion of men than women were diagnosed: 65.2% vs 76.0% respectively,  $p < 0.001$ . Treatment coverage among those diagnosed was 78.3% in women versus 79.6% in men, and viral suppression among those treated was 88.5% in women and 88.5% in men. Treatment coverage was 60.6% among 15-24 years diagnosed versus 86.5% among 45-59 years ( $p < 0.001$ ). HIV viral suppression among all HIV-positive was very low in the youngest individuals and increased with age (32.9% in 15-24 years, 47.9% in 25-34 years, 64.9% in 35-44 years, 70.6% in 45-59 years).

### Conclusions

Adolescent and young adult men and women had the lowest HIV diagnosis, treatment coverage, and viral suppression rates. Given projections of new infections in young people, interventions targeted and adapted to this population should be urgently enhanced.