

Reasons Influencing PrEP continuity among Key and Priority Populations in Tabora region, Tanzania. A cross-sectional study

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Abstract

Background:

In Tabora, PrEP continuity 6 months after among newly enrolled among Key and Priority Population (KPP) is low at 47%. However, information on reasons influencing to PrEP continuity in KPP in Tabora is limited. We report study findings from nine (9) health facilities (HFs) in the Tabora region.

Methodology:

This was a cross-sectional survey, deployed both quantitative and qualitative methods. 425 current or previous PrEP beneficiaries started PrEP between July 2020 to January 2021 were administered with a structured questionnaire, whereby 157 participants were purposively selected for 18 focused group discussions (FGDs). Recruitment of study participants carried between February to April 2022.

Results:

A total of 425 KPPs, aged 15-70 years with average 30 years, the majority 288(58%) were FSWs, the proportion of interruption was 25(20.5%). Reported reasons for PrEP interruptions, (57%) were due to drug side effects and the least was migration (3%). There was an association between interruptions and clients' age ($P<0.05$), area of service offered ($P=0.010$.) and being knowledgeable about PrEP: ($P<0.05$). There is significant relationship between awareness and PrEP interruptions, though in proportions of those aware and had interruptions was at 33%.

Conclusion:

Drugs side effects, misconception, stigma, pill burden and migration were cited among influencing reasons for PrEP interruptions.

Recommendations :

Interventional study recommended to explore on the reasons cited for PrEP discontinuity in reaching PrEP goals in prevention services.

Keywords: PrEP- Pre- Exposure Prophylaxis, KPP- Key and priority population, FSW- Female sex workers, Submitted: 16th/11/2022 Accepted: 22nd/11/2022

1. Background of the study:

Over the past 17 years, the Government of Tanzania (GOT) made significant progress in ending the HIV epidemic in Tanzania. As of 2020, Tanza-

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nia's progress toward UNAIDS the 95-95-95 milestones was **84%**, **82%**, and **88%**: **84%** of PLHIVs knew their status **82%** were on treatment, and **88%** of ART patients are virally suppressed (UNAIDS, 2020). In 2020, UNAIDS also reported Tanzania had a 27% decline in new HIV infections from 95,000 in 2010 to 69,000 in 2020, as the country continues to strive to achieve the national set target of 75% reduction of new infections (Program, 2018). UNAIDS factsheet, 2020, indicated that HIV prevalence among 15-49 years of age is 4.7% while incidence of same age is 2.08%, and disparities in HIV burden differs across settings, regions, and sub-populations. UNAIDS factsheet (UNAIDS) indicated that, HIV prevalence is still high among Key and Priority Populations (KPPs): 15.5% among persons who inject drugs (PWID), 15.4% among Female Sex Workers (FSWs), and 8.4% among men who have sex with men (MSM), Adolescent Girls and Young Women (AGYW) aged 10-24 years disproportionately affected. Although HIV disease estimates among other priority populations including fisherfolk, long-distance truck drivers and mining communities are inadequately explored, a 2018 study among fisherfolk in Kagera and Mwanza in Tanzania showed prevalence as high as 14%, which was 3 times higher than that of the general population in their districts (Kapesa 2016). These special population groups demand rapid and structured HIV prevention interventions to reach epidemic control in Tanzania.

Several prevention interventions, including behavior change and condoms, have been applied to help reduce the spread of HIV, especially among adolescent girls and young women. These interventions are limited in their ability to promote HIV risk reduction because they are dependent on male partner cooperation (K, 2016). HIV Pre-Exposure Prophylaxis (PrEP) has been proven to reduce the transmission of HIV infections for individuals who are at high risk (Roehr). PrEP represents an effective biomedical HIV prevention method, with the potential of giving a woman more self-efficacy and agency by taking a once-daily pill to minimize her HIV risk.

Pre-Exposure Prophylaxis (PrEP) is a medicine

taken to prevent getting Human Immunodeficiency Virus (HIV). PrEP is highly effective for preventing HIV when taken as prescribed. PrEP reduces the risk of getting HIV from sex by about 99% and by at least 74% by injecting the drugs. Since PrEP protects from HIV only (Prevention, 2021). There are two (2) drugs approved for PrEP services, this includes Truvada and Descovy. In Tanzania, TRUVADA is commonly used. This is a once-daily prescription composed of Emtricitabine (FTC) 200 mg/Tenofovir Disoproxil Fumarate (TDF) 300 mg (Truvada) PO Daily. It is paramount, since, this group contributed more in new HIV infections, reaching these groups through PrEP services will contribute in reaching epidemic control by 2030.

In Tanzania after adoption of WHO recommendations on PrEP services, it was piloted in a few regions including Mbeya and Mwanza in 2017/18, in 2019 scaled up to be part of the Combination Prevention Package to people who are at risk of contracting HIV infection (Program, 2021b). In the Tabora region, PrEP services started in July 2020 in Nine (9) Health Facilities out of 149 supported by PEPFAR/ CDC and scaled up to 50 by May 2022 (Program, 2022). PrEP drug adherence/continuity in Key and priority Populations is still a challenge. Moreover, Routine HIV Program Reports in Tabora- Tanzania indicated that in the period of July 2020-January 2021, among 1,277 KVPs started PrEP drugs, in 6 months later i.e in July 2021, a 681(53%) PrEP clients had dropped from using PrEP drugs. (Health, 2021). Yet reasons for PrEP interruptions in Tabora are unclear. In studies conducted in different countries cited reasons for interruptions. In a study in South Africa by Diantha Pillay et al, the majority (73.8%, n = 59) of participants who discontinued oral PrEP cited side effects as the primary reason for discontinuation, followed by feeling stigmatized (18.8%, n = 15), also the study compared timing of using PrEP, more past users reported experiencing side effects (95% versus 59%). Only 15% of past users stated that the side effects were tolerable, and 83% said that the side effects they had experienced had affected daily life. The most commonly reported side effects that were consid-

ered intolerable by past users (n = 47) were stomach pain (89.4%, n = 42), vomiting (42.6%, n = 20), and nausea (40.4%, n = 19). Discontinuation due to side effects happened on average within the first five months of use (plos).

A study conducted in New York by Unger ZD et al cited that approximately half of PrEP initiators discontinued PrEP during the study period (n = 44; 47%). Most participants (71%) noted systemic issues (insurance or financial problems, clinic or pharmacy logistics, and scheduling barriers) as reasons for discontinuation. One-third cited medication concerns (side effects, potential long-term side effects, and medication beliefs; (32%) behavioral factors (low relevance of PrEP because of sexual behavior change. Over half (53.5%) highlighted systemic issues alone, while an additional 19% attributed discontinuation to systemic issues in combination with other factors. Of those who discontinued, approximately one-third (30%) restarted PrEP during the follow-up period, citing resolution of systemic issues or behavior change that increased PrEP relevance (Zoe D Unger, 2022)

A study conducted in Kenya, Tanzania and Lesotho by Mutegi, et al cited the most common one was a bad encounter with a health provider, cited by 27% of respondents, while 21% said they'd stop due to side effects. "I don't think I'm at risk of HIV" was only cited by 14%. Other noteworthy reasons were "it's too burdensome" (9%), "people might think I have HIV" (6%), and "my partner didn't like it" (5%). No-one stopped because they thought PrEP did not work or because of its cost. In terms of other characteristics, PrEP stoppers were somewhat more likely to be depressed (37.5% versus 31% who continued) and to use recreational drugs (5.6% versus 1.5%), but these differences were not statistically significant.

.....In a study of Four themes emerged related to reasons for PrEP discontinuation, including: (1) lower perceived HIV risk related to changes in sexual behavior; (2) structural or logistical barriers

(e.g., lapse or loss of health insurance, cost, difficulty navigating complex medical systems); (3) anticipated and experienced medication side

effects, with a sub-theme of interactions

between PrEP and feminizing hormone medications; and (4) challenges with medication adherence

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In a study conducted in California, Los Angeles by Omar Nieto et Al on PrEP discontinuation among Latino and Black MSM and transgender women cited that, Four(4) themes emerged related to reasons for PrEP discontinuation included; lower perceived HIV risk related to changes in sexual behavior, structural or logistical barriers (e.g. lapse or loss of health insurance, cost, difficulty navigating complex medical systems, anticipated and experienced medication side effects, with a sub-theme of interactions between PrEP and feminizing hormone medications and challenges with medication adherence (Nieto, 2020).

In a study conducted by Jordan Poti et al cited 92 out of 120 respondents (70%) discontinued PrEP. Among TGW and MSM, the main reason for discontinuing PrEP was the fact that clients felt that they were no longer at risk. Over 30% respondents reported that they were no longer at risk, and 60% said they would restart PrEP when their risk increases. Self-reported risk behaviors were that of the clients who reported to not be at risk, 43% may not be using condoms, and more than 50% did not return for testing (Poti, 2019).

This study in Tabora, helped to understand influencing reasons for PrEP continuity in Tabora, Tanzania for improving program performance to reaching epidemic control by 2030.

2. Methodology:

Mixed study exploratory design, A quantitative cross-sectional, followed by qualitative content analysis method. The quantitative survey used a semi-structured closed/open-ended questionnaire applied. Recruitment of participants took place between February to April 2022 as a follow up for those started PrEP between July 2020 to January 2022.

Study was complemented with Focused Group Discussions. (FGDs) ranging 4-12 PrEP clients, with at least 2 groups per each HF implementing PrEP service, this enabled to have 18 FGDs with a total of 157 participants. The study population involved Key and Priority Populations i.e MSM, PWID, FSW, vAGYW, and Discordant Couples who received PrEP drugs from 9 Health facilities (HFs) in the Tabora Region.

Inclusion criteria, the study was carried out among KPPs started PrEP services in July 2020 to Jan 2021 in 9 HFs in the Tabora region. Only those who consented for study were included. Exclusion criteria, the study excluded the participants who declined consent to participate in the study.

3. Findings:

The study surveyed 425 KPP who started PrEP for a minimum of 6 months from July 2020, included FSW 288(58%), MSM 19(4%), PWID 14(3%), vAGYW 57(13%) as well as discordant couples 10(5%) and other Priority populations 67(16%), (see table 1 below).

In qualitative approach (FGD), the study conducted 18 FGDs with total of 157 participants comprised of 79-FSW, 4 -MSM, 47- vAGYW, 11-Discordant couples, 16- PWID.

The study participants had mean age 30 years, ranging from 15-70 years, with 72.2% of the total sample contributed by participants above 25 years. More than two-thirds (76.2%) were female, and less than one-third were male (23.8%) (See Table 1 above).

More than half of participants were FSW (58.3%), Partners of Key Population (15.7%),

vAGYW (13.4%), discordant couple (4.7%), MSM (4.5%) and PWID (3.3%). Economic activities of participants engaged in small business (37%), Bar Maid (20.2%), No Job (18.4%), small scale farmers (12.5%), money for sex (6.2%), boda-bodas drivers (4.9%)

The majority (81.9%) reported to reside in rural areas, while (18.1%) reside in urban settings. (See table 1)

From the study, 112 clients did stop taking PrEP, we explored the reasons for them to stop which included: drug aftermath (57%), misconception (19%), forgetting (9%), stigma (6%), pill burden

(5%) and migration (3%), (see below graph 1 above)

From the figure-1 above, drug aftermath cited to be the major reason for PrEP interruptions contributed 57%, and its distribution among KVP groups is as follows: FSW 39 (62.9%), followed by partner of KVP 9 (14.5%) and vAGYW 7(11.3%), (see Table 2)

From the qualitative part, cited different cases reported by PrEP beneficiaries on reasons for discontinuity on PrEP services.

3.1. Drug aftermath (drug side effect):

Under this group, majority of clients gave reason pertaining dizziness, hungry, nausea, tired, headache.

FSW: "I used to feel nausea and sometimes tired".

FSW: "When I started taking the medicine, I felt nausea, dizzy, headache and extremely sleepy, but now, am doing well".

vAGYW: "Though at the beginning I used to feel dizziness, but currently am doing well and proceeding with my medication".

PWID: "Because when I started using it, I used it, i.e is just after using it I started feeling hungry, dizziness, you know what? I felt I didn't eat, and went to eat but the system was the same".

3.2. Misconception:

FSW: "People can't spot the different between PrEP and ARVs, they claim both are for PLHIV".

Discordant couple: "If I walk with this medicine,

Table 1: Surveyed 425 KPP who started PrEP for a minimum of 6 months from July 2020

variable	Observation, n	Percentage, %
Gender		
Male	101	23.8
Female	324	76.2
Age group		
15-24	103	24.2
25+	307	72.2
Missing	15	3.5
Economic activity		
Bar Maid	86	20.2
Small business*	158	37.2
Boda-boda- driver (motorcycle driver)	21	4.9
No Job	78	18.4
Money for Sex	29	6.8
Small scale farming	53	12.5
KVP Group		
vAGYW	57	13.4
FSW	248	58.3
MSM	19	4.5
PWID	14	3.3
Discordant Couple	20	4.7
Partner of KP (Key Population)	67	15.7

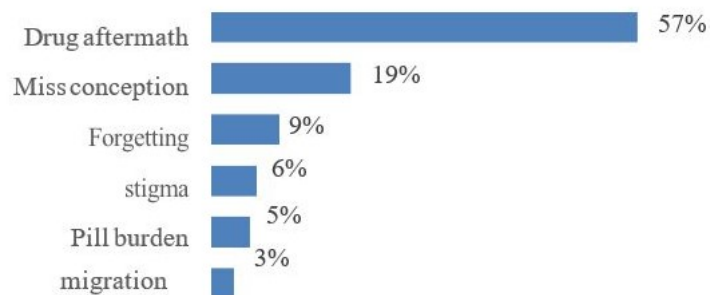


Figure 1: (Drug aftermath meant drug side effect)

Table 2: Reasons for PrEP interruptions among KPP groups

KVP Group	Stigma	Migra- tion	Pill burden	Forget- ting	Miss conception	Drug aftermath	To- tal
vAGYW	0	1	2	0	3	7	13
%	0	20	40	0	12.5	11.3	12.6
Discordant Couple	0	1	1	0	2	4	8
%	0.0	20.0	20.0	0.0	8.3	6.5	7.8
FSW	1.0	2.0	2.0	2.0	15.0	39.0	61.0
%	50.0	40.0	40.0	40.0	62.5	62.9	59.2
MSM	0	0	0	1	1	1	3
%	0.00	0.00	0.00	20.00	4.17	1.61	2.91
Partners of KVP	0	1	0	2	3	9	15
%	0.0	20.0	0.0	40.0	12.5	14.5	14.6
PWID	1	0	0	0	0	2	3
%	50.0	0.0	0.0	0.0	0.0	3.2	2.9
Total	2	5	5	5	24	62	103

and if my partner finds them, we shall quell and will think that I am already infected”.

FSW: “Other people see us using the drug and consider us as PLHIV, and if one tried to explain them about PrEP, they consider us as Prostitute, that’s why we are taking PrEP”.

FSW: “People claim that, once you take PrEP there is high chance to be infected with HIV”.

3.3. Forgetting:

vAGYW: “I am working at girl’s saloon, I forgot my drug when I am with my client, and we are drunk”.

FSW: “I am doing business, time to take drugs am still doing my business”.

FSW: “I forgot to take medicine when am drug or on transit”.

4. Stigma:

FSW: “I am being stigmatized by my friends, thinking that am infected with HIV”.

FSW: “Need to hide drugs no to be seen as due to my work of sex for money, they say am infected with HIV”.

5. Pill burden:

vAGYW: “PrEP is very exhaustive, and once you missed a dose, you can be infected”. MSM: “Taking drugs every day is tiresome, as they say. we should take them daily”.

5.1. Migration:

Partner of Key population: “Forgetting to take drugs while travelling”.

FSW: “Am settled am always on travel, I forget to take drugs”.

Partner of Key population: “Failing to take my drug on time, as I finish them and am, far from health facility”.

Discordant couple: “Long distance from home to the dispensary to get PrEP”

6. Discussion:

In this study conducted in Tabora, Tanzania, it was observed that, timing of PrEP interruptions was within 6 months, this was also noted by study conducted A study conducted in South Africa by Diantha Pillay et al (Diantha Pillay, 2020)

The majority (73.8%, n = 59) of participants who discontinued oral PrEP cited side effects as

the primary reason for discontinuation, followed by feeling stigmatized (18.8%, n = 15) (see Table 6), a study conducted in Kenya, Tanzania and Lesotho by Mutegi, et al cited, The most common one was a bad encounter with a health provider, cited by 27% of respondents, while 21% said they'd stopped due to side effects. "I don't think I'm at risk of HIV" was only cited by 14%. Other noteworthy reasons were "it's too burdensome" (9%), "people might think I have HIV" (6%), and "my partner didn't like it" (5%).

A study conducted by Jordan Poti et Al (Poti, 2019) cited 92 out of 120 respondents (70%) discontinued PrEP. Among TGW and MSM, the main reason for discontinuing PrEP was the fact that clients felt that they were no longer at risk. Over 30% respondents reported that they were no longer at risk, and 60% said they would restart PrEP when their risk increases, A study conducted in South Africa by Diantha Pillay et al, and New York by Unger ZD et al (Zoe D Unger, 2022), In our study it was observed that 53% of clients discontinued PrEP usage at 6 months since beneficiaries started PrEP drugs, in the other study conducted in same countries above mentioned also noted 50% discontinued within the first six months of PrEP use. In our study, side effects contributed 57% in hindering uptake and continuity of PrEP services, there were more concerns cited in this study included misconception (19%), forgetting (9%), stigma (6%), pill burden (5%) and migration (3%). Additionally, study results suggested that, PrEP interruption is significant among clients aged 19-24 years, and mainly within first 7 months, but statistically no variations among KPP groups. Side effect also reported as barrier to uptake and continuation in other studies (Matthew S, 2018a) Prevalence of client's side effects where the primary reason why current users had interrupted using oral PrEP within the first seven months of use which is the period showed huge drop, also from our study this has been associated with poor of knowledge. Clients from Tabora who had history of interrupted oral PrEP due to side effects challenging, cited side effects included nausea, headache, tired, hungry being intolerable and affecting daily

life. Clients who continued using oral PrEP appeared to tolerate side effects differently from those who stopped using it, cited also some who did not mention any side effect. This suggests for improved counselling skills from health care providers, PrEP expert Peers tie, and providing assurance to clients to consult health facility in case of intolerable side effect. In the 5 days training 40 curriculum for PrEP to health care workers, there is a session on how to manage and understanding side effects. Smith et al (2012) conducted a study in the United States among young adults using oral PrEP, and found concerns over ARV-based stigma and burden of daily pill taking. In this study, similar concerns were cited from participants in quantitative survey, but did not cite them as reasons for discontinuation. These issues are worth monitoring in future studies and in PrEP programs.

7. Conclusion:

In this study conducted in Tabora, Tanzania, it was observed that, PrEP drug interruption among clients started PrEP after 6 months of usage was at 53%, where 30% contributed by FSW, in proportions per KPP. Drop is as high as 71% among OVP. It was also observed that, interruptions vary among KPP groups and among ages, i.e 15-24 years had high possibility and among FSWs, while those receiving PrEP services at community showed interruption at 36.7% vs at facility 21.8% (P=0.01). Among leading factors influencing interruptions included drug side effects, misconceptions followed by forgetting and lastly migrations, overall ranging from 3% to 57%.

8. Recommendation:

Practice: study findings showed area of improvement in terms on capacity building to HCPs in provision of health education, counselling and providing assurance on drug side effects, client centered approach depending on type of KPP group receiving the services to improve levels of awareness and knowledge on PrEP services. Policy: There are number of issues pointed out by

clients including multi month dispensing of PrEP drugs, change of drug Tins not to resemble ARVs packaging to reduce stigma, incentivizing those adheres well to PrEP drugs, decentralization for easy accessibility of PrEP

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10. List of Abbreviations:

HIV Human Immunodeficiency Virus
PrEP Pre-Exposure Prophylaxis
STDs Sexual Transmitted Diseases
PEPFAR Presidential Emergency Plan for AIDS Relief
Centre for Disease Control
MDH Management and Development for Health
UNAIDS United Nations AIDS
WHO World Health Organization
MOH Ministry of Health
NACP National AIDS Control Program

THIS Tanzania Health Information Survey
KP Key Population
PP Priority Population
KPP Key and Priority Population
FSW Female Sex Workers
MSM Men having sex with Men
PWID People who Inject Drugs
HF Health Facility
HCP Health Care Provider

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Adam Mrisho Adam Mrisho; Medical Doctor, A holder of Post Graduate Diploma in Human Resources Management, A Public Health Specialist (MPH) with more than 12 years' experience in HIV/AIDS care and treatment, Reproductive, Maternal, Newborn and Child Health (RMNCH)/Elimination of mother-to-child transmission (eMTCT) of HIV and syphilis, supply chain management, and integrated TB/HIV programs in collaboration with the Government of Tanzania (GoT), other HIV implementing partners (IPs), community-based organizations (CBOs), and bilateral donors such as PEPFAR/CDC.

Specifically relating to KVP, in January 2020 Dr. Mrisho led MDH's successful rollout of Tabora's KVP/AGYWs and other related targeted sub population i.e fisherfolks, mining communities and long track drivers in Community HIV Testing Services that improved from 3% to 18% contribution to HTS Total positive (18000+) in Tabora region by 2020. Also, under his leadership, over a 9-month period in 2020, community

interventions for KVP resulted in 2601 new clients knowing their status to reach UNAIDS 1st 95. This was achieved through Dr. Mrisho's ability to develop trusting and collaborative working relationships with KVP peer groups, KVP Forum, Community Advocacy IPs, and the GoT under RCHMTs. Dr. Mrisho has also led the rollout of HIV SELF TEST and PrEP programs to reach more KVPs as per New National HTS guideline through their networks and PrEP to consented HIV Negative as a prevention package to risk sub population (KVPs) to reach epidemic control.

As MDH's Regional Program Manager (RPM) in Tabora, Dr. Mrisho led a team of 84 clinical, administrative, and financial staff. He also brings to this project experience and well-established working relationships in two target regions of Geita and Kagera. He served as MDH's RPM in Geita where he led 32 clinical, administrative, and financial staff. Dr. Mrisho was also Clinical and Strategic Information Manager for MDH's Kagera Regional programs. For the past five years, Dr Mrisho has worked with Regional and District Health Management Teams to ensure Kagera, Geita and Tabora regions achieve set national and donor targets, including early identification through targeted testing in reaching sub populations (KVP, AGYWs) and retention, and that HIV/AIDS quality of care is delivered per national guidelines in MDH-supported facilities. Under his leadership in Geita region (with 6 district councils), he has worked with RHMTS and other partners to improve identification and linkage to ART-reducing treatment gap from 19% to 5% by September 2019, HVL coverage from 76% to 90% by September 2020, HEID below 2 months coverage from 33% to 80% by September 2020, and Isoniazid Preventive Therapy (IPT) coverage among PLHIV on ART from 49% in Sept 2019 to 82% in Dec 2020 uptake and ever completed IPT among current PLHIV on ART from 69% in Sept 2018 to 91% in Sept 2019

Additionally, Dr. Mrisho managed collaboration with Regional and District Health Management Teams of Tabora to increase the number of health care facilities providing comprehensive HIV/AIDS care in the region from 71 facilities

in 2020 to 142 facilities in Dec 2020, with the aim of ensuring 149 facilities provide these services by September 2021. This increase in facilities has contributed to easy availability and accessibility of HTS, prevention, treatment, and support services within communities with a result that 18000+ clients were initiated on ART by September 2020.

Honoratha Rutatinisibwa is a Public health specialist, vast experience in HIV Care and treatment services, worked as DMO in Musoma Municipal council and later appointed as regional medical officer for Tabora region.

George Msalale Dr George, among the prominent Regional Aids Control Coordinators in URT, ToTs in various clinical areas including Basic ART Management and TBHIV

Ramadhani Shemtandulo Vast experience in Monitoring and Evaluation in PEPFAR/CDC supported program, played key role in quantitative analysis of this study

Benson Mturi Major in computer science, vast experience in CTC database, DHIS2 as well community intervention focusing KpP data management, currently working in capacity of data Manager for community intervention focusing KPP in Tabora region under MDH

Steven Ambonisye Experience in HIV data management at facility level, recently promoted to oversee community intervention focusing KPP in Tabora region under MDH. Holder of Bachelor in computer science

Abeleabela Rumisha Dr AbelaAbele experienced in KPP related prevention and HTS services, working in capacity of District community HTS and prevention officer. Played vital role in orientation of data collectors for this study.

Mohamed Ayoub Dr Mohamed Experience in KPP related prevention and HTS services, working in capacity of District community HTS and prevention officer. Played vital role in orientation of data collectors for this study.

Charles Shirima Dr Charles Experience in KPP related prevention and HTS services, worked as field assistant and later in capacity of community art officer. Played vital role in orientation of data collectors for this study

Wilhellmuss Mauka Dr Wilhellmuss is Public health specialist, currently working in capacity of public health evaluation manager under MDH

Shallon Atuhaire Dr Shallon is a Public health specialist, PhD holder, working in capacity of Lecturer at CUU in the faculty of science and Technology. She coordinates research for students under FST at CUU.

Evaline Maziku Head of HIV prevention at National Aids Control Program – MOH, URT, vast experience in KPP related interventions. Holder of Msc. Pediatrics

Anath Rwebembera Dr Anath is a Public health specialist, vast experience in care and treatment services, for so many years worked as Pediatric care and treatment focal at MOH-NACP. Currently serves as Program Manager- at National Aids Control Program

Goodluck Lyatuu Dr Goodluck, Director of Programs at MDH. Specialist with over 10 years' experience in clinical and public health management. He completed his doctor of medicine training in 2009 at Muhimbili University of Health and Allied Sciences in Dar es Salaam and Master of Public Health in 2013 at Dartmouth's Geisel School of Medicine, Hanover, USA. PhD holder in public health at Karolinska university- Sweden.

David Sando MDH CEO, Dr. Sando who is an experienced Global Health specialist, having worked as both a physician and a public health specialist, Dr. Sando has a wealth of experience in managing PEPFAR and non-PEPFAR funded projects