REVOLUTIONARY GOVERNMENT OF ZANZIBAR

MINISTRY OF HEALTH

ZANZIBAR INTEGRATED HIV, HEPATITIS, TUBERCULOSIS & LEPROSY PROGRAMME (ZIHHTLP)

ANNUAL REPORT

2020

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

ACRONYMS

ACSM	Advocacy Communication and Social Mobilization
AFB	Acid Fast Bacilli
AIDS	Acquired Immune Deficiency Syndrome
ANC	Antenatal-Care
ART	Anti-Retroviral Therapy
ARV	Anti-Retro Viral
BCC	Behavioural Change Communication
CHBC	Community Home Based Care
CHMT	Council Health Management Team
CITC	Client Initiated Testing and Counselling
CMS	Central Medical Stores
CPT	Cotrimoxazole Preventive Therapy
CTC	Care and Treatment Clinic
DHIS2	District Health Information System 2
CHMT	Community Health Management Team
DNA	Deoxyribose Nucleic Acid
DOT	Directly Observed Therapy
DDM	District Data Manager
DMO	District Medical Officer
DTLC	District Tuberculosis and Leprosy Coordinator
EAC	Enhanced Adherence Counselling
EID	Early Infant Diagnosis
EQA	External Quality Assurance
FBO	Faith Based Organization
HBC	Home Based Care
HBV	Hepatitis B Virus
HCW	Health Care Worker
HIV	Human Immunodeficiency Virus

HMIS	Health Management Information System
HTS	HIV Testing and Counselling
HVL	HIV Viral Load
HTS	HIV Testing Services
IBBSS	Integrated Bio- Behavioural Surveillance Survey
ICT	Information and Communication Technology
IEC	Information Education Communication
IPD	In-Patient Department
IPT	Isoniazid Preventive Therapy
IQC	Internal Quality Control
IRB	Institutional Review Board
IT	Information Technology
KPs	Key Populations
LTF	Lost-To-Follow up
MAT	Methadone Assisted Therapy
MB	Multi Bacillary
MDR	Multi Drug Resistant
MDT	Multi Drug Therapy
M&E	Monitoring and Evaluation
MOH	Ministry of Health
MSD	Medical Stores Department
MSM	Men who have Sex with Men
MTB/RIF	Mycobacterium Tuberculosis/Rifampicin
NACP	National AIDS Control Programme
NGO	Non-Governmental Organization
NTLP	National Tuberculosis and Leprosy Programme
OPD	Out-Patient Department
PB	Pauci Bacillary
PCR	Polymerase Chain Reaction

PEP	Post Exposure Prophylaxis
PHCC	Primary Health Care Centre
PHCU	Primary Health Care Unit
PITC	Provider Initiated Testing and Counselling
PLHIV	People Living with HIV
PMTCT	Prevention of Mother to Child Transmission of HIV
PWID	People Who Inject Drugs
RCH	Reproductive and Child Health
RTI	Reproductive Tract Infection
RTLC	Regional Tuberculosis and Leprosy Coordinator
SI	Strategic Information
SOPs	Standard Operating Procedures
STI	Sexually Transmitted Infection
TB	Tuberculosis
THPS	Tanzania Health Promotion Services
TWG	Technical Working Group
UNAIDS	United Nations programme on HIV and AIDS
UNDP	United Nations Development Programme
UNICEF	United Nations Children's Fund
VCT	Voluntary Counselling and Testing
VHP	Viral Hepatitis
WHO	World Health Organization
ZAC	Zanzibar AIDS Commission
ZAMREC	Zanzibar Medical Research Ethical Committee
ZAPHA+	Zanzibar Association of People living with HIV and AIDS
ZAYEDESA	Zanzibar Youth Education Environment Development Support Association
ZIHHTLP	Zanzibar Integrated HIV, Hepatitis, TB and Leprosy Programme

EXECUTIVE SUMMARY

The 2020 annual report is tenth on the progress to HIV, STI, TB and Leprosy responses since 2011. This report has been prepared through analysis of service utilization reports i.e., HIV care and treatment, Counselling and Testing for HIV infection, Prevention of Mother to Child Transmission of HIV infection, Integrated Community-Based HealthCare Services, Behavioural Change Communication, HIV/TB laboratory, TB and Leprosy, Key Population, STI/RTI, Viral Hepatitis, Strategic Information and surveillance of HIV and TB in the country. Additionally, 2020 mark the baseline implementation of the National TB and leprosy strategic Plan 2020 -2022. The report also includes highlights of HIV and TB research conducted in Zanzibar during the reporting period. In 2020, the following achievements have been marked in the country.

HIV Testing Services: By 2020, HIV Testing Services (HTS) were provided in 174 sites (112 Unguja and 62 in Pemba) i.e., 12 provide VCT services only, 113 provide PITC services only and 49 provide both PITC and VCT services. A total of 231,505 individuals were counselled and tested for HIV and received results in 2020. Of them, 130,924 (56.6%) were females. Of the 231,505 tested clients, 1,625 (0.7%) had HIV.

Prevention of Mother to Child Transmission services: A total of 63,881 pregnant women were tested for HIV in 2020 i.e., 84.9% of estimated pregnant women. Of the 451 estimated HIV positive pregnant women, 421 (89.3%) were initiated on ART. About 79% (355/451) infants born to HIV positive mothers received HIV antigen test (DNA PCR) within 2 months of birth. Additionally, all infants (100%) were started on Cotrimoxazole within two months of birth.

Key Population services: In 2020, a total of 9,236 key populations were reached through NGOs (1,920 MSM, 4,234 FSW and 3,082 PWID. Of them, a total of 8,187 key population (1,337 MSM, 4,183 FSWs and 2,667 PWIDs) were tested for HIV. As of December 2020, a total of 1,207 clients were enrolled and 881 were currently receiving MAT services in Unguja. Percentage of PWIDS who were on Methadone services for at least six months among PWID who have ever used methadone was 75.7%.

STI/RTI Control and Prevention Programme: In 2020, there was an increase in STI cases diagnosed compared to 2019. A total of 24,702 STI cases were reported and managed in 2020 which is an increase by 7,587 cases from 2019. Of the 24,702 STI patients diagnosed, 75.9% were females. A total of 10,514 (42.6%) patients were youth aged 10 – 24 years. Of them, majority (80.5%) were also females.

Care and Treatment services for PLHIV: Care, treatment and support programme provide comprehensive services for PLHIV which include free ART, prevention and treatment of opportunistic infections (OIs) and provision of psychosocial support. By 2020, there were 14 ART clinics providing care and treatment services with 7,020 patients receiving care. Of them 6,940 (98.9%) were on ART at these facilities. About 62% of patients initiated on ART are still alive and known to be on treatment 12 months after initiation of treatment. Percentage of patients screened for TB stand at 99.9%.

Integrated Community-Based HealthCare Services: During the year 2020, a total of 4,721 patients received HBC services. Among those received services, 1,505 were People living with HIV (995 female and 510 males) and 3,216 had chronic illnesses.

Tuberculosis and Leprosy control services: In total, 1,074 TB cases were registered in 2020. Of them, 276 (30%) were new bacteriologically confirmed TB cases and 5 (0.5%) MDR-TB. In 2020, TB treatment success rate was 93%. For TB/HIV collaborative activities, 1,074 TB patients tested for HIV and 9% were HIV positive. Ninety nine percent (99%) of the co-infected patients started ART through under one-roof service. The number of new leprosy cases registered in 2020 was 130 cases of whom 73% were multibacillary.

Laboratory Services: In 2020, there were 13 laboratories (9 Unguja and 4 Pemba) which support monitoring of HIV care and treatment services. Furthermore, laboratory supports HIV diagnosis at 157 (109 Unguja 48 Pemba) HTS sites, 168 (100 Unguja 68 Pemba) PMTCT sites, 56 (38 Unguja 18 Pemba) TB diagnostic sites and Public Health laboratories (PHL) in Pemba which serves as reference laboratory for TB culture. In 2020, a total of 9,396 sputum samples were collected from testing sites. of them 92.9% were tested by Gene Xpert. All 56 TB diagnostic sites have capacity to perform sputum examination by microscopy technique, which is used for follow-up of TB patients.

Viral Hepatitis: During the year 2020, a total of 12,907 pregnant women were tested for Hepatitis B (5,966 in Unguja and 6,941 Pemba). Of them, 79 (1.3%) tested HBsAg positive (51

(0.9%) in Unguja and 28 (0.4%) Pemba). In addition, a total of 1,761 pregnant women were tested for hepatitis C (370 in Unguja and 1,391 Pemba). Of them all tested HCV antibody positive in Unguja and none in Pemba.

Behaviour Change Communication: In 2020, the unit printed a total of 70,800 copies of IEC/BCC materials on HTS, PMTCT, CTC and STI. Moreover, 3,870 (2,150 brochure, 2,681 posters, 2,681 factsheet and 550 stickers) IEC/BCC materials were distributed to various stakeholders including Health facilities and Non-Governmental Organizations in order. In addition, various radio and TV spots were aired during the year of reporting.

Strategic Information: In 2020, Strategic Information (SI) unit conducted various activities including CTC system upgrade, technical support to other intervention units and operational research i.e., HIV disclosure among children and retention on PMTCT care cascades. Annual program recording and reporting tool's review workshop was also conducted including revision of registers and monthly summary reports.

Program Management & Finance: By December 2020, a total of 122 (97 Unguja and 26 Pemba) staff. Of whom 112(87 Unguja and 25 Pemba) staff from Government and 10 (9 Unguja and 1Pemba) staff on contractual basis with different specialties were working in the programme. During the reporting period, technical staff from the programme participated in long and short term national, regional and international conferences, meetings, and training funded through HIV, hepatitis, TB and leprosy partners.

CHAPTER 1: BACKGROUND INFORMATION

1.1 Introduction

Zanzibar Integrated HIV, Hepatitis, TB and Leprosy Programme (ZIHHTLP) is under the Directorate of Preventive Services and Health Education of the Ministry of Health, Social Welfare, Elderly, Gender and Children (MoHSWEGC), Zanzibar. The programme was made-up of two separate programmes namely Zanzibar AIDS Control Programme and Zanzibar TB and Leprosy Control Programme. These were originally established as standalone programmes in 1987 and were officially integrated in February 2012 in order to optimize service provision and efficient utilization of the available resources.

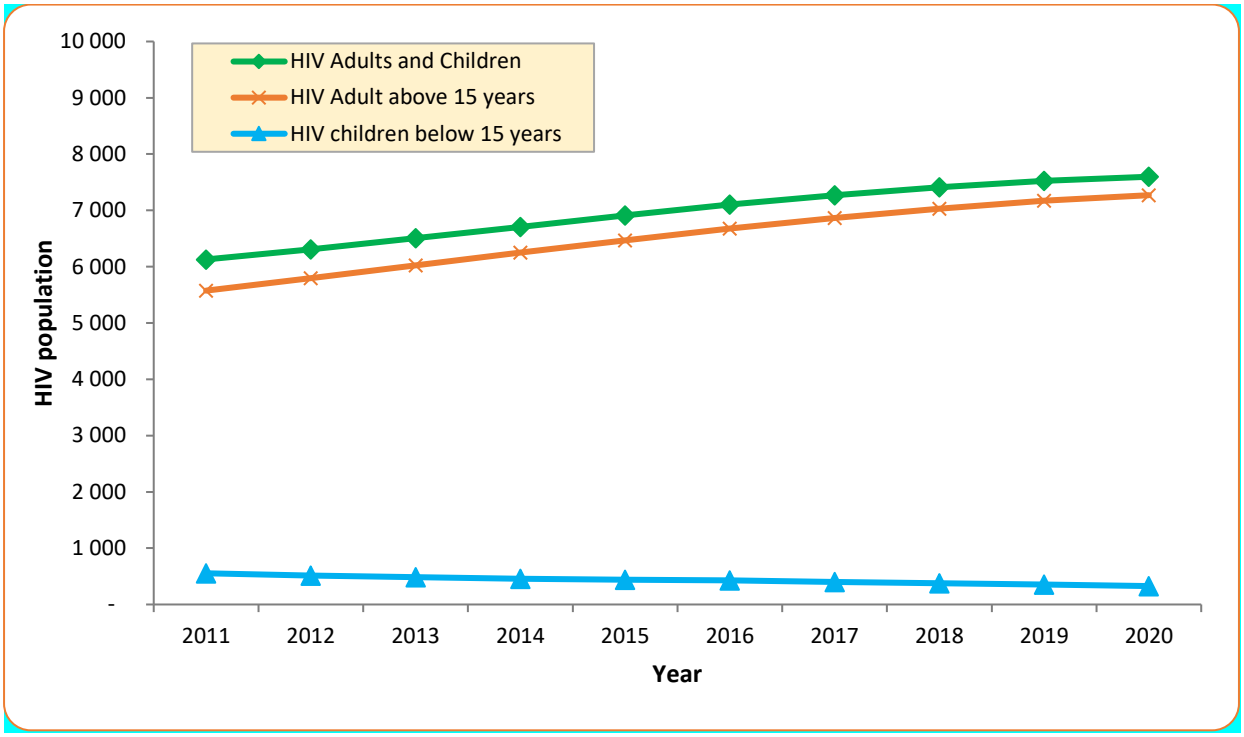
1.2 The burden of diseases (HIV, Hepatitis, TB and Leprosy)

1.2.1 HIV situation

The first three AIDS cases in Zanzibar were diagnosed in 1986. Since then, the HIV epidemic has remained low (below 1%) in the general population. However, Zanzibar is typically characterized by concentrated HIV epidemic with high HIV prevalence among female sex workers (FSWs), people who inject drugs (PWIDs) and men who have sex with men (MSM). According to the Integrated Bio-Behavioral Surveillance Survey (IBBSS) conducted in 2018/19, HIV prevalence was estimated to be 12.1%, 5.1% and 5.0% among FSWs, PWID and MSM, respectively.

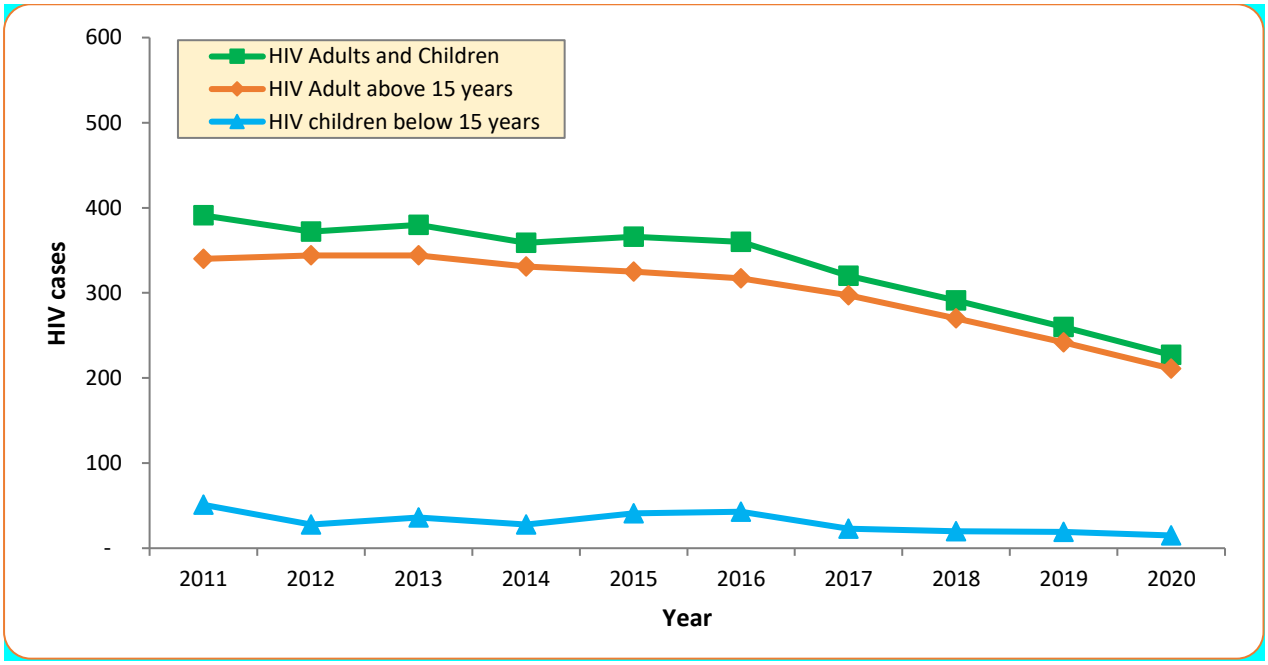
As of December 2020, spectrum projection estimated a total of 7,598 people including adults and children were living with HIV in Zanzibar. Among them, 96% (7,270) were people aged 15 years and above. The population of people living with HIV (PLHIV) has been increasing steadily from 2010 to 2020 as illustrated in figure 1 below.

Figure 1: Population estimates of people living with HIV, 2011 – 2020, Zanzibar



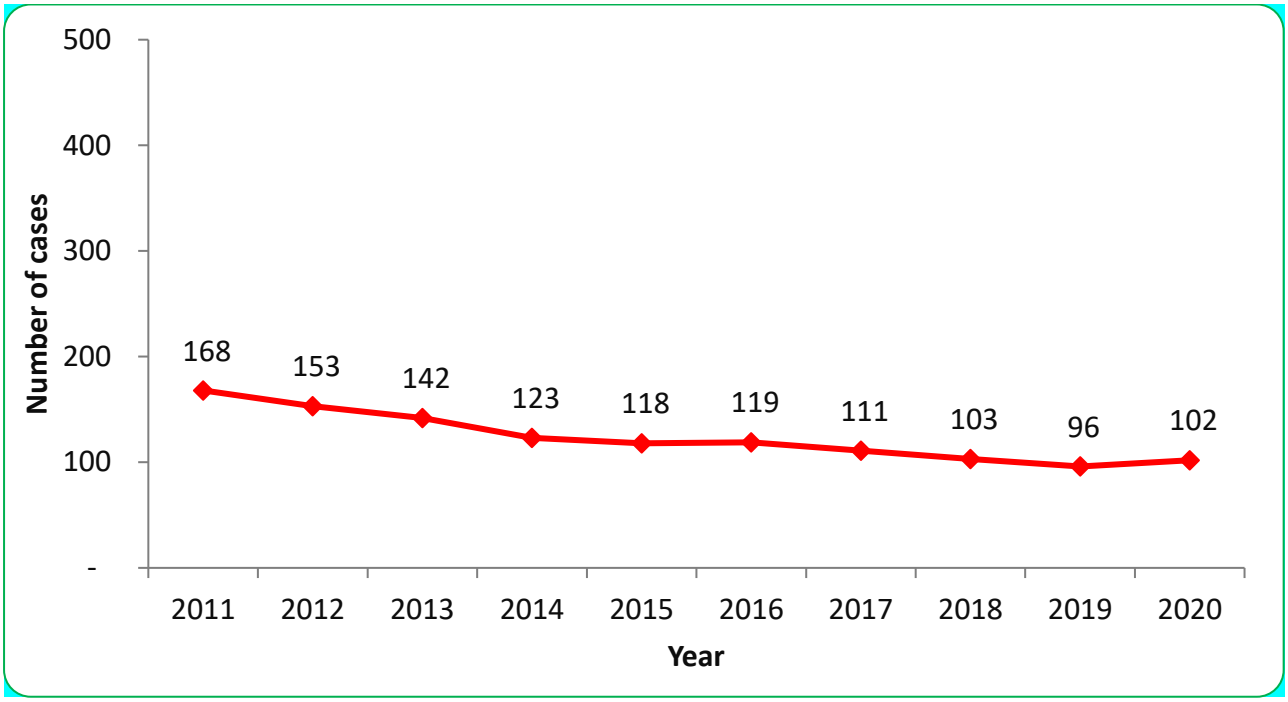
A total of 227 new HIV cases were estimated in 2020. Of them, 93% were adults above 15 years. The number of new HIV infections from 2010 to 2020 shows an inconsistent downward trend across all age groups (figure 2).

Figure 2: Trend of new HIV infection from 2011 – 2020, Zanzibar



In the last 10 years, the estimated annual AIDS deaths among PLHIV have decreased tremendously with a slight increase in 2020 (figure 3).

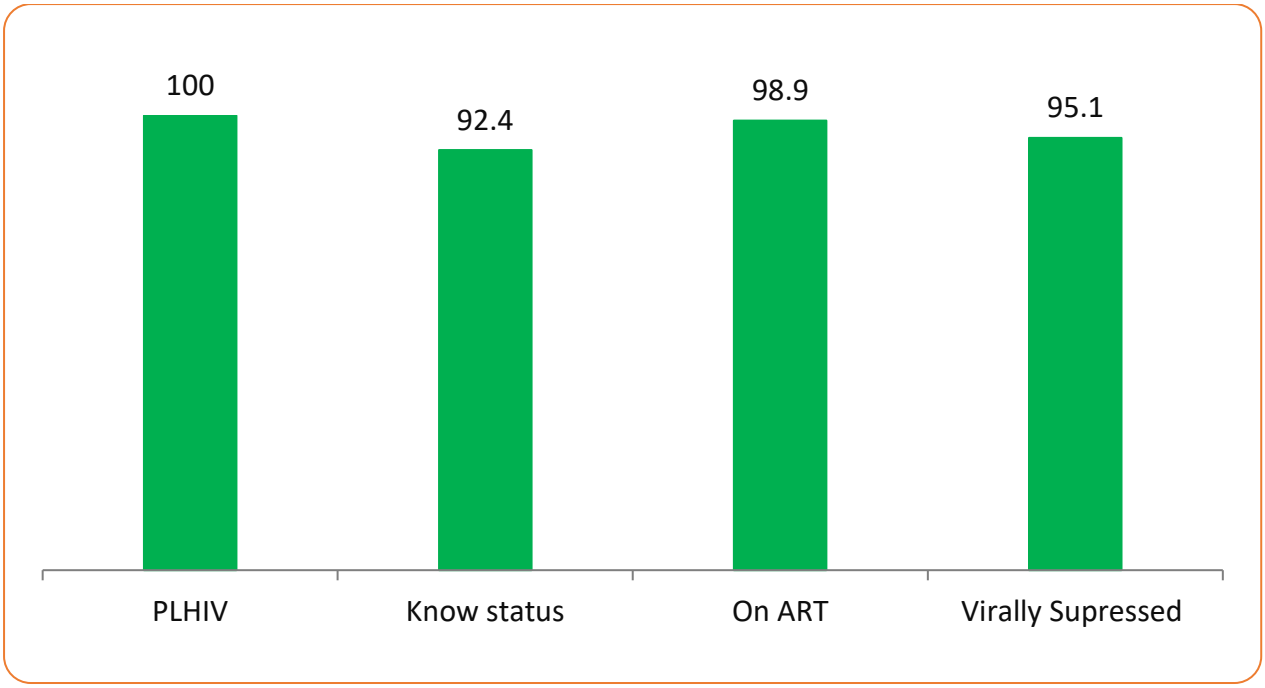
Figure 3: Total deaths to HIV population from 2011 to 2019 in Zanzibar



HIV Treatment Cascade

As of December 2020, the programme managed to achieve the global 90-90-90 targets i.e., about ninety two percent (90.5%) of people who are living with HIV (PLHIV) had been previously diagnosed. Of those, 98.9% were on ART. Of those on ART, 95.1% were virally suppressed (Figure 4).

Figure 4: Progress towards 90-90-90 targets among PLHIV



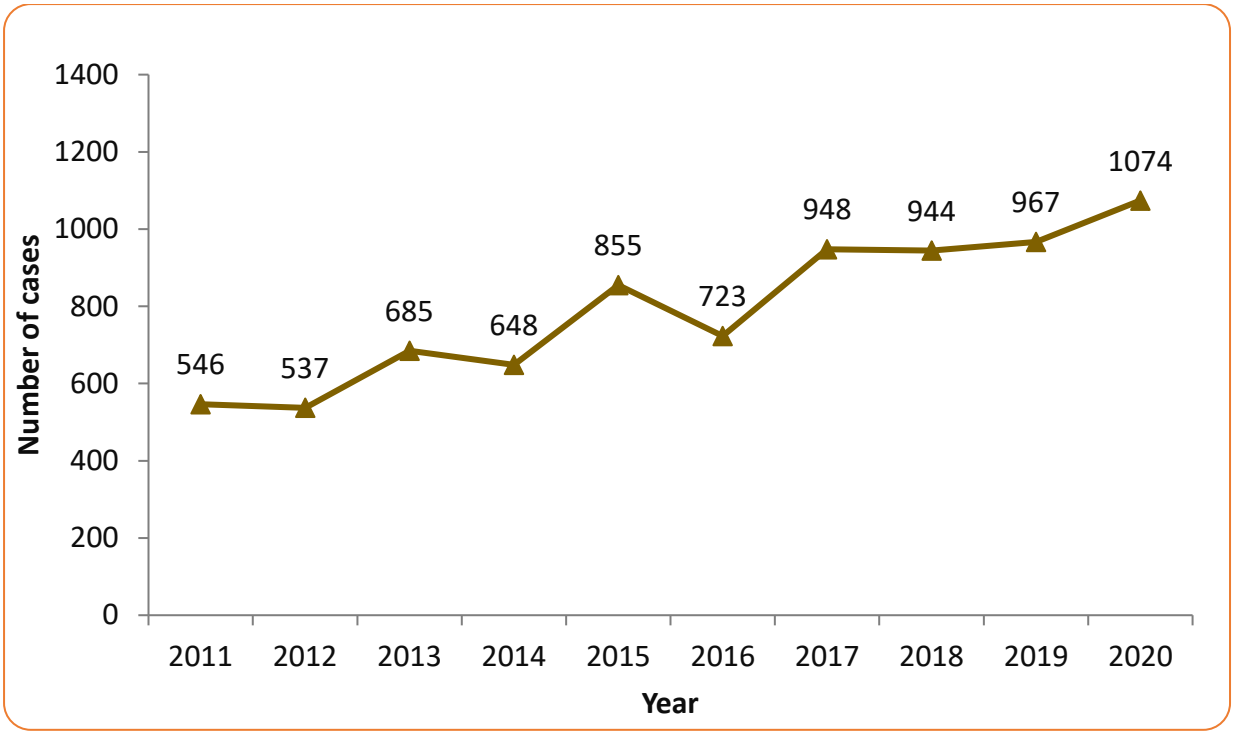
1.2.2 TB situation

Tuberculosis (TB) continues to be among the major public health problem in the country. The number of TB cases notified in Zanzibar has steadily increased from 449 in 2010 to 1074 in 2020. The increase in the notification was largest in the group of clinically diagnosed TB cases between 2015 and 2020 (Figure 5).

In 2020, a total of 1074 patients were diagnosed with TB. Of them 989 (92.1%) were new cases. Among the newly identified cases, 374 (35%) were bacteriologically confirmed, 563 (52.4%) clinically diagnosed and 137 (13%) were extra pulmonary TB patients. A total of 85 (7.9%) patients were previously treated. Among them 37 (403.5%) were a relapse, 9 (10.6%) were a failure and 18 (21.2%) were return to control and 21 (24.7%) were others.

MDR-TB cases remain few in Zanzibar. The Drug-Resistant Survey (DRS) done in Tanzania in 2007 indicated that the MDR-TB burden in Zanzibar was 1.1% among new cases and 3.9% among re-treated cases. The first case of MDR-TB in Zanzibar was diagnosed in 2009 in Pemba. In 2020, 5 MDR-TB cases were notified and treated.

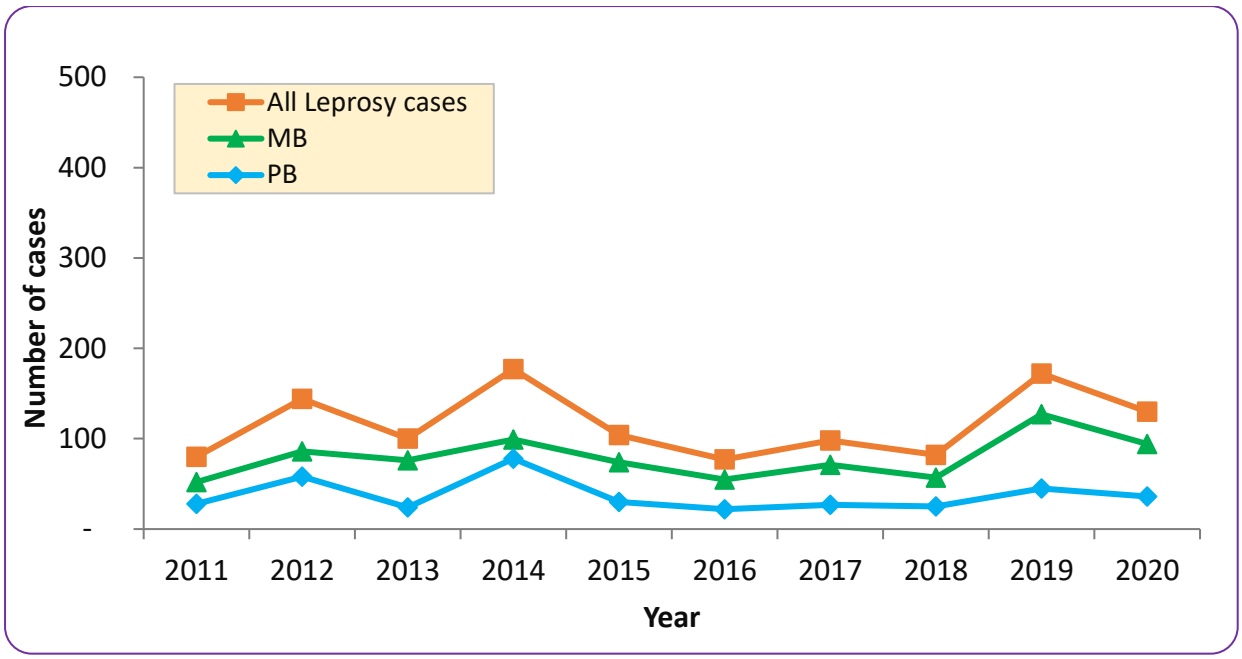
Figure 5: Number of TB cases from 2011-2020, Zanzibar



1.2.3 Leprosy situation

Tanzania (Zanzibar inclusive) was declared to have reached the Leprosy elimination targets in 2006. The trend of newly registered Leprosy cases has been fluctuating in the last 10 years (figure 6) with a prevalence of less than 1 case per 10,000 populations as per WHO elimination target. However, some of Zanzibar districts has high Leprosy prevalence above WHO target. Although Multi-Drug Therapy (MDT) results are successful in Zanzibar, the number of newly detected Leprosy patients with disabilities has not declined. In total 130 Leprosy cases were registered in 2020. Of them, ten (7.8%) had disability grade 2.

Figure 6: Number of cases by type of Leprosy from 2010-2019 in Zanzibar



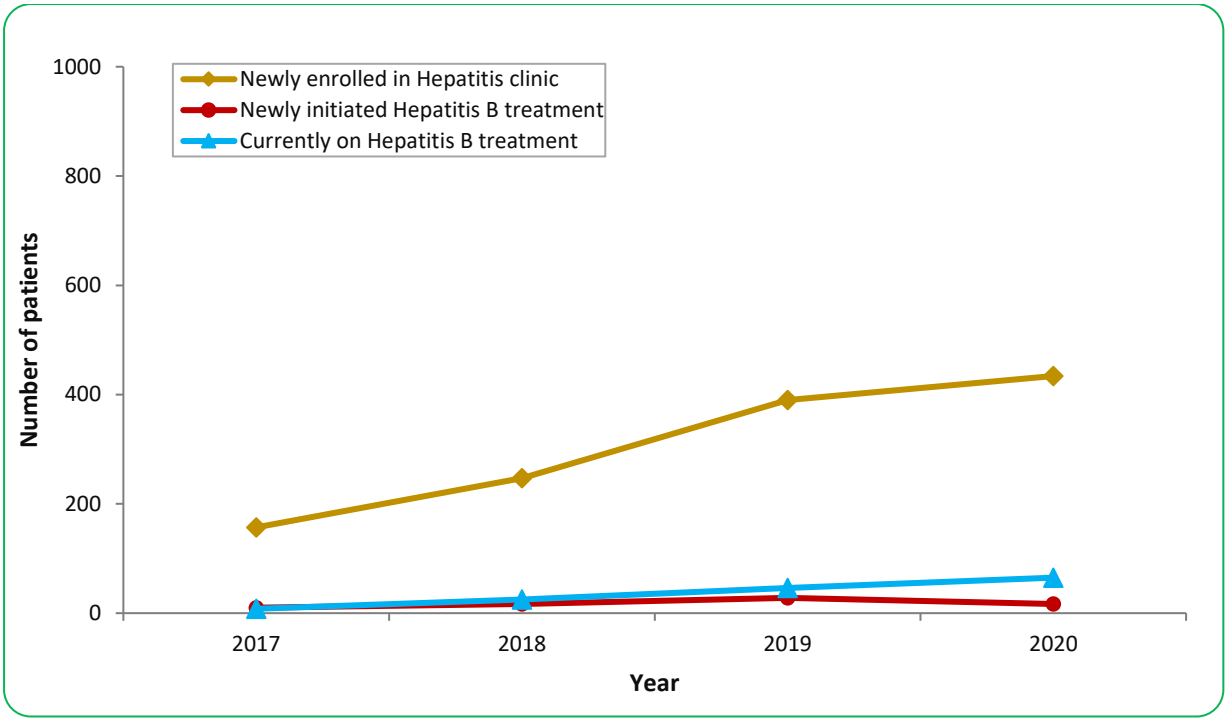
1.2.4 Viral Hepatitis

In Zanzibar, Hepatitis B remains the most prevalent bloodborne infection among pregnant women. Findings from 2018 ANC surveillance showed 1.3% of ANC attendees participated in the study had hepatitis B infection. Hepatitis C was the least prevalent infection amongst tested pregnant women.

According to the IBBSS conducted in 2018/19, high prevalence of hepatitis B and C infections were observed among PWIDs. The survey found that, the prevalence of HBV among PWID, MSM and FSW was 4.4%, 1.8% and 1.0% respectively. Whereas the prevalence of HCV amongst PWID, MSM and FSW was 13.7%, 0.5% and 0.7% respectively.

As shown in figure 4, the number of hepatitis B infected clients has increased tremendously from 157 in 2017 to 434 in 2020. The number of hepatitis B infected individuals who were newly initiated Hepatitis B treatment has also increased i.e., 10 in 2017 to 17 in 2020. At the end of 2020, there were 65 Hepatitis B and 3 Hepatitis C clients on treatment.

Figure 7: Number of clients receiving viral hepatitis services



1.3 Vision

Zanzibar free of new HIV, Hepatitis, TB and Leprosy infections; people infected or affected by these diseases are not stigmatized or discriminated; and key populations accessing HIV, Hepatitis, TB and Leprosy information and services.

1.4 Mission

To provide technical leadership and collaboration with other sectors and actors in ensuring that there are access availability and equity of quality HIV, Hepatitis, TB and Leprosy services for general and key populations.

1.5 The Goal

- To prevent the spread of new HIV infections among general and key population
- To reduce morbidity and mortality related to HIV/AIDS.
- To reduce incidence by 25% and mortality by 50% of TB by 2022.
- To eliminate Leprosy in all districts and reduce proportion of people diagnosed with grade II leprosy to less than 0.1 cases per 1000 by the year 2022.
- To eliminate viral hepatitis as a major public health threat by 2030.

1.6 Program's Core Functions

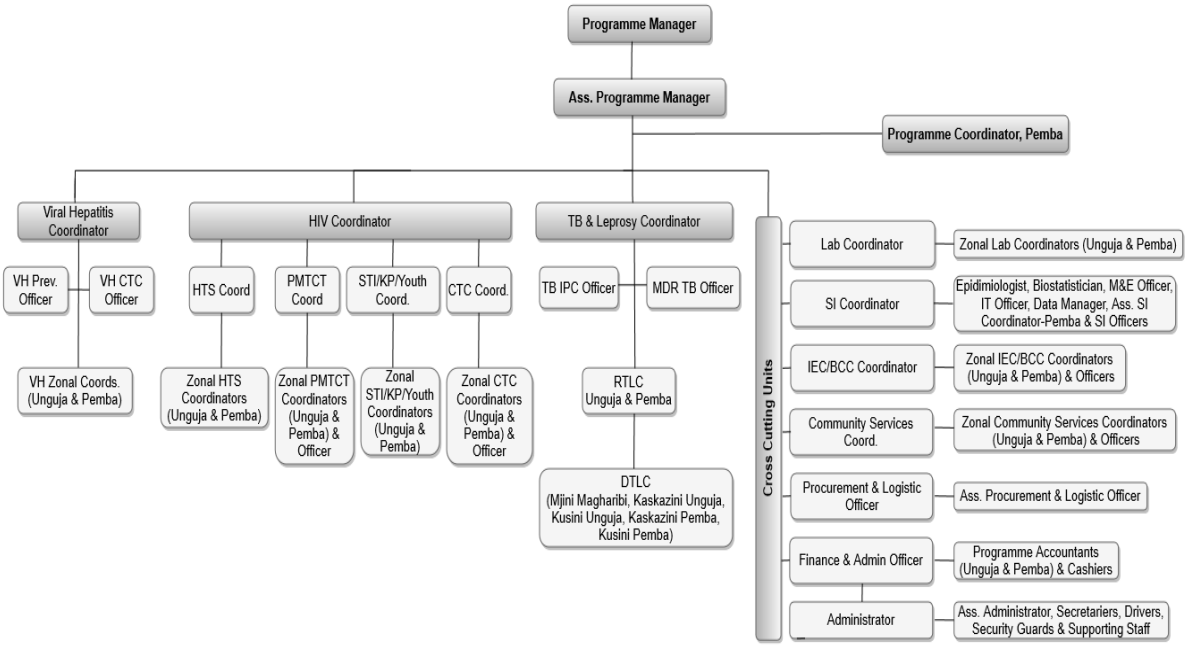
The ZIHHTLP coordinates and implements all health-related responses pertaining to HIV, Hepatitis, TB and Leprosy control in the country. It is also responsible for advising and guiding the MoH on health issues related to these diseases, building capacity of health care workers

(HCWs) on the management of the four diseases, monitoring the quality of services and strengthening strategic information system. In line with the above, the program ensures that control and prevention initiatives of HIV, Hepatitis, TB and Leprosy infection are in line with the Government key policy documents including the health sector strategic plan and multisectoral HIV strategic plan.

1.7 Organizational Structure

This is an area of authority, responsibility, and accountability. ZIHHTLP contains ten (10) technical units, each unit led by a coordinator. While the program manager is the overall in-charge of the program, coordinators oversee the execution of program plans and implementation of activities under their respective program areas. They ensure that program plans are in line with the key strategic plans, develop and monitor adherence of the developed guidelines by service providers. Current program units are HIV Counseling and Testing, Prevention of Mother to Child Transmission of HIV, HIV Care and Treatment, Hepatitis, TB and Leprosy, Behavior Change Communication, Key Populations & Sexually Transmitted Infections, Integrated Community Based Healthcare services, HIV/TB Laboratory, Strategic Information and Program Administration and Finance. The following is the Organizational Chart of the program:

Figure 8: Organizational chart of Zanzibar Integrated HIV, TB and Leprosy Programme



1.8 Implementation status of the previous year (2019) recommendations

SN.	Recommendations	Implementation status
HTS		
1	To strengthen escort referral system by peer counsellors in the high yield HTS sites	This recommendation was partial implemented, the involvement of peer in escorted referral is conducted in some high yield HTS sites
2	To mobilize fund for refresher training and mentorship for counsellors	This recommendation was not implemented
PMTCT		
1	Active involvement of CHMTs to strengthen collaboration with service providers to improve follow up of mother infant pair.	Collaboration between CHMTs and service providers was strengthened by establishing WhatsApp group to improve active follow up of mother infant pair.
2	Strengthen follow up mechanisms for mother mentors to HIV infected pregnant women and their infants through phones and home visiting.	Mobile voucher has been given to healthcare workers/mother mentors to improve follow up mechanisms to HIV infected pregnant women and their infants.
STI/KP		
1	Strengthen tracking mechanisms for the defaulted MAT clients	Tracking is still going on and some of the clients able to return to the services
2	Increased visit of supportive supervision to peer educators and community outreach workers	This has not been implemented due to the shortage of funds and will be carried on
CTC		
1	Develop and implement strategies to improve retention of PLHIV on ART.	All HIV viral load patients were initiated EAC Follow up were made to clients who missed their appointments to CTC Strengthened fast-track mechanism for stable clients in all CTC
2	Strengthen tracking system	Implemented by providing registers and appointments book and enhanced capacity of CTC

		HCWs to document and supervise tracking of clients using 3 boxes system.
3	Enhance counselling to PLHIV with high viral load.	CTC providers were mentored on EAC for patients with high HVL and their capacity to conduct Viraemic clinic were improved.
TB & LEPROSY		
1	To strengthen mentorship to health care providers on TB screening to all patients attending to health facilities	The mentorship on effective TB screening through PITS in all entry points of health care facilities was conducted. In addition, TB quality improvement teams were capacitated to mentor their fellow staff on effective TB screening.
2	Scale up of private health facilities on implementing of TB care interventions	The scale up of private health facilities providing TB care intervention was not implemented due to funds constraints. The intervention is planned to be implemented in 2021.
3	Conduct mentorship to health care providers on early leprosy diagnosis and management	Mentorship to health care providers was conducted during supportive supervision in all health care facilities supervised in 2020.
VIRAL HEPATITIS		
1	Advocate for resource mobilization to support implementation of viral hepatitis interventions.	Advocacy for resource mobilization that was conducted at various levels facilitated allocation of some funds to procure hepatitis B and C antiviral medicines. However, limitation of funds affected countrywide shortage of hepatitis B and C test kits.
LABORATORY		
1	Follow up of sample transporters to ensure timely sputum transportation.	Follow up of sample transporters to ensure timely sputum transportation was conducted and delay of sputum sample transportation from TB collection sites to testing laboratories was reduced.
2	Capacity building for proper collection and transportation of sputum samples should be enhanced.	Capacity building for proper collection and transportation of sputum samples was conducted TB during supportive supervision.
	Capacity building for HIV Viral Load, Laboratory Quality System and Hepatitis diagnosis to laboratory service providers.	Capacity building for HIV Viral Load, Laboratory Quality System and Hepatitis diagnosis to laboratory service providers was not implemented due to COVID 19 outbreak.
IEC/BCC		

1	Resource mobilization on production of IEC materials	Through GF COVID-19 fund, financial support was obtained to support production of IEC materials
STRATEGIC INFORMATION		
1	Mobilize fund to support HIV, VHP, TB and leprosy data review meetings, data verification and supporting supervision at health facilities and council levels	Not Implemented
MANAGEMENT		
1	Advocate for resource mobilization to support the implementation of HIV, TB, Hepatitis and Leprosy interventions.	Funds were mobilized to accomplish COVID-19 interventions but but were not adequate to support other interventions.
2	Liaise with partners to ensure timely disbursement of funds.	Discussions with partners was made and there are some improvements in funds disbursement. However, more efforts are needed to ensure the challenge is fully addressed.
3	To collaborate with Central Medical Store and District Pharmacist to plan and conduct mentorship for services provider on proper reporting and requesting of HIV commodities	• Not implemented

CHAPTER 2: HIV PREVENTION

2.1 HIV TESTING SERVICES

2.1.1 Background

HIV testing and counselling (HTC) services were established in 1988 in five (5) public hospitals. By 2020, HIV Testing Services were provided in **174** (112 Unguja and 62 in Pemba) sites in Zanzibar. Of them, **160** are government facilities, **4** NGOs, **3** FBOs and **7** private hospitals. These services were offered through two main approaches including Client Initiated Counselling and Testing (CITC)/Voluntary Counselling and Testing (VCT) and Provider Initiated Testing and Counselling (PITC). Among **174** sites; **12** provide VCT services only, **113** provide PITC services only and 4**9** provide both PITC and VCT services.

2.1.2 Goal

To increase utilization of quality HIV testing services (HTS) to the general population, Key Population (KP), Youth and Adolescents.

2.1.3 Objective

To increase proportion of people living with HIV who know their status by 95%.

2.1.4 Program Implementation

2.1.4.1 Service Monitoring

Annual supportive supervision was conducted to **174** (112 Unguja and 62 Pemba) sites providing HTC services. The objectives were to monitor HTS and support providers to improve their performance. Key findings were periodic stock out of HIV test kits at facility level, shortage of skilled HTC service providers, inadequate documentation of HIV reagent used and clients tested. In addition, monthly follow up visit was conducted to all HTC sites for data collection, which provide opportunity for supervisors to oversee the services.

2.1.4.2 Capacity building

Three days study tour was conducted at Kinondoni district in Tanzania Mainland. A team of seven (7) people from ZIHHTLP, ZAC and ZAYEDESA participated in the visit. The objective was to learn on how HIV self-testing approach is performed, associated challenges and best practices experienced in its implementation. Hence, HIV self-testing service will be introduced in the coming year as pilot targeting KPs group and will be implemented by selected NGO.

2.1.5 HTS indicators and trend

Table 1: Trends of HIV Testing Services from 2018 to 2020

Indicator	Year		
	2018	2019	2020
1. Number and percentage of health facilities providing HTS services	141/280 (50.4%)	168/326 (51.5%)	174/341 (51.0%)
2. Number and proportion of people who were tested for HIV and received their results within the past 12 months	261,399 (16.1%)	271,123 (16.9%)	231,505 (13.9%)
• Individuals identified as HIV positive	1,840	1,915	1,620

1. Percentage of health facilities providing HTS

The percentage of health facilities providing HTC services in 2020 was 51%, nearly the same as 51.5% in 2019. This is lower than the 2020 set target of 58% due to inadequate resources for scaling up new HTS sites (public and private health facilities).

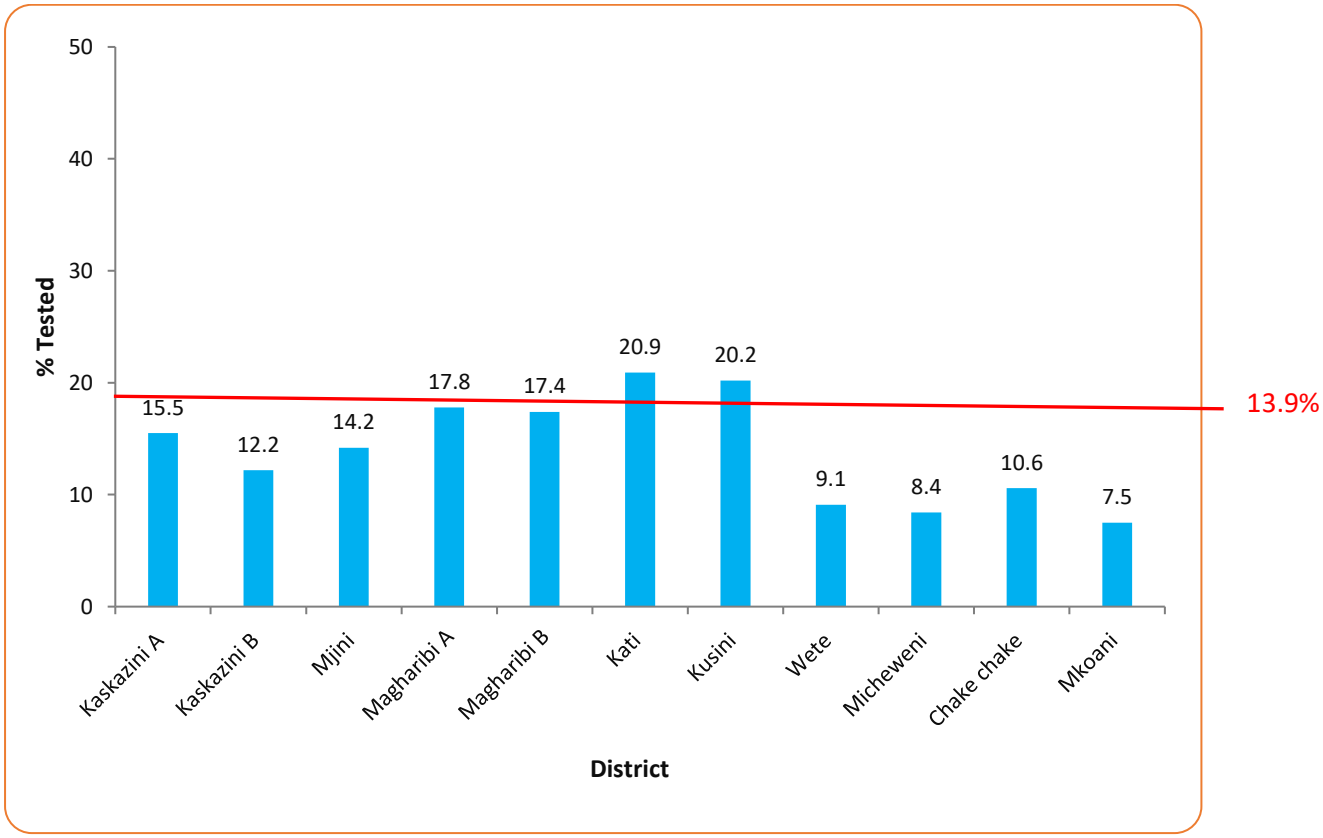
Table 2: Number of HTS sites per district in 2020

S/NO	DISTRICT NAME	TOTAL	Government	Private	NGOs	FBO
1	Mjini	21	16	5	1	0
2	Maghraibi A	10	9	0	0	0
3	Magharibi B	13	9	1	1	1
4	Kaskazini A	14	12	1	1	0
5	Kaskazini B	13	13	0	0	1
6	Kati	26	24	0	0	1
7	Kusini	12	12	0	1	0
8	Wete	16	14	0	0	0
9	Micheweni	14	15	0	0	0
10	Chake Chake	18	13	1	0	0
11	Mkoani	17	15	0	1	0
	TOTAL	**174**	**160**	**7**	**4**	**3**

2. Number and proportion of people who were tested for HIV and received their results within the past 12 months

The overall proportion of people who were tested for HIV and received their results in 2020 was 13.9%, the figure is low compared with 16.9% in 2019 where the program target was testing 20% of the population. Inconsistent availability of HIV test kits at facility level due to improper distribution and COVID-19 outbreak contributed to the under achievement of the set target. However, only Kati and Kusini districts achieved the set target (20.9% and 20.2% respectively) as indicated in figure 1. The achievement was due to increase in frequency of outreach services during village health day organized by district council.

Figure 9: Percent of population received HTS by district, Zanzibar, 2020



The figure above shows the proportion of people counselled and tested by district. Only Mjini and Magharibi 'B' districts had testing levels above the national target (22.0% and 20.9% respectively) of testing 18% of the general population as indicated in figure 9. Other districts did not achieve the target regardless of having high number of HTS sites. Districts which achieved the target were mainly due to initiatives from development partners including hiring of service providers special for providing PITC services and PITC providers were motivated to provide services during evening hours at OPD in major health facilities. In addition, outreach services conducted by NGOs, CHMT and during the special event was strengthened.

Table 3: HIV proportion among clients tested by district of residence, Zanzibar 2020

District	Number Tested for HIV	Number HIV Positive	% of HIV Positive
Kaskazini A	**180,555**	**1,453**	**0.8**
Kaskazini B	20,203	72	0.4
Mjini	12,425	65	0.5
Magharibi A	39,515	320	0.8
Magharibi B	35,403	251	0.7
Kati	44,428	416	0.9
Kusini	18,943	219	1.2
Unguja	9,638	110	1.1
Wete	**50,333**	**150**	**0.3**
Micheweni	13,633	36	0.3
Chake chake	12,138	24	0.2
Mkoani	14,382	68	0.5
Pemba	10,180	22	0.2
Outside Zanzibar	617	22	3.6
Total	**231,505**	**1,625**	**0.7**

HIV testing and positivity by age and sex

Out of all people (231,505) who received HIV testing and counselling services, more than half 130,924 (56.5%) were females. About half (51.1%) of clients tested and received results had ages between 25-49 years, of whom 54.1% were female. Moreover, female clients had slightly higher positivity rates (0.8%) compared to male counterparts (0.6%). By age higher positivity rate was observed among older age group i.e. 25- 49 (1.0%) and 50+ (0.9%). Table 4 show these results.

Table 4: HIV proportion among clients tested by age and sex, Zanzibar, 2020

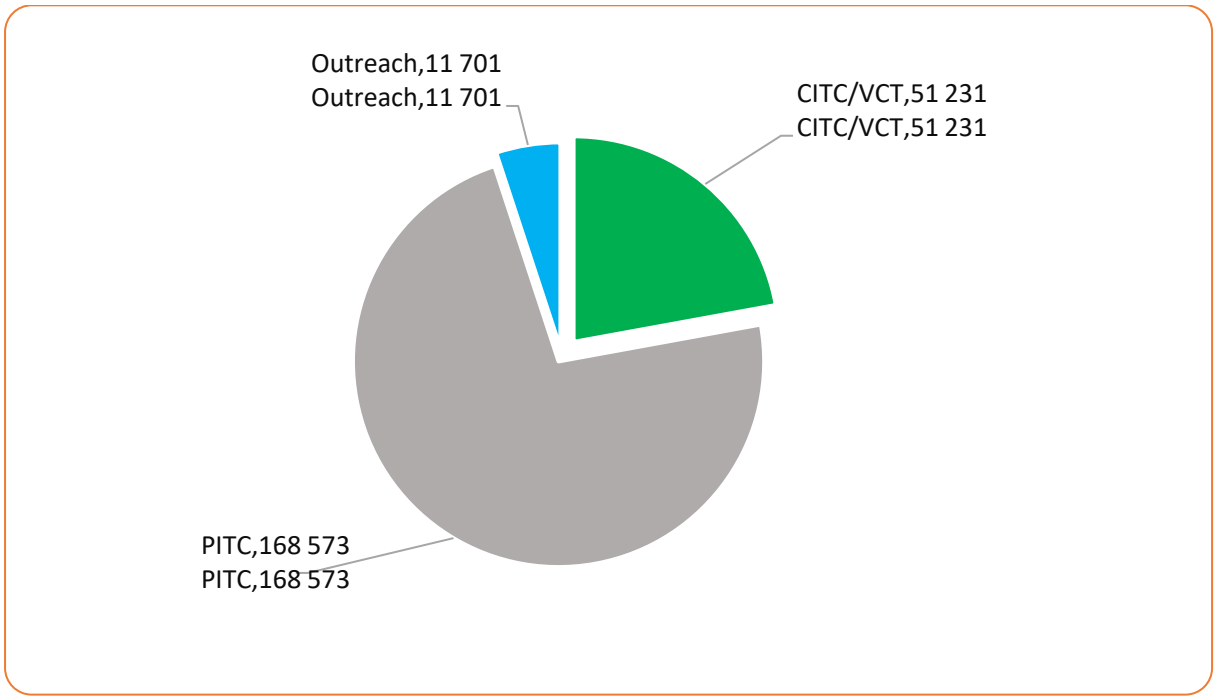
Age Group (Years)	Female			Male			Total		
	Tested HIV	HIV positive	% positive	Tested HIV	HIV positive	% positive	Tested HIV	HIV positive	% positive

<1	2,089	7	0.3	1,775	7	0.4	3,864	14	0.4
1-4	5,107	17	0.3	4,981	19	0.4	10,088	36	0.4
5-9	3,287	10	0.3	3,158	2	0.1	6,445	12	0.2
10-19	18,674	51	0.3	9,678	16	0.2	28,352	67	0.2
20-24	29,962	162	0.5	17,726	53	0.3	47,688	215	0.5
25-49	63,821	738	1.2	54,048	388	0.7	117,869	1,126	1.0
50+	7,984	70	0.9	9,215	85	0.9	17,199	155	0.9
Total	**130,924**	**1,055**	**0.8**	**100,581**	**570**	**0.6**	**231,505**	**1,625**	**0.7**

HIV testing by modality

Figure below shows that, 72.8% were reached through PITC approach in 2020 which is higher as compared to 67.4% in 2019. VCT approach decreased to 22.1% in 2020 compared to 27.3% in 2019. Effort to improve access of VCT service is needed by promoting voluntary HIV testing, providing opportunity for individuals to learn about HIV knowledge and to assess their own risk behaviours of HIV transmission.

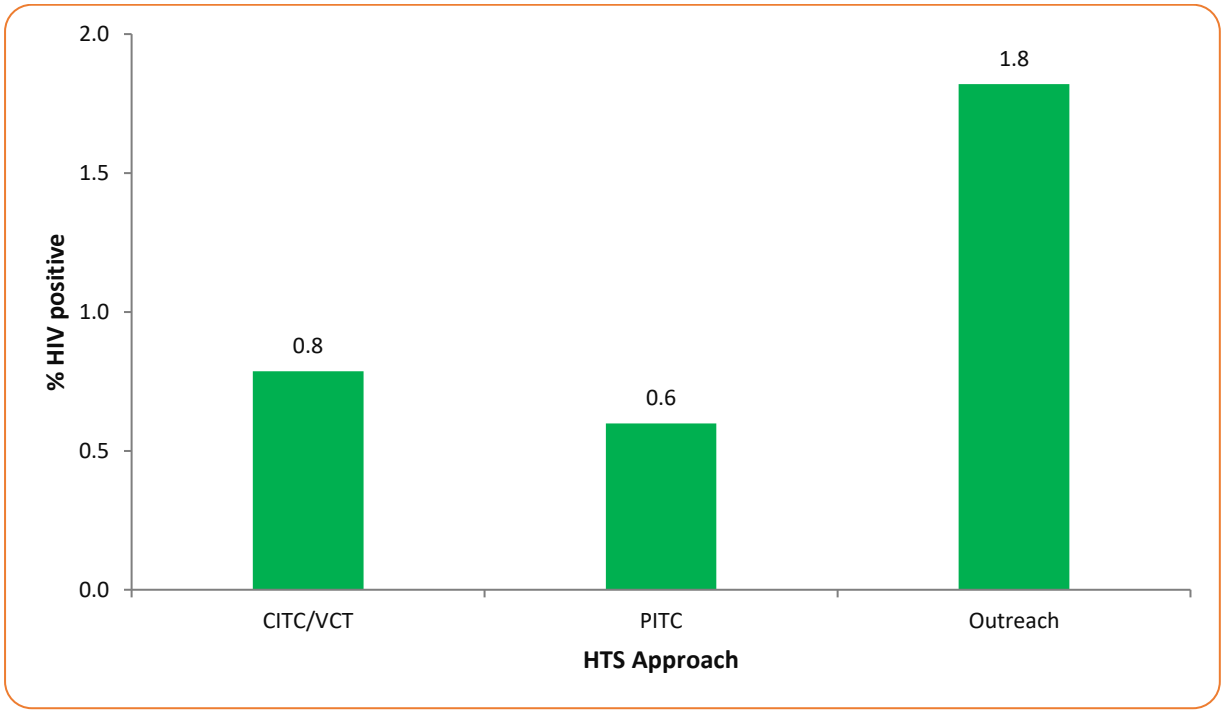
Figure 10: HIV testing modality, Zanzibar, 2020



HIV proportion among tested by HTS modality, Zanzibar, 2020

In 2020, HIV positivity rate was high among clients who were reached through outreach approach (1.8%) while it was low (0.6%) among individual tested through PITC services as indicated in figure 3. The high positivity rate in outreach might be due to HIV testing in the hotspot area for KPs. This result highlights the need of implementing a focused HIV testing through PITC approach as recommended by WHO and strengthening in index testing services in hotspot area.

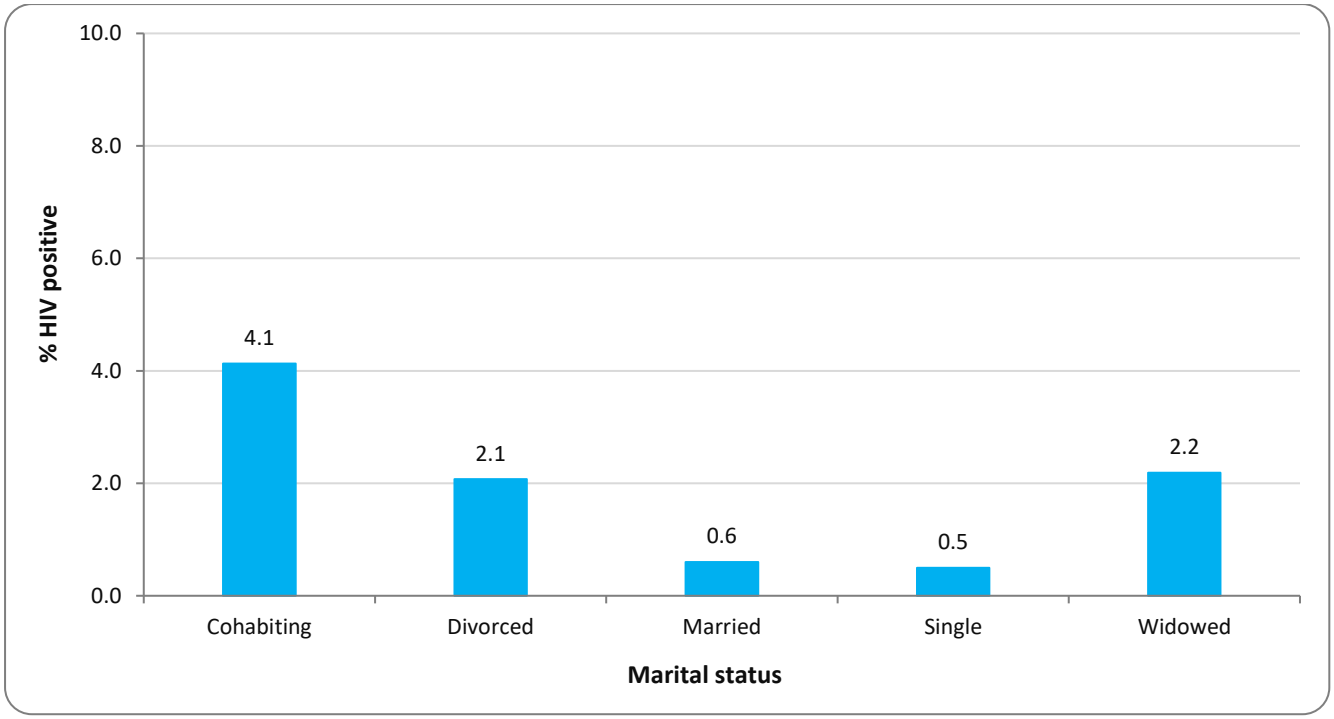
Figure 11: HIV proportion among tested by HTS modality, Zanzibar, 2020



HIV proportion among individual tested by marital status, Zanzibar, 2020

HIV positivity rate in 2020 was highest among clients who were cohabiting (4.1%). This is slight decrease with 2019 positivity rate (4.6%) of this group. Nevertheless, those who were single had lowest HIV positivity rate (0.5%) as indicated in figure 4. The result indicates that, effort to improve index testing and raising awareness on couple counselling and HIV testing services is needed.

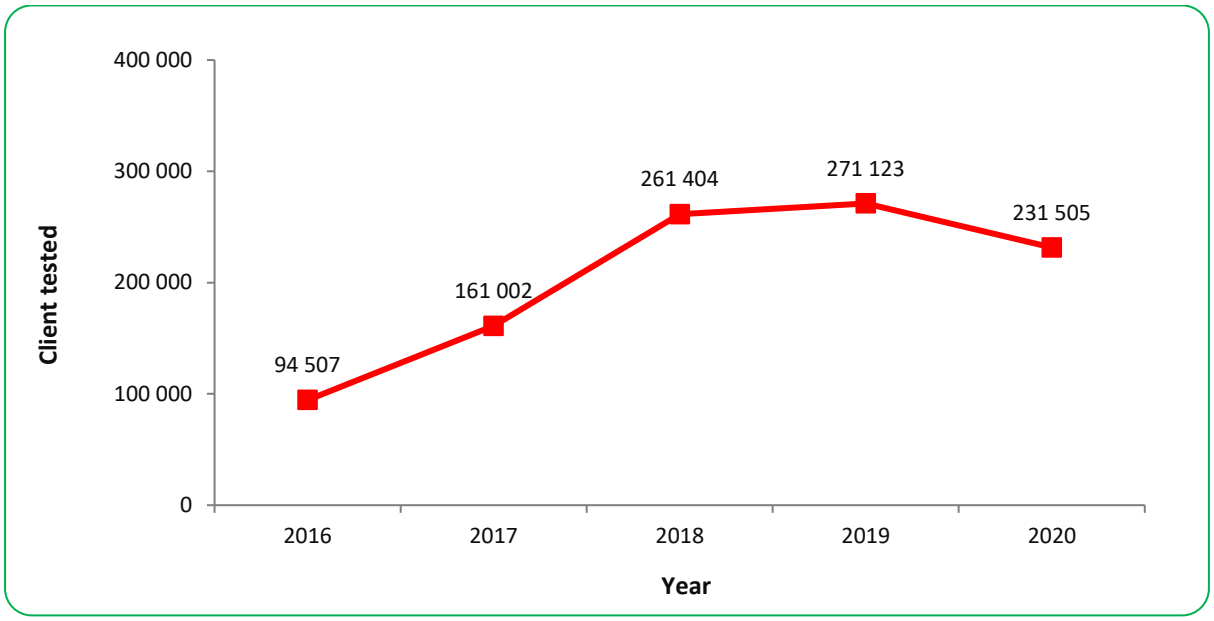
Figure 12: HIV proportion among individual tested by marital status, Zanzibar, 2020



Trend of people who were tested for HIV and received their results from 2016 to 2020

Figure 5 shows that, the number of people who received HIV testing services and received their results has been increasing from 94,507 in 2016 to 271,123 in 2019 and decreases to 231,505 in 2020. This decrease was due to outbreak of COVID-19 and inconsistent availability of HIV test kits at facility level.

Figure 13: Number of people who were tested for HIV and received their results from 2016 to 2020



2.1.6 Challenges

- ❖ Inconsistent availability of HIV test kits due to improper distribution procedure

2.2. PREVENTION OF MOTHER TO CHILD TRANSMISSION OF HIV (PMTCT) SERVICES

2.2.1 Background

PMTCT services include HIV testing for pregnant women and their partners, lifetime use of antiretroviral therapy (ART) for HIV-infected pregnant and breastfeeding women, safe delivery practices and safe infant feeding. HIV Early infant diagnosis (HEID) performed antigen (DNA PCR) at 4-6 weeks after birth and 6 weeks after complete cessation of breastfeeding to confirm HIV infection among HIV-exposed infants for provision of prophylaxis ARV at birth and cotrimoxazole 4 weeks after birth. Currently, the services are provided at 177 (103 Unguja and 74 Pemba) Reproductive and Child Health (RCH) clinics, across all eleven districts of Zanzibar.

2.2.2 Goal

To eliminate mother to child transmission of HIV and improve care for HIV-infected partners and their children.

2.2.3 Objectives

1. To increase access and utilization of PMTCT services
2. To increase involvement of male partners in PMTCT services
3. To integrate PMTCT services with other common co-morbidities
4. Increase access to HIV diagnosis and treatment for HIV exposed and infected infants.

2.2.4 Program Implementation

2.2.4.1 Service monitoring

Annual Supportive supervision was conducted to service providers at 162 (97 Unguja and 65 Pemba) PMTCT sites. The objectives were to monitor the implementation of PMTCT services and enhance the capacity of service providers. It was observed that, PMTCT services has improved in most of the health facilities particularly on documentation of ANC registers and monthly report forms. However, major challenges identified were missed opportunity of HIV re-test for pregnant women at ANC and post-natal visits, low coverage of HIV test for exposed infants at six weeks after cessation of breast feeding and irregular supply of HIV test kits. Therefore, intensified follow up is needed to ensure HIV re-test services for pregnant women and HIV test of exposed infants at six weeks after cessions of breast feeding are performed at all levels as well as monitor uninterrupted supply of HIV test kits across the Islands.

Furthermore, bi-annual meeting with 30 (25 in Unguja and 5 in Pemba) mother mentors was conducted in Unguja. The objectives were to discuss the achievement and challenges encountered during implementation of PMTCT services and to plan effective way of achieving their responsibilities. Major issue discussed was mother delayed to bring their children for second test at six weeks after cessation of breast feeding. The agreed way forward was to continue with health education at facility level to emphasize the importance of complying with PMTCT care cascade.

2.2.5 PMTCT services indicators and trend from 2018 to 2020

Table 5 : PMTCT services indicators and trend from 2018 to 2020

SN	Indicator	2018	2019	2020
1	Percentage of pregnant women with known HIV status	63,663/ 67941 (93.7%)	64,286/73,152 (87.8%)	63,881/75,222 (84.9%)

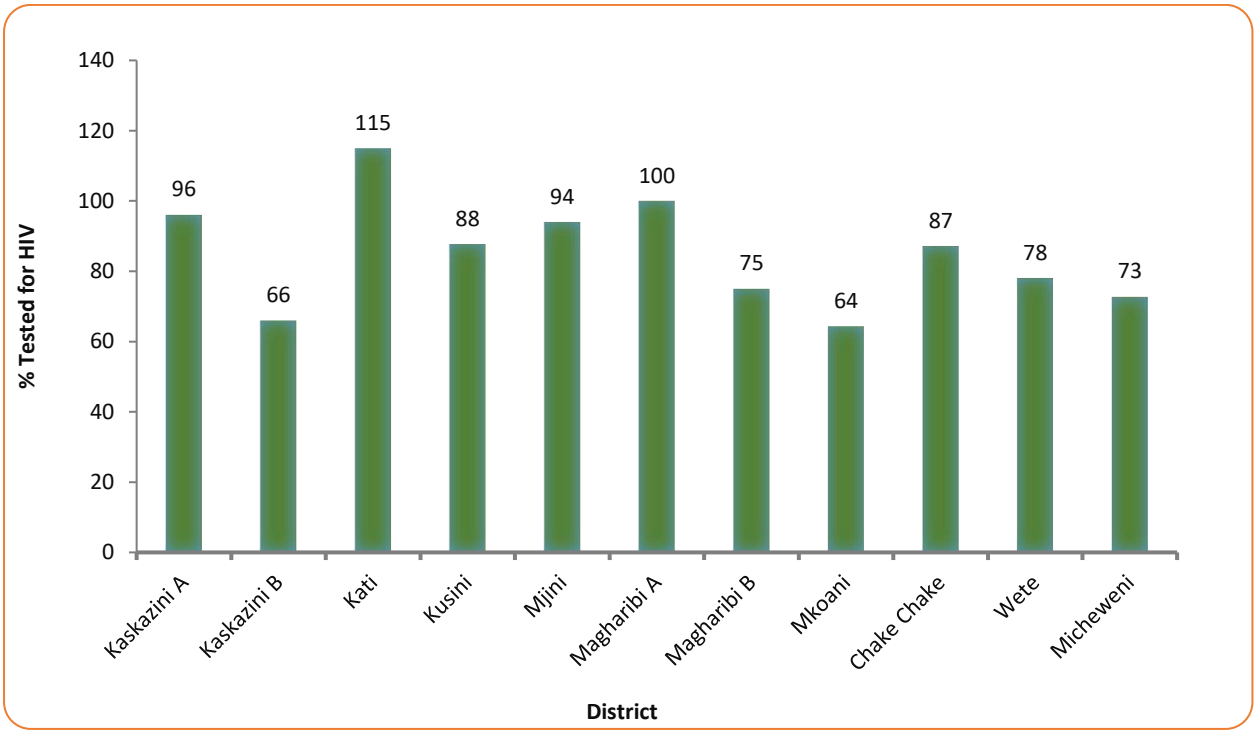
2	Percentage of pregnant women living with HIV who received ART to reduce the risk of mother to-child transmission of HIV	3,94/405 (97.3%)	391/438 (89.7%)	421/451 (93.3%)
3	Percentage of pregnant women attending ANC whose male partner was tested for HIV during pregnancy	21,734/62877 (34.6%)	27,434/ 64,286 (42.6%)	26,895/63,912 (42.1%)
4	Percentage of pregnant women who were tested for HBV	TBD	16,319/64,286 (25.3%)	12,907/63,912 (20.1%)
5	Percentage of pregnant women who were tested for syphilis	13344/62877 (21.2%)	29,525/64,286 (45.9%)	32,342/63,912 (50.6%)
6	Percentage of HIV-exposed infants who started on ARV prophylaxis	258/405 (63.7%)	343/438 (78.3%)	355/451 (78.7%)
7	Percentage of HIV-exposed infants receiving virological test for HIV within 12 months of birth • Percentage of infants born to HIV positive mothers who receive HIV antigen test (DNA PCR) within 2 months of birth	334/405 (82.4%) 258/405 (64.0%)	404/438 (92.2%) 343/438 (78.3%)	407/451 (90.2%) 355/451 (78.7%)
8	Percentage of HIV-exposed infants receiving test for HIV 6 weeks after cessation of breastfeeding	67/405 (16.5%)	150/438 (34.2%)	172/451 (38.1%)
9	Percentage of HIV-infections among HIV exposed infants born in the past 12 months	9/334 (2.7%)	5/388 (1.2%)	5/407 (1.2%)
10	Percentage of HIV-exposed infants started on CTX prophylaxis within 2 months of birth	261/405 (64.4%)	343/438 (78.3%)	372/451 (82.4%)
11	Percentage of identified HIV positive infants who started on ART by 12 months of age	8/9 (89%)	5/5 (100%)	5/5 (100%)

1. **Percentage of pregnant women with known HIV status.**

The proportion of HIV pregnant women who were aware of their HIV status decreased from **87.8% (64,286/73,152)** in 2019 to **84.9% (63,881/75,222)** in 2020 which is below the set target of **100%**. This was due to inconsistent availability of HIV test kits at many health facilities. Therefore, proper ordering and distribution system of HIV test kits need to be strengthened in all districts.

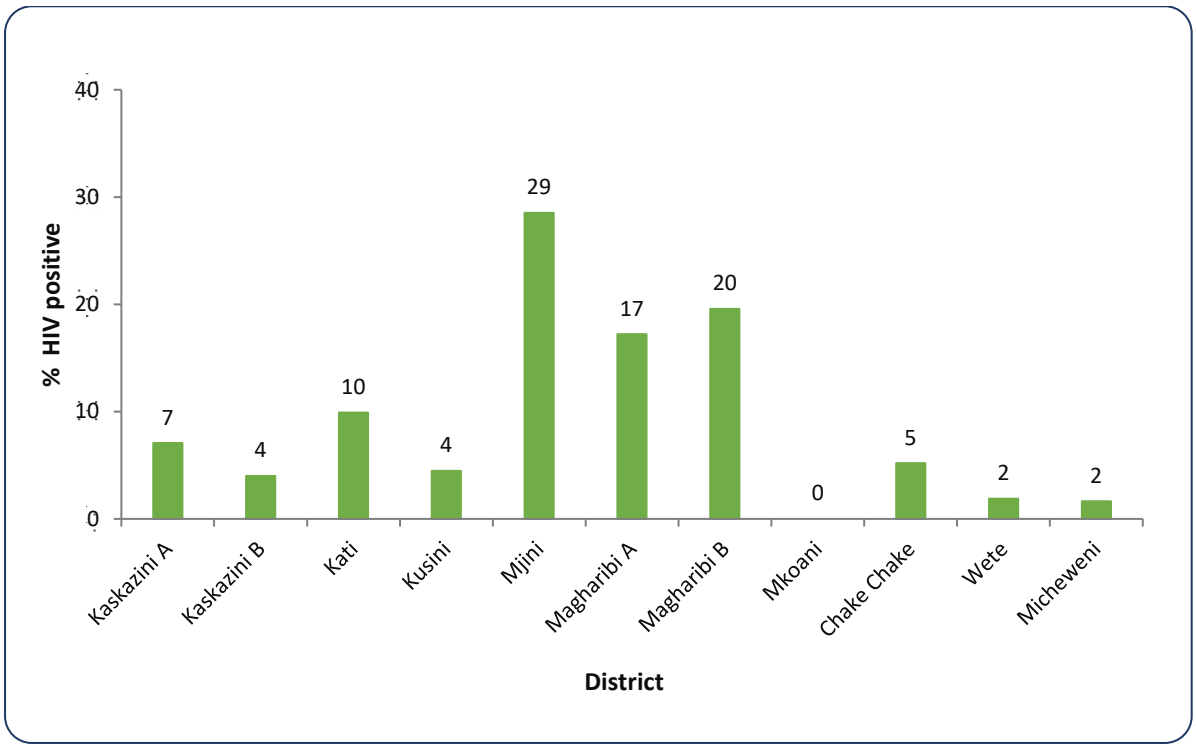
Among all clients who attended ANC services, Kati district **(115%)** had the highest proportion of ANC clients tested for HIV. While Mkoani district **(64%)** had the lowest ANC, clients tested for HIV as indicated in figure below.

Figure 13: Proportion of ANC clients tested for HIV by district, Zanzibar, 2020



Furthermore, among HIV positive pregnant women, **69.8 % (315/451)** were previously known and **24.2% (109/451)** were newly tested positive at ANC and maternity. Majority of HIV positive cases reported were from Mjini district (29%) while, Mkoani district reported no case of HIV positive**,** as shown in the figure below.

Figure 14: Distribution of known HIV Positive Pregnant Women Identified by District, Zanzibar, 2020



2. **Percentage of pregnant women living with HIV who received ART to reduce the risk of mother to-child transmission of HIV**

Proportion of HIV-infected pregnant women who started ART to reduce the risk of mother to-child transmission of HIV has increased from **89.7% (391/438)** in 2019 to **93.3% (421/451)** in 2020 which is above the set target of **93%**. This was contributed by improved referral system from ANC to CTC and close follow up of all HIV infected pregnant women done by PMTCT unit, service providers and mother mentors.

3. **Percent of male partners of pregnant women who are tested for HIV in last 12 months.**

Pregnant women attending ANC whose male partner was tested for HIV during pregnancy remain the same of **42.6% (27,434/ 64,286**) in 2019 and **42.1% (26,817/63,665)** in 2020, however it is above the set target of **20%**. This was contributed by community sensitization on male involvement in PMTCT services and couples being expedited for ANC services.

Furthermore, the highest proportion of male partner testing for HIV among the women attended at RCH was Chake Chake district **(81.8%),** while the least proportion was at Micheweni district **(11.4%)**, as shown in the table below.

Table 6: Percent of male partners tested for HIV in last 12 months per district, Zanzibar, 2020

District	Partners tested	Women ANC attendees	% Male involvement
Mjini	5,838	11,712	49.8
Magharibi A	2,550	8,897	28.7
Magharibi B	2,988	8,605	34.7
Kaskazini A	1,455	5,630	25.8
Kaskazini B	1,080	3,010	35.9
Kati	1,690	4,663	36.2
Kusini	714	1,885	37.9
Chake Chake	4,363	5,337	81.8
Mkoani	2,713	3,947	68.7
Wete	2,918	5,261	55.5
Micheweni	537	4,730	11.4
Total	**26,846**	**63,677**	**42.2**

4. Percentage of pregnant women who were tested for HBV

The percentage of pregnant women tested for HBV decreased from **25.3% (16,319/64,286)** in 2019 to **20.1% (12,907/63,912)** in 2020 which is below the set target of **30%**. This was due to shortage of HBV test kits at health facilities. In addition, a total of **79**(1.3%) (**51**(0.9%) Unguja and **28** (0.4%) Pemba) pregnant women tested HBsAg positive. Furthermore, a total of **1,761** (**370** Unguja and **1,391** Pemba) pregnant women were tested for hepatitis C and all tested HCV antibody positive in Unguja and none in Pemba. The highest proportion of pregnant women attended at RCH who were tested for HBV was at Micheweni district **(62.6%)** and the least was at Magharibi A district **(5.4%)** as shown in the table below.

Table 7: Percentage of pregnant women who were tested for HBV per district, Zanzibar, 2020

District	Pregnant women tested HBV	Women ANC attendees	% Women tested HBV
Mjini	1,738	11,712	14.8
Magharibi A	479	8,897	5.4
Magharibi B	1,093	8,605	12.7
Kaskazini A	1,067	5,630	19.0
Kaskazini B	415	3,010	13.8
Kati	600	4,663	12.9
Kusini	1,145	1,885	60.7
Chake Chake	987	5,337	18.5
Mkoani	630	3,947	16.0
Wete	825	5,261	15.7
Micheweni	2,961	4,730	62.6
Total	**11,940**	**63,677**	**18.8**

5. **Percentage of pregnant women who were tested for syphilis.**

The percentage of pregnant women tested for syphilis was improved from **45.9% (29,525/64,286)** in 2019 to **50.6% (32,163/63,665)** in 2020. However, this was below the set target of **60%**. This was contributed by inconsistent availability of syphilis test kits to many health facilities. All districts need to include procurement of syphilis test kits in their work plan. The highest proportion of pregnant women tested for syphilis among the women attended at RCH was Kusini district **(86.8%),** while the least proportion was from Magharibi A district **(26.3%)**, as shown in the table below.

Table 8: Percentage of pregnant women who were tested for syphilis per district, Zanzibar, 2020

District	Pregnant women tested syphilis	Women ANC attendees	% women tested syphilis
Mjini	8,444	11,712	72.1

Magharibi A	2,338	8,897	26.3
Magharibi B	3,402	8,605	39.5
Kaskazini A	3,946	5,630	70.1
Kaskazini B	2,153	3,010	71.5
Kati	1,733	4,663	37.2
Kusini	1,637	1,885	86.8
Chake Chake	1,543	5,337	28.9
Mkoani	1,549	3,947	39.2
Wete	3,370	5,261	64.1
Micheweni	2,227	4,730	47.1
Total	**32,342**	**63,677**	**50.8**

6. Percentage of HIV-exposed infants who started on ARV prophylaxis

Proportion of HIV-exposed infants started on ARV prophylaxis has remained the same at **78.3% (343/438**) in 2019 and **78.7% (355/451)** in 2020. Hence the set target of **90%** was not reached. This was due to some women still delivering at home and changing their HIV status in ANC card. There is a need to strengthen mother mentors follow up system and to improve counselling to pregnant women on hospital delivery and accepting their HIV status.

7. Percentage of HIV-exposed infants receiving virological test for HIV within 12 months of birth

Proportion of infants born to HIV positive mothers who received HIV antigen test (DNA PCR) within 12 months of birth has remained the same at **92.2% (404/438)** in 2019 and **92.5% (407/451)** in 2020. However, this is above the set target of **85%**. In addition, percentage of infants born to HIV positive mothers who receive HIV antigen test (DNA PCR) within 2 months of birth has improved from **78.3% (343/438**) in 2019 to **80.6% (355/451)** in 2020. This was contributed by ongoing supportive supervisions to health care workers and mother mentors to ensure proper utilization of PMTCT services to pregnant women including early identification of HIV exposed infants.

8. Percentage of HIV-exposed infants receiving test for HIV 6 weeks after cessation of breastfeeding.

The proportion of HIV-exposed infants receiving test for HIV 6 weeks after cessation of breastfeeding is improved from **34.2% (150/438)** in 2019 to **38.1% (172/451)** in 2020 which is below the set target of 6**0%**. This was contributed by pregnant women not sending their children for second test and inadequate follow up of mother infant pairs after the first test. Therefore, there is a need to strengthen health education, follow up and attachment of mother infant pairs by mother mentors.

9. Percentage of HIV-infections among HIV exposed infants born in the past 12 months

HIV positivity rate among exposed infants born in the past 12 months remained the same at **1.2% (5/388)** in 2019 and **1.2% (5/409)** in 2020. Hence the set target of **<5%** was surpassed**.** This was contributed by ongoing follow up of mother infant pairs done by mother mentors through phones and home visiting; and strengthening of adherence counselling skills of healthcare workers. The number of exposed infants borne and tested for HIV and their results by quarter is shown in the table below.

Table 9: Number of exposed infants borne and tested for HIV and their results, by quarter, Zanzibar, 2020

Period	Number of infants received virological test of HIV after birth by age		HIV-exposed infants receiving test for HIV 6 weeks after cessation of breastfeeding	Number of infants tested HIV positive by age		Percentage Positive		
	HIV tested 1-2 month after delivery	Tested at 3-12 month after delivery		HIV tested positive 1-2 month after deliver	HIV tested positive 3-12 month after deliver	Percentage positive at 1-2 months	Percentage positive at 3-12 months	Percentage positive at 6 weeks after cessation of breastfeeding
Jan-Mar	77	5	39	1	0	0.8	0	0
Apr-Jun	85	14	43	1	0	0.7	0	0
Jul-Sep	103	16	50	1	0	0.5	0	0
Oct-Dec	90	17	40	2	0	0.6	0	0
Total	**355**	**52**	**172**	**5**	**0**	**1.4**	**0**	**0**

10. Percentage of HIV-exposed infants started on CTX prophylaxis within 2 months of birth

Proportion of HIV-exposed infants started on cotrimoxazole prophylaxis within 2 months of birth increased from **78.3% (343/438**) in 2019 to **82.4% (372/451)** in 2020. However, it is below the set target of **85%**. This was contributed by pregnant women delayed sending their children for postnatal services. Continued supportive supervision and close follow up of mother-infant pairs and enhanced counselling to mothers to comply with PMTCT services.

11. Percentage of identified HIV positive infants who started on ART by 12 months of age

Proportion of identified HIV positive infants started on ART within 12 months is **5/5 (100%)** which is within the set target of **(100%).** This achievement was contributed by timely escorted referral to CTC done by mother mentors and HCWs.

2.2.6 Challenges

- Low coverage of HIV test for exposed infant at 6 weeks after cessation of breast feeding
- Missed opportunity for re-test of pregnant /breast feeding women at RCH clinics

2.3 INTERVENTION TARGETING KEY POPULATIONS, ADOLESCENTS AND YOUTH

2.3.1 Background

Key Populations (KPs) are populations that are at higher risk of being infected by HIV, Viral Hepatitis and other STI/RTI infections such as syphilis. In Zanzibar, KPs include Men having Sex with other Men (MSM), Female Sex Workers (FSW) and People who inject drugs (PWID). KPs remains a key actor in contributing HIV epidemic.

To date there are two KPs friendly services centers located at ZAYEDESA and Methadone Assisted Treatment (MAT) clinic at Kidongo Chekundu hospital Unguja. There are 11 (7 Unguja and 4 Pemba) local and one National NGOs which in collaboration with other KP stakeholders, continue to implement KPs interventions in Zanzibar.

Sexually Transmitted Infections (STIs) and other Reproductive Tract Infections (RTIs) are highly prevalent in many communities worldwide1. They cause considerable morbidity, increase the risk of acquiring HIV infections and are costly to individual and the society in general. STI/RTI services were integrated within the programme since 1987. The role of STI unit is to monitor and coordinate STI/RTI services in Zanzibar. These services are provided in 253 (161 in Unguja and 92 in Pemba) health facilities in Zanzibar.

2.3.2 Goal

To reduce new HIV and other Sexually Transmitted Infections and provide care, treatment, and support to KPs.

2.3.3 Objectives

1. To reduce risky behaviours among Key populations by 15%
2. To increase services utilization among Key populations to 90% by 2022.
3. To increase use of HIV /AIDs, sexual and reproductive health (SRH) by young people.
4. To increase utilization of STI/RTI services among Key and General population by 30%

2.3.4 Programme Implementation

2.3.4.1 Capacity building

Five days training on counseling skills to 44 (24 in Unguja and 20 in Pemba) Peer educators, Community Outreach Workers (COW) and lay counsellors was conducted. The objective was to build capacity of these participants on proper counseling so as to improve counselling skills and uptake of HIV services among KPs.

Four days study tour on Pre-Exposure Prophylaxis (PrEP) services to KPs was conducted in Dar Es salaam region. A total of six delegate from ZIHHTLP, ZAC and ZAYEDESA participated. The objectives were to gain knowledge and skills in the provision of PreP services targeting KPs. The outcome of this visit was to support establishment of PrEP services as among HIV preventive measures targeting FSW and other high-risk population in Zanzibar.

[1] Sexually Transmitted and Other Reproductive Tract Infections, A guide to essential practice World Health Organization, 2005

2.3.4.2 Service monitoring

Biannual supportive supervision to nine (**6** in Unguja and **3** in Pemba) NGOs implementing HIV and other related interventions targeting KPs was conducted. The objectives were to assess the quality of HIV and other related services provided to KPs, but also provide technical assistance to service providers in the provision of quality HIV and other related services targeting these populations. Major challenges observed were low number of FSW and MSM reached, counselled and tested for HIV during the outreach services, poor linkage to HIV care and treatment services for KPs tested positive and insufficient follow up mechanisms. More efforts are needed to increase and strengthen coverage of HIV counselling and testing services and increase linkage to HIV care and Treatment services among these populations in Zanzibar.

In addition, biannual KP stakeholders' meetings involved 51 (30 Unguja and 21 Pemba) participants were conducted. The objectives were to share findings from the previous supportive supervision and discussed challenges faced during the implementation of KP interventions. Key issues discussed were low number of KPs reached and tested during the outreach services and most of the NGOs conducting outreach at the same area which might contribute to double counting for the KPs reached and tested for HIV. There is a need to map KP hotspots and assign them to specific NGO for their respective outreach interventions.

Moreover, quarterly Methadone Assisted Treatment (MAT) Technical Working Group (TWG) meeting was conducted in Unguja. A total of 20 technical peoples attended these meetings. The objectives were to discuss the status of MAT services and challenges encountered in its implementation. The main challenges identified were low number of new clients enrolled to MAT clinic due to COVID-19 pandemic but also increased number of clients who lost to follow up. Following this, standard operating procedures (SoP) to be used by services providers during the outbreak were developed and provided to staff working at MAT clinic.

In addition, quarterly MAT – Steering Committee meeting was conducted to 20 Committee members from MoHSWEGC, ZIHHTLP, Commission for National Coordination and Drug Control (CNCDC), Correction facilities, AMREF, Mnazi Mmoja Hospital and MAT clinic. The objective was to discuss issues raised during the MAT – TWG meeting for solution. The main challenges discussed were delay in upgrading MAT database, overcrowding of clients outside the hospital, and defaulting of clients.

Furthermore, annual STI supportive supervision was conducted to 171 (109 Unguja and 62 Pemba) health facilities providing STI services. The objectives were to assess the quality of STI services and to provide technical assistance to services providers. Main challenges observed were shortage of some STI drugs (especially ceftriaxone injection) and other related supplies in some health facilities, low level of knowledge and understanding in identifying Key Populations in their facilities, also only few private health facilities have STI/RTI monitoring tools. Efforts have been made to procure and distribute essential STI drugs to health care facilities, train HCWs on the use of current STI guidelines and to provide STI monitoring tools to selected private health facilities.

In addition, annual HIV integrated services' post supportive supervision meetings in seven sessions (3 Pemba and 4 Unguja) were conducted to 317 (164 Unguja and 153 Pemba) service providers from all districts. The objectives were to share and discuss findings of the supervision of HIV services in Zanzibar. The main challenges discussed were low uptake of PITC, inadequate tracking of mothers-infant pairs, improper documentation in mother-infant follow up register, shortage of drugs and other supplies e.g., DBS, syphilis test kits, STI drugs and IPC supplies. Other challenges were insufficient performance in majority of the CTC laboratory sites in documentation, quality improvement and waste management.

2.3.5 KP and youth services indicators and trend from 2018 to 2020

Table 10: KP and youth services indicators and trend from 2018 to 2020, Zanzibar

SNO	Indicators		2018	2019	2020
1	Percentage of KPs reached with individual or small-group level HIV prevention interventions designed for the target population	MSM	96.4%	85%	45%
		FSW	76.0%	77%	49%
		PWID	98.0%	85%	83%
2	Percentage of KPs tested for HIV and received their results in the past 12 months	MSM	56.2%	81%	29%
		FSW	61.0%	66%	45%
		PWID	48.7%	74%	74%
3	*Proportion of HIV-infected KPs receiving ART (IBBSS)	MSM	NA	55.5%	-
		FSW	NA	68.4%	-

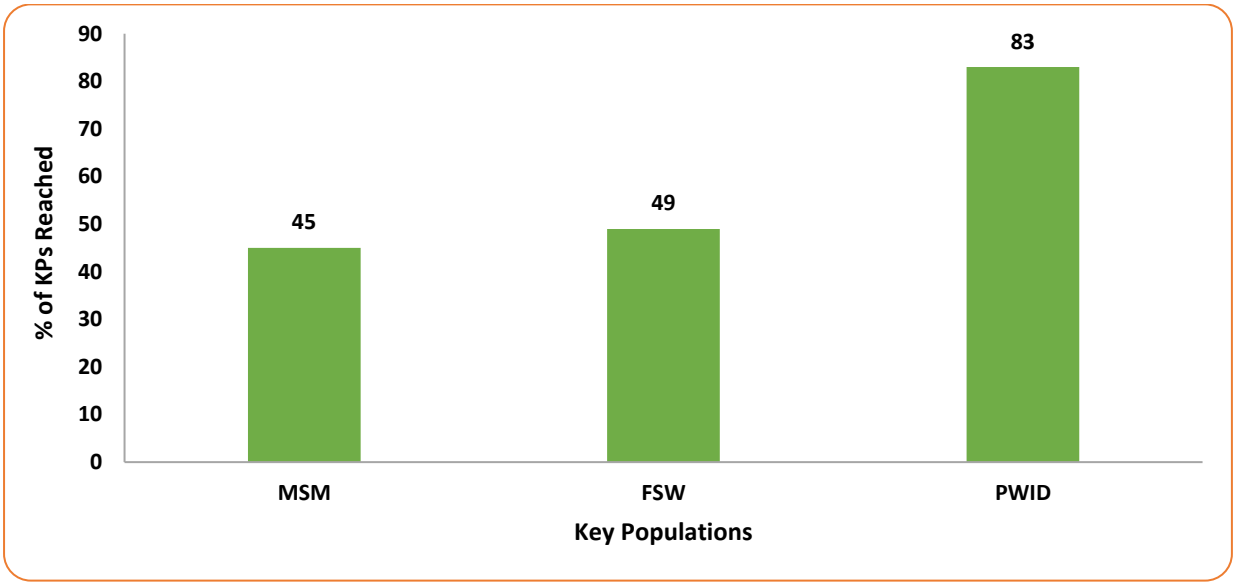
		PWID	NA	42.0%	-
4	*Percentage of sex workers reporting the use of condoms with their most recent clients		NA	72.7%	-
5	*Percentage of MSM reporting using a condom the last time they had anal sex with a male partner		NA	42.0%	-
6	*Percentage of PWID reporting the use of sterile injecting equipment the last time they injected		NA	91.1%%	-
7	*Percentage of HIV-infected KPs who are HIV infected	MSM	NA	5.0%	-
		FSW	NA	12.1%	-
		PWID	NA	5.1%	-
8	Percentage of people who inject drugs receiving OST		16.9%	22%	33.9%
9	Percentage of PWID receiving OST for at least 6 months		70.4%	61.6%	75.7
10	Number of adolescents and youth who receive HIV testing services (HTS) and receive their test results		76,559	81,836	69,886

**Require data from the Integrated Biobehavioral Surveillance Survey (IBBSS) which is conducted every three to five years term.*

1. Percentage of KPs reached with individual or small-group level HIV prevention interventions designed for the target population

Percentage of KPs (MSM, FSW and PWID) reached with different HIV and STI interventions was gradually decreased for MSM and FSW from 85% and 77% in 2019 to 45% and 49% in 2020 respectively, while there slightly decreased in percentage from 85% in 2019 to 83% in 2020 as indicated in table 10 above. However, the percentage of MSM and FSW reached were below the set target of 80% for 2020. These achievements for PWID were due to increased number of sessions conducted by NGOs implementing PWID related services in Unguja and Pemba. The under achieved for the MSM and FSW reached with HIV services were contributed by the low number of HIV outreach sessions conducted by NGO implementing MSM and FSW related services in Zanzibar. In general, these performances were also contributed by the significant change in size estimate for KPs.

Figure 15: Percentage of KPs reached for HIV prevention services by categories in Zanzibar, 2020.



As of December 2020, a total of 6,353 (1,469 MSM, 2,735 FSW and 2,149 PWID) KPs reached through NGOs, while tested for HIV were 5,333 (952 MSM, 2,470 FSW and 1,911 PWID) as indicated in the table 11 below.

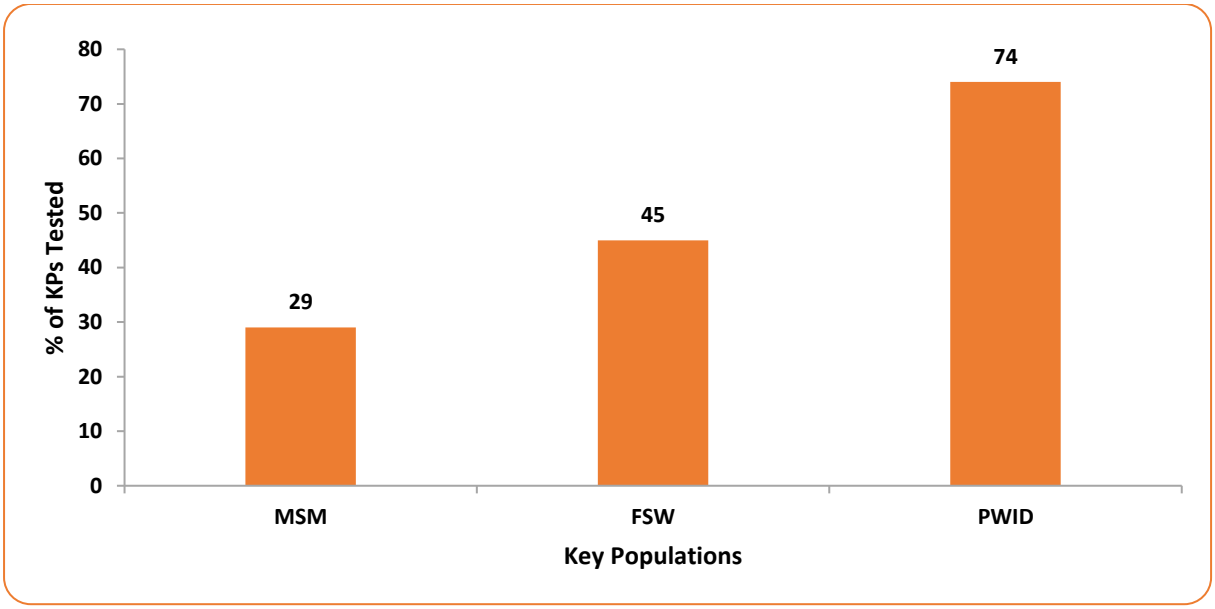
Table 11: Number of Key Populations (KPs) reached, counselled and tested for HIV January – December 2010

Type of KP	Reached	Tested	Positive	% Positive
MSM	1,469	952	25	2.6
FSW	2,735	2,470	87	3.5
PWID	2,149	1,911	14	0.7
TOTAL	**6,353**	5,333	**126**	**2.4**

2. Percentage of KPs tested for HIV and received their results in the past 12 months

Percentage of KPs who received HIV test in the past 12 months and know their results is reported to be gradually decreased for MSM and FSW from 81% and 66% in 2019 to 29% and 45% in 2020 respectively, while remain the same (74%) for these two-year as indicated in figure 16 below. However, these percentage are below the set target of 75% in 2020. The under achievement was might due to the low number of outreach sessions conducted by NGO implementing MSM and FSW related services in Zanzibar, poor linkage to HIV care and treatment services for HIV positive KPs and inadequate follow up. In general, these performances were also contributed by the significant change in size estimate for KPs.

Figure 16: Percentage of KPs tested for HIV and received their results in the past 12 months by categories in Zanzibar, 2020



Majority (73%) of KPs tested were Adult aged 25 years or above compared to 27% of young KPs. Most (73%) of the tested positive KPs were the age of 25 years or above also as indicated in table below.

Table 12: KPs who received HIV testing services by type of category, Zanzibar, 2020

KP category	HIV tested KPs			Total	HIV Positive KPs			Total
	15-19	20-24	25+		15-19	20-24	25+	
MSM	38	270	644	952	2	6	17	25
FSW	105	561	1,804	2,470	1	17	69	87
PWID	123	345	1,443	1,911	0	2	12	14
Total	266	1,176	3,891	5,333	3	25	98	126

Majority 4,091(77%) of KPs tested for HIV were from Unguja Island. More than one third (44%) of them were FSW, and nearly half (46%) of KPs tested for HIV in both islands were FSW followed by 36% for the PWIDS as indicated in table 13 below.

Table 13: Number and percentage of KPs tested for HIV by category and Island in Zanzibar, 2020

Type of KP	Tested	Percentage tested	Positive	Percent positive
Unguja				
MSM	655	12	20	16
FSW	1,785	33	84	67
PWID	1,651	31	14	11
Sub Total	4,091	77	118	94
Pemba				
MSM	297	6	5	4
FSW	690	13	3	2
PWID	266	5	0	0
Sub Total	1,253	23	8	6
Total Zanzibar	**5,344**	**100**	**126**	**100**

3. Percentage of people who inject drugs receiving Opiate Substitution Therapy (OST)

As of December 2020, 35% (902/2,600) of PWID were currently receiving MAT services in Unguja which is above the set target of 21% for 2020, of whom 94% were male as indicated in table 14 below. This achievement was contributed by the increasing support and number of follow-up visits to PWIDS at the potential hotspots conducted by NGO implementing PWID related interventions in Unguja.

Table 14: MAT services at Kidongo Chekundu MAT clinic in Unguja, Zanzibar, 2020

Services	Male	Female	Total
Ever enrolled	1,139	68	1,207
Current on Methadone	848	54	902
New patient enrolled	322	6	328
Recovered patients	15	2	17
Death (Cumulative)	50	3	53
Defaulters	226	9	235

4. Percentage of sex workers reporting the use of condoms with their most recent clients

Percentage of PWID who were on Methadone services for at least six months is 78% (727/960) which is below the target of 90% for 2020 as indicated in table below. This decline was due poor adherence to rules and regulations among MAT clients and increased number of defaulters at MAT clinic.

Table 15: Number of heroin users retained on MAT services for at least six months at Kidongo Chekundu MAT clinic in Unguja, Zanzibar, 2020

ITEM	Male	Female	Total
Client ever enrolled as of July 2020	965	68	**1,033**
Recovered clients	15	02	**17**
Death of patients, ever registered	52	04	**56**
Clients required to be on service	898	62	**960**
Current on Treatment for at least six months	678	49	**727**

5. Number of adolescents and youth who receive HIV testing services (HTS) and receive their test results

Number of adolescents and youth who receive HIV testing services (HTS) and receive their test results was 69,886 which is above the set target of 65,000. More than half (68%) were the ages of 20 – 24 and more than half (65%) were female. The highest proportion (76%) of adolescent and young people tested for HIV were reported from Unguja Island as indicated in the table below.

Table 16: HTS Testing among adolescents by sex, age and district of residents in 2020 Zanzibar

District	Female		Male		Total		Total	Percent
	15-19	20-24	15-20	20-25	15-19	20-24		
Kaskazini A	1,556	2,908	701	1,559	2,257	4,467	**6,724**	10%
Kaskazini B	831	1,799	409	1,068	1,240	2,867	**4,107**	6%
Mjini	1,799	4,793	1,050	3,342	2,849	8,135	**10,984**	16%
Magharibi A	2,055	4,481	803	2,465	2,858	6,946	**9,804**	14%
Magharibi B	2,687	6,095	1,188	3,109	3,875	9,204	**13,079**	19%
Kati	1,042	2,315	530	1,450	1,572	3,765	**5,337**	8%

Kusini	461	1,258	280	848	741	2,106	**2,847**	4%
Mkoani	894	1,256	410	716	1,304	1,972	**3,276**	5%
Wete	1,187	1,563	482	1,040	1,669	2,603	**4,272**	6%
Chake Chake	1,442	1,992	557	1,141	1,999	3,133	**5,132**	7%
Micheweni	1,259	1,399	511	925	1,770	2,324	**4,094**	6%
Outside Zanzibar	56	103	8	63	64	166	**230**	0%
Total	**15,269**	**29,962**	**6,929**	**17,726**	**22,198**	**47,688**	**69,886**	**100%**
Total %	**22%**	**43%**	**10%**	**25%**	**32%**	**68%**	**100%**	

2.3.6 STI services indicators and trend from 2018 to 2020

Table 17: STI services indicators and trend from 2018 – 2020, Zanzibar

SNO	Indicators	2018	2019	2020
1	Number of men and women diagnosed with and treated for STIs/RTI	13,335	17,115	25,085
2	Proportion of sexual partners traced and treated for STI/RTI at health facilities	0.2 2368/13,335	0.2 3446/17,115	0.1 2,555/24,702

1. Number of men and women diagnosed with and treated for STIs/RTI

Number of men and women diagnosed with and treated for STIs/RTI is increased from 17,115 in 2019 to 25,085 in 2020. The increase in trend was might due to enhanced capacity of service providers to diagnose STI/RTIs after training on the current national guidelines and regular monitoring of quality of services. Of the 25,085 STI patients diagnosed, 24.1% were male, youth aged 15 – 24 years were 9,129 (36%), and majority (84%) were female youth. Most 12,194 (48%) of the patients were diagnosed with Vaginal Discharge Syndrome, followed by Lower Abdominal Pain which account for 4,666 (19%) and Urethral Discharge syndrome which is 4,372 (17%) as indicated in table below.

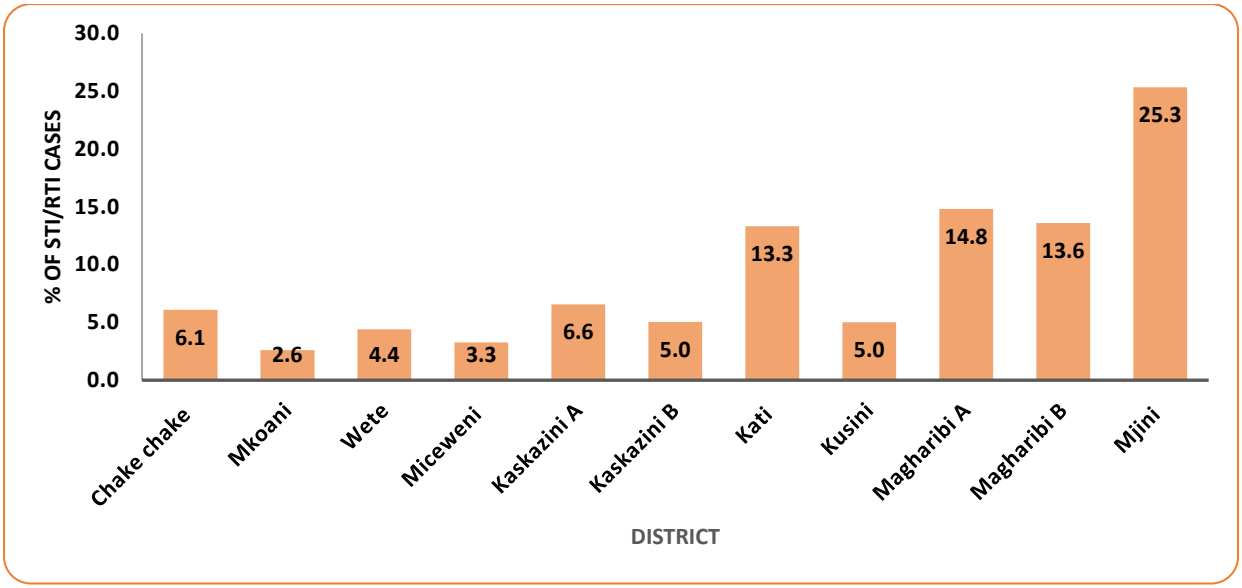
Table 18: STI patients by syndrome, age and sex distribution from January to December 2020 in Zanzibar

Diagnosis	Male in years					Female in years					Total	
Syndromic	**0–9**	**10–14**	**15–19**	**20–24**	**25 +**	**0–9**	**10–14**	**15–19**	**20–24**	**25 +**	**M**	**F**

Genital Ulcer (GU)	2	5	42	78	91	1	1	54	95	164	218	315
Inguinal Bubo (IB)	2	10	2	2	17	1	0	0	2	12	33	15
Oral Pharyngeal (OP)	7	1	3	11	29	2	0	5	15	29	51	51
Anorectal (ARS)	0	0	0	13	6	0	1	19	32	49	19	101
Lower abdominal pain (LAP)										6	58	540
Vaginal Discharge (VD)										33	60	1,142
Urethral Discharge (UD)	2	6	191	891	3,282							
Painful Scrotal Swelling (PSS)	13	6	35	115	356							
Neonatal Conjunctivitis (0 – 28 days)	538					742					538	742
Other STI conditions	0	0	0	1	2	0	0	0	3	4	3	7
Total	564	28	273	1,111	3,783	785	120	1,760	5,550	9,875	5,759	18,090
Aetiologic	**Male in years**					**Female in years**					**Total**	
	0–9	**10–14**	**15–19**	**20–24**	**25 +**	**0–9**	**10–14**	**15–19**	**20–24**	**25+**	**M**	**F**
Gonorrhea	0	2	16	20	69	0	0	5	44	81	107	130
Syphilis	1	0	9	3	5	0	0	13	43	51	18	107
Trichomonas Vaginalis	10	0	0	6	23	3	4	28	80	329	39	444
Chlamydia	0	0	12	35	40	8	8	28	45	50	87	139
Candidiasis	0	0	1	2	9	0	0	1	2	4	12	7
Hepatitis B	0	0	0	2	38	2	0	0	4	15	40	21
Hepatitis C	1	0	0	3	20	4	0	6	27	24	24	61
Total Aetiology	12	2	38	71	204	17	12	81	245	554	327	909
Grand total	576	30	311	1,182	3,987	802	132	1,841	5,795	10,429	6,086	18,999
Case Type	Index			Partner Tracing					Re Attendance			
Number of cases	15,224			2,555					521			

Mjini district has high (25.3%) proportion of STI/RTI cases followed by followed by 14.8%, 13,6% and 13.35 Magharibi A, Magharibi B, and Mkoani respectively. Mkoani district has reported with the lowest distric with STI/RTI cases in Zanzibar. Figure 17 show these results

Figure 17: Percent of STI/RTI burden per district of Residence January to December 2020 in Zanzibar



Condom promotion, distribution and use are among the effective strategies towards the prevention and control of STI/RTIs in Zanzibar. As of December 2020, a total of 2,046,431 (male 2,045,931 and Female 500) pieces of condoms were distributed in different condom outlets, 33% were distributed to NGOs followed by Government offices (32%) as indicated in Table 19 below.

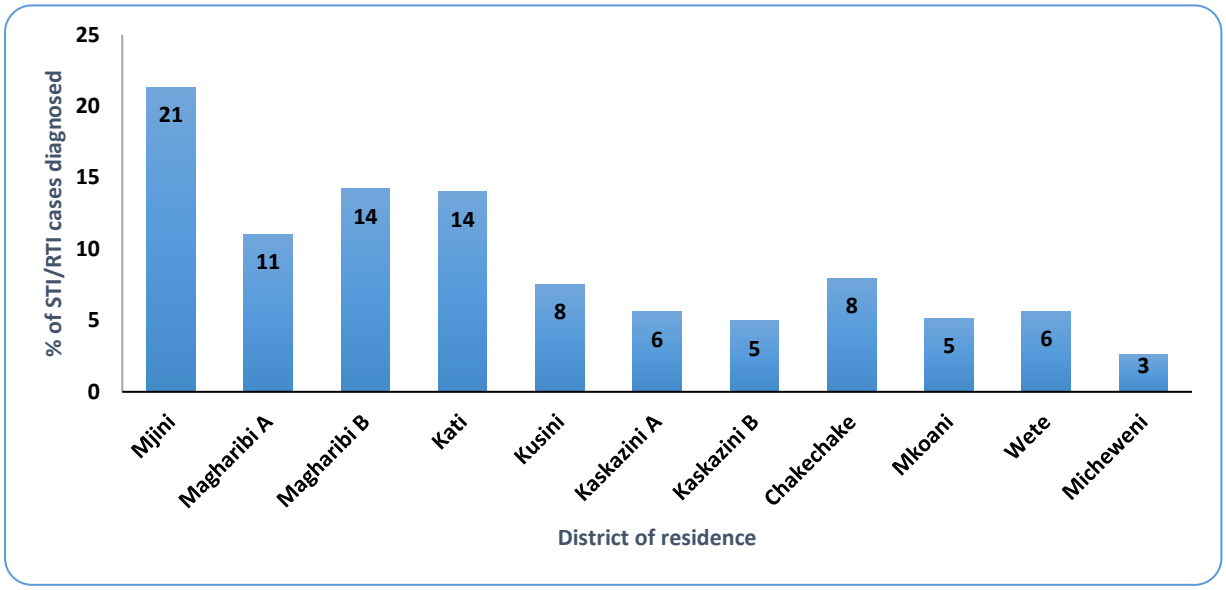
Table 19: Condom distribution by types and outlets in Zanzibar January to December 2020

Organization	**Total**
Male Condoms	
Outreach including Hotspots (Different bars & guest house)	**453,888**
Non-Governmental Ogrnaiations (NGOs)	**671,904**
Government Offices	**656,040**
Military Camps	**163875**
Distric Authorities	**100,224**
Total	**2,045,931**
Female Condoms	
Organization	**Total**
Outreach including Hotspots (Different bars & guest house)	**100**
Non-Governmental Ogrnaiations (NGOs)	**400**
Total	**500**
Grand Total	**2,046,431**

2. Proportion of sexual partners traced and treated for STI/RTI at health facilities

The proportion of sexual partners traced and treated for STI/RTI at health facilities in Zanzibar has declined from 0.2 in 2019 to 0.1 in 2020. This might be due to reluctancy of STI patients to disclose STI status to their partner. More strategies are needed to increase STI partner tracing such as enhanced STI partner notification counselling. Mjini district reported high (21%) proportion of STI/RTI partner traced followed by Magharibi B and Kati. The least reported STI/RTI cases were from Micheweni district as indicated in the figure below.

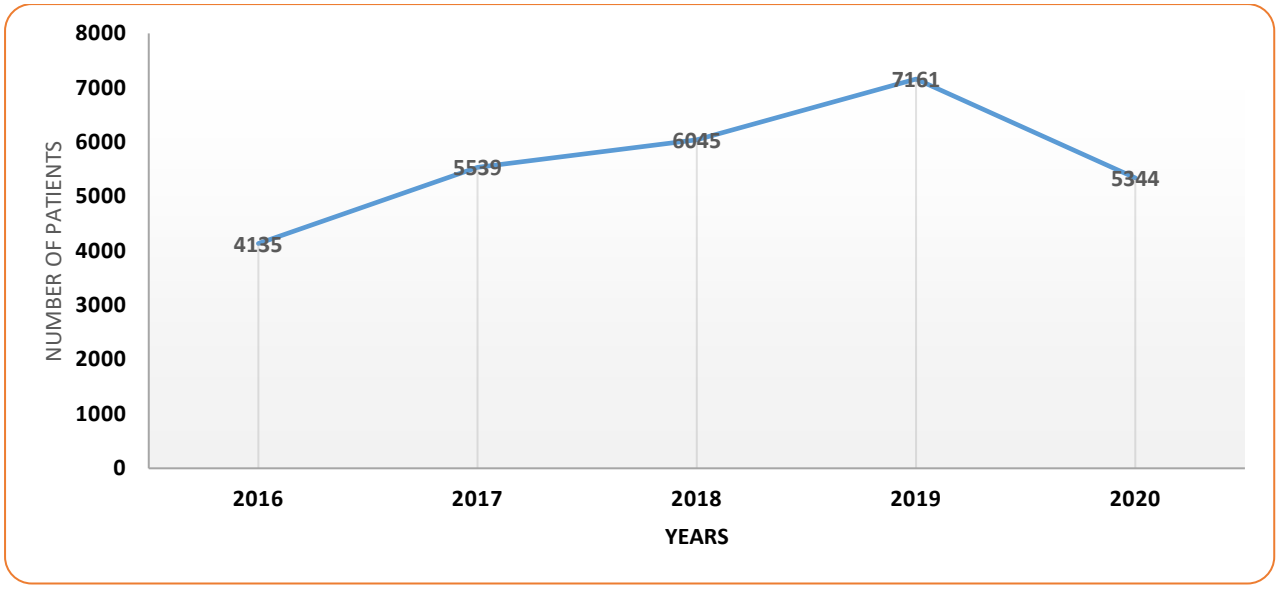
Figure 18: Percent of STI/RTI partner traced per district of residence, Zanzibar 2020



2.3.7 Trend of HIV testing services among KPs from 2016 – 2020, Zanzibar

There was an increased number of KPs who received HIV testing services for the four years' period from 4,135 in 2016 to 11,855 in 2019, and then declined to 8323 in 2020 as indicated in figure 19 below. This decline was might due to the epidemic of COVID-19 leads to low number of KPs received HIV services fearing of getting infections, but also low number of outreach services conducted to MSM and FSW in Unguja and Pemba. Following this, standard operating procedures (SoP) to be used by services providers during the outbreak will be developed and provided to all NGOs implementing KP services in Unguja and Pemba. staff working at MAT clinic.

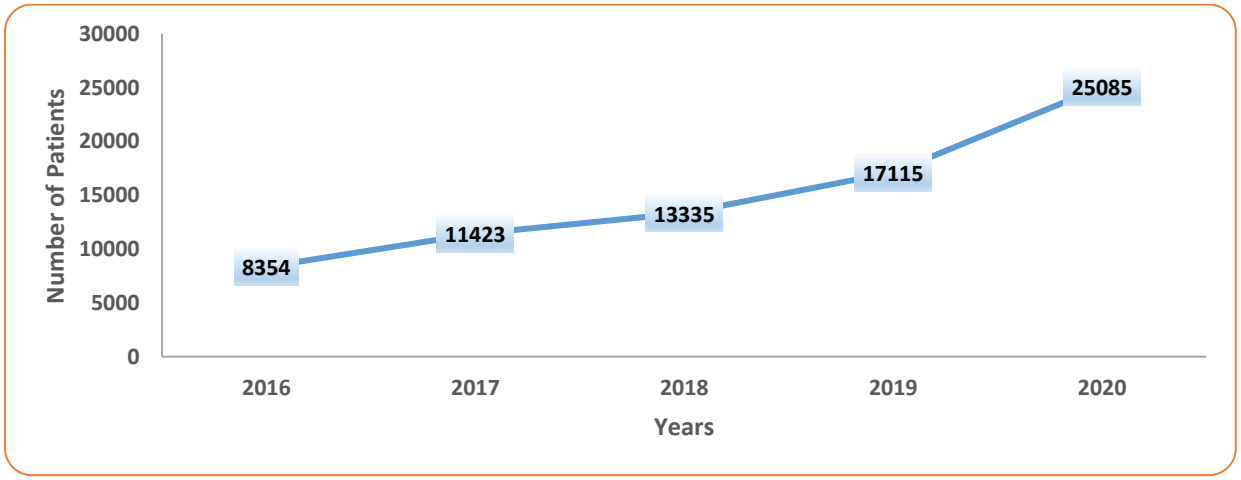
Figure 19: Trend of HIV testing services among KPs from 2016 – 2020, Zanzibar



3.3.8 Trend of patients diagnosed with and treated for STIs/RTI, 2016 – 2020

Number of men and women diagnosed with and treated for STIs/RTI has gradually increased from 8,354 in 2016 to 24,702 in 2020 as indicated in figure below. This might be contributed by increased number of service providers who were trained on STI management using current guidelines and availability of some STI drugs in some health facilities. This increase needs special attention and call for more effective prevention and control interventions on STIs/RTIs in Zanzibar. However, there is a need to investigate the cause of the increase in STIs/RTIs in Zanzibar.

Figure 20: Number of men and women diagnosed with and treated for STIs/RTI in Zanzibar, 2016 -2020



3.3.9 Challenges

- Low number of KPs reached and tested for HIV
- High number of PWIDS defaulted from MAT services
- In adequate follow up for KPs who were reached for the first time

- Low number of STI partner traced

CHAPTER 3: HIV CARE AND TREATMENT SERVICES

3.1 HIV CARE AND TREATMENT SERVICES

3.1.1 Background

HIV care and treatment services were established in 2005 at Mnazi Mmoja Hospital. Currently there are 14 (10 Unguja and 4 Pemba) care and treatment clinics (CTCs) in Zanzibar of them 12 are public health facilities, 1 private hospital and 1 Non-Governmental Organization. In addition, there are 3 ART refilling sites in Unguja. In the year 2020, a new CTC was established at Ziwani Police health facility.

3.1.2 Goal

Reduction in morbidity and mortality related to HIV/AIDS by 2022

3.1.3 Objective

1. To increase utilization of care and treatment services to 95% of PLHIV by 2022
2. To reduce TB incidence among PLHIV by 50%.

3.1.4 Program Implementation

3.1.4.1 Service monitoring

Biannual supportive supervision was conducted to 14 (10 Unguja, 4 Pemba) CTCs and 3 refilling sites in Unguja. The objective of supportive supervision was to monitor and improve the quality of care and treatment services. Key findings observed were improper documentation in monitoring tools especially CTC2 cards in some sites. Onsite feedback was given to healthcare providers on their accomplishments and identified implementation gaps. The health care providers agreed to address all gaps identified for maintaining quality of care.

In addition, Quality improvement meetings were conducted to 58 (38 Unguja and 20 Pemba) QI team members from their respective CTCs. The objectives were to discuss the functionalities of QI teams, share experience and to address identified gaps. One among the crucial issue discussed was on parents/guardians were not aware of the importance of HVL test to their children. It was agreed to have a meeting with caregivers and discuss with them on several issues including importance of HVL test and viral suppression and treatment adherence. With

regards to functionalities of QI teams, for some CTCs (7 out of 13) the teams are functional and are meeting regularly to discuss success and challenges in service provision. However, majority of CTCs do not meet regularly due to some CTCs having inactive members of QI teams.

3.1.5 HIV care and treatment indicators and trend from 2018 to 2020

Table 20: HIV care and treatment indicators and trend from 2018 to 2020

SN	Indicator	Year		
		2018	2019	2020
1	AIDS mortality per 100,000 per year	6.4	6.2	6.5
2	Number of new PLHIV started on ART during reporting period	1,154	1,203	1,047
3	Number and percent of PLHIV who are currently on ART	5,915 (84.5%)	6,519 (86.6%)	6,940 (91.3%)
4	Number of PMTCT sites that are providing comprehensive care and treatment services	2	2	2
5	Percentage of adults and children known to be on treatment 12 months after initiation of ART	72.3%	69.1%	62.5%
6	Proportion of women living with HIV ages 30–49 who report being screened for cervical cancer using any of the following methods: Visual inspection with acetic acid (VIA), Pap smear or human papilloma virus (HPV) test	TBD	(17%) 481/2859	(50.0%) 1381/2762
7	Percentage of ART clients with viral load results documented in the medical records and laboratory information system (LIS) within the past 12 months with a suppressed viral load less than 1,000 copies/ml	76.7%	84.1%	95.1%
8	Percentage of PLHIV screened for TB	99.6%	99.9%	99.9%
9	Percentage of PLHIV who started TB treatment in the reporting period	1.2% 83/6,025	2.0% 134/6,706	1.4% 96/7,020

10	Number of health facilities providing TB/HIV collaborative activities (Under One Roof)	2	2	2
11	Number of care and treatment clinics (CTCs) providing IPT services	6	12	13
12	Percentage of People newly enrolled in HIV care who are started on TB preventive therapy	-	-	8.3% 87/1045

1.AIDS mortality per 100,000 per year

According to the Zanzibar spectrum projection, in 2020 AIDS mortality was 6.45%. The set target of (4.7%) was not achieved, due to some of clients refusing to use CTC services and failing to adhere to ART. However, AIDS mortality slightly declined from 6.2% in 2019 and raised again to 6.5% per 100,000 population in 2020 as indicated in table below. The highest AIDS mortality was observed among PLHIV (both males and females) aged 45 – 64 years.

Table 21: Age and sex distribution of AIDS mortality per 100,000 population, Zanzibar 2020

Age category (years)	Sex		Total
	Male	Female	
0-4	4.21	4.14	4.27
5-9	0.51	0.57	0.46
10-14	1.36	1.45	1.28
15-19	1.78	1.94	1.62
20-24	4.57	4.71	4.43
25-29	7.23	8.57	5.89
30-34	10.65	13.32	8
35-39	11.69	16.65	6.83
40-44	15.01	20.67	9.48
45-49	19.38	26.24	12.74
50-54	19.52	25.99	13.3
55-59	16.91	22.38	11.76
60-64	13.41	17.79	9.38
65-69	9.62	13.1	6.53
70-74	7.22	10.16	4.76
75-79	5.71	8.41	3.55
80+	3.74	5.88	2.18
Total	**6.45**	**8.05**	**4.86**

Source: Spectrum Projection 2020

2. Number of new PLHIV started on ART during reporting period

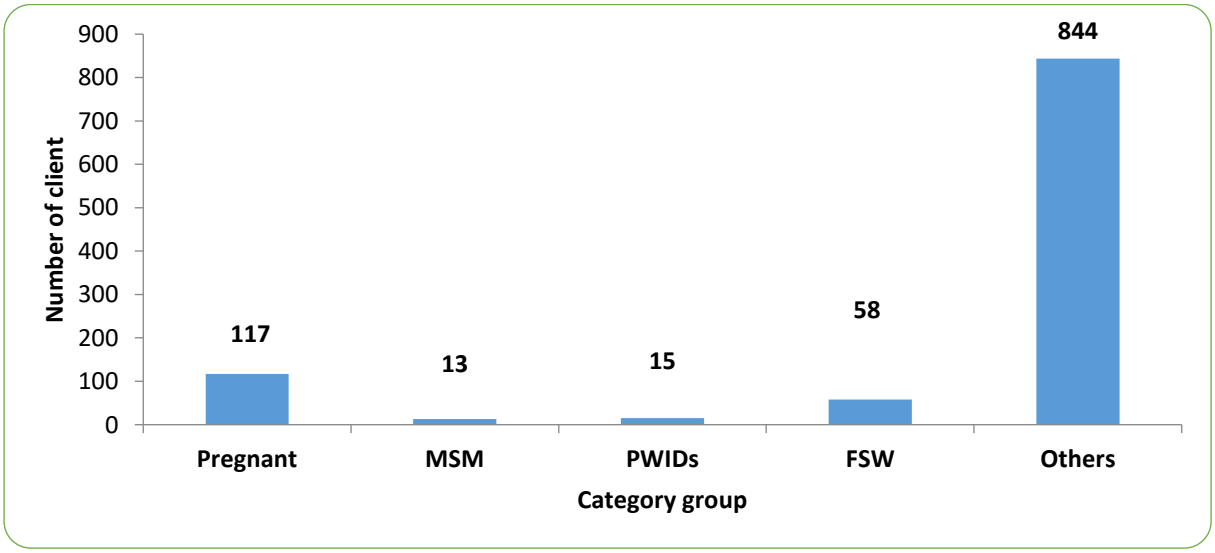
The number of new PLHIV started on ART has decreased from 1,203 in 2019 to 1,047 in 2020, which is below the set target of 1,600 clients. During this period, clients escorted to CTC decreased due to COVID-19 outbreak which affected the number of new HIV positive clients identified. Most of clients (719) enrolled at CTCs were of age group 25 – 49 and few (8) were of age group 5- 9 years.

Table 22: Number of new PLHIV started on ART by age and sex, Zanzibar, 2019

Age category	Sex		Total
	Male	Female	
<1	6	3	9
1-4	10	7	17
5-9	7	1	8
10-14	8	4	12
15-19	29	5	34
20-24	108	35	143
25-49	467	252	719
50+	47	58	105
Total	682	365	1047

Among new PLHIV started on ART in 2020, pregnant women were 117, MSM were 13, PWID were 15, FSW were 58 and 844 were others as illustrated in the figure below:

Figure 21: Number of new PLHIV started on ART by categories, Zanzibar, 2020



3. Number and percentage of PLHIV who are currently on ART, Zanzibar, 2019

As of December 2020, a total of 7,020 patients received care in all CTCs, of whom 6,940 (98.9%) were receiving ART. The percent of patients currently on ART has increased from 6,519 (86.6%) in 2019 to 6,940 (91.3%) in 2020. The proportion of PLHIV currently on ART was below the set target of 93%. This was due to decrease in number of new enrolled clients in CTCs and loss of new clients enrolled in CTCs after first refilling (Inadequate linkage of some newly enrolled clients in CTCs)

Table 23: Number of PLHIV currently on ART by age, sex and CTC clinics in Zanzibar, 2020

Name of the clinic	Age group and sex																Total	
	<1		1 -4		5 - 9		10 - 14		15 - 19		20 -24		25 -49		50+			
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
	UNGUJA																	
Mnazi mmoja	2	2	6	15	24	28	50	44	42	64	47	134	499	1,430	273	425	943	2,142
Mwembeladu	0	0	2	3	8	3	17	7	6	9	7	32	166	630	58	98	264	782
ZAYEDESA	0	0	0	1	0	1	2	2	0	2	8	28	99	168	25	29	134	231
MAT	0	0	0	0	0	0	0	0	0	0	1	1	25	11	4	0	30	12
Kivunge	0	0	0	1	0	3	5	2	2	6	2	14	62	188	26	21	97	235
Makunduchi	0	0	0	0	0	3	1	1	3	2	0	9	25	90	9	17	38	122
Bububu	0	0	3	1	2	1	6	2	6	6	3	27	131	361	62	55	213	453
Alrahma	0	0	0	0	1	1	1	0	1	2	1	6	17	118	16	21	37	148
Bububu	0	0	1	3	0	1	0	2	0	3	4	9	22	51	7	4	34	73
Total Unguja	**2**	**2**	**12**	**24**	**35**	**41**	**82**	**60**	**60**	**94**	**73**	**260**	**1,046**	**3,047**	**480**	**670**	**1,790**	**4,198**
	PEMBA																	
Chakechake	0	1	3	2	5	1	4	4	1	6	2	8	41	101	22	33	78	156
Wete	0	0	0	1	4	2	6	2	6	5	1	5	40	75	15	15	72	105
Mkoani	0	0	0	0	2	2	0	1	0	1	1	0	12	35	11	8	26	47

Micheweni	0	0	1	0	1	0	1	2	2	1	0	1	9	24	2	3	16	31
Total Pemba	**0**	**1**	**4**	**3**	**12**	**5**	**11**	**9**	**9**	**13**	**4**	**14**	**102**	**235**	**50**	**59**	**192**	**339**
Total Zanzibar	2	3	16	27	47	46	93	69	69	107	77	274	1,148	3,282	530	729	**1,982**	**4,537**

4. Number of PMTCT sites that are providing comprehensive care and treatment services

By the end of 2020, PMTCT sites that are providing comprehensive care and treatment services are 2, which is below target of 4. However, assessment was done at two sites, out of which one has qualified to start in 2020 yet has not started due to service providers are not trained.

5. Percentage of adults and children with HIV, known to be on treatment 12 months after initiation of ART 2019

Overall percentage of patients who are still alive and known to be on treatment 12 months after initiation of ART has decreased from 69.1% in 2019 to 62.5% in 2020 and this is below the set target of 95%.This was due to inadequate linkage of some newly clients enrolled in CTCs leading to lost many of these clients, some of clients has tendency to join in other CTCs without taking transfer letter from their initial enrolled CTCs, loss of clients due to unfriendly infrastructure of some CTCs, poor rapport system in treatment adherence between health care providers and clients as well as lack of tracking technique to lost clients to return them in CTCs.

Table 24: Percentage of adults and children with HgIV, known to be on treatment 12 months after initiation of anti-retroviral therapy by December 2020

S/N	CTC site	12 Month		
		Numerator	Denominator	Retention (%)
1	Mnazi Mmoja	288	458	62.9
2	Mwembeladu	89	137	65
3	MAT	5	5	100
4	Alrahma	10	15	66.7
5	ZAYEDESA	53	79	67.1
6	Bububu	57	112	50.9
7	Fuoni	35	48	72.9
8	Makunduchi	18	45	40
9	Kivunge	46	78	59
10	Chake chake	20	30	66.7
11	Micheweni	2	3	66.7
12	Mkoani	13	18	72.2
13	Wete	24	28	85.7

Zanzibar	660	1056	62.5

This table shows that, Mnazi Mmoja, Mwembeladu, Bububu and Makunduchi clinics have the highest number of clients lost to follow-up.

Table 25: Retention of clients in CTCs with their outcome of missing visit in 2020.

SN	FACILITY	NET CURRENT	ALIVE	TRANSFER OUT	LTF	DEATH	STOP
1	Mnazimmoja	458	87	210	139	22	0
2	Mwembeladu	137	13	88	30	4	2
3	MAT	5	4	1	0	0	0
4	Zayedesa	79	19	36	24	0	0
5	Al Rahma	15	10	10	5	0	0
6	Ziwani	0	0	0	0	0	0
7	Bububu	112	8	86	26	8	0
8	Fuoni	48	21	56	10	3	0
9	Kivunge	78	6	56	25	3	0
10	Makunduchi	45	8	10	26	0	1
11	Chake Chake	30	9	29	6	4	0
12	Micheweni	3	2	5	0	1	0
13	Mkoani	18	1	17	1	1	0
14	Wete	28	6	30	4	0	0
TOTAL		**1,056**	**194**	**634**	**296**	**46**	**3**

It has been observed that children below fifteen years had slightly higher retention rate compared to adults while retention rate in female is higher compared to male. There is a need to investigate the reason for low retention among male PLHIV.

Table 26: Percentage of adults and children with HIV, known to be on treatment 12 months after initiation of anti-retroviral therapy by December 2020 by age and sex

Retention at 12 months		**Percent**
Sex	**Males**	**56%**
	Female	**70%**
Age	**<15**	**75%**

	15+	**63%**

1. **Proportion of women living with HIV ages 30–49 who report being screened for cervical cancer using any of the following methods: Visual inspection with acetic acid (VIA), Pap smear or human papilloma virus (HPV) test**

In the year 2020, a total of 1381(50.0%) which is above the target set 40% of women living with HIV ages 30–49 were screened cervical cancer using the different methods. Among them, (92.7%/1281) were from Unguja and (7.3% /100) were from Pemba CTCs.

2. **Percentage of ART clients with viral load results documented in the medical records and laboratory information system (LIS) within the past 12 months with a suppressed viral load (less than 1,000 copies/ml).**

During the year 2020, a total of 6,203 ART clients were tested for viral load and 95.1% (5,896) were virally suppressed within the past 12 months. The 90% target of HIV viral suppression was surpassed due to effective adherence counselling, proper monitoring of adherence and decreasing number of defaulters. Makunduchi CTC has low percent of HIV viral suppression due to poor ART adherence caused by frequent defaulting of clients from CTC.

Table 27: Percentage of ART clients with viral load results documented in the medical records and laboratory information system (LIS) within the past 12 months with a suppressed viral load (less than 1,000 copies/ml)

Site	Clients eligible for viral load testing during most recent 12 months	Clients with documented viral load result from most recent 12 months (PVLS Denominator)	Clients with suppressed viral load result during most recent 12 months (<1000 copies/mL) (PVLS Numerator)	% Viral suppression
Micheweni	55	52	51	98.1
Wete	183	182	172	94.5
Kivunge	326	298	282	94.6
Chake Chake	243	233	222	95.3
Mkoani	69	68	64	94.1
Fuoni	129	111	104	93.7
Al Rahma	159	135	126	93.3
MAT	46	41	40	97.6
Mnazi Mmoja	3123	2997	2873	95.9
Mwembeladu	1056	1016	966	95.1
ZAYEDESA	385	365	344	94.2
Bububu	634	617	576	93.4
Makunduchi	110	88	76	86.4
Total	**6518**	**6203**	**5896**	95.1

3. Percentage of PLHIV screened for TB

The percent of PLHIV attending CTC clinics screened for TB in 2020 was 99.9%. This was the same as for 2019. The target of 100% was almost achieved.

9. Percentage of PLHIV who started TB treatment in the reporting period by age, sex

In this reporting period, 1.4% (99/7020) of PLHIV started TB treatment. This was below the set target of 2% due to some CTCs has no x-ray machine leading to poor diagnosis of TB, observation noticed when clients ordered to do chest x-ray to other hospital faced some obstacles when reached there. Therefore, clinician making diagnosis only basing on sputum investigations. Of them, 46.5% (46/99) were males and 53.5% (53/99) females. Among them 5.2% were children below the age of 15 years as shown in Table

Table 28: Percentage of PLHIV who started TB treatment in 2020 by age, sex

Age category	Total started Treatment	Sex	
		Male	Female
0 –11 months	0	0	0
1 – 4 years	0	2	2
5 – 9 years	2	0	2
10 – 14 years	0	3	3
15 – 19 years	5	1	6
20 – 24 years	2	3	5
25 – 49 years	35	25	60
≥ 50 years	9	12	21
Total	53	46	99

10. Number of health facilities providing TB/HIV collaborative activities (Under One Roof).

Currently, there are four sites providing comprehensive TB/HIV services (Mnazi Mmoja, ZAYEDESA, Makunduchi and Chake Chake hospitals). This number was more than the set target of 3 for the year 2020. The number of sites increased from 2 sites in 2019 to 4 sites in 2020.

11. Number of care and treatment clinics (CTCs) providing IPT services

The number of care and treatment clinics providing IPT services has increased from 12 in 2019 to 13 (9 Unguja and 4 Pemba) in 2020. This number has surpassed the set target of 10 CTCs facilities providing IPT services by 2020.

Table 29: Percentage of People newly enrolled in HIV care who are started on TB preventive therapy

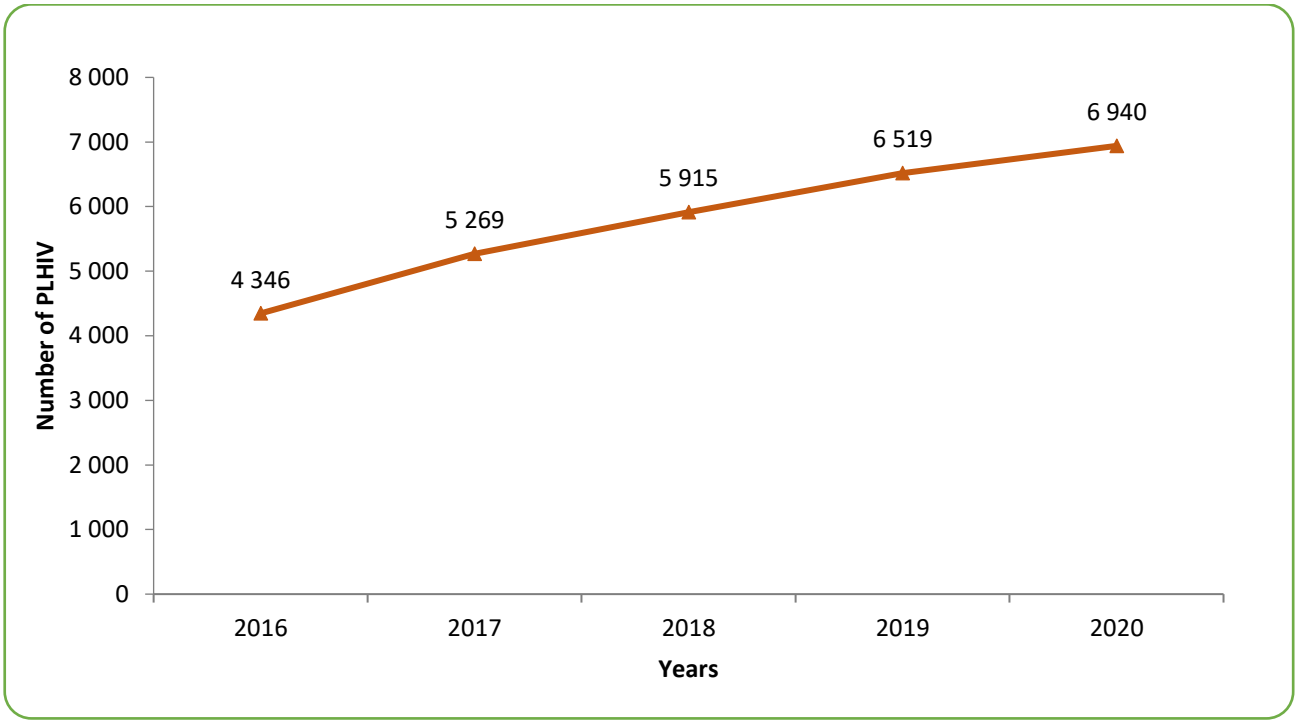
S/No.	CTC Name	New HIV enrolled in care	New HIV enrolled in care who are started TB treatment	Percent (%)
1.	Mnazi Mmoja	373	38	**10.2**
2.	Mwembeladu	193	0	**0.0**
3.	ZAYEDESA	89	2	**2.2**
4.	Al Rahma	11	2	**18.2**
5.	MAT	2	0	**0.0**
6.	Ziwani	4	0	**0.0**
7.	Bububu	92	6	**6.5**
8.	Fuoni	94	2	**2.1**
9.	Kivunge	78	7	**9.0**
10.	Makunduchi	23	8	**34.8**
11.	Chake Chake	43	14	**32.6**
12.	Micheweni	13	1	**7.7**
13.	Mkoani	7	1	**14.3**
14.	Wete	23	6	**26.1**
Total		**1045**	**87**	**8.3**

In the year of 2020, 8.3% (1045) was the percentage of People newly enrolled in HIV care who are started on TB preventive therapy. It observed that Mnazi Mmoja and Chake Chake were leading to have high number of clients treated TB, while three CTCs did not enrol any one client.

3.1.6 Trend of PLHIV currently on ART from 2016 to 2020

The figure below shows number of patients currently on ART has increased progressively from 4,346 in 2016 to 6,940 by December 2020. This steady increase was attributed by increase in identification of HIV positive clients, strengthened referral and linkage mechanism through escorted referral and linkage case management by peers as well as timely ART initiation.

Figure 22: Trend of PLHIV currently on ART from 2016 to 2020.



3.1.7 Challenges

- Persistent poor retention of PLHIV on ART.
- Low number of the patients diagnosed with TB and started TB treatment

3.2 INTEGRATED COMMUNITY-BASED HEALTHCARE SERVICES

3.2.1 Background

Home Based Care (HBC) services in Zanzibar are integrated in 144 health facilities (54Pemba and 90Unguja) at all 11 districts of Zanzibar. The community-based health volunteers are pivotal in the provision of these services at the community. The volunteers are working under the supervision of facility-based HBC providers. Each health facility has a contact person (facility supervisor) who is accountable for all HBC services at the facility level.

Home-based care providers offer various services to patients, including basic nursing care, health and hygiene education, psychosocial-spiritual support, assistance with household duties, monitoring adherence of drug compliance as well as referral to health centers, NGOs, FBOs and Community based organization (CBOs.)

3.2.2 Goal

To increase the utilization of CBHC services to 30% of PLHIV by 2022

3.2.3 Objectives

1. To increase availability of quality comprehensive ICBHC services by PLHIV
2. To strengthen linkage of ICBHC services with health facilities

3.2.4 Program Implementation

3.2.4.1 Services monitoring

Annual supportive supervision was conducted to facility-based HBC providers at 90 (60 Unguja and 30 Pemba) health facilities. Other54 health facilities were not visited due to inadequate fund. The objective was to improve the performance of home-based care providers to deliver quality and comprehensive HBC services, including documentation. The key finding observed was the presence and use of national M&E tools for HBC according to guidelines.

Moreover, quarterly meetings with **200** (120 Unguja and 80 Pemba) CBHC providers were conducted. The objective was to share experience and challenges faced during the provision of ICBHC services. Furthermore, issue ofCOVID-19 epidemic was raised and discussed on how to provide services in the context of COVID-19. Standard precaution and infection preventive control measures were emphasized.

Incentive for CBHC volunteers were provided in all districts with the aim to motivate the volunteers to continue providing care to patients.

Table 30: HBC Services indicator

SN	Indicator	Year		
		2018	2019	2020
1	Percentage of PLHIV receiving comprehensive HBC services	18.1%	31.7%	31.9%
2	Percentage of missed appointment and LTFU clients followed up and linked back to health facility services by community-based HIV and AIDS services providers	-	-	50.9%

1. Percentage of PLHIV receiving comprehensive HBC service

The percentage of PLHIV receiving comprehensive HBC services has almost remained the same 31.7% in 2019 and 31.9% in 2020. However, this is above the set target of 28%. This achievement

was due to improved coordination between HBC and CTC services. The percentage of LTFU clients follow up and link back to CTC in 2020 is 50.9%

Table 31: Number of clients who received HBC services by disease category, sex and age group in Zanzibar, 2020

Age (years)	HIV patients		Other chronic diseases		Total
	M	F	M	F	
0 – 4	4	8	22	17	51
5 – 14	50	33	94	97	274
≥ 15	456	954	1254	1732	4,396
Total	510	995	**1370**	1846	**4,721**

Home-based care providers offer various services to patients, including basic nursing care, health and hygiene education, psychosocial-spiritual support, assistance with household duties, monitoring adherence of drug compliance as well as referral to health centres, NGOs and CBOs.

2.2.5 Challenges

- Shortage of funds to implement HBC services

3.3 TUBERCULOSIS AND LEPROSY SERVICES

3.3.1 Background

Tuberculosis and Leprosy unit is responsible to oversee the provision of TB and leprosy services in Zanzibar. The main objective is to facilitate early diagnosis, treatment and cure of Tuberculosis (TB) and Leprosy patients so as to reduce the incidence and prevalence of the disease. All 169 public health facilities and 20 private facilities are providing TB and Leprosy services.

There are three Gene-Xpert sites (Mnazi Mmoja, Kivunge and Chake Chake Hospitals) which perform TB molecular diagnosis and one Public Health Laboratory performing TB culture. A total of 56 (38 Unguja and 18 Pemba) TB diagnostic centres are performing follow up smear examination and 11 health facilities do X-ray services (6 Unguja and 5 Pemba). Eight (5 Unguja and 3 Pemba) CSOs/NGOs are also involved in TB care and control interventions in Zanzibar.

3.3.2 Goals

1. To reduce the TB incidence by 25% of the 2020 level,
2. To reduce TB mortality by 50% from the 2020 case fatality rates
3. To reduce TB/HIV mortality by 50% from the 2020 burden
4. To eliminate Leprosy in all districts and reduce the proportion of people diagnosed with grade 2 leprosy to less than 0.1 /100,000 by the year 2022

3.3.3 Objectives

1. To provide universal access to quality and assured services to detect and treat 90% of all forms of estimated TB cases by 2022
2. To achieve treatment success of Drug susceptible Tuberculosis (DSTB) to above 95% and Drug Resistance Tuberculosis (DRTB) to 100% by 2022
3. To provide TB Preventive Therapy to all (100%) eligible people at risk of TB by 2022
4. To ensure all (100%) of TB patients co-infected with HIV receiving timely antiretroviral therapy
5. To reduce new leprosy cases with disability grade 2 to less than 0.1 per 100,000 population by 2022.
6. To ensure none (zero) of families affected by TB and Leprosy suffers from catastrophic costs
7. To build strong health systems to support TB and Leprosy control by 2022

3.3.4 Programme Implementation

3.3.4.1 Capacity building

Five days training on leprosy case management to 60 (30 Pemba and 30 Unguja) health care workers was conducted. The objective was to enhance capacity of health care providers on early identification of leprosy and provision of comprehensive management to prevent disability caused by leprosy.

In addition, one day orientation meetings to drug shop sellers on TB prevention and control was conducted to 60 (30 Unguja and 30 Pemba) participants. The objective was to orient drug shop sellers on TB care and control in order to identify TB presumptive cases at their respective drug shops and refer them for investigation at health facilities.

The program also conducted leprosy sensitization meeting in nine schools (8 Unguja, and one Pemba) and 40 Shehia (22 Unguja, 16 Pemba). The objective was to enhance leprosy community awareness so as to increase health seeking behavior among symptomatic patients for earlier diagnosis and treatment so as to reduce transmission and prevent leprosy disability.

Moreover, five days training on Pediatric TB was conducted to 46 (25 from Unguja and 21 from Pemba) health care workers. The objective was to increase knowledge and skills on the pediatric TB management in order to improve their ability to diagnose and treat children with TB at facility level.

Four days training of trainers (TOT) on infection prevention and control in the context of COVID -19 was conducted to 44 (28 Unguja and 16 Pemba) members of district IPC teams. The objective was to equip the teams with knowledge and skills of IPC in the context of COVID-19 thereafter to train and supervise other health care provider. Following TOT, 12 sessions of training on IPC in the context of COVID-19 were conducted to 440 (280 Unguja 160 Pemba) HCWs.

Furthermore, two sessions of MDR -TB sensitization meeting was conducted to 48 (24 participants in each session) health care providers in Pemba. The objective was to orient health care providers on MDR TB case detection in order to improve suspicious index, identify presumptive cases, diagnose and follow up of MDR TB suspect at their respective health facilities.

3.3.4.2 Service Monitoring

Quarterly supportive supervision was conducted in 162 (92 Unguja and 70 Pemba) health facilities.

The objective was to assess the performance and support District coordinators and other HCWs working in TB, TB/HIV and Leprosy services. The key findings were reduced number of patients seeking health care at the onset of COVID-19 epidemic and inadequate TB screening of clients who attended health care facilities. In addition, post supervision feedback meetings were conducted with health care providers to discuss supervision findings and plan way forward to resolve the challenges identified.

Three days supportive supervision in **8** (5 Unguja and 3 in Pemba) CSOS/NGOs was conducted. The objective was to monitor implementation status and performance on provision of TB care services to community and TB high risk groups at their respective areas. Key issues observed were data discrepancy and inadequate documentation of activities report. The identified challenges were discussed, and staff were mentored on identified gaps.

In addition, feedback meetings were conducted to **60** (30 Unguja, 30 in Pemba) CSO/NGOs members. The objective was to discuss strengths and challenges observed during supervision and share best practices. Among the issues discussed were proper report writing and improving documentation of implemented activities. Finally, the participants agreed on way forward to overcome the challenges.

Two days quarterly MDR-TB cohort review meeting was conducted. A total of 18 (15 in Unguja, 3 in Pemba) participants attended the meeting. The objectives were to discuss performance on MDR-TB management, reviewing routine investigation of patients, success, challenges and share best practices. Agreed way forward was for coordinators to strengthen MDR-TB case finding and management.

Moreover, quarterly program review meetings which involved program coordinators and other stakeholders were conducted. A total of 40 (30 Unguja and 10 Pemba) participants attended. The aim was to discuss performance of different level of implementation regarding TB, TB-HIV and leprosy interventions including success, challenges and share best practices.

Furthermore, quarterly TBHIV quality improvement meetings which involved health facility TB quality improvement members were conducted. A total of 52 (26 Unguja and 26 Pemba) participants attended. The objective was to discuss provision of quality TB services to increase TB case detection in their respective health facilities. The main issues discussed were integration of TB screening as a routine service using Provider Initiated TB Screening (PITS) approach.

TB contact investigation was conducted for 431 (367 Unguja and 64 Pemba) bacteriologically confirmed TB patients, where by 1873 (1615 Unguja and 258 Pemba) contacts who were household members were reached, given health education, and screened for TB. A total of 248 (177 Unguja and 71 Pemba) TB presumptive were investigated for TB, of them 24 (4 from Pemba and 20 from Unguja) were diagnosed with TB. Following contact investigation 173 (129 Unguja and 44 Pemba) under-fives were identified and provided INH prophylaxis.

In addition, TB screening to correctional facilities students in Unguja and Pemba was conducted. The objective was to identify all students with TB symptoms for early diagnosed and initiate proper treatment in order to control TB transmission in correctional facilities. Total of 691 students were screened for TB, of them 138 were TB presumptive and their samples were sent for TB investigation. As a result, 22 (15 Unguja and 7 Pemba) students were diagnosed with TB and initiated treatment.

3.3.5 Tuberculosis services indicators and trend from 2018 to 2020

Table 32: Tuberculosis service indicators and trend from 2018 to 2020

Indicators		Year		
		2018	2019	2020
1.	Number of notified cases all form of TB – Bacteriological confirmed plus clinical diagnosed new and relapse cases	944	967	1074
2	Percent of new bacteriological confirmed TB	37%	33%	35%
3	Treatment success rate bacteriological	95%	93%	93%
4	Treatment success rate–-all new TB cases	95%	93%	92%
5	Percentage of patient who had HIV test result	99%	99.8%	100%
6	Proportion of registered new and relapse TB	13%	14%	9%
7	Percent of HIV positive TB patient initiated on	96%	95%	99%
8	Percent of HIV positive TB patient on CPT	96%	100%	100%
9	Number of bacteriological confirmed drug	7	5	5
10	Number of cases with drug resistant TB that began second-line treatment	7	5	5

11	Percent of notified TB cases, all forms contributed by non-NTP providers	14%	14%	15%

1. **Number of notified cases all form of TB –Bacteriological confirmed plus clinical diagnosed new and relapse cases**

In the year 2020, the number of notified cases has increased from 967 in 2019 to 1,074, this might be contributed by strengthening sputum collection and transportation from peripheral to Gene X-pert site, as well as community involvement which contributed 155 (15%) of notified cases. However, the set target of 1,411 was not reached due to inadequate contribution of private health facilities in TB case detection and inadequate community active case finding during COVID-19 epidemic. Among the notified cases, 374 (35%) were bacteriologically confirmed, including 5 MDR-TB, 563 (52.4%) were clinically diagnosed and 137 (13%) were extra pulmonary. In addition, 85 (8%) retreatment cases were notified as shown in the table 4.1 below. More effort is needed to reach the intended target.

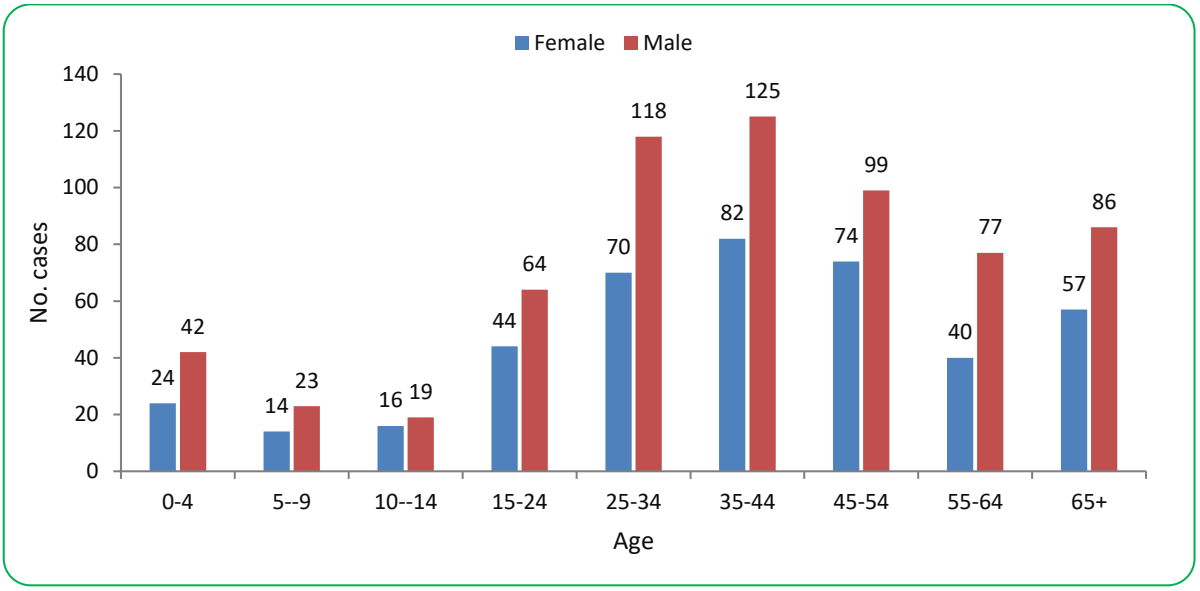
Table 33: TB cases notified by type of patient and category, Zanzibar, 2020

Type of patients	Bacteriologically confirmed	Clinical diagnosed	Extra pulmonary	Total
New	351	509	129	989
Relapse	10	22	5	37
Failure	9	0	0	9
Return to control	4	12	2	18
Others	0	20	1	21
Total	**374 (35%)**	**563 (52.4%)**	**137 (13%)**	**1,074 (100%)**

**Retreatment including relapse, failure, return and others were 85 (8%) of all patients notified*

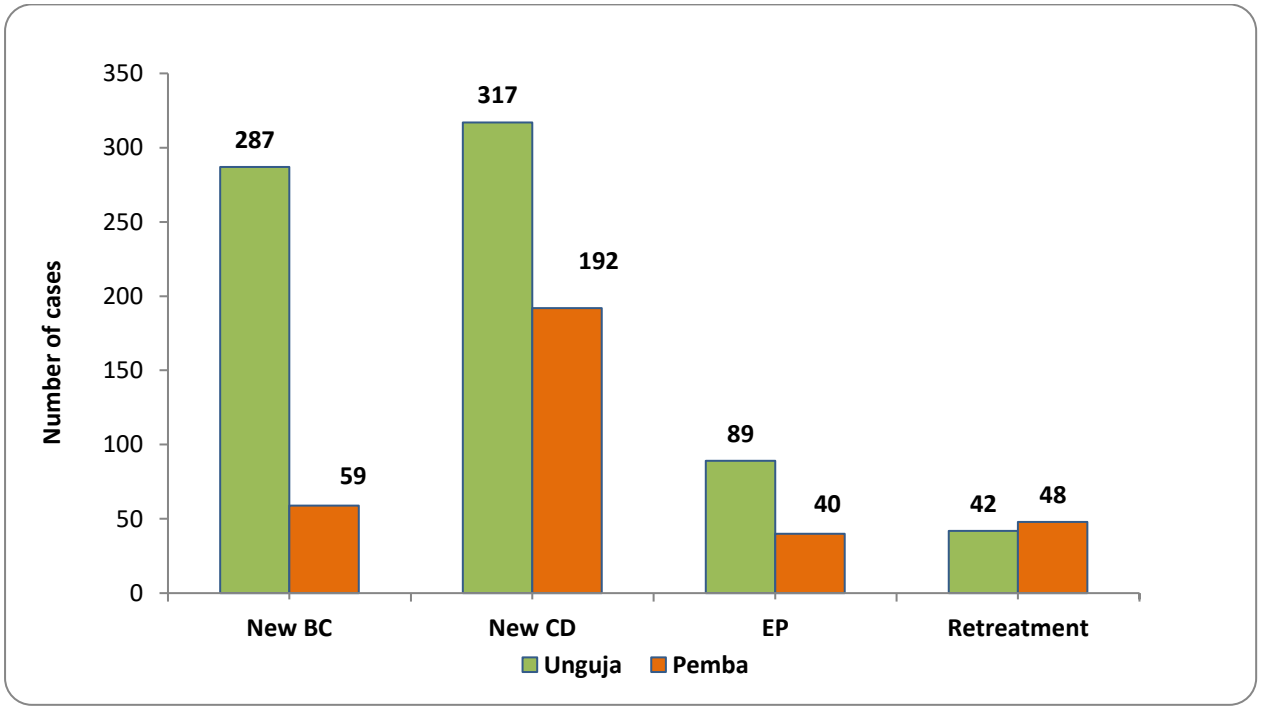
In the year 2020, all sex and age groups were affected, but the most affected age group was 25 – 54 years with male more affected than female. The percentage of children under 15 years affected with TB was 13% (138/1074).

Figure 23: Age and sex distribution for TB cases notified in Zanzibar, 2020



Among all patients notified in 2020, 735 (68%) were in Unguja and 339 (32%) in Pemba as seen in figure 4.2. The number of re-treatment cases increased from 62 in 2019 to 85 in 2020. This increase might be due to new TB case definition for retreatment which include previous treated clinically diagnosed TB patients. More effort is needed to strengthen follow-up especially in Pemba

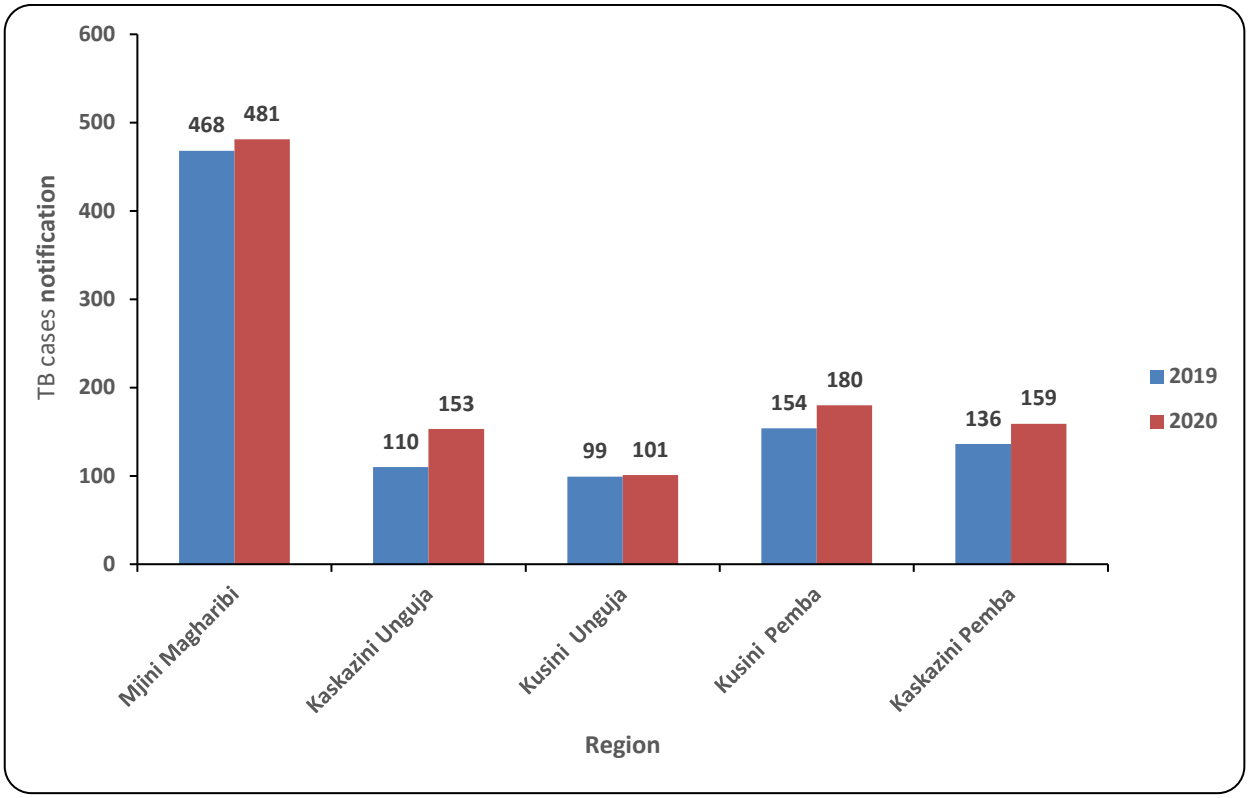
Figure 24: TB case notification by category and island, Zanzibar, 2020



In the year 2020, the number of notified has slightly increase across all regions compared to 2019, the increase is highest in Mjini Magharibi region which contribute 481 (44.8%) and the lowest in Kusini Unguja notified which notified 101 (9.4%). Generally, there is no remarkable

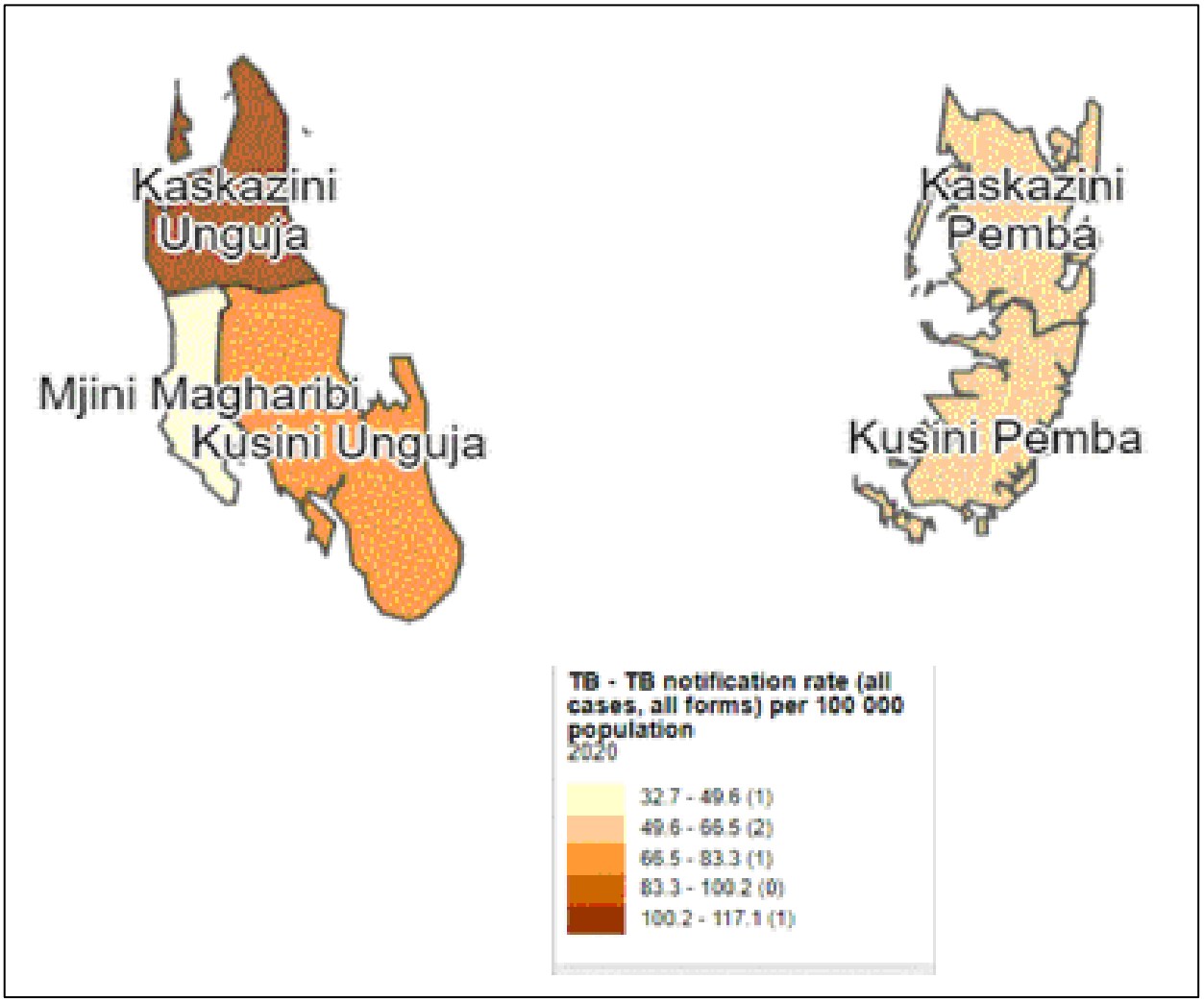
increase in number of TB cases notified in 2020 in all regions compared to the number of cases reported in 2019 (see figure 25 below).

Figure 25: TB case notification by region, Zanzibar, 2019 – 2020



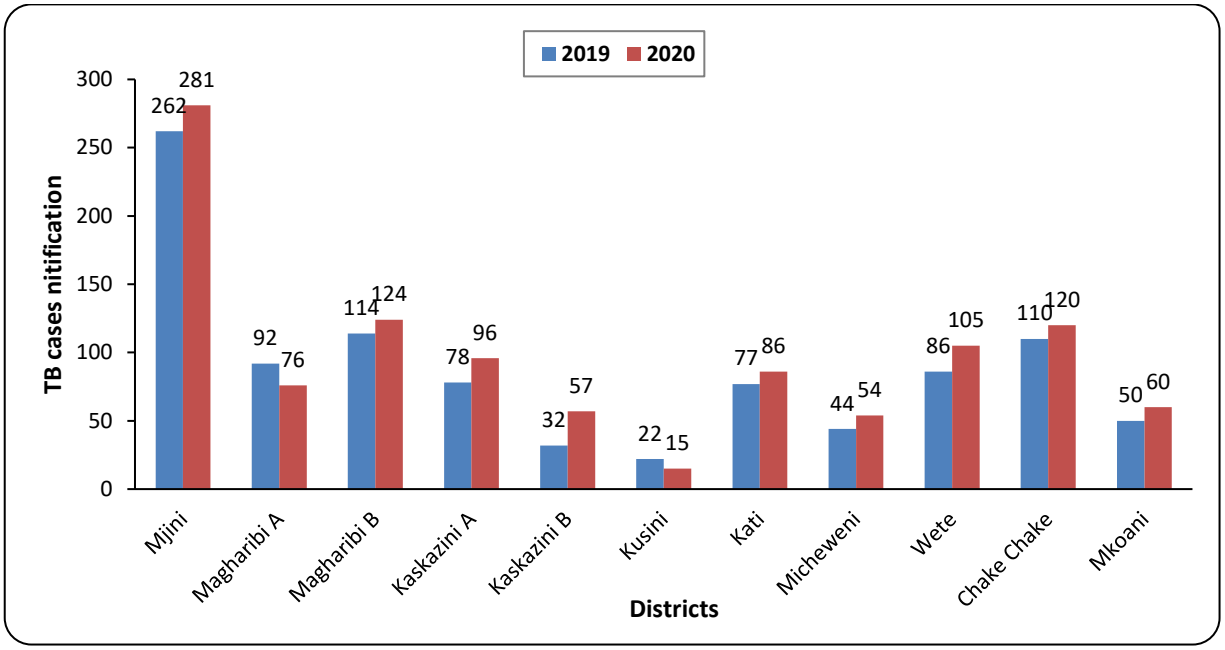
The number of notified patients per 100,000 population is high in Kaskazini Unguja ranging from 100 -117 per 100,000 population follow by Kusini Unguja 67 -83 Mjini magharibi is the least 32 – 49. This indicate more TB cases is in Kaskazini and Kusini Unguja follow by Pemba in both regions, while Mjini magharibi has less as shown in the map below.

Figure 26: TB notification per 100,000 population by region, Zanzibar, 2020



Number of notified TB patients has slightly increased across all districts compared to 2019 except in Kusini and Magharibi A (figure 27). This increase might be contributed by introduction of Provider Initiated TB screening approach (PITS) in health care facilities and CSOs

Figure 27: TB case notifications by Districts, Zanzibar, 2020



2. Percent of new bacteriological confirmed TB (New smear positive)

The proportion of new bacteriological confirmed TB cases has slightly increased from 33% in 2019 to 35% in 2020. This might be due to using of Gene Xpert Ultra cartridge which is more sensitive in identifying MTB.

3. Treatment success rate bacteriological confirmed TB cases

In the year 2019, a total of **309** bacteriological confirmed TB patients notified and started TB treatment, of them **265** were cured and **21** treatments completed. Therefore, treatment successes rate of bacteriological confirmed TB cases was **93%** which was below the set target of **95%** for this year due to death and lost to follow up which account for 2.6% each as shown in table 34.

Table 34: Treatment success rate for bacteriological confirmed TB cases Zanzibar, 2020.

Type	Notified	Cured	Treatment completed	Failure	Died	Lost to follow up	Not Evaluated	Total
New bacteriologically confirmed	291	256	15	4	8	5	3	291
Failure	5	4	0	0	0	1	0	5
Return	13	5	6	0	0	2	0	13
Total	**309**	**286**		**4**	**8**	**8**	**3**	**309**
%		**93**		**1.2**	**2.6**	**2.6**	**1**	**100**

4. Treatment success rate - All TB cases

In the year 2020, the treatment success rate for all new TB cases registered and started treatment was 92 % (856/927). The success rate has slightly decreased compared to 93% in 2019. The set target of 95% was not reached due to increasing number of deaths from 4% (2019) to 6% (2020) as shown is table 35.

Table 35: Treatment successes rate for all new TB cases registered, Zanzibar, 2020

Type	Notified	Cured	Treatment completed	Failure	Died	Lost to follow up	Not Evaluation	Total
Bacteriologically confirmed	291	256	15	4	8	5	3	291
Clinically Diagnosed	636	0	585	0	46	0	5	636
Total	**927**	**856**		**4**	**54**	**5**	**8**	**927**
%		**92.3**		**0.4**	**5.7**	**0.9**	**0.8**	**100%**

5. Percentage of patient who had HIV test result recorded in the TB register

Among 1,074 patients registered in the year 2020, all of them were tested for HIV and result recorded in the TB register. Therefore, the proportion of TB patient tested for HIV was 100%. Which is in line with set target of 100% due to strengthened PITC and improving documentation.

6. Proportion of registered new and relapse TB patients with documented HIV positive status

The proportion of patients who were diagnosed with TB/HIV co-infection in the year 2020 is 9% which is lower than 2019 (14%). Among them 78 (78%) were from CTC and 22% were patients from TB clinics. See figure 4.5 below.

7. Percent of HIV positive TB patient initiated on ART

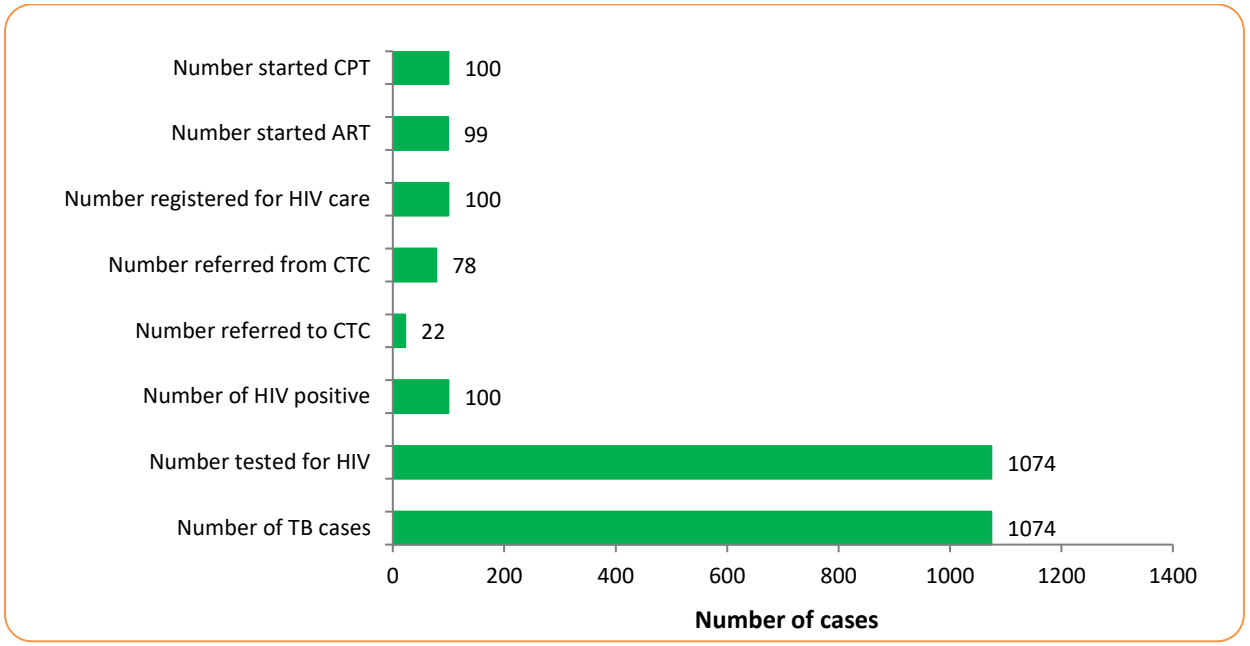
Of 100 TB/HIV patients diagnosed in 2020, 99 (99%) started ART (figure 4.5). The proportion of HIV/TB patient started ARV is the same as 2019 (99%). The target was not achieved as one patient died immediately after diagnosed.

8. Percent of HIV positive TB patient on CPT

The percentage of TB/HIV patients started on CPT is **100%** (100/100), which is the same as for 2019. The unit managed to reach above the set target of **100%.** This might be contributed by

strengthening counseling services for co-infected patients as well as availability of cotrimoxazole.

Figure 28: /HIV notification, Zanzibar, 2020 (x and Y axis) ianze CPT than ART)



9. Number of bacteriological confirmed drug resistant TB cases

A total of 5 (4 Unguja and 1 Pemba) MDR TB cases were notified in the year 2020; the number of notified cases was the same as 2019. However, the number is low compared to target of **11** cases, this might be contributed by low follow up of MDR suspects such as MDR contacts and retreatment TB cases. Therefore, efforts to detect more is needed by strengthening follow up mechanism of all MDR suspect.

10. Number of cases with drug resistant TB that began second-line treatment

All 5 detected MDR cases notified in 2020 started on second-line treatment and were monitored according to the national guideline.

11. Percent of notified TB cases, all forms contributed by non-NTP providers – community referral

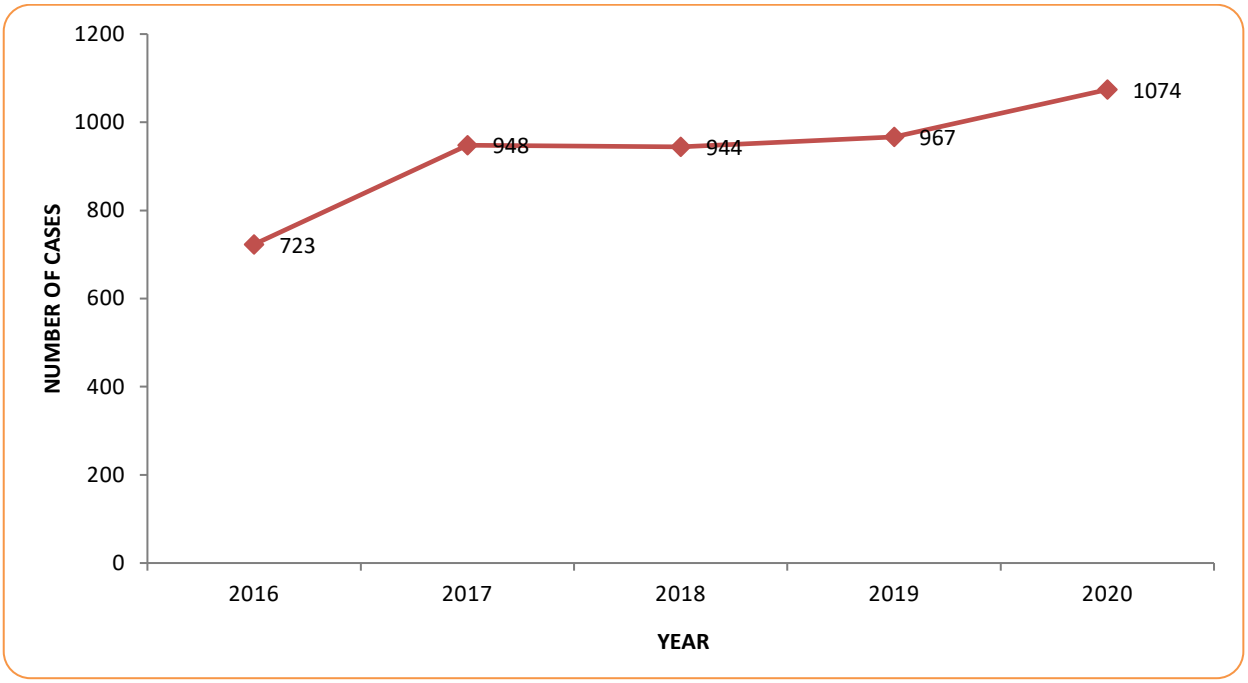
The proportion of notified TB cases all forms contributed by non- national TB providers (Civil Society organization and private health facilities) increased from 14% in 2019 to 15% (155/1074) in 2020 which is within the set target (15%). The distribution of TB cases from non-NTP providers

was 11% (109) from community and 4% (46) from private facilities. Hence, more effort is needed to scale up TB intervention in private facilities.

3.3.6 Trend of TB case notification from 2016 to 2020

For the past five years, the number of notified TB cases has increased from 723 in 2016 to 1074 in 2020 in Zanzibar. The increase in the notification was due to introduction of PITS to all clients attended health care facilities, sputum collection and transportation and strengthened QI intervention in TB case finding.

Figure 29: Trend of TB case notification from 2015 to 2019, Zanzibar



3..3.7 Leprosy services indicators and trend from 2018 to 2020

Table 36:Leprosy services indicators and trend from 2018 to 2020

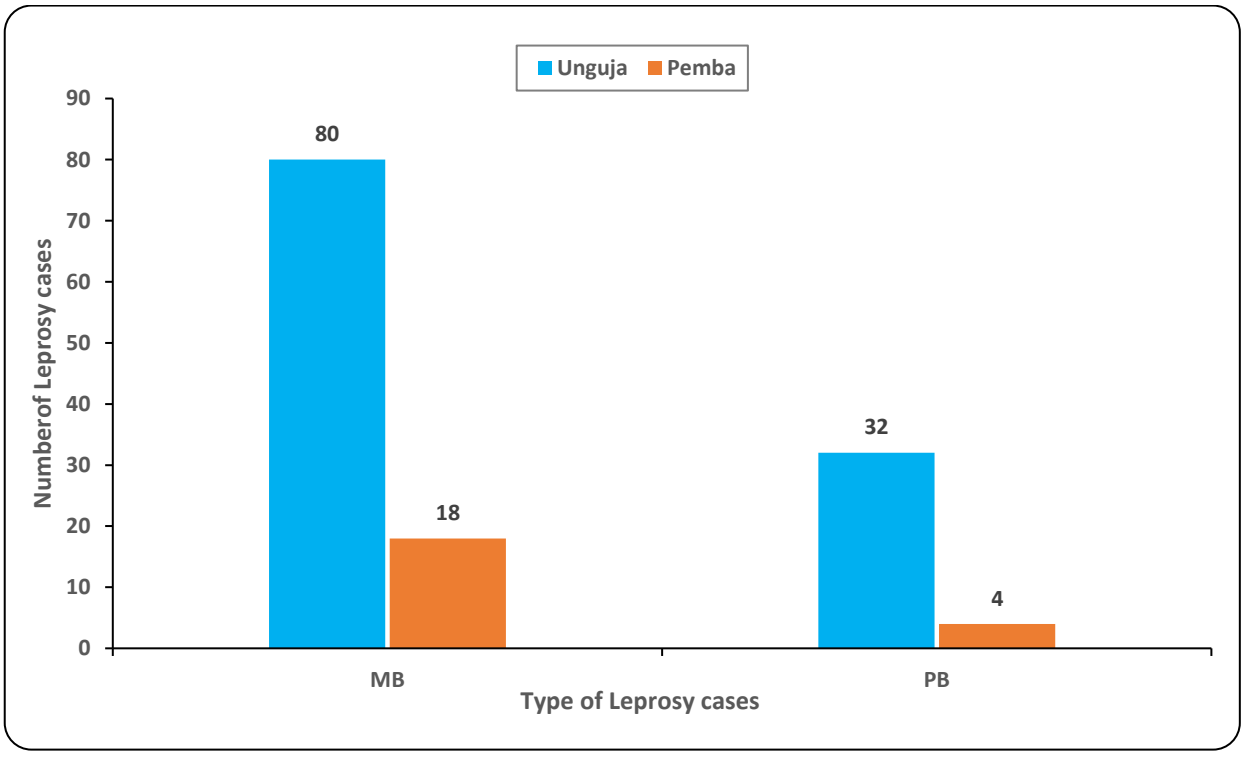
Indicators		Years		
		2018	2019	2020
1.	Number of all new registered Leprosy cases, contributed by active case findings and other intervention	82	163	130
2.	Percent of MB cases among all new cases	70	72	73
3.	Percent of children among new cases	18	19	17

4.	Percent of WHO disability grade 2 among new	2	7	7.6
5.	Rate of disability grade 2 per 100,000 population	0.1	0.7	0.5

1. Number of all new registered leprosy cases contributed by active case finding and other interventions

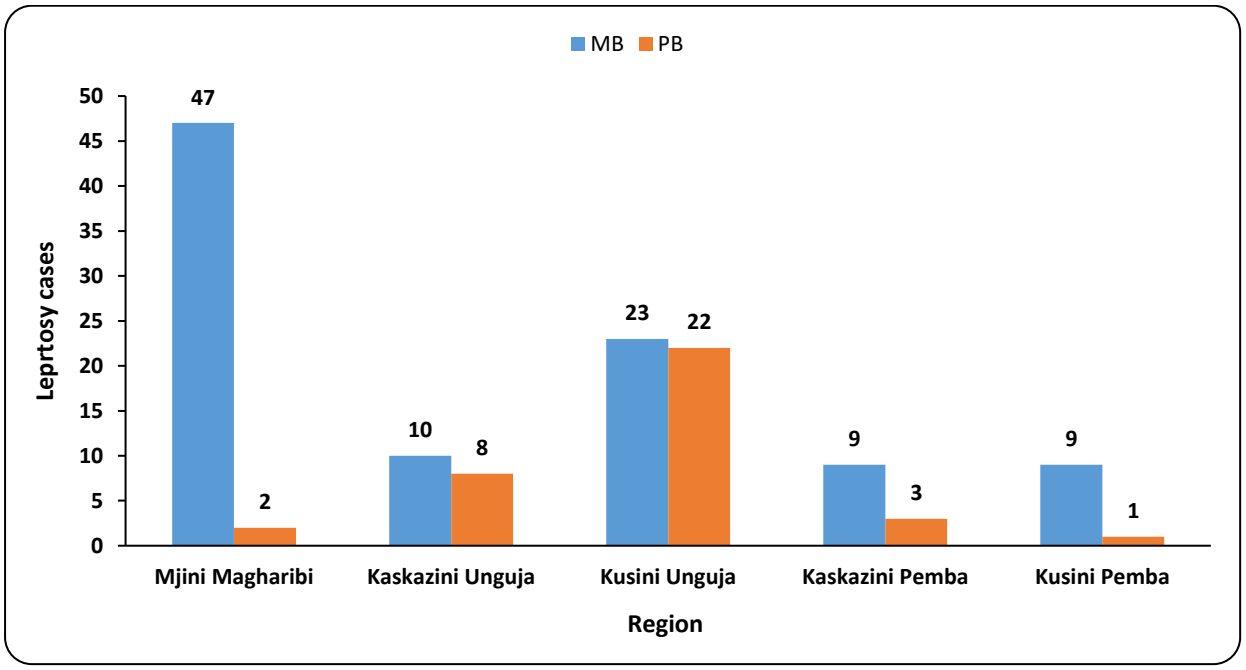
Number of new leprosy cases registered in 2020 was 130, of them 109 (84%) were diagnosed in Unguja and 21 (16%) were diagnosed in Pemba. Among them, 94 (72%) were Multi bacillary (MB), and 36 (28%) were Pauci bacillary (PB) as shown in the figure 30. The number of leprosy cases diagnosed has decreased from 163 in 2019 to 130 cases in 2020. The decrease might be contributed by inadequate implementation of active case finding in the community due to the presence of COVID-19 pandemic.

Figure 30: Number of all new registered Leprosy cases by type and Island, Zanzibar, 2020



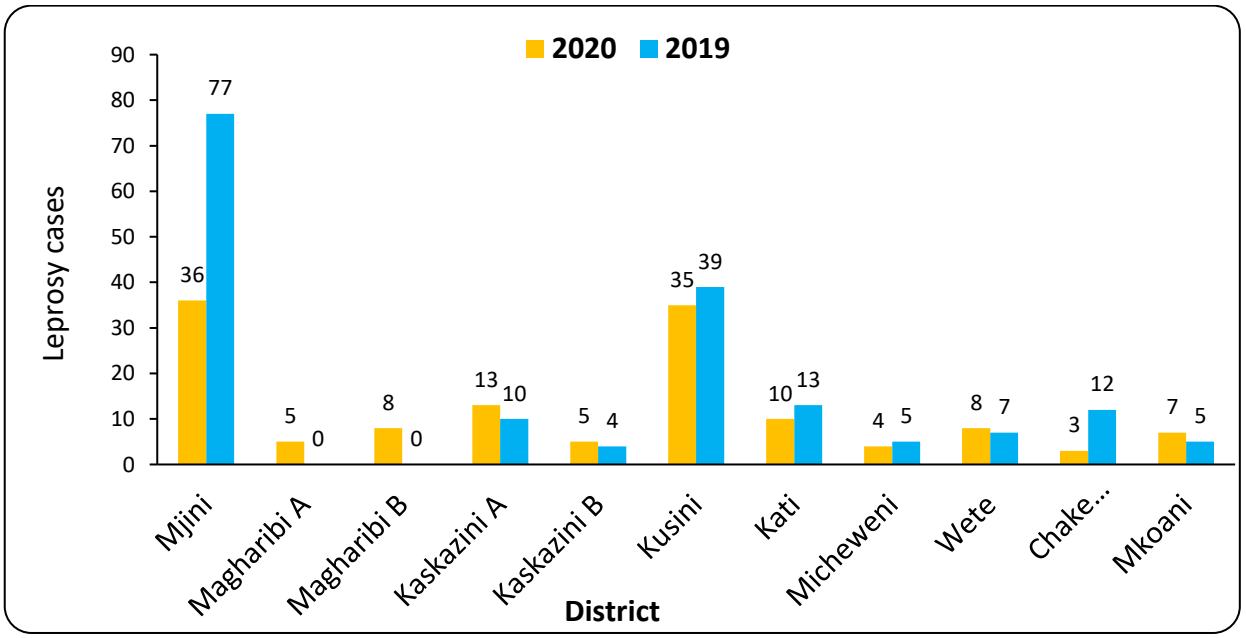
The below illustrates the number of leprosy cases notified per region whereby Mjini Magharibi region notified highest number of leprosy cases **49(37%)**, followed by Kusini Unguja region which notified **45(34%)** cases. Kusini Pemba region reported lowest number of leprosy cases **10** (8%).

Figure 31: Number of Leprosy notified cases by region Zanzibar, 2020



Number of notified leprosy patients has decreased in 2020 across all districts with the remarkable decrease in Mjini district. The decrease in leprosy case notification might be due to inadequate active case finding within the community as shown in figure 32 below.

Figure 32: Leprosy notification by District Zanzibar 2019 & 2020



Among 134 cases detected, 0 - 34 years of age seem to be more affected by leprosy, male of 15-34 years was more affected with MB leprosy compared to female. This indicates the presence of active leprosy infections within the community.

Table 37: Age and sex distribution and type of all leprosy cases registered during the year 2020, Zanzibar.

	0-14		15-24		25-34		35-44		45-54		55-64		65+		Total
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
MB	4	2	17	5	13	10	9	9	4	2	4	4	7	8	**98**
PB	7	10	3	3	5	5	1	0	0	0	0	0	1	1	**36**
Total	**11**	**12**	**20**	**8**	**18**	**15**	**10**	**9**	**4**	**2**	**4**	**4**	**8**	**9**	**134**

2. Percent of MB cases among all new cases

Of all **130** new cases registered and initiated leprosy treatment in 2020, the percentage of multibacillary patients is **72.3%** (**94/130**). MB cases are the source of transmission among the community members. Therefore, active leprosy case finding interventions should be strengthen in order to reduce leprosy transmission of infection in the community.

3. Percent of children among new cases

The proportion of children who were diagnosed with leprosy among new cases in 2020 was **18%** (23/130) which is the same as 2019. The high percentage of children diagnosed with leprosy indicates the presence of infectious MB cases in the community.

4. Percent of WHO disability grade 2 among new cases

Among **130 of** new Leprosy cases diagnosed, 85 (65%) had disability grade 0, while **35** (**27%**) patients had disability grade **1** and **10** (**7.6%**) had disability grade 2. The proportion of Leprosy cases with disability grade 2 is almost the same in 2019 (7%) and 2020 (7.6%), which is below the set target of 1%. More investment is needed in community active case finding to facilitate early detection and management in order to prevent disability.

Table 38: Disability grading for newly diagnosed leprosy patients diagnosed in 2019

Grade	Number of cases	%
0	85	65
1	35	27
2	10	7.6
Total	**130**	**100**

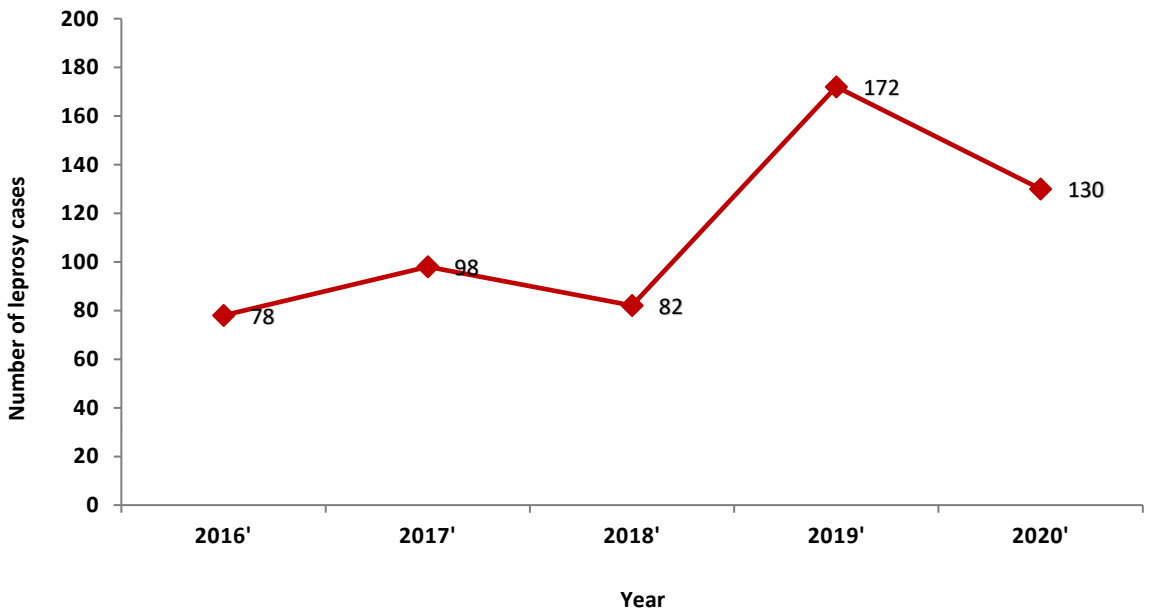
5. Rate of disability grade 2 per 100,000 population

The rate for disability grade 2 per 100,000 populations among new cases in 2020 is 0.5. The proportion is below the national target of 0.1 indicating that more interventions are needed to detect missing leprosy cases early in the community.

3.3.8 Trend of Leprosy case notification from 2016 to 2020

Leprosy case notification is fluctuating from 2016 to 2020; as shown in the figure below. However, there is notable increase in Leprosy case notification in 2019 which was due to active case finding and capacity building for HCWs on leprosy diagnosis and management. Leprosy case notification is fluctuating from 2016 to 2020; as shown in the figure below. However, there is notable increase in Leprosy case notification in 2019 which was due to active case finding and capacity building for HCWs on leprosy diagnosis and management.

Figure 33: Trend of Leprosy cases notification from 2016 to 2020, Zanzibar



3.3.9 Challenges

- Inadequate contribution of TB case notification from private facilities
- Inadequate funds to support leprosy interventions

3.3.10 Recommendations

- Strengthen engagement of private facilities in TB care management
- Mobilize funds from different sources to support leprosy interventions.

3.4 LABORATORY SERVICES

3.4.1 Background

The laboratory services are key components of quality health care services, accountable for overseeing laboratories in HIV, Hepatitis, TB and Leprosy services to ensure that tests performed, and results generated are reliable, reproducible, timely, and accurate. Currently there are 14 laboratories (10 Unguja and 4 Pemba) which support monitoring of HIV care and treatment services. Additionally, laboratory supports includes 174 (112 Unguja 62 Pemba) HTS sites, 177 (103 Unguja 74 Pemba) PMTCT sites, 56 (38 Unguja 18 Pemba) TB diagnostic sites and Public Health laboratories (PHL) in Pemba which serves as reference laboratory for TB culture.

3.4.2 Goal

To improve laboratory infrastructure at the national and district levels, establish viral load testing and to enable proper collection of samples.

3.4.3 Objectives

1. To Increase laboratory capacity to perform quality HIV, TB and Viral hepatitis diagnostic and monitoring tests including diagnosing co-morbidities
2. To capacitate health care workers on HIV, TB and Viral hepatitis diagnosis
3. To increase capacity to perform HIV Viral load
4. To expand proficiency testing to all HIV services delivery points
5. To expand the scope of the Strengthening Laboratory Management Towards Accreditation (SLMTA) to regional and district levels

3.4.4 Program Implementation

3.4.4.1 Capacity building

Five days of refresher training was conducted to 20 TB laboratory technicians (12 Unguja and 8 Pemba). The objective was to increase knowledge on the aspect of molecular technology of Gene Xpert on TB diagnosis, proper management of Gene Xpert machine, and sample processing. By the end of the training participants were able to perform molecular techniques using Gene Xpert machine and sputum sample processing.

3.4.4.2 Service monitoring

Quarterly supportive supervision for TB diagnostic service was conducted at 56 (38 Unguja 18 Pemba) sites. The objectives were to support HCWs to improve diagnostic services and solve problems that were identified and provide support. The major concerns were delay of returning results

to their respective sites and improper filling of the laboratory register in some TB diagnostic sites leading to delay of the monthly report writing.

Furthermore, bi-annual supportive supervision for care and treatment laboratory services was conducted in 13 (9 Unguja and 4 Pemba) CTC sites. The objective was to assess the quality of laboratory services in CTC sites. It was observed that there was persistent delay in returning HVL result leading to longer turnaround time (TAT). This was due to insufficient capacity of the Gene Xpert machine at Mnazi Mmoja hospital and reagent stock out in the last quarter of the year.

3.4.5 Laboratory services indicators and trend from 2018 to 2020

Table 39: Laboratory services indicators and trend from 2018 to 2020

Indicator	YEAR		
	2018	2019	2020
1. Number of laboratories engaged in continuous quality improvement activities and achieved accreditation	1	1	1
2.Number of laboratories with capacity to perform HIV Viral load testing	2	3	3
3.Percentatge of testing sites with satisfactory performance in EQA/PT	50.6% (42/83) (52 PMTCT &31HTS sites)	71.8% (102/142) 55PMTCT & 87 HTS)	0
4.Percentage of sputum samples transported to gene expert for TB diagnosis	91% (7,991/8751)	93.7% (8187/8736)	95.3% (8955/9396)

1. Number of laboratories engaged in continuous quality improvement activities and achieved accreditation

By 2020 Mnazi Mmoja Pathology Laboratory is the only accredited laboratory in Zanzibar using ISO 15189. This was below the set target of having 3 accredited laboratories in 2020. However, three laboratories (Kivunge and Bububu in Unguja and Mkoani in Pemba) were assessed for basic requirements for the accreditation process.

2. Number of laboratories with capacity to perform HIV viral load (HVL) testing

Since the inception of HVL testing in Zanzibar, there are three (2 Unguja and 1 Pemba) laboratories performing HVL test. The set target of four laboratories sites for 2020 was not attained due to inadequate funds to procure another Gene Xpert machine.

3. Percentage of testing sites with satisfactory performance in External quality assurance using proficiency testing

In the year 2020, no EQA/PT have been distributed to all sites that perform HIV testing. This was due to the National Health Laboratory Quality Assurances and Training Center (NHLQATC) suspending the exercise of EQA following COVID 19 outbreak.

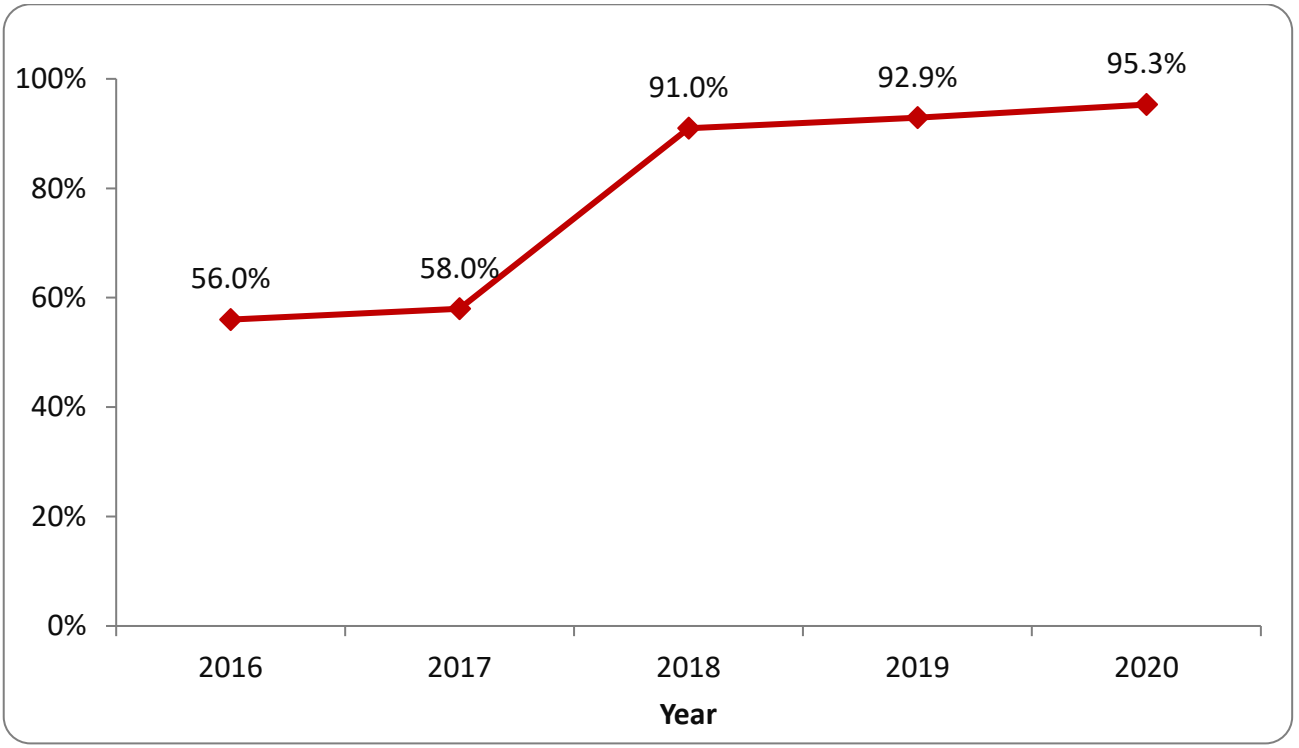
4. Percent of sputum samples transported to gene expert for TB diagnosis

There was a slight increase in the percent of sputum samples transported and tested to Gene Xpert sites from 92.9% (8023/8634) in 2019 to 95.3% (8955/9396) in 2020. This increase was due to enhance the sample transportation process using local sample transporters (Boda Boda).

3.4.6 Trend of the sputum transported to Gene expert from 2016 to 2019, Zanzibar

The percent of sputum transported to Gene Xpert has been increased from 56% in 2016 to 95% in 2020 as indicated in figure below:

Figure 34: Percent of sputum samples tested by Gene expert sites for TB diagnosis Zanzibar, 2016-2020



3.4.7 Challenges

- Stock - out of CD4 reagents to test HIV client.
- Absence of the EQA/PT panel distribution has affected monitoring of quality of HIV testing services.
- Delay in returning of HVL results from testing site to HVL collection sites.

3.4.8 Recommendation

- Right now, we are using a gene xpert machine for measuring HVL for the care and treatment of HIV clients, there is a need to remove CD4 as first test for the newly diagnosis HIV clients
- To have backup EQA/PT panel or any other alternative suppliers for EQA/PT for monitoring of HIV quality testing services, in case of any absence of the EQA panel distribution received from NHLQATC
- To strengthen the system for delivering HVL result from testing Laboratories to health facilities

3.5 INFORMATION, EDUCATION AND COMMUNICATION

3.5.1 Background

Information, Education, Communication/Behavioural Change Communication (IEC/BCC) unit is responsible for raising awareness and facilitating behavioural change that prevent individuals from risk of contracting or transmitting HIV, STI, Hepatitis, TB and Leprosy in the community. In collaboration with other stakeholders, the unit facilitate raise of awareness to the community through different approaches like media (electronic and print media), dialogue, theatre performance, etc.

3.5.2 Goal

To bridge the existing gap of awareness for both General and Key Populations to facilitate behavioural change in accessing the related services that could help in HIV, Hepatitis, and TB and Leprosy prevention in Zanzibar.

3.5.3 Objectives

1. To empower community with knowledge and skills to utilize culturally appropriate approaches in prevention of HIV, Hepatitis, TB and Leprosy transmission

2. To raise public awareness about behaviours that put individuals at the risk of contracting or transmitting HIV, Hepatitis, TB, Leprosy and other STIs

3. To empower communities on HIV, TB, TB/HIV, Hepatitis and Leprosy prevention, care, treatment and support through Advocacy and Communication.3) To empower communities on HIV, TB, TB/HIV, Hepatitis and Leprosy prevention, care and support through Advocacy and Communication (AC)

3.5.4 Program Implementation

1. Developed IEC materials on relationship between HIV/TB and COVID-19 and HIV/TB treatment adherence in the context of COVID-19

Four days' workshop was held with the aim to develop IEC printing materials on relationship between HIV/TB and COVID-19 and HIV/TB treatment adherence in the context of COVID-19. A total of 29 participants (25 Unguja and 4 Pemba) participated in the workshop. Following the workshop, a total of 6 printing materials (4 brochures and 2 posters) were developed and printed.

IEC materials developed and printed were.

A) Poster

1. Poster 1: "Jikinge na Korona, Dumu kwenye Tiba ya VVU"
2. Poster 2: "Jiunge na Huduma ya Methadone kwa utaratibu maalum, hata wakati wa korona"

B) Brochure

1. Brochure 1: "Dumu kwenye huduma na tiba ya VVU kipindi cha Korona"
2. Brochure 3: "Pambanua dalili za Kifua Kikuu na Korona"
3. Brochure 4: "Tupime VVU wenza na wana ndoa"
4. Brochure 5: "Zijue huduma za PITS"

2. Commemoration of the World Tuberculosis Day

The world Tuberculosis Day 2020 was commemorated at Southern region of Unguja to raise public awareness about the devastating health, social and economic consequences of tuberculosis, and to step up efforts to end the global Tuberculosis epidemic. The theme of this year was **"**PAZA SAUTI, ZUNGUMZIA TB**"**. In this event, South Regional Commissioner was a guest of honour who accompanied with his Central and South District Commissioners and his office staff. Other participants were journalists. Prior to the climax, press conference was held by Minister for Health who appealed to the people who present with respiratory symptoms to screen for both TB and COVID-19 at health facilities as this disease are somehow similar in symptoms. Also, press release was distributed to media and one radio programme was conducted at Zanzibar Broadcasting Corporation with the focus on TB prevention and treatment messages.

3. Aired Radio and Television spots

Three radio and TV spots were aired in both public and private media (ZBC TV and Radio, and Swahiba FM Radio) with the specific messages on TB signs and symptoms, effects of improper use of medicine for TB presumptive and not all cough is TB. Each spot was aired on TV and Radio for 3 days per week for 120 days spread over 1 year.

4. Radio and TV panel discussions

A total of 23 Radio and TV panel discussions (13 Radio and 10 TV) were conducted in both public and private media to create awareness on HIV, Hepatitis, Tuberculosis and Leprosy diseases. The messages were focused on prevention, treatment, and other related services. Also, due to the outbreak of COVID-19, specific program known as "UKWELI SI UVUMI'' was designed through ZBC TV and Radio. Several topics were discussed by panel of experts with specific messages on relationship and differences between COVID-19 with HIV, Tuberculosis, Hepatitis, and adherence to ART for People living with HIV in the context of COVID-19.

5. Distribution of IEC/BCC materials

In the year 2020, a total of **3870** (**2,150** brochure, **810** posters, **371** factsheet and 540 stickers) IEC/BCC materials were distributed to various stakeholders in Unguja and Pemba including health facilities and NGOs with specific messages on HIV, Hepatitis, Tuberculosis and Leprosy.

3.5.5 Challenges

- Inadequate funds to support IEC/BCC interventions

3.5.5 Recommendation

- Funds resource mobilization on IEC/BCC interventions

3.6 VIRAL HEPATITIS SERVICES

3.6.1 Background

Viral hepatitis services in Zanzibar were established in April 2017, aimed at early identification and prompt management of people living with viral hepatitis to prevent life-threatening complications and associated death. The services include prevention, diagnosis, care, treatment, and support at national, district, health facility and community levels. Being an epidemic that affects a wide range of population, implementation of viral hepatitis interventions involves various stakeholders within and outside Ministry of Health.

Currently, viral hepatitis screening services are provided at various entry points, including all public health facilities, sites that provide Key Population (KP) services as well as Blood Bank. Furthermore, services for management of viral hepatitis are provided at special clinic at Mnazi Mmoja Referral Hospital, Unguja. All identified HBV and HCV infected individuals from all entry points are linked to this clinic for management and follow up.

3.6.2 Goal

To eliminate viral hepatitis as a major public health threat in Zanzibar by 2030.

3.6.3 Objectives

1. To raise awareness on viral hepatitis to create demand for services.
2. To strengthen collaborative preventive interventions to reduce transmission of viral hepatitis.
3. To establish and scale up viral hepatitis diagnostic, care, and treatment services in the context of continuum of care and in the context of universal health coverage.
4. To strengthen viral hepatitis monitoring and evaluation systems including research to generate evidence for programme improvement.
5. To strengthen procurement, supply chain systems to ensure availability of good quality commodities for screening, diagnosis, prevention, and treatment of viral hepatitis.
6. To enhance partnership, coordination, advocacy, and resource mobilization efforts to increase efficiencies and sustain viral hepatitis programme.

3.6.4 Program Implementation

3.6.4.1 Capacity building

Two sessions of four-days training on Management of Viral Hepatitis were conducted to 32 (18 Unguja and 14 Pemba) healthcare workers. Main objective was to enhance their capacity in providing quality and comprehensive viral hepatitis care and treatment services in accordance with World Health Organization (WHO) guidelines. Following the training, healthcare workers will deliver the services at designated clinics.

3.6.4.2 Service monitoring

Sensitization meetings were conducted at government ministry, training institutions and community (shehia level) inand Pemba. The objective was to raise awareness on viral hepatitis, aimed at promoting prevention and increasing demand for service utilization. Following the

meetings, A total of 3,601 clients were tested for viral hepatitis B, among them, 991 clients were from The State University of Zanzibar five of them were found HBsAg positive. Furthermore, no positive case was found in 325 tested employees from Ministry of infrastructure, communication and transport in 2020. Additionally, the total of 1,543 tested clients for hepatitis C showed 18 positive results and a total 742 clients showed 10 positives from both Unguja and Pemba respectively

All tested positive for HBV and HCV individuals were linked to designated hepatitis clinics for further management.

In addition, a three-day workshop that involved six participants from ZIHHTLP, Ministry of Health and Viral Hepatitis Clinic was conducted in Unguja. The objectives were to develop draft Viral Hepatitis Training Modules and Monitoring tools. The draft documents were circulated to various stakeholders for technical inputs before finalization. Final documents will be used to build capacity among service providers and to monitor delivery of viral hepatitis prevention, care and treatment services.

Furthermore, site visits were conducted at 2 (1 Unguja and 1 Pemba) designated hepatitis clinics and Methadone Assisted Therapy (MAT) clinic in Unguja. The objective was to monitor and improve quality of viral hepatitis services. It was observed that enrolment and treatment coverage for HCV positive clients were very low at the hepatitis clinics and 50 HCV positive clients at MAT clinic required further management. Technical assistance was provided to track the clients for viral load testing to determine eligibility for treatment and expedite HCV antiviral initiation. To date, a total of 10 clients were successfully located and offered the test, while active tracking is ongoing to find the remaining.

Moreover, a series of collaborative consultation meetings were conducted with staff at Blood Bank, Methadone Assisted Therapy Clinic (MAT), HIV Care and Treatment Clinic (CTC) at Mnazi Mmoja hospital and Zanzibar Network of People who Used Drugs (ZANPUD). The objectives were to strengthen collaboration and improve linkage of identified hepatitis B surface antigen (HBsAg) and hepatitis C antibody positive clients to hepatitis clinics. It was agreed that all entry points will develop feasible mechanisms for effective referrals of clients and CTC will improve documentation and follow up of HBV/HCV co infected PLHIV for prompt and appropriate management.

Table 40: Hepatitis B and C testing results at various entry points Unguja and Pemba

3.6.5 Hepatitis services indicators and trend from 2018 to 2020

Table 41: Hepatitis services indicators and trend from 2018 to 2020

S/N	Indicators	Year		
		2018	**2019**	**2020**
1	Number of people who were tested for hepatitis B and received their results in the last 12 months:	NA	14,341	**20,495**
	Number of people who were tested for hepatitis C and received their results in the last 12 months:	NA	1910	18,875
2	Number of HBV patients NEWLY enrolled into hepatitis clinic	247	390	12,347
	Number of HCV patients NEWLY enrolled into hepatitis clinic	0	0	66
3	Number of HBV patients newly initiated antiviral treatment	17	28	17
	Number of HCV patients newly initiated antiviral treatment	0	0	3
4	Number of HBV patients currently on antiviral treatment	25	46	66
	Number of HCV patients currently on antiviral treatment	0	0	3

1. Number of people who were tested for hepatitis B&C and received their results in the last 12 months

Number of people who were tested for viral hepatitis B and received their results in the last 12 months has increased from 14,341 in 2019 to 20,495 in 2020. Further analysis shows that Unguja makes high promotion of 85.6% (17,536). Majority 17,536 (85.6%) were from Unguja, more than tow third 14,761 (72.1%) are male clients.

Besides, HCV tested clients has increased almost 10 times in 2020. This was meant to emphasize an increased awareness of hepatitis C to community to be same as hepatitis B and encouraging positives to start clinic as immediately as possible. Moreover, vast majority 16724 (88.0%) of clients were from Unguja. Male test as high as 83.6% in hepatitis C similar to that in hep B. Only 4.9% and 0.5% of clients tested positive for HBV and HCV respectively as indicated in the table below.

Table 42: Hepatitis services indicators and trend from 2018 to 2020

Zone	HBsAg Tested			HBsAg +			HCVAb Tested			HCVAb +		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Unguja	**14,120**	**3,416**	17,536	575	314	889	13985	2739	16724	84	2	86
Pemba	**641**	**2,318**	2,959	52	58	110	489	1662	2151	4	1	5
Total	**14761**	**5,734**	**20,495**	**627**	**372**	**999**	**16,724**	**4,401**	**18,875**	**88**	**3**	**91**

2. Number of patients newly enrolled into the Hepatitis Clinic

The number of people who were tested for viral hepatitis and enrolled to clinic after receiving their results in the last 12 months increased from 390 in 2019 to 12,347 in 2020 for hep B which vastly exceeded the set target of 150. Besides a total of 66 hep C clients were succeeded to be enrolled in clinics for the first time in Zanzibar. The overall achievement is attributed to widespread sensitization meetings on viral hepatitis at community, district and national levels and also to the establishment of additional VH clinic at kivunge Hospital and Chake chake for facilitating the linkage of identified both HBSAg and HCV positive individuals to hepatitis clinic for management.

For hepatitis B, the MMH clinic had the largest number of 1058 (85.5%) of all enrolled followed by Chake Chake VH Clinic which enrolled only 166 (13.4%) new clients. The least number of all enrolled in the year 2020 was 13 (1.1%) by VH clinic at Kivunge.

On the other hand, MMH enrolled 51 (77.3%) hepatitis C clients of which still the highest compared to those enrolled from other VH clinics. Chake chake reached 15 (22.7%) and no client enrolled at Kivunge hospital at all. These data are summarized in the table below.

Table 43: Number of patients by gender who were newly enrolled into all hepatitis Clinics

Sex	HBsAg +	HCVAb +

	MMH	Kivunge	Chake chake	Total	MMH	Kivunge	Chake chake	Total
Male	567	6	63	636	34	0	7	41
Female	491	7	103	601	17	0	8	25
Total	**1,058**	**13**	**166**	**1,237**	**51**	**0**	**15**	**66**

3. Number of patients newly initiated Hepatitis B treatment

The number of patients newly initiated hepatitis B treatment decreased from 28 in 2019 to 17 in 2020. The accomplishment is below the set target of 20 because majority of the newly enrolled clients did not meet eligibility criteria for antiviral treatment. As for hepatitis C, the number of patients newly initiated treatment was also low due to lack of free reagents to perform viral load test to determine treatment eligibility. Besides, majority of HCV antibody positive clients were people who inject drugs who are least engaged with health system and hard to reach. However, upon availability of free HCV viral load test since June 2020, active tracking of these clients is ongoing to facilitate expedited and appropriate management.

During this year, a total of 17 (8 male and 9 female) were initiated hepatitis B antiviral treatment and 3 males were enrolled in hepatitis C treatment which is below the set target of 20 for hepatitis B. VH clinic in MMH initiated hepatitis B treatment to 14 (82.4%) patients of all 17 initiated in this year where the remained 3 (17.7%) were initiated treatment in Chake Chake clinic. No patient ever received treatment from VH clinic at Kivunge so far. The 3 clients for hepatitis C were started their treatment at MMH making the whole Number of such patient in Zanzibar for the year 2020 as summarized in the table below.

Table 44: Number of patients-initiated HBV and HCV antiviral treatment by region, health facility and sex.

Sex	HBsAg +				HCVAb +			
	MMH	Kivunge	Chake chake	Total	MMH	Kivunge	Chake chake	Total
Male	5	0	3	**8**	3	0	0	**3**
Female	9	0	0	**9**	0	0	0	**0**
Total	**14**	**0**	**3**	**17**	**3**	**0**	**0**	**3**

4. Number of patients currently on hepatitis B treatment

Number of patients currently on hepatitis B treatment has increased from 46 in 2019 to 66 in 2020 which is above the set target of 50% in 2020.The achievement is due to effective management of eligible patients for treatment, ongoing health education, counseling and effective follow up of patients to maximize adherence to treatment and retention in care. For hepatitis C the number was from 0 in 2019 to at least 3 in 2020 for all 3 hepatitis clinics.

Currently, a total of 66 (52 male and 14 female) clients are on treatment for hepatitis B infection and MMH clinic having 63 patient which is equivalent to 95.5% of all patients receiving treatment in Zanzibar. Other 3(4.5%) patients were initiated and continue with Hepatitis B treatment in Chake chake clinic. Kivunge hospital had not any patient ready for treatment yet, in the year 2020. Additionally, only 3 patients are continuing with the hepatitis treatment in MMH clinic which make the overall percentage of all clients on treatment for hepatis C. Other 2 clinics had not started any patient on medication in this year due to the already above-mentioned reasons. See table 45 below.

Table 45: Number of patients currently on hepatitis treatment by island, health facility and sex.

Sex	HBsAg +				HCVAb +			
	MMH	Kivunge	Chake chake	Total	MMH	Kivunge	Chake chake	Total
Male	49	0	3	**52**	3	0	0	**3**
Female	14	0	0	**14**	0	0	0	**0**
Total	**63**	**0**	**3**	**66**	**3**	**0**	**0**	**3**

3.6.6 Challenges

- Inadequate resources to support viral hepatitis interventions.

3.6.7 Challenges

- Strengthen advocacy for resource mobilization to support viral hepatitis interventions.

3.7 MONITORING AND EVALUATION OF HIV, HEPATITIS, TB AND LEPROSY SERVICES

3.7.1 Background

Strategic Information (SI) unit of ZIHHTLP in collaboration with Health Management Information System (HMIS) unit of Ministry of Health, Social Welfare, Elderly, Gender and Children (MoHSWEGC) is the custodian of health sector HIV, Hepatitis, TB and Leprosy data in Zanzibar. The unit is coordinating, collecting, storing, retrieving, and analysing data from various interventions including HIV surveillance, HIV counselling and testing, Care & Treatment, PMTCT, Integrated Community Based Health Care, Laboratory, STI/KP and Youth, Hepatitis, TB and Leprosy services.

3.7.2 Goal

To provide information for tracking progress and informing decision makers in implementation of HIV, Hepatitis, TB and Leprosy interventions.

3.7.3 Objectives

- To strengthen M&E System in HIV, Hepatitis, TB &Leprosy related services
- To execute Surveillance and operational research plans on the field of HIV, Hepatitis, TB &Leprosy
- To improve quality of HIV, Hepatitis, TB &Leprosy data at all levels
- To provide guidance on collection, processing, use and sharing of HIV, Hepatitis, TB &Leprosy data for decision-making at all levels.
- To provide a framework for measuring the outcomes and impact of HIV, Hepatitis, TB &Leprosy interventions in Zanzibar

3.7.4 Implementation of M&E system

1. CTC2 system upgrade

A 17-day fieldwork on CTC2 system upgrade and testing was conducted in all CTC sites in Zanzibar with a total of 12 (Unguja 10, Pemba 2) participants. The main objective of this activity was to test the system functionalities and new features added if comply with all CTC2 nodules and its compatibility with different computer architectures and applications. All challenges encountered during the implementation highlighted the need for review of HIV monitoring and reporting tools.

2. NGO's/Facility assessment and readiness to revive KP database

ZIHHTLP Strategic Information Unit (SI) and KP Unit together with SI staff from AMREF (Afya Kamilifu) conducted 2 days site visits from 20th - 21st August 2020 to different NGOs which are implementing KP HIV interventions and has KP Database installed in Unguja. A total of four (4)

NGOs were visited namely Zanzibar Youth Forum (ZYF), ZAYEDESA, AYAHIZA, ZANGOC and one health facility working with Key Population (PWIDs) at MAT clinic. The main purpose of site visits was to assess the implementation status of the KP database and to identify challenges limiting its full implementation. During the visits, several system implementations challenge that needed improvements for smooth operations were identified. The key recommendations to revive the database included complete system development, hosting the database publicly, conducting User Acceptance Test (UAT) and site testing including database installation, training healthcare providers who will be using the system and procurement of computers and their accessories for a smooth operation.

3. Management and Hosting National M&E databases

Zanzibar Health Management Information System (HMIS) maintains District Health Information System II (DHIS2) database that stores most of the data across all health sector programs including HIV, Hepatitis, TB and Leprosy services. ZIHHTLP staff continued accessing DHIS2 database through a web-based interface. Despite some of the database being integrated into DHIS2 system, ZIHHTLP continued managing and hosting different database for M&E purposes such as:

- **CTC** - The CTC2 database is an electronic system used routinely to capture patient level data at health facilities providing HIV services. This system uses MS Access for front-end (user interface) whereas back-end (data storage) uses Microsoft SQL server. In this database, data are entered at a facility level and managed centrally for M&E.

- **HTS** - The programme uses an Epi Info™ database recording case-by-case HTS surveillance data. Data entered in this database is collected routinely from health facilities that offer HIV counselling and testing services and thereafter sent to ZIHHTLP for data entry, cleaning, analysis, and storage.

- **KP** - ZIHHTLP in support with implementing partners have designed an electronic KP database to collect and manage KP data. However, this database is now functioning as a standalone but is expected to be hosted publicly which will improve access and data security, data entry and report generation.

- **PMTCT Mother-Infant Follow-up Tracker** - ZIHHTLP in collaboration with HMIS unit developed PMTCT Mother-Infant follow-up Tracker that aimed at tracking clients across the

PMTCT continuum of care to strengthen retention of mother-infant pairs. This tracker is embedded in DHIS2

- **TB and Leprosy electronic data management (ETL register)** - This is an electronic system used to monitor the progress of TB and Leprosy patients, from the time they are diagnosed to the end of their treatment. This system captures all important patient data from various Health facilities as long as it has internet access. Currently, this system uses Tanzania Mainland's DHIS2.

4. Evaluation and Research

Two operational research were conducted in the year 2020. These include a study on Disclosure of HIV status among children and continuation of PMTCT Care Cascade study which was on its follow-up stage. The Disclosure of HIV status among children study was concluded on 2020 whereas the preliminary analysis of early endpoints of the PMTCT Care Cascade study was done late in the year. However, the PMTCT study is expected to be concluded in late 2021 allowing 18 months of infant's follow-up. See appendix I and II for respective executive summaries.

5. Supportive supervision

Supportive supervision and data auditing are integral parts of a routine monitoring system. SI staff together with different unit coordinators participated in quarterly supportive supervision for their respective service interventions. These units included KP/STI, HTS, PMTCT, CTC and HBC. The goal was to monitor data quality periodically and address obstacles to produce quality data.

6. M&E tools review workshop

A 5-day M&E tools review workshop was conducted in Unguja. A total of **30** (**29** Unguja and **1** Pemba) participants attended. The objectives were to review and update the existing monitoring tools including registers, monthly summary report and guidelines based on changes in different service indicators and field experiences. Various HIV/STI/Hepatitis monitoring tools were reviewed including registers, cards and report forms.

7. Quarterly PMTCT study supervision

(ZIHHTLP) under the Strategic Information (SI) unit, managed to conduct a 9-day quarterly supervision in **51** (**48** Unguja and **3** Pemba) facilities selected to participate in a study on "Retention to PMTCT Care Cascade in Unguja and Pemba. The implementation of this study is carried out by

trained health service providers and data are collected at respective sites through pre-designed register. Data processing is done by the supervisors and study investigators in a quarterly basis. This supervision aimed at assessing progress of "PMTCT Care Cascade" study in the respective sites. The activity also involved monitoring data collection process, data quality assessment, discussing challenges encountered during follow-up of enrolled clients and data entry into web-based electronic database.

8. Information dissemination and data use

During the year 2020, dissemination meetings were conducted as well as various reports were produced for informing stakeholders on the status and level of implementation of various services. The goal was to disseminate and use data from the M&E system to guide policy formulation, designing interventions, prioritization & resource allocation, program planning and improvement. These were as follows:

- A five-day data analysis workshop was conducted to **10** participants from Unguja. The objective was to enter, clean and analyze data from a PMTCT Care Cascade study. Findings from this study is summarized in the Appendix I.

- One-day dissemination meeting to **40 (**36 Unguja and 4 Pemba**)** participants was done in Unguja. The main objective was sharing preliminary findings of a survey determining retention in PMTCT Care Cascade to PMTCT healthcare providers, facility incharges, implementing partners and other stakeholders in the country.

- In the year of reporting, preparations, submission and sharing of quarterly, semi-annual, annual, and detailed indicators performance reports for tracking HIV, Hepatitis, TB and Leprosy health sectors responses has been made. These include Bango Kitita, Dashboard, and GF Progress Update. These reports were submitted to MoHSWEGC, ZAC and other HIV stakeholders.

3.7.5 Strategic Information Indicators and Trend from 2018 to 2020

Table 46: Strategic Information Indicators & Trend 2018 to 2020

Indicator	2018	2019	2020

1. Percentage of health facilities submitting HIV, TB and Leprosy report in a timely way into DHIS 2	-	41.9%	75.8%
2. Percentage of health facilities which submitted complete HIV, TB and Leprosy report into DHIS 2	-	73.5%	72.3%
3. Number of HIV and TB operational research conducted based on national HIV/TB health sector research agenda	0	3	2
4. Number of HIV data review meetings conducted at district and facility levels	2	2	0
5. Number of HIV/TB information dissemination products produced and disseminated by ZIHHTLP	2	2	2

1.Percentage of health facilities submitting HIV, TB and Leprosy report in a timely way into DHIS2

Timeliness of entering reports into the DHIS2 database had been low 75.8% in 2020. This is below programme target of 74%. This was contributed by late data entry into DHIS2 database, insufficient support provided to district data managers including CHMTs supportive supervision and mentorship.

2.Percentage of health facilities which submitted complete HIV, TB, and Leprosy report into DHIS2

The completeness of reports collected from health facilities has been low at 72.3% that opposed to the programme target of 88% in 2020. This was contributed by a weak report collection process from healthcare facilities to CHMTs. Hence, more efforts are needed to strengthen the collections of monthly reports from health facility to CHMT levels.

3.Number of HIV/TB operational research conducted based on national HIV health sector research agenda

Two operational research were conducted. This is aligned with programme target of conducting at least one HIV/TB operational research in 2020. The details of these research are presented in the appendices.

4.Number of HIV data review meetings conducted at district and facility levels

No data review meeting was conducted in 2020. The programme target was not achieved of conducting 4 data review meetings due to shortage of funds.

5.Number of HIV/TB information dissemination products produced and disseminated by ZIHHTLP

Two information dissemination product was produced and disseminated to stakeholders. This is below the programme target of producing at least two information dissemination products in 2020. These were products dissemination of the PMTCT study and 2019 annual report which disseminated using programme website and distribution of printed books.

3.7.6 Challenges

- Inadequate fund to conduct enough operational research, to support HIV, Viral Hepatitis, TB and Leprosy data review meetings & information use, supportive supervision at health facility and council level and other various data activities.
- Lack of system integration between CTC2, CTC3 Macro and DHIS2 database complicating timely availability of the aggregated data.

3.8 PROGRAMME MANAGEMENT

3.8.1 Background

Programme Management coordinates and supports all programme units to implement technical roles by ensuring the availability of necessary requirements to execute programme interventions effectively. In addition, it oversees all administrative, programmatic and financial management aspects of the program including human resource, financial resource, procurements as well as tracking of the procured goods and services as per the programme objectives.

3.8.2 Objectives:

I. Strengthen programme management and coordination for effective implementation of the Zanzibar HIV, Hepatitis, TB and Leprosy Strategic Plans
II. Strengthened partnerships and coordination system for Health Sector HIV, Hepatitis, TB and Leprosy response.
III. Mobilize adequate financial resources for implementation of the health sector HIV, Hepatitis, TB and Leprosy response
IV. To ensure availability of HIV, Hepatitis, TB and Leprosy medicines and related commodities in all service delivery points

3.8.3 Planning and administration

Programme Management is responsible for: policy guidance; planning and budget; human resource management; capacity building; inter and intra coordination; procurement and provision of logistics; financial management; and monitoring, evaluation and reporting.

3.8.3.1 Policy Guidance

Programme Management has the mandate to develop policy guidelines to guide staff and all HIV, Hepatitis, TB and leprosy implementers on the processes and procedures that are necessary to ensure implementation and accountability of services. In this reporting period, the programme developed the MAT and NSP guideline and SOP. These will provide guidance in implementing harm reduction interventions targeting PWID in the country.

3.8.3.2 Planning and budget

In the year 2020, a comprehensive work plan and budget for Government and various HIV, Hepatitis, TB and Leprosy partners was prepared. The final consolidated budget was then submitted to the Ministry of Health for submission to the Ministry of Finance and presentation to the House of Representatives for approval. Reprogramming of the planned activities was done from the saving after implementation of planned activities in accordance with programme priorities. During the year we had received supplementary budget from the Global Fund to support COVID-19 interventions.

9.8.3.3 Human resource management

Majority of ZIHHTLP staff are employees of the Ministry of Health. However, over the years, there was a need for additional staff to implement specific tasks within the Programme, which development and implementing partners are supporting on a contractual basis. By December 2020, the programme had a total of 122 (97Unguja and 26 Pemba) staff. Among them,112(87 Unguja and 25 Pemba) were Government staff and 10 (9 Unguja and 1Pemba) staff were working in the programme on contractual basis with different specialties

3.8.3.4 Capacity building

During the reporting period, technical staff from the programme participated in long and short term national, regional and international conferences, meetings, and training funded through HIV, hepatitis, TB and leprosy partners. These include the following:

- International Meetings and Conferences
    - A total of Two Program staff participated the 23rd International AIDS Conference Virtual. The conference showcased the latest HIV research and policies by different experts as well as shared success and challenges in meeting 90 90 90 targets. Two (oral and poster) presentation were done, These are "Progress in HIV prevention interventions uptakes among people who inject drugs in Unguja Island, Zanzibar: Analyses of bio-behavioral surveys in 2007, 2012 and 2019 "for oral presentation and "Key Populations HIV care cascades in Zanzibar 2018/2019: Missing the mark on the

first 90 of the UNAIDS 90-90-90 Targets" for poster presentation .Abstracts are attached in Appendix…..

- A total of Four program staff participated the Virtual Conference for the 51st Union World Conference on Lung Health. The conference aim at gathering health professionals and community members working to end suffering caused by lung disease, with a focus on the challenges faced by low and lower –middle income countries.

- Regional Meetings and Conferences
  - One programme staff participated in the the East African Community (EAC) technical steering committee meeting at Karatu district in Arusha region. The aim of the meeting was to discuss report of the partner study report titled "STI Boresha Maisha Study".

3.8.3.5 Inter and Intra Coordination

The programme has continued to collaborate with development partners to support the implementation of HIV, Hepatitis, TB and Leprosy activities at all levels. Outlined in Table 47 below are the partners who provided technical support to ZIHHTLP during the year 2020.

Table 47: ZIHHTLP Technical Support by Partners, Zanzibar, 2020

NAME OF PARTNERS	TECHNICAL SUPPORT PROVIDED
1. Management Development for Health	• Provide technical support on updating CTC2 database and development of CTC3 macro database
2. University of Maryland Baltimore (UMB)	• Support in strengthening TB and TB/HIV data quality • Support paediatric HIV care and treatment
3. World Health Organization (WHO)	• Provide technical assistance on Updating Zanzibar HIV prevention and treatment Guidelines and Viral Hepatitis Guidelines
4. Tanzania Health Promotion Support	• Support Capacity building in Laboratory
5. University of Dar es salaam Computing Centre (UCC)	• Provide Technical support in system development and integration, training, Program website design and development

3.8.3.6 Procurement and provision of logistics

Procurement unit supports quantification, procurement and monitoring of supply chain plan of the program commodities. Also, it has a responsibility to ensure all procurements are done according to the Zanzibar Procurement Act number 11 of 2016.

ZIHHTLP's commodities are divided into two categories i.e., core and non-core products. Core products are ARVs, HIV test kits and Condoms. These are procured by Global Fund through Pooled Procurement Mechanism (PPM) whereby the programme does quantification and places order. Non-core products are Reagents, Opportunistic infections (OIs) drugs and other related commodities. Some non-core products are procured locally, and others are procured through PPM. All products except Anti-TB and OIs drugs are procured through support from the Global Fund, stored and distributed by Central Medical Store (CMS) to facility level.

In the year 2020, the Programme has quantified and procured Personal Protective Equipment (PPE) and COVID-19 testing reagents to support the fighting of COVID-19 epidemic through Global Fund support. For the first time the Program has procured medicine for Hepatitis B and C through Global Fund platform (Wambo system) by using the Government Fund.

During the year 2020, the programme has ordered and received commodities of 4,331,727,474 through PPM and TZS 211,655,000 for local procurement as summarized in tables below.

Table 48: Commodities procured through Global Fund PPM, Zanzibar, 2020

SN	Item	Cost of product (TZS)
1.	ARVs	649,142,949
2.	HIV test kits	1,685,728,119
3.	Viral Load tests	310,190,840
4.	Condoms	374,910,129
5.	Gene X- Pert	181,081,604
6	Hepatitis B and C medicine	316,845,400
7	PPE	397,132,737

8	COVID TEST	384,257,122
9	Test for NBTS	32,438,574
	TOTAL	4,331,727,474

3.9.1 Procurement performance indicators and performance for the years **2018 to 2020**

Table 49: Procurement performance indicators for the years 2018 to 2020

SN	Indicator	2018	2019	2020
1	Percentage of tracer HIV/AIDS commodities received	100%	100%	100%
2	Percentage of facilities reporting stock out of tracer HIV commodities in the last 3 months of their ordering	7%	5%	19%
3	Percentage of tracer commodities orders delivered on time by the CMS	91%	91%	95%
4	Percentage of facilities reporting and requesting HIV/AIDS commodities in a timely way	92%	97%	97%

1. Percentage of tracer HIV/AIDS commodities received

In the year 2020, all tracer HIV/AIDS commodities (ARVs, HIV test kits and condoms) were procured as planned (100%). This achievement was due to proper planning and procurement through electronic system (Wambo system) which support tracking of order until the items are delivered in the country.

2. Percentage of facilities reporting stock out of tracer HIV commodities in the last 3 months of their ordering

During this reporting period, 36 out of 194 Health facilities (19%) reported a stock out of HIV tracer commodities within the last 3 months. Hence, the set target (<5%) was not met. This was due to inconsistent distribution of HIV test kits, poor management of emergency orders and improper filling of report & request forms.

3. Percentage of tracer commodities orders delivered on time by the Central Medical Stores

During this reporting period, 95% tracer commodities orders were delivered on time by CMS. This was above set target (85%). In addition, this achievement is higher than the 2019 performance (91%). This was due to efficiency of mSupply system used by CMS to manage orders and the availability of tracer items which was contributed by proper planning and procurement using GF Wambo system.

4. Percentage of facilities reporting and requesting HIV/AIDS commodities in a timely way

During this reporting period, 97% (188/194) health facilities reported and requested HIV/AIDS commodities timely which is below the set target of 100%. This performance is the same as for last year (2019). This was due to the lack of commitment. More effort is needed to reach the set target of 100%.

3.9.2 Financial Management

Finance unit supports other technical units in financial management according to financial regulations and procedures. It also has a responsibility of providing the summary of cumulative budget, income together with expenditures and share within the program and other stakeholders periodically. The following is the overview of the financial position for programme in 2020:

Budget

Program planned to receive funds from different sources for the implementation of HIV, Hepatitis, TB and Leprosy interventions. The major support was from the Revolutionary Government of Zanzibar and development partners as illustrated in the table below.

Table 50: Source of funds from the Government, development and Implementing partners and area supported, 2020

Name of Partners	Area Support
Government of Zanzibar	HIV, Hepatitis, TB and leprosy programme activities.
Global Fund fighting against AIDS, Tuberculosis and Malaria	HIV and TB programme activities
MDH	HIV programme activities
AMREF (Afya Kamilifu)	HIV and TB programme activities

Every partner has got its own accounting period. Table 52 shows financial year and budget allocated for mentioned partners.

Table 51: ZIHHTLP budget from different sources per fiscal year 2018- 2020

FUND SOURCE	FINANCIAL YEAR	BUDGET 2018 TZS	BUDGET 2019 TZS	BUDGET 2020 TZS
Government	July to June	96,000,000	248,000,000	300,000,000
Global Fund	Jan to Dec.	3,537,563,259.24	4,708,081,297	5,869,856,225.52
AMREF	Oct to Sept	250,061,565	373,229,736.04	213,995,376.04

a. Inflow and outflow of financial resource

Cash Inflow /Income

During the year 2020, Programme received funds as a cash inflow from various sources as mentioned above, the total amount received was TZS 5,153,187,329.72 The following is a summary of cash inflow received (Table 53).

Table 52: Summary of Programme funds received from various sources 2018-2020

SOURCE OF FUND	2018	2019	2020
Government	90,000,000	166,000,000	100,000,000
GF	2,935,407,107.59	6,752,038,807.51	4,839,191,953.68
AMREF	250,061,565	324,104,649.02	213,995,376.04
TOTAL	**3,275,468,672.59**	**7,242,143,456.53**	**5,153,187,329.72**

Cash outflow/expenditures

During the year 2020, the programme absorption rate was 99.6% of the entire fund. The Programme utilized the entire fund received from Government and AMREF while the absorption rate was 99.6% for the Fund received from Global Fund.

Table 53: Summary of expenditure of ZIHTLP funds from various sources, 2018-2020

SOURCE OF FUND	2018	2019	2020
Government	90,000,000	166,000,000	100,000,000
GF	2,898,836,326.86	6,280,961,612.15	4,816,584,024.56
AMREF	250,041,031.00	324,104,649.02	213,995,376.04
TOTAL	**3,148,877,357.86**	**6,771,066,261.17**	**5,130,579,400.60**

I. Projection of budget for the year 2020/2021

For the year 2020/2021, the program is expecting to receive a total amount of TZS 4,259,276,743.04 to implement its planned activities as indicated in Table 47 below.

Table 54: Budget Projections from different sources for 2020/2021

SOURCE OF FUND	FISCAL YEAR	AMOUNT USD
GLOBAL FUND	January – December	3,789,901,167
GOVERNMENT	July – June	248,000,000
AMREF	October-September	221,375,576.04
Total		**4,259,276,743.04**

3.9.3 Programme Management Indicators and performance for the years 2018 to 2020

S/N	Indicator	2018	2019	2020
1.	Number of health training institutions integrating HIV/TB knowledge and skills in their training curricula	**1**	**1**	**1**
2.	Number of partners coordination meetings conducted by ZIHHTLP per year	**0**	**0**	**0**
3	Proportion of required funds mobilised	**40%**	**51%**	**29%**

1. Number of health training institutions integrating HIV/TB knowledge and skills in their training curricula

In the year 2020, there were no new health training institutions integrating HIV/TB knowledge and skills in their training curricula. The set target of 2 training institutions were not met due to shortage of funds to support these activities.

2. Number of partner's coordination meetings conducted by ZIHHTLP per year

In this reporting period, there were no annual partner's coordinating meeting conducted due to limitations of funds.

3. Proportion of required funds mobilised

In 2020, the percentage of required fund mobilised were 29%. This was below the set target of 75% due to competing priorities from the government and other partners. Therefore, there is a need to continue advocacy for resource mobilisation.

3.9.4 Challenges

- Inadequate funds to support the implementation of HIV, TB, Hepatitis and Leprosy interventions.
- Delay of delivery of some items ordered through PPM such as Abacavir/Lamivudine and Gene Xpert HIV Viral Load caused by the Quality Control issues at the vendors.
- Frequent shortage of HIV test kits at the facility level.

CHAPTER 4: RECOMMENDATIONS

1. To conduct regular collaborative meeting between ZIHHTLP, DPs and CMS to discuss HIV test kits issues and CMS should strengthen the distribution procedure of HIV commodities.
2. Build capacity to HCWs and mother mentors on counselling on the importance of HIV test at 6 weeks after cessation of breast feeding at all levels
3. Close follow up for HCWs to ensure pregnant/breast feeding women are tested for second test as per guideline.
4. Conduct Mapping (Proper plan and working schedules for NGOs to reach and test more KPs)
5. Strengthening Psychosocial support and counselling services
6. Conduct training to COW to support close follow up to peer educators and community outreach workers
7. Conduct study to investigate the cause of the increased STIs/RTIs in Zanzibar
8. Enhanced STI partner notification counselling.
9. Review and improve the developed strategies to improve retention of PLHIV on ART**.**
10. Strengthen full investigation (sputum examination and X-ray) of presumptive TB clients through escorted referral.
11. Resource mobilization to support HBC interventions.
12. Strengthen engagement of private facilities in TB care management
13. Mobilize funds from different sources to support leprosy interventions.
14. Right now, we are using a gene Xpert machine for measuring HVL for the care and treatment of HIV clients, there is a need to remove CD4 as first test for the newly diagnosis HIV clients
15. To have backup EQA/PT panel or any other alternative suppliers for EQA/PT for monitoring of HIV quality testing services, in case of any absence of the EQA panel distribution received from NHLQATC
16. To strengthen the system for delivering HVL result from testing Laboratories to health facilities
17. Resources mobilization on IEC/BCC interventions.
18. Strengthen advocacy for resource mobilization to support viral hepatitis interventions.
19. Advocate for resource mobilization to support the implementation of HIV, TB, Hepatitis and Leprosy interventions.
20. To find a way of having both technologies for testing Viral Load by using PCR and Gene Xpert machine in order to have a flexibility in case of emergency.
21. Strengthen collaboration with CMS and District Pharmacists to address the issue of emergency order and conduct quarterly meetings to discuss the availability of commodities at facility level.

APPENDICES

Appendix I

Title: A RAPID ASSESSMENT TO ASCERTAIN THE SITUATION OF HIV DISCLOSURE AMONG CHILDREN LIVING WITH HIV IN ZANZIBAR

Background: Disclosure of HIV positive status to an infected child is increasingly becoming a common issue in clinical practice and family context. Despite the existence of guidelines on HIV disclosure to children in Zanzibar, most healthcare providers, parents, or care givers still face difficulties during the disclosure process. However, evidence exists that disclosure is associated with improved health among children. There are no attempts to determine levels and explore factors associated with disclosure of HIV status among children enrolled in CTC sites in Zanzibar.

Methods: This was a cross-sectional study using both qualitative and quantitative data collection methods. The study was conducted from November to December 2019 in 12 out of 13 CTCs available in the country. The study recruited children at partial, fully or post disclosure age (6-14) attending CTC, health care workers providing disclosure services to children, parents/caregivers of children with a disclosure age and workers and caregivers from the association of PLHIV in Zanzibar (ZAPHA+).

Results: In total, 114 children, 86 parents/caregivers, and 15 health providers were enrolled in this study. The proportion of children aware of their HIV status was 64.0% (n=73) while 59.3% (n=51) parents/caregivers reported disclosing HIV sero-status to their children. The highest proportion of children who were aware of their HIV status had ages between 10 - 15 years (81.7%); both parents dead (80.0%); living together with both parents (71.0%); enrolled at CTC for more than 5 years (100%); and virally supressed (67.9%). Only name of health status (p=0.013) and HIV viral load status (p=0.048) were significantly associated with awareness of HIV status among children.

Conclusion: The proportion of children who were aware of their HIV status and that of parents/caregivers disclosing HIV status to their children was moderate. Efforts are needed to improve disclosure of HIV status among 36% of children who are unaware of their sero-status so as they have better abilities to seek social support, improved coping skills, practice safer sexual practices to prevent secondary transmission and adherent to treatment for better health outcomes.

Appendix II

Title: RETENTION IN PMTCT CARE CASCADE AND ASSOCIATED FACTORS IN ZANZIBAR.

Introduction: HIV and AIDS epidemic is a major public health problem in Zanzibar, due to its devastating impact on health and lives of people, especially pregnant women. Comprehensive approach to PMTCT recommended in Zanzibar exists. However, challenges across the PMTCT care cascade are varied and complex, requiring ongoing monitoring and a series of parallel or sequential interventions to identify and address the multifaceted implementation gaps and to plan appropriate resolutions. This study aimed at determining the retention rates in PMTCT care Cascade and associated factors in Zanzibar.

Methods: This will be a facility-based prospective cohort study employing quantitative approaches. The cohort of pregnant women attending ANC from July 2019 will be enrolled and followed-up until the last date of a final PMTCT cascade. Retention in PMTCT care cascade will be measured as attending and completing the antenatal and infant follow-up services. These will include ART initiation, Delivery at the health facility, early infant diagnosis at 2 months after birth and Infant HIV diagnosis 6 weeks after cessation of Breastfeeding. The overall retention to PMTCT care will be measured as completing all 4 endpoints of the care cascade among the study participants.

Results: In total, 215 pregnant women were enrolled. The mean (±SD) age at enrolment was 29 years (±5.4). Most of the participants had primary education (58.6%); married (74.4%); had income <300,000 (74.4%); didn't live in Zanzibar their whole life (79.1%). In general, 90.2% of enrolled pregnant women were retained in care until delivery. About 92% were retained in care until their infants had first DNA-PCR. Only 1.5% of the infants born were HIV positive. About 7% of the women reported experiencing HIV associated stigma. About 16% of the women did not disclose their HIV status and a quarter of them (26.5%) are not intending to disclose in future.

Conclusions: Retention on PMTCT care cascade was generally high (>90%). Positivity rate among HIV exposed infant was within the anticipated range. Although majority of respondents disclosed their HIV status, 16% did not disclose and a quarter of them are not intending to disclose in future. Almost one in ten of study participants experienced HIV associated stigma. Although retention in PMTCT Care Cascade is high, there is a need to reinforce compliance of PMTCT services in order to minimize positivity rate among HIV exposed infants.