REVOLUTIONARY GOVERNMENT OF ZANZIBAR

MINISTRY OF HEALTH

ZANZIBAR INTEGRATED HIV, HEPATITIS, TUBERCULOSIS & LEPROSY

PROGRAMME

(ZIHHTLP)

ANNUAL REPORT

2017

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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
CDC	Center for Disease Control and Prevention
CHBC	Community Home Based Care
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
DHMT	District Health Management Team
DNA	Deoxyribose Nucleic Acid
DOT	Directly Observed Therapy
DSO	District Surveillance Officer
DTLC	District Tuberculosis and Leprosy Coordinator
EID	Early Infant Diagnosis
EQA	External Quality Assurance
FBO	Faith Based Organization
FBT	Full Blood Tests
HBC	Home Based Care
HBV	Hepatitis B Virus
HCW	Health Care Worker
HIV	Human Immunodeficiency Virus
HMIS	Health Management Information System
HTC	HIV Testing and Counselling
HTS	HIV Testing Services
HUWANYU	Huduma za Wagonjwa Nyumbani
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
MARPs	Most at Risk Populations
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
PEPFAR	President's Emergency Plan for AIDS Relief
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
SWs	Sex Workers
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
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

This 2017 annual report is the seventh report on the progress to the HIV, STI, TB and Leprosy responses since 2011. This report has been prepared through analysis of service utilization reports from HIV care and treatment, Counselling and Testing for HIV infection, Prevention of Mother to Child Transmission of HIV infection (PMTCT), Home Based Care, Information, Education and Communication, TB and Leprosy, Key Population, STI/RTI, Strategic Information and surveillance of HIV and TB in the country. In addition, 2017 mark the mid-term implementation of the National TB and leprosy strategic Plan 2015 -2019. The report also includes highlights of HIV/AIDS and TB research being done in Zanzibar. The following have been achieved regarding the services in the country.

HIV Counselling and Testing Services: The number of Counselling and Testing sites offering HIV Counselling and testing services were 120 including 15 sites provide VCT services alone, 59 provide PITC services alone and 46 provide both PITC and VCT services. A total 161,002 of individuals from general population were counselled and tested for HIV in 2017 compared with 94,507 clients in 2016. Among the clients tested, 53% were females and 47% were males.

Prevention of Mother to Child Transmission services: The Prevention of Mother to Child Transmission services with treatment as “TREAT ALL” approach. A total of 59,004 pregnant women were tested for HIV which is 89% of all estimated pregnant women, wherein 336 (88%) HIV positive pregnant women out of 383 estimated HIV positive pregnant women were initiated on ART. Number of infants born to HIV positive mothers who received HIV antigen test (DNA PCR) within 2 months of birth was 197/280 (70%) and all were started on Cotrimoxazole within two months of birth.

Key Population services: About 5,549 of key population including 2,569 FSWs, 1,421 MSMs and 1,559 PWIDs were tested for HIV. A total of 281 (70% of the year one target) clients who inject/use drugs were enrolled at MAT. As of December 2017, a total of 455 clients were ever enrolled at MAT clinic in Unguja of whom 89.5% were male. Number of clients who have been on MAT for six months and above were 244.

STI/RTI Control and Prevention Programme: In 2017, a total of 11,106 STI cases reported and managed which is a decrease from 8,354 episodes reported in 2017. There was an increase in STI cases diagnosed compared to 2016.

Care and Treatment services for PLHIV: The care, support and treatment programme provides comprehensive services for PLHIV which include free ART, psychosocial support, prevention and treatment of Opportunistic Infections including Tuberculosis. By 2017, a total of twelve ART clinics were provide care and treatment services with 5,385 patients who received care in CTCs of whom 5,263 (98%) are receiving ARVs at these facilities. Patients who were currently receiving ARVs including transfer in were 82.4% (5,269/6,393) of patients estimated to be in need of treatment according to spectrum file of June 2017.About 87.5% 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 has remained the same at 99%.

Home Bases Care services: During 2017, a total of 3,158 compared to 2,351 patients in 2016. Among those received services 1,211 were People living with HIV where 812 Female and 399 were male.

Tuberculosis and Leprosy control services: A total number of all registered TB cases were 948, where number of new smear positive TB cases was 511(54%). TB success rate was 91.3%. For TB/HIV collaborative activities, 940 TB patients tested for HIV and 124 (13%) were positive for HIV. Eighty-eight percent (95%) of the co-infected patients started ART through under one roof service. The number of new leprosy cases registered in 2017 was 98 cases of whom 72.4% were MB cases. The number of patients with multibacillary leprosy is still alarming which demonstrates increased risk of transmission in the community. Among the registered, 20% were children, 4.0% had disability grade 2.

Laboratory Services: A total of 17,409 clinical tests were performed in 2017 in 9 laboratories. Samples for Early Infant Diagnosis, diagnosis of HIV in exposed infants and children less than 18 months of age were collected from PMTCT sites and transported to Muhimbili National Hospital, Dar es Salaam. A total of 278 Samples for Early Infant Diagnosis (EID) were received from PMTCT sites and transported to Muhimbili National Hospital, Dar es Salaam. The number of samples received from PMTCT sites increased to 278 compared to 222 in 2016. For TB diagnosis, in 2017, Also diagnostic performance increased from 5,934 samples (2016) to 7078 in 2017, while positivity rate decreased from

518 to 436 in 2017.All 56 TB diagnostic sites performs sputum examination by microscopy technique, however Mnazi Mmoja in Unguja and Chake Chake in Pemba are using both Gene Expert and microscopy examination for diagnosis.

Information, Education and Communication/ Behaviour Change Communication: The focus of IEC activities has been on promoting safe behaviour, reducing HIV and TB stigma and discrimination, demand generation for HIV/ AIDS services and condom promotion. In 2017, the programme conducted meeting on TB/HIV sensitization and health education to the community, Correction facility and to School health education program. Also, sensitization meetings on Leprosy to the community, Sensitization meeting to key community leaders on importance of Male involvement in ANC services, Also, different IEC/BCC materials on HIV and TB were developed, printed and distributed.

Strategic Information Management: Some of the key achievements during 2017 are operation research conducted on Retention of clients in CTCs. formative assessment to determine methods that can be used to conduct next round of IBBSS including size estimation for KPs has also been done. Also, the unit in collaboration with UCSF prepared and submitted to ZAMREC and CDC IBBS protocol for ethical clearance. Preparation for pilot project on HIV case based surveillance using biometry was done. Capacity building activities including supportive supervision, mentorship have been conducted.

90, 90, 90 Achievement: With the first 90, 84.2% of the estimated PLHIV are receiving care at CTCs. Among those who were currently on care (n=5,385), 98% of them were on ART (second 90). Among those who had viral load taken and result recorded in CTC2, 80% (2,655/3,307) had viral load below 1000 copies (third 90)

CHAPTER 1:

GENERAL INSTITUTIONAL 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 (MOH) Zanzibar. It is a result of two combined programs, namely Zanzibar AIDS Control Programme and Zanzibar TB and Leprosy Control Programme. These programmes were originally established as individual programmes in 1987 and were then officially joined in February 2012 in order to maximize provision of services for two interrelated diseases and efficiently utilize resources.

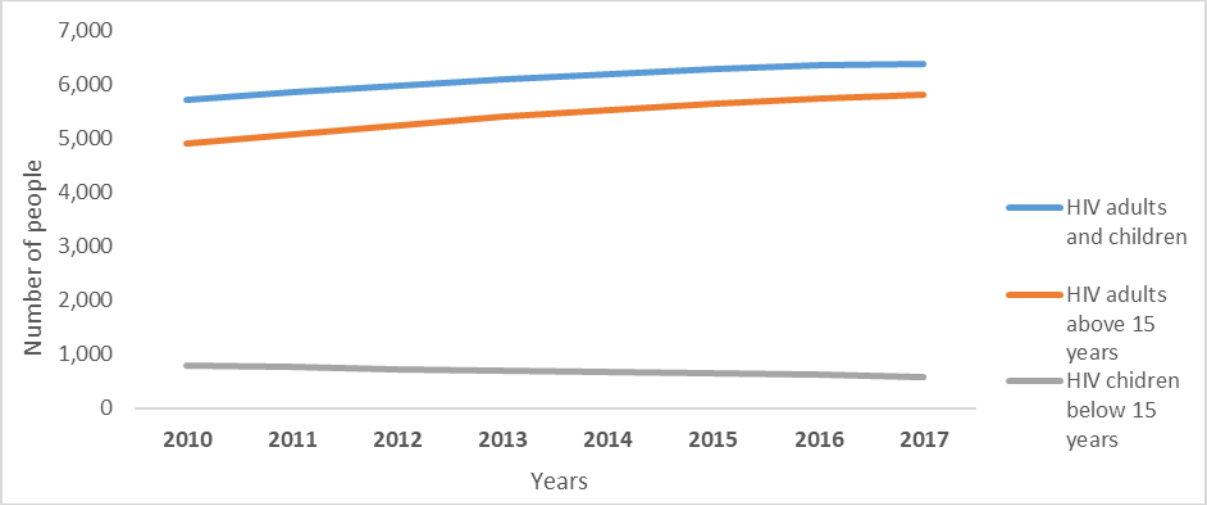
1.2 The burden of diseases (HIV, Hepatitis, TB and Leprosy)

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 with concentrated HIV epidemic with high HIV prevalence among sex workers (SWs), people who inject drugs (PWIDs) and men who have sex with men (MSM). The prevalence is 19.3%, 11.3% and 2.6% among SWs, PWID and MSM, respectively. This is according to the Integrated Bio-Behavioral Surveillance Survey (IBBSS) conducted in 2012.

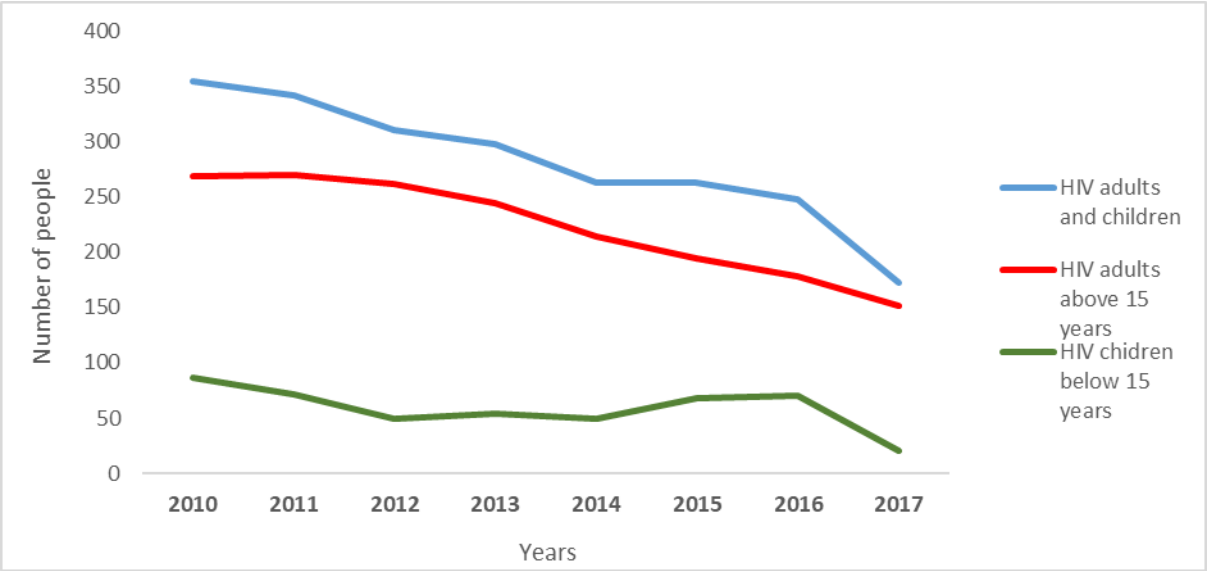
Based on the spectrum data, it is estimated that an average of 6,393 people including adults and children will be living with HIV in 2017. Among them 91% (5,811) will be people in age group above 15 years and 9. % (582) are children less than 15 years of age. The population of people living with HIV (PLHIV) has been steady from 2010 to 2017 as illustrated in figure 1.1 below. This can be explained by the establishment of care and treatment services in 2005 and access to ART that improved health outcome of PLHIV.

Figure 1. 1: Population estimates of people living with HIV, 2010 – 2017, Zanzibar



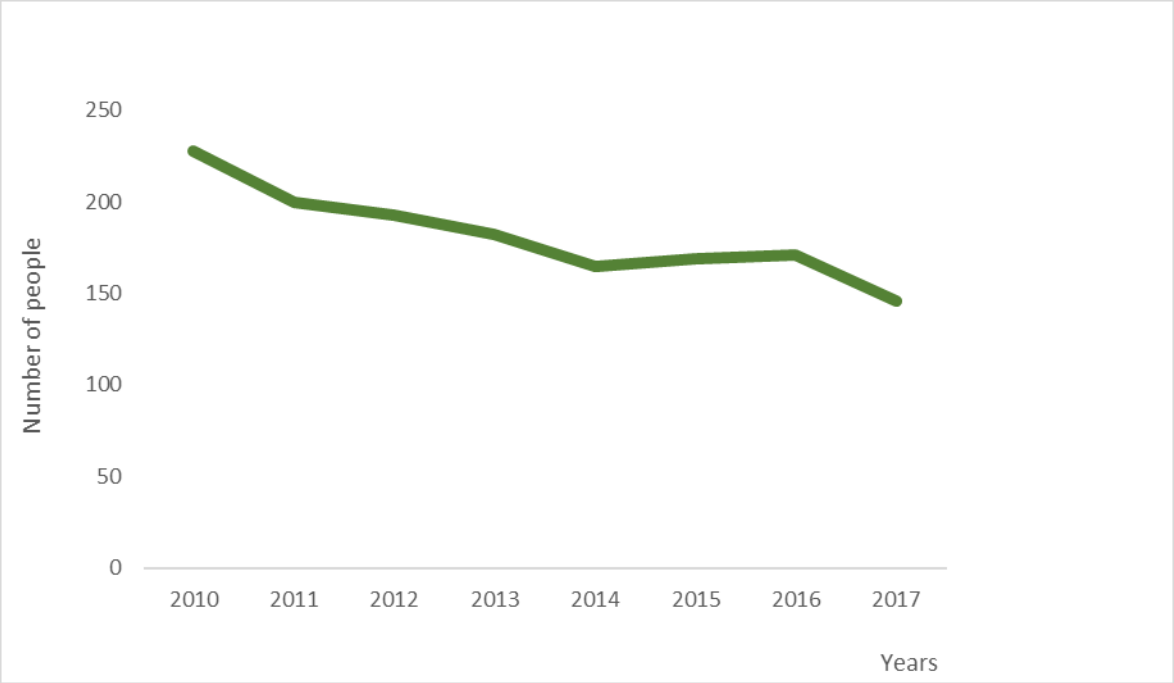
The number of new HIV infections from 2010 shows a downward trend across all age groups (figure 1.2). In 2017, 172 new cases are estimated whereby 12% (20) are children less than 15 years. The decline of new HIV cases indicates that HIV prevention and treatment interventions are fruitful.

Figure 1. 2: Trend of new HIV infection from 2010 – 2017, Zanzibar



Moreover, the number of deaths among PLHIV has decreased tremendously for the last 10 years (figure 1.3). The decline is remarkable from 2005 which reflects the time period when care and treatment program with access to ARVs was established.

Figure 1. 3: Total deaths to HIV population from 2010 to 2017 in Zanzibar

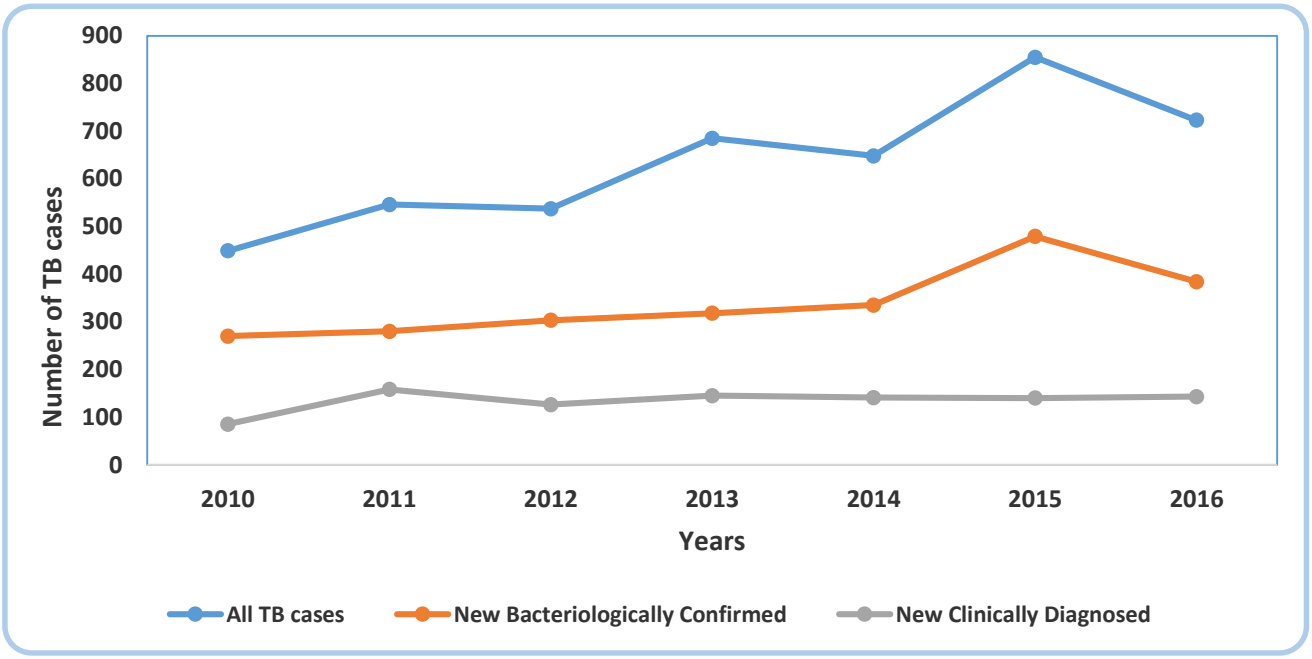


1.2.2 TB situation

Tuberculosis (TB) continues to be among the major public health problems in the country. The number of TB cases notified in Zanzibar has steadily increased from 449 in 2010 to 855 in 2015. However, a slight decrease was observed in 2016, whereby 723 cases were notified. The increase in the notification was largest in the group of bacteriological confirmed TB cases between 2014 and 2015 (Figure 1.4). Considering the age group specific notification, we observe that the group of 25-34 years is the most affected. Men are more affected than women.

Though the programme has shown an increasing trend in notification of all forms of TB in the past years (Figure 1.4), it is still below the estimated number of the existing TB cases. According to TB prevalence survey of 2013, it is estimated that there are 124 TB cases per 100,000 populations which is equivalent to 1,612 cases per year. This indicates that the TB case detection is far below the expected cases.

Figure 1. 4: Number of TB cases by method of identification from 2010-2016, Zanzibar



In 2017, a total of 723 patients were diagnosed of whom 695 (96%) were newly diagnosed. Among the newly identified, 361 (52%) were bacteriological confirmed, 138 (20%) clinically diagnosed and 196 (28%) were extra pulmonary TB patients. A total of 25 re-treatment patients registered during 2017, among them 13 (52%) were relapse, 3 (12%) were failure and 4 (16%) were return to control.

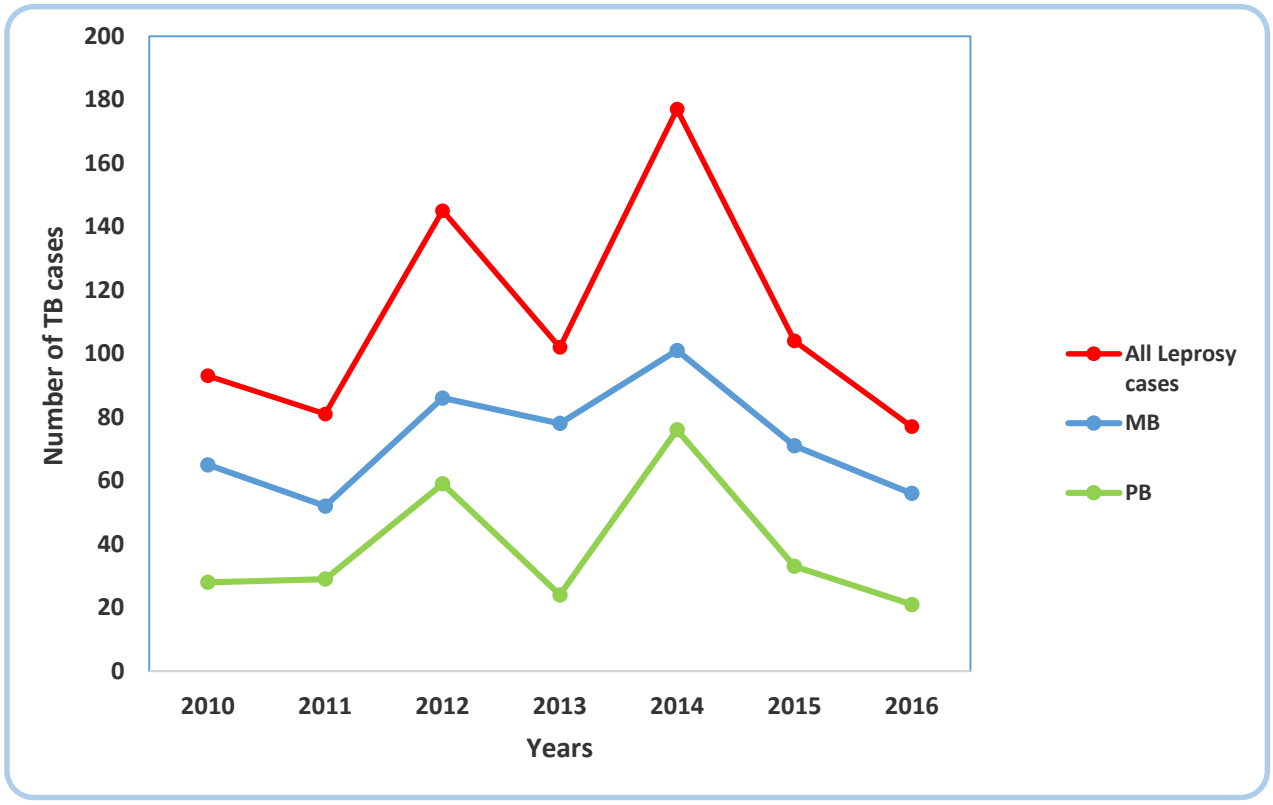
MDR-TB cases remain low in Zanzibar. The Drug Resistant Survey (DRS) done in Tanzania in 2007 indicated that the MDR-TB burden in Zanzibar was 1.1% among new cases and 3.9% among retreated cases. The first case of MDR-TB in Zanzibar was diagnosed in 2009 in Pemba. Since then between 1 to 2 MDR-TB patients are diagnosed annually. In 2017, 3 MDR-TB cases were notified.

1.2.3 Leprosy situation

The main objective of Leprosy control is prevention of disability from the disease through early detection and treatment of all Leprosy patients. Although Multi Drug Therapy (MDT) results are fairly good in Zanzibar, the number of newly detected Leprosy patients with disabilities has not significantly declined. According to Annual Report of 2016, the total number of Leprosy cases registered was 77, being a decrease from 104 cases in 2015. The case detection rate was slightly less than 1 per 10,000 populations.

The trend of new registered Leprosy cases has been fluctuating in the last 11 years (figure 1.5) with prevalence rate of less than 1 case per 10,000 populations similar to the WHO elimination target. Tanzania as a country was declared to have reached the Leprosy elimination targets in 2006. However, Zanzibar still has some districts with high prevalence of Leprosy above WHO targets including South, Urban and West districts. Thus, Zanzibar remains a high Leprosy-burden country in the Africa Region.

Figure 1. 5: Number of cases by type of Leprosy from 2005-2015 in Zanzibar



1.3 The Vision

Zanzibar free of new HIV, infection, people infected or affected by HIV are not stigmatized or discriminated against and key populations accessing HIV information and services.

1.4 The Mission

To provide technical leadership and collaboration with other sectors and actors in ensuring that there is access availability and equity of quality HIV and AIDS services for general key population.

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

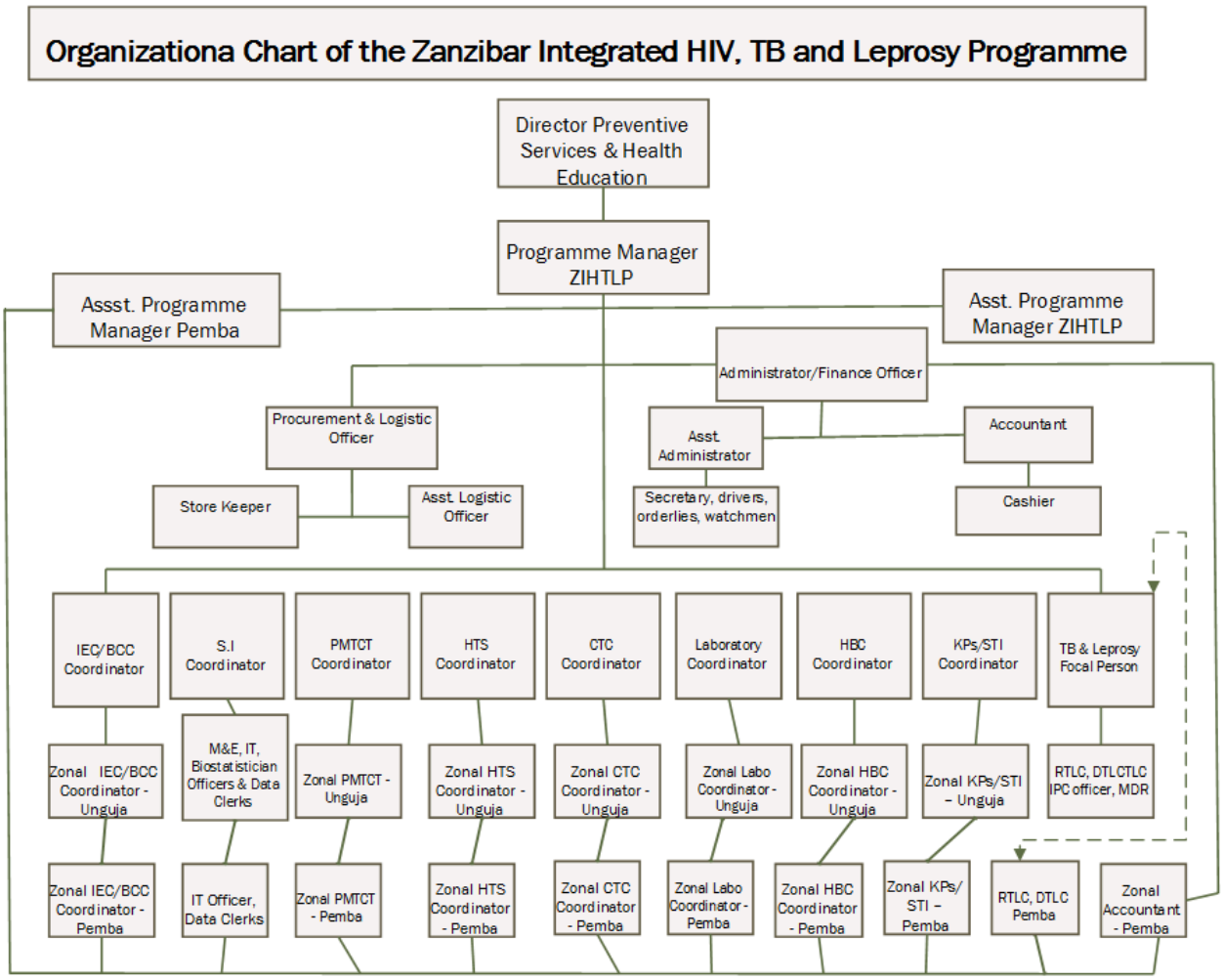
1.6 Program's Core Functions

The ZIHHTLP coordinates all activities pertaining HIV, Hepatitis, TB and Leprosy control in the country. It is also responsible for advising and guiding the MOH on health issues related to HIV, Hepatitis, TB and Leprosy, building capacity of health care workers (HCWs) on the management of the three diseases, monitoring quality of services and strengthening strategic information system to monitor trends of the diseases. In line with 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 and the health sector 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 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, Information Education Communication/Behavioural Change Communication, Key Populations & Sexually Transmitted Infections, Home Based Care, HIV Laboratory, Strategic Information and Program Administration and Finance. The following is the Organizational Chart of the program:

Figure 1. 6: Organizational chart of Zanzibar Integrated HIV, TB and Leprosy Programme



1.8 Implementation status of previous year (2016) recommendations

Recommendation	Implementation status
Build capacity of HTS providers on how to use report and request form for HIV commodities	In collaboration with CMS personnel mentorship was conducted on how to fill R&R form for HIV commodities and current no stock out reported due to R&R. The mainly reported stock out is due to District Pharmacist Manager (DPM).
Liaise with Hospital management and DHMTs to integrate PITC services as a routine test for all who attend health facilities	Some hospital management and DHMT integrate PITC services as a routine test as a result there is an increase of individual who was tested through PITC approach. However, more effort are needed in other facilities.
Conduct study to identify factors that influence ART retention in Zanzibar	Study to identify factors associated with retention so as to reduce the number and proportion of loss to follow-up conducted. The objective of this study was to assess factors influencing retention of PLHIV in ART services in Zanzibar. Its recommendations are being implemented in CTCs to improve retention of clients.
Strengthen collaboration with community home based care providers, and peers in tracing of defaulters	In collaboration with peers and Community Home Based Care (CHBC) providers conducted defaulter tracing to 168 defaulters. However, 54(32%) were returned back to services.
Conduct quarterly QI meeting to discuss retention of patients and progress on service provision	QI meeting to discuss retention of patients and progress on service provision conducted Unguja and Pemba

Liaise with DHMTs and Mnazi Mmoja Hospital management for additional CTC staff	Ministry of health allocated social workers at Mkoani and Wete CTCs. In collaboration with partners, 4 clinicians, 1 at Mwembeladu and 3 Mnazi Mmoja Hospital CTCs were deployed.
In collaboration with Global funds mobilize resources for procurement of Home based care kits	144 HBC kits were procured, distributed and are in use
Inadequate tracking of mother-infant pairs	Tracking mechanism for mother-infant pairs has been strengthened through phone calls, follow up by mother mentors and CHBC volunteers
Low male involvement in ANC services	Various approaches such as ongoing health education and counselling, use of partner invitation letters, prioritization of services for couples at RCH as well as community sensitization and engagement have been implemented to improve male involvement in ANC services and the outcomes are positive
Mobilize resources for developing ACSM strategy for TB, HIV and leprosy	ACSM Strategy was considered in the new grant of GF and planned to be developed in the next year
Conduct community mobilization sessions on HIV, TB and leprosy awareness so as to increase uptake of HIV, TB and leprosy services	HIV, TB and leprosy community mobilization sessions to create awareness in community were conducted in both Unguja and Pemba
Liaise with Global Fund to speed up procurement process	Procurement of three gene expert was done, installed and are functional two are located at Mnazi Mmoja Hospital laboratory and One at Chake Chake Pemba

In collaboration with Global funds mobilize resources for procurement of laboratory reagents and supplies	Reagents were procured and available and in use
With support of Global funds Expand laboratory rooms where sputum examination is done	10 facilities were assessed and renovation planned for two laboratories i.e Kwamtipura and Wingwi under the support of Global Fund.
Low case detection whose contributing factors are: Inadequate involvement of CSOs in TB and leprosy interventions	8 CSOs (4Pemba 4 Unguja) has been capacitated on TB control, where in turn they required to sensitize communities, collect sputum/ refer TB presumptive cases. In this reporting period the community contribution was 7%. More intervention has been planned to support CSOs in 2018.
Low MDR case detection	Effort has been done to increase MDR TB case detection through strengthening follow up of MDR suspect. Sputum transportation to Gene x-pert Unguja and Pemba. Transportation of sputum for culture (PHL) and DST (CTRL). However, the number of MDR cases is still low, efforts are ongoing to determine the actual prevalence of MDR in Zanzibar.
Mobilize fund for supportive supervision at district and HIV/TB data verification at facility levels	Plans have been integrated in Government Plans. In addition, annual data verification has been secured through Global Funds
Develop Programme website	Technical assistance was requested to MDH and the website is in process of development

1.9 Structure of the report

The ZIHHTLP annual report provides details on the progress of HIV, TB and Leprosy Program for the period of January – December 2017. The report is divided into nine chapters, which provide overview of implementation of program activities and the progress performance of each program unit.

The report used data generated from routine services and reflects services provided through health facilities and community groups. It also covers information collected from different disease surveys/studies and assessment reports. It highlights performance and challenges encountered during the implementation of HIV, TB and Leprosy interventions. It also provides recommendations to overcome the identified challenges.

CHAPTER 2:

HIV PREVENTION

2.1 HIV TESTING SERVICES

2.1.1 Background

Currently, HIV Testing Services have been provided in **120** sites (**104** Government facilities, **5** NGOs, **3** FBOs and **8** Private hospitals) which are located in Zanzibar. The services are 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 **120** established sites, **15** sites provide VCT services alone, **59** provide PITC services alone and **46** provide both PITC and VCT services.

2.1.2 Goal

The goal of HTS in Zanzibar is to ensure increased accessibility of free quality HTS and to create demand for the services.

2.1.3 Objectives

1. To promote HIV testing services
2. To improve quality of HIV testing services delivery
3. To increase access of HIV testing services
4. To strengthen HIV testing services

2.1.4 Program Implementation

2.1.4.1 Capacity Building

A six day's training on PITC services to **66** (36 in Unguja and 30 Pemba**)** health care workers from different hospitals and Primary Health Care facilities in Unguja and Pemba was conducted. The objective of this training was to equip health care workers with required knowledge, skills and attitude on provision of quality HIV counselling and testing services.

2.1.4.2 Service Monitoring

Quarterly supportive supervisions to **42** sites which provide HTC services (**21** Unguja and 21 in Pemba) was conducted. The objective was to monitor the progress of HTS and support providers to improve their performance. Apart from supportive supervision, monthly follow up visit was conducted for **86** sites, which provide opportunity for supervisors to oversee the services provision and provide on-site feedback.

In addition, one-day coordination meeting with **20** management staff of Mnazi Mmoja hospital was conducted. The objectives of the meeting were to discuss progress of PITC uptake, identify gaps which lead to low performance and to plan strategy to overcome the gaps. Also issue of referral and linkage for positive cases identified through PITC service at Mnazi Mmoja hospital were discussed.

2.1.5: HIV Testing Services indicators and trend from 2015 to 2017

Indicator		Year		
		2015	**2016**	**2017**
1	Number of health facilities and sites offering HTS	**98 HTS sites**	**123 HTS sites**	**120 HTS sites**
2	Number of individuals who received testing and counselling services for HIV and received their results	**101,669**	**94,507**	**161,002**
	• Individuals identified as HIV positive	**1,172**	**1,064**	**1,557**

1. Number of sites offering HTS

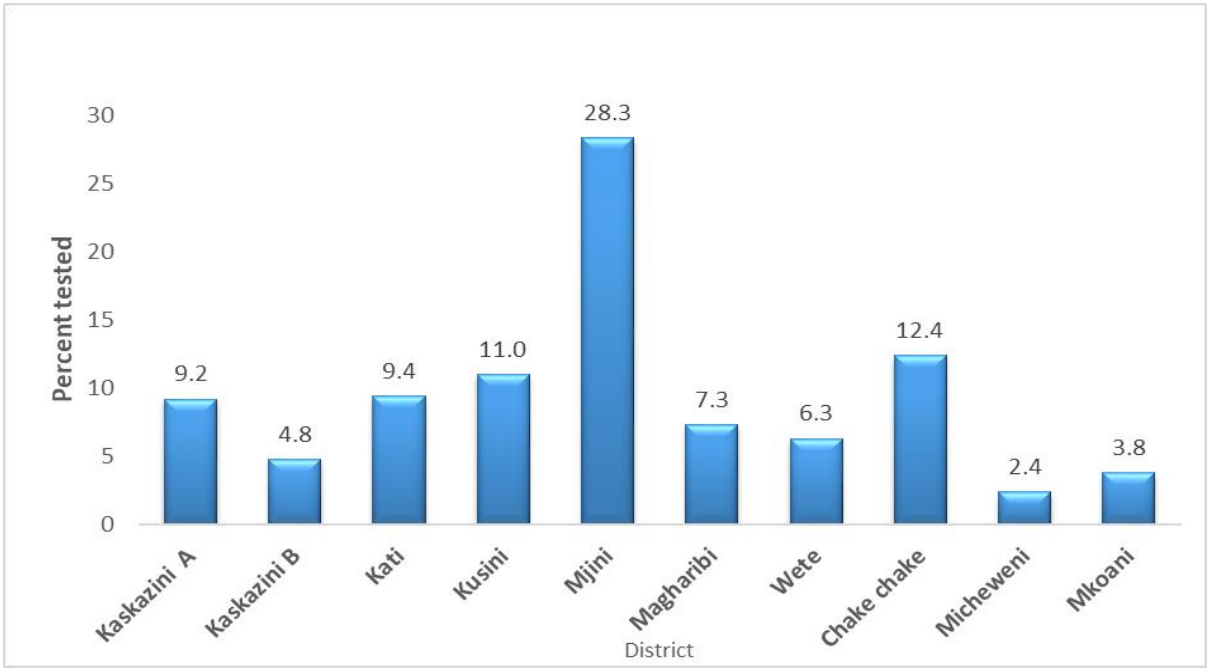
Number of sites offering HTC services has decreased from **123** in 2016 to **120** in 2017. This decrease was due to several reasons including, transfer of trained personnel, phase out supported partner and changing of hospital owner.

2. Individuals received HIV testing and received their test results

Number of individuals who received testing and counselling services for HIV and received their results has increased form **94,507** in 2016 to **161,002** in 2017. It was approximated **10.8%** individuals were counselled and tested for HIV in 2017 as per Zanzibar projected population. This shows an increase of **4.7%** from the number of people who were counselled and tested in 2016. This achievement was contributed by consistent availability of HIV test kits and strengthening PITC services at all levels.

The figure below shows the proportion of individuals counselled and tested by district. Mjini district had the highest proportion of people tested (**28.3%**) of district projected population, followed by Chake Chake district (**12.4%**) while Micheweni district had the least (**2.4%**) in the list as indicated in Figure 2.1.1.

Figure 2.1. 1: Percent of population received HTS by district, Zanzibar, 2017



The overall proportion of HIV positive cases among tested was **1.0%** (**1,546/160,729**). HIV positivity rate was highest in Kati district (**1.5%**) and least in Kaskazini "A", Wete and Mkoani district (**0.5%**), where, positivity rate was higher in Unguja (**1.0%**) as compared to Pemba (**0.6%)** as indicated in table 2.1.1.

Table 2.1. 1: HIV proportion among tested by district of residence, Zanzibar 2017

District	Number Tested for HIV	Number HIV Positive	% of HIV Positive
Kaskazini A	12,781	62	0.5
Kaskazini B	7,247	87	1.2
Mjini	33,727	355	1.1
Magharibi	59,920	601	1.0
Kati	10,779	159	1.5
Kusini	6,012	62	1.0
Unguja	**130,466**	**1326**	**1.0**
Wete	8,856	46	0.5
Micheweni	5,009	33	0.7
Chake chake	9,920	55	0.6
Mkoani	5,460	30	0.5
Pemba	**29,245**	**164**	**0.6**
Outside Zanzibar	**1,282**	**66**	5.1
TOTAL	**160,993**	**1,556**	**1.0**

***Note; 9 records excluded, had missing values in district of residence and has 1 case which is HIV positive)*

Out of all people **(161,002)** received HIV testing and counselling services, **84,960 (52.77%)** were females and **75,992 (47.20%)** were males and **50 (0.03%)** their sex was not stated with HIV positivity being almost twice higher among females **(1.2%)** than males **(0.7%)**. Furthermore, the age group of "35-44" and "45+" had high positivity rate **(1.7%)** and age group of "0-4" had low positivity rate of **(0.3%)** as indicated in table 2.1.2

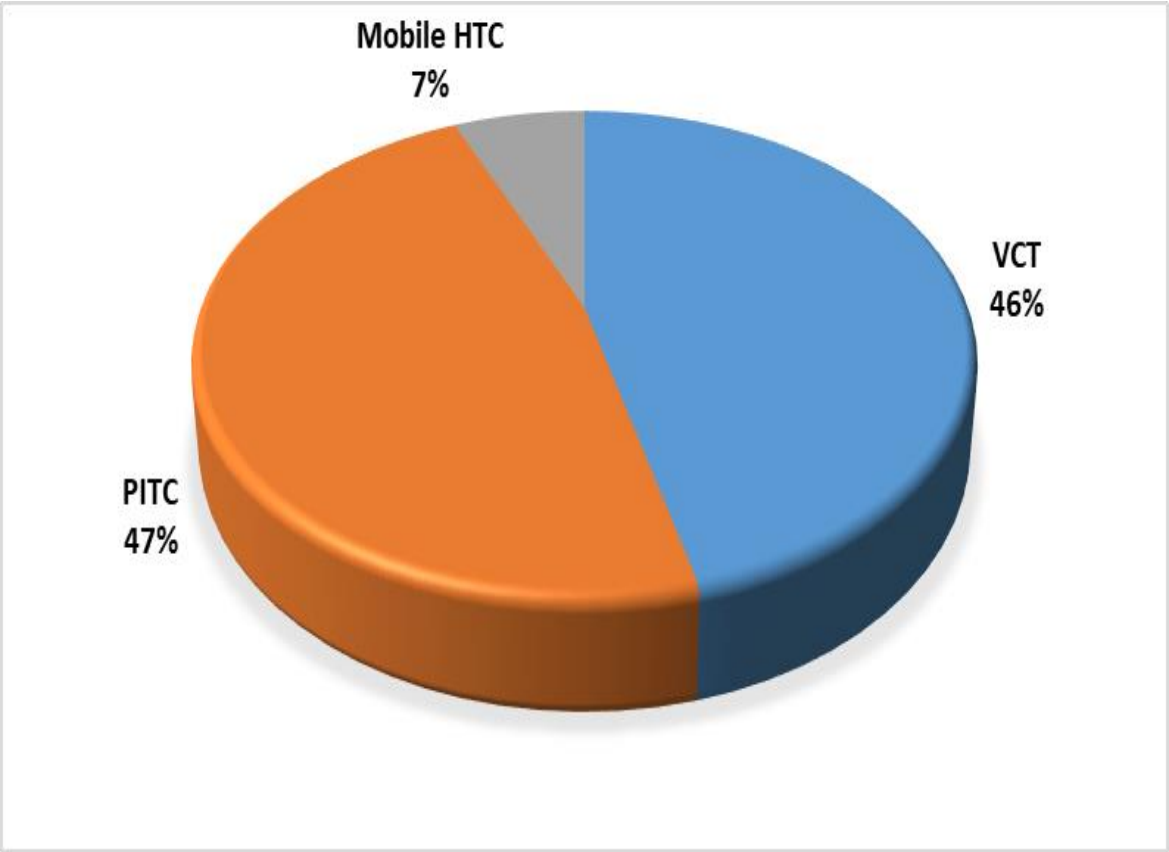
Table 2.1. 2: HIV proportion among tested by age groups and sex, Zanzibar, 2017

Age Group (Year)	Female			Male			Total		
	Number tested for HIV	Number HIV positive	Percent positive	Number tested for HIV	Number HIV positive	Percent positive	Number tested for HIV	Number HIV positive	Percent positive
0-4	5,539	17	0.3	5,712	18	0.3	11,251	35	0.3
5-9	1,291	4	0.3	1,242	10	0.8	2,533	14	0.6
10-14	1,213	3	0.2	924	13	1.4	2,137	16	0.7
15-24	32,579	240	0.7	18,188	44	0.2	50,767	284	0.6
25-34	27,537	394	1.4	29,406	179	0.6	56,943	573	1.0
35-44	10,609	219	2.1	12,039	162	1.3	22,648	381	1.7
45+	6,188	120	1.9	8,475	133	1.6	14,663	253	1.7
Total	**84,960**	**997**	**1.2**	**75,992**	**559**	**0.7**	**160,952**	**1,556**	**1.0**

***Note; 50 records excluded had missing values in sex, and has 1 case which is HIV positive)*

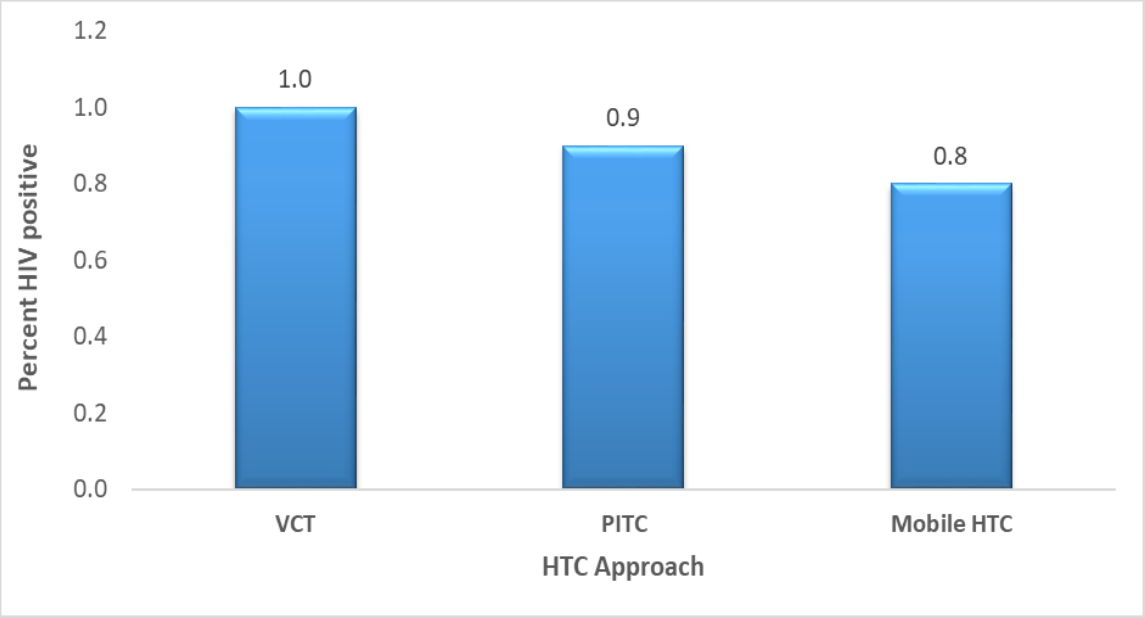
Figure below shows that, **47.4%** (**76,305/161,002**) were reached through PITC approach in 2017 which is higher as compared to 27% in 2016, followed by CITC/VCT 46% (**74,404/161,002**) while the lowest was mobile HTC which account for **6.4% (10,293/161,002)** as indicated in figure 2.1.2.

Figure 2.1. 2: HIV testing by HTS approach, Zanzibar, 2017



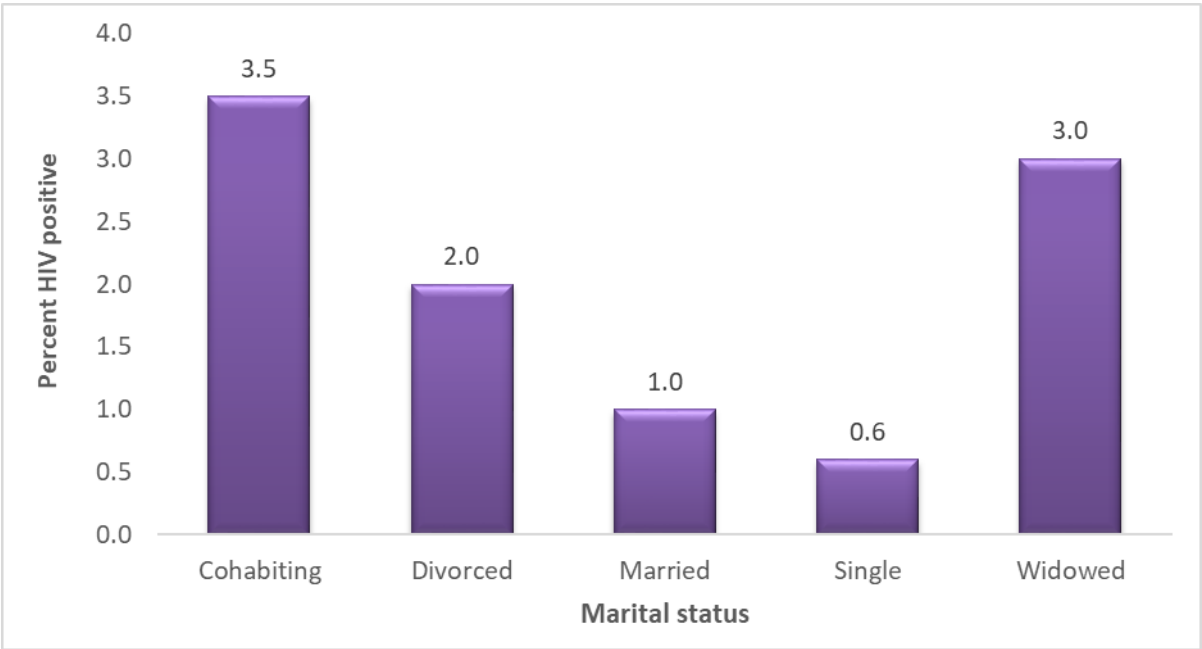
In 2017, HIV proportion among those tested positive through VCT approach was slightly higher **(1.0%)** than those tested through PITC **(0.9%)**. Furthermore, proportion of HIV is lowest (**0.8%)** among individual tested through mobile HTC services as indicated in figure 2.1.3.

Figure 2.1. 3: HIV proportion among tested by HTS approach, Zanzibar, 2017



HIV positivity rate was highest among those tested as cohabiting (**3.5%**) followed by widow (**3%**), while those who tested as single shows a lowest percentage of (**0.6%)** as indicated in figure 2.1.4

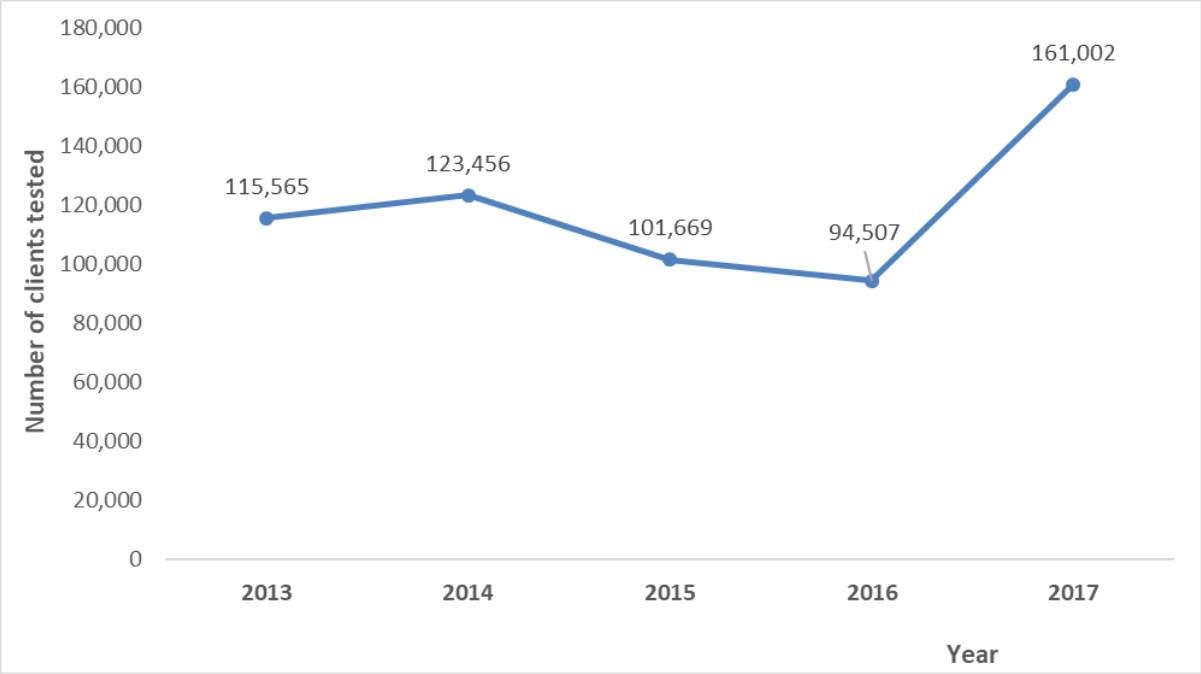
Figure 2.1. 4: HIV proportion among tested by Marital Status, Zanzibar, 2017



2.1.6 Trend of number of individuals who received HIV testing services and received their results from 2013 to 2017

Figure 2.1. 5 indicate that, the number of individuals who received HIV testing services and received their results has been fluctuated from 2013 (**115,565**) to (**94,507**) in 2016; whereby in the year 2017, there is a massive increasing in number of people tested of (**161,002)** due to several reasons as mentioned in the indicator number 2 above.

Figure 2.1. 5: Trend of people received HIV testing and received their results, Zanzibar (2013 – 2017)



2.1.7 Challenges

- Shortage of trained HTC providers
- Low uptake of PITC services

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

2.2.1 Background

PMTCT program targets women of reproductive health, pregnant women, breastfeeding mothers, their partners and infants. 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. Currently, the services are provided at 168/171 Reproductive and Child Health (RCH) clinics (100 Unguja and 68 Pemba), across all eleven districts of Zanzibar.

Early infant diagnosis (EID) is a component of PMTCT services that entails early identification of infants born to HIV-infected mothers (HIV-exposed infants) for provision of prophylaxis (ARV at birth and cotrimoxazole 4 weeks after birth). In addition, HIV antigen (DNA PCR) test is performed at 4-6 weeks after birth and 6 weeks after complete cessation of breastfeeding to rule out or confirm HIV infection among HIV-exposed infants for prompt management to improve their wellbeing and survival.

2.2.2 Goal

The goal of PMTCT program is to eliminate mother to child transmission of HIV and improve care for their infected partners and children.

2.2.3 Objectives

1. To eliminate transmission of HIV from mother to child during pregnancy, birth, and breastfeeding and ensure enrolment into care and treatment services for mother and HIV infected baby.

2. To improve child survival among HIV-exposed and infected children.

3. To increase utilization of PMTCT services by pregnant women and their male partners.

4. To increase percentage of HIV-positive pregnant and breastfeeding women who receive ART.

2.2.4 Program Implementation

2.2.4.1 Capacity Building

Four sessions of PMTCT refresher trainings were conducted to **116** health care providers (66 Unguja and 50 Pemba), including nurses, medical and clinical officers as well as laboratory

technicians. The main objective was to build their capacity in providing quality and comprehensive PMTCT services according to newly-developed Integrated HIV Guidelines.

In addition, the unit conducted two sessions of comprehensive paediatric ART training to **60** healthcare providers (30 Unguja and 30 Pemba). The main objective was to equip them with knowledge, skills and attitudes to effectively prevent, diagnose and properly manage HIV disease in children and adolescents.

Mentorship to PMTCT providers was conducted at **50** health facilities (30 Unguja and 20 in Pemba) to address implementation challenges that were identified during routine site visits and supportive supervision. PMTCT providers were coached on key elements of counselling for pregnant women and modified obstetric care for HIV-infected pregnant women, performing HIV and Syphilis tests in accordance with SOP as well as documentation in PMTCT monitoring tools according to national guidelines.

2.2.4.2 Service monitoring

Quarterly supportive supervision was conducted to **159** PMTCT sites (95 Unguja and 64 Pemba). The objectives were to improve quality of services for HIV-infected pregnant women, breastfeeding mothers and partners through service monitoring, site support and technical assistance to PMTCT providers. Also, to ensure compliance of PMTCT providers to EID guidelines in providing quality and comprehensive services.

Quarterly meeting was conducted to **30** mother mentors who work at PMTCT sites (25 Unguja and 5 Pemba). The main objective was to evaluate and enhance performance of mother mentors in accomplishing individual and collective responsibilities. Tracking of mother-infant pairs has improved as increasing numbers of those who miss appointment or who were lost to follow up were traced and returned to services.

Follow up of HIV-infected pregnant women, breastfeeding mothers and their infants was done in Unguja and Pemba to track those who missed appointments or dropped out of PMTCT care cascade. As a result, **39** out of **41** women and **13** infants were returned to continue with PMTCT services and escorted to CTC for initiation of ARVs.

2.2.5 PMTCT services indicators and trend from 2015 to 2017

S/N	Indicators	Year		
		2015	**2016**	**2017**
1	Number of health facilities providing RCH services that also provide both HIV testing and counseling and ARVs for PMTCT on the site	159/164 (97%)	168/168 (100%)	168/171 (98%)
2	Number and percent of pregnant women who were tested for HIV and know their results	31,536/64,085 (49%)	43,937/61,147 (72%)	59,004/66,417 (89%)
3	Number and percent of known positive pregnant women	230/385 (59.7%)	235/423 (55%)	361/383 (94%)
4	Percent of HIV positive pregnant women who receive ARVs to reduce the risk of mother to-child transmission of HIV	200/385 (51.9%)	197/423 (47%)	336/383 (87.7%)
5	Percent of HIV positive pregnant women delivering in health facilities	232/385 (60.2%)	232/423 (55%)	280/383 (73%)
6	Percent of male partners of pregnant women who are tested for HIV in last 12 months	1,059/64,085 (1.6%)	2,286/61,147 (3.7%)	6,410/66,417 (9.7%)
7	Percent of infants born to HIV positive pregnant women who are started on Cotrimoxazole within two months of birth	180/230 (78.2%)	146/232 (63%)	208/280 (74. 3%)

8	Percent of infants born to HIV positive mothers who receive HIV antigen test (DNA PCR) within 2 months of birth	180/230 (78.2%)	146/232 (63%)	197/280 (70%)
9	Percent of HIV positive infants started on ART	9/6 (150%)	4/10 (40%)	14/15 (93.3%)

1. Number of health facilities providing RCH services that also provide both HIV testing and counselling and ARVs for PMTCT on the site.

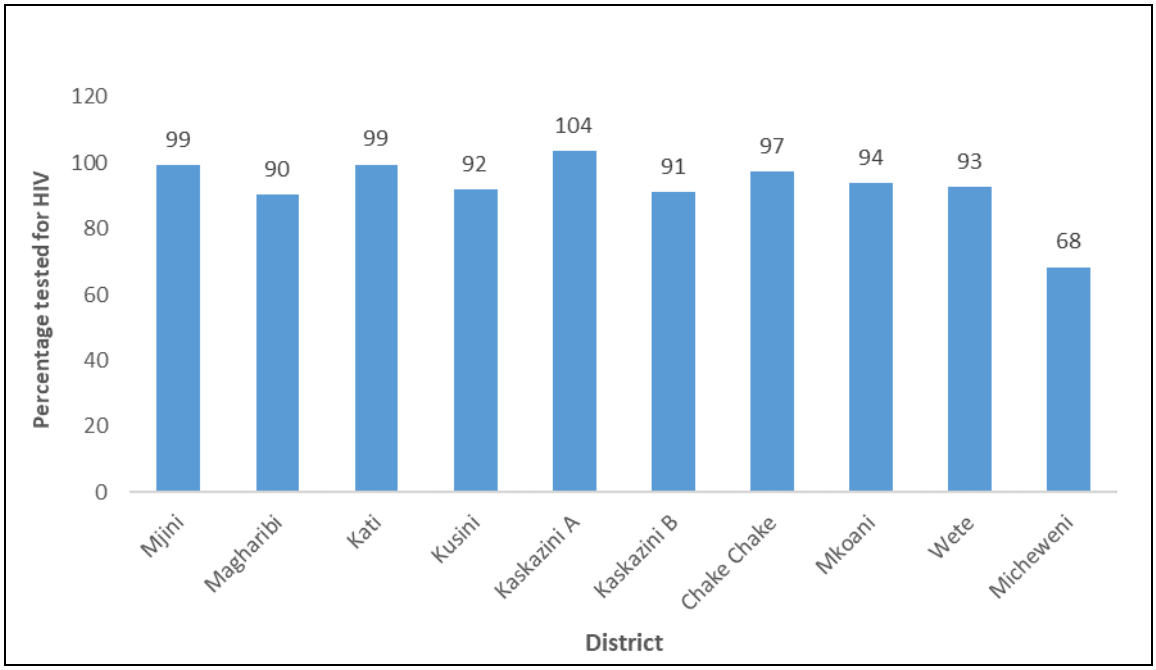
A total **168/171** RCH clinics (100 Unguja and 68 Pemba) provide PMTCT services and the coverage is anticipated to increase in accordance with emerging new RCH clinics. Majority, (90%, n=153) of health facilities providing PMTCT services are public, 8 (5%) are parastatal (mostly military health facilities), 4 (3%) are faith based and 3 (2%) are private.

2. Number and percent of pregnant women who tested for HIV and know their results.

HIV testing for pregnant women has significantly increased from **72% (43,937/61,147)** in 2016 to **89% (59,004/66,417)** in 2017 among those expected to be pregnant. The achievement is due to ongoing efforts that are being taken to identify and promptly resolve implementation challenges as well as ensuring adequate, consistent and timely supply of HIV test kits to all PMTCT sites.

Among all clients who attended ANC services, Kaskazini A, had the highest proportion (104%) followed by Mjini and Kati district **(99%)** of clients tested for HIV and Chake chake district Pemba **(97%)**. Micheweni district remained with the lowest **(68%)** of ANC clients tested for HIV as indicated in figure 2.2.2 below.

Figure 2.2. 1: Proportion of ANC clients tested for HIV by district, Zanzibar, 2017



3. Number and percent of known positive pregnant women.

Proportion of known positive pregnant women has increased from **59.7% (230/385)** in 2016 to **94% (361/383)** in 2017. Among positive pregnant women, **57%** (207/361) were previously known and **43% (154/361)** were newly tested positive at ANC and maternity. Ninety-one **(91%)** of all identified positive pregnant women were from Unguja, where Magharibi district reported **34%** of the cases, followed by Mjini District **32%.** Low number of cases were identified in Kaskazini A and B, Kusini Unguja, Wete, Mkoani and Micheweni, as shown in the figure below.

Figure 2.2. 2: Percentage of known HIV Positive Pregnant Women Identified by District, Zanzibar, 2017

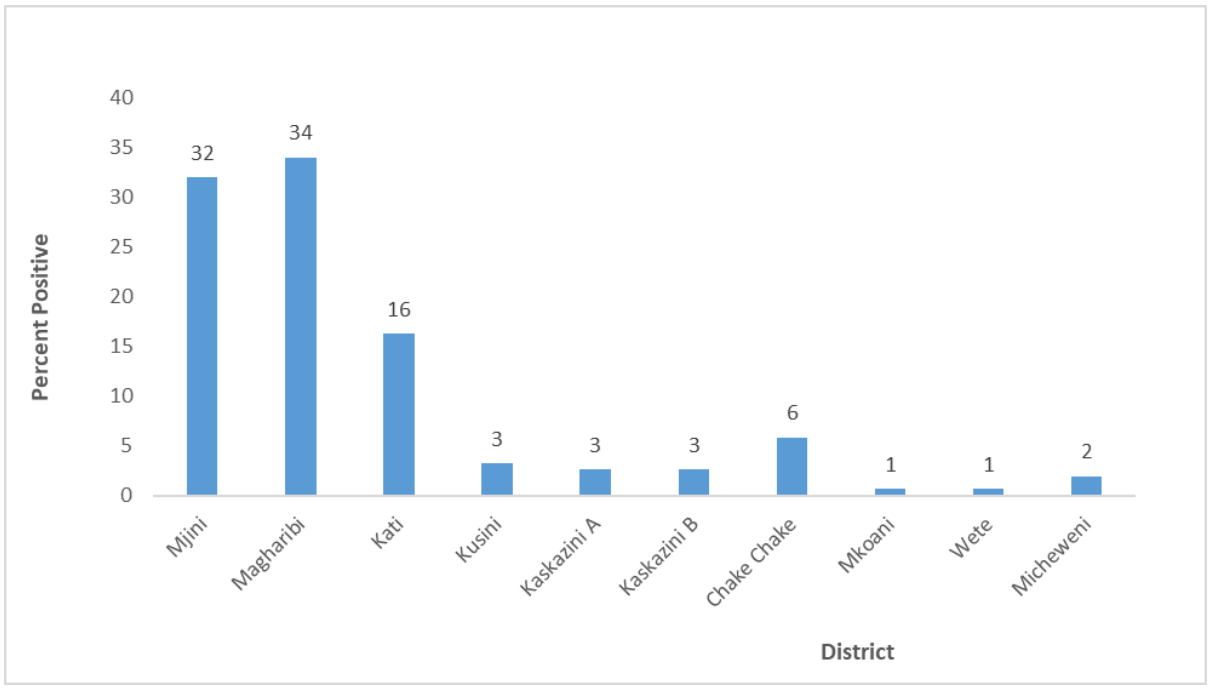
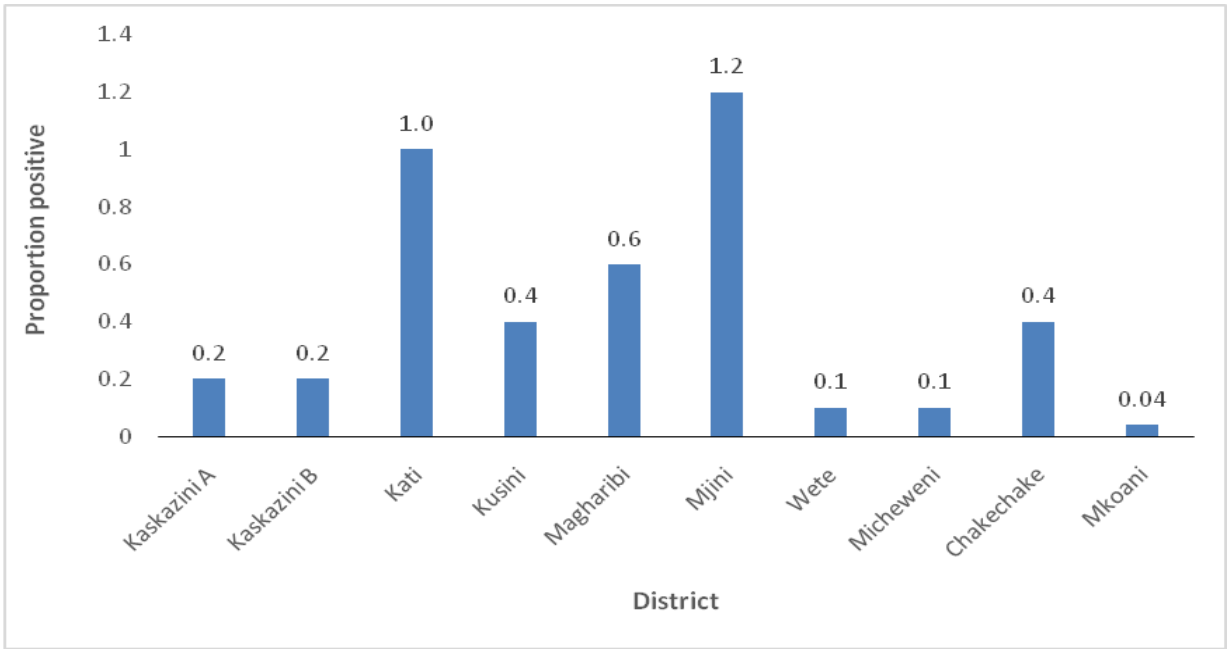


Figure 2.2. 3: Proportion of HIV positive women by district, Zanzibar, 2017



4. Percent of HIV positive pregnant women who received ARVs 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 out of estimated HIV positive pregnant women has increased from **47%** (197/423) in 2016 to **87.7% (336/383)** in 2017. Among them **37%** were newly identified positive from ANC, **61%** were previously known pregnant women and **2%** started ART at maternity.

5. Percent of HIV positive pregnant women delivering in health facilities.

Percentage of HIV positive pregnant women delivering at health facilities out of estimated HIV positive pregnant women increased from **55% (232/423)** in 2016 to **73% (280/383)** in 2017. In spite of that, out of all identified HIV-infected pregnant women, a great proportion **83% (280/336)** delivered at health facilities.

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

There is an increase of male involvement in PMTCT services from **3.7% (2,286/61,147)** in 2016 to **9.7% (6,410/66,417)** in 2017 among the expected pregnancy. However, among the pregnant women who attended RCH clinic, **11.1% (6,410/57,660)** of their partners tested for HIV as seen in table 2.1 below. In addition, Chake Chake district reported high number of partner testing (19.6%) among the women attended at RCH, followed by Mjini (15.4%) and Magahribi district (12.1%). The district reported the least number of male partners tested for HIV was Micheweni (3.2%) and Kati District (4.2%). Ongoing counselling and health education, prioritization of services for couples attending ANC as well as community sensitization and engagement are contributing factors to the increased male involvement in ANC and PMTCT services.

Table 2.2. 1: Percent of male partners tested for HIV in last 12 months per district, Zanzibar, 2017

District	Partners tested	Women tested	Percent Male involvement
Micheweni	103	3,234	3.2
Chake Chake	1,050	5,358	19.6
Mkoani	198	4,103	4.8
Wete	398	5,128	7.8
Kaskazini A	503	4,732	10.6
Kaskazini B	217	2,711	8.0
Kati	179	4,304	4.2
Kusini	151	1,643	9.2
Magharibi	1,688	13,966	12.1
Mjini	1,923	12,481	15.4
Total	**6,410**	**57,660**	**11.1**

7. Percent of infants born to HIV positive pregnant women who started on Cotrimoxazole prophylaxis within two months of birth.

Proportion of HIV-exposed infants started on cotrimoxazole prophylaxis within the first 2 months of birth increased from **63% (146/232)** in 2016 to **74.3% (208/280)** in 2017.

8. Percent of infants born to HIV-positive mothers who received HIV antigen test (DNA PCR) within 2 months of birth.

Proportion of infants born to HIV positive mothers who received HIV antigen test (DNA PCR) within 2 months of birth increased from **63% (146/232)** in 2016 to **70% (197/280)** in 2017. This could be attributed to improved tracking system for mother-infant pairs. The following table shows the number of infants tested for HIV by DNA PCR machine by quarter.

Table 2.2. 2: Number of infants tested for HIV by DNA PCR machine and their results, by quarter, Zanzibar, 2017

Period	All HIV positive women who delivered live birth	Number of infants tested for HIV by DNA PCR by age		Number of infants tested HIV positive by age		Percentage Positive	
		Tested 1-2 month after delivery	Tested >2 month after delivery	Infants aged 1-2 months tested HIV positive	Infants aged >2 months tested HIV positive	Percentage positive at 2 months	Percentage positive at 12 months
Jan to Mar	58	34	25	2	3	5.8%	12%
Apr to Jun	87	46	21	2	2	4.3%	9.5%
Jul to Sep	77	46	14	0	0	0%	0%
Oct to Dec	58	64	28	4	2	6.2%	7.1%
Total	**280**	**190**	**88**	**8**	**7**	**4.2%**	**7.9%**

As illustrated in table 2.2.1, a total of **280** HIV-infected women delivered at health facility while **278/280 (99%)** of their HIV-exposed infants were tested for HIV using HIV antigen test (DNA PCR). A total of **190/278** (**68%**) were tested within two months of birth and **88/278** (**32%**) were tested between 3-12 months of age. Among those tested of all ages, **15/278 (5.39%)** were identified to be HIV positive. The positivity rate aamong infants aged two months or below was **4.5% (10/221)**.

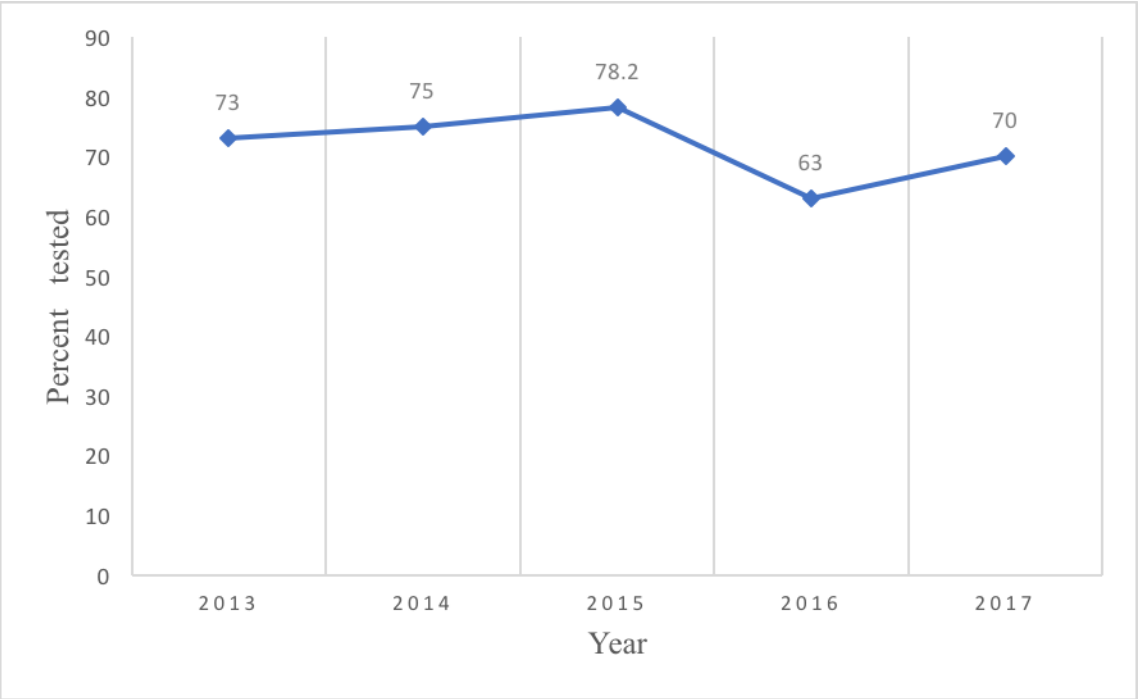
9. Percent of HIV positive infants started on ART

Among **15** identified HIV-positive infants, **14 (93%)** were started ART in 2017.

2.2.6 Trend of HIV exposed infants testing by HIV DNA PCR from 2013 to 2017

The figure 2.2.5 below shows trend of proportion of infants born to HIV positive mothers who receive first HIV antigen test (DNA PCR) within 2 months of birth. The proportion of children tested increased gradually from **66%** in 2016 to **74%** in 2017. This increase was attributed to close follow up of lost mothers and infants, and regular supportive supervision and mentorship.

Figure 2.2. 4: Percent of infants born to HIV positive mothers who received HIV antigen test (DNA PCR) within 2 months of birth, Zanzibar, 2013-2017



2.2.7 Challenges

1. Inadequate tracking of mother-infant pairs
2. Low number of HIV exposed infants tested DNA PCR compared to HIV positive mothers who deliver as well as HEI infants who receive cotrimoxazole.

2.3 KEY POPULATIONS SERVICES

2.3.1 Background

Key Populations (KPs) are people that are at higher risk of being infected with HIV, viral hepatitis and other STI/RTI infections such as syphilis. In Zanzibar, three groups of people that have been documented to be at higher risk of acquiring HIV infection are Men having Sex with other Men (MSM), Sex Workers (SW) and People who inject drugs (PWID). KPs remains a key actor in contributing HIV epidemic. In Zanzibar, Ministry of Health (MoH) through Zanzibar Integrated HIV, TB and Leprosy Programme (ZIHHTLP) is mandated to coordinate and implement all health services related KPs interventions.

To date there are three KPs-friendly service centres located at Mnazi Mmoja Hospital, ZAYEDESA and Methadone Assisted Treatment (MAT) clinic at Kidongo Chekundu - Unguja. There is also one National and 8 local NGOs, which in collaboration with other KPs stakeholders, continue to implement KPs interventions in Zanzibar.

2.3.2 Goal

The goal of Key Populations services in Zanzibar is to reduce new HIV and other Sexually Transmitted Infections and provide care, treatment and support to KPs.

2.3.3 Objectives

1. The objective of the unit is to expand access and improve quality of HIV services for KPs.
2. To enhance staff capacity on KP interventions.

2.3.4 Programme Implementation

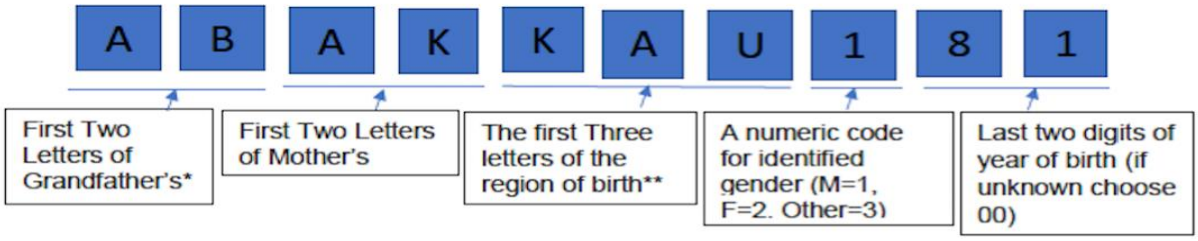
2.3.4.1 Capacity building

Mentorship on KP services to KP implementers was conducted at the identified sites that were supervised and found with major issues that hindering effective provision of KP services in Unguja and Pemba. A total of four (ZAC Unguja and Pemba, AYAHIZA and ZANGOC – Unguja and JUKAMKUM for Pemba) sites were mentored. This mentorship was mainly done in areas of finance management, clients follow-up and programming issues. The purpose of this activity helped the continuing providers become more knowledgeable and effective in providing KPs services.

Moreover, National Guidelines on Comprehensive HIV Interventions for Key Populations (KPs) was developed. These guidelines will be used by institutions that provide HIV services targeting these populations at all levels in Zanzibar.

In addition, KPs National Monitoring tools were revised to monitor and report all KPs interventions implemented in Zanzibar. The tools involved information collected from the outreach and facility. Following the revision, the orientation training on these tools was done to 62 (50 From Unguja and 12 From Pemba) participants.

The Unique Identifier Code (UIC) for KPs in Zanzibar were developed. The aim is to provide an anonymous and reliable system for tracking key populations through prevention, treatment and care services. This will help to improve coverage and reach of good quality services to key populations in Zanzibar. The recommended code includes the following key attributes



Refresher training on comprehensive KP interventions was conducted to **44** (24 in Unguja and 20 in Pemba) community outreach workers and peer educators. The purpose of this training was to strengthen capacity in provision of quality of HIV related services to Key Populations in Zanzibar.

In addition**,** a five days training on proper use of condom to KPs was conducted. A total of **165** participants (105 in Unguja and 60 in Pemba) from different KPs hot spots including NGOs attended. The objective of the training was to build and strengthen knowledge and skills on condom negotiation as well as proper and consistence use of condoms among Key populations.

Sensitization workshop was conducted to key community leaders at district and community levels on Methadone Assisted Treatment (MAT) services to Peoples who inject drugs. A total of **66** community leaders from Unguja were sensitized. The aim of this workshop was to create awareness on the importance of provision of MAT services to PWIDS so as to provide support in the whole process towards the behaviour change of the clients.

2.3.4.2 Service monitoring

Quarterly supportive supervision to NGOs implementing KP services in Zanzibar was conducted. A total of **17** sites (3 NGOs, 5 Health facilities, and 9 sober houses) were supervised. The objectives of this supervision were to assess the quality of HIV and other related services provided to key populations as per the guidelines as well as to support service providers in improving quality of services to clients.

Moreover, a one day KPs stakeholders meeting was conducted to **62** (32 in Unguja and 30 from Pemba) participants from NGOs implementing KP services. The objective of this meeting was to strengthen coordination, share experiences and provide feedback on services implementation.

Furthermore, a one-day Methadone Assisted Treatment Steering committee meeting was conducted. The aim was to discuss issues presented by MAT – Technical Working Group on the provision of MAT services including methadone consumption report and directions on the improvement of MAT services.

2.3.5 KP services indicators and trend from 2015 - 2017

SNo.	Indicators	Achievement		
		2015	2016	2017
1.	Number and percentage of KPs who received an HIV test in the past 12 months and who know their results	1,895 (18.8%)	4,135 (41.1%)	5,549 (55.2%)
2	*Number of PWIDS who were on MAT for at least six months	159	194	244

1. **Number and percent of KPs who received an HIV test in the past 12 months and who know their results**

In 2017, number of KPs who received HIV test in the past 12 months and know their results has increased from 4,135 (41.1%) in 2016 to 5,549 (55.1%) of the estimated KP population. The highest increase was on PWIDS category 28.5% in 2016 to 66.6% in 2017. This increase might be contributed by increased in number and frequencies of outreach interventions conducted by NGOs supported by different partners.

Table 2.3.1 below indicates that, majority of the KPs tested (72.3%) were in the age group of 25 years and above, only 1% were in age group bellow 14 years. Those tested who were aged 25+ were found with high positivity rate of 2.6%. This indicates the presence and availability of young KPs in HIV and other related interventions which need more attentions in reducing new HIV infection targeting KPs and general population.

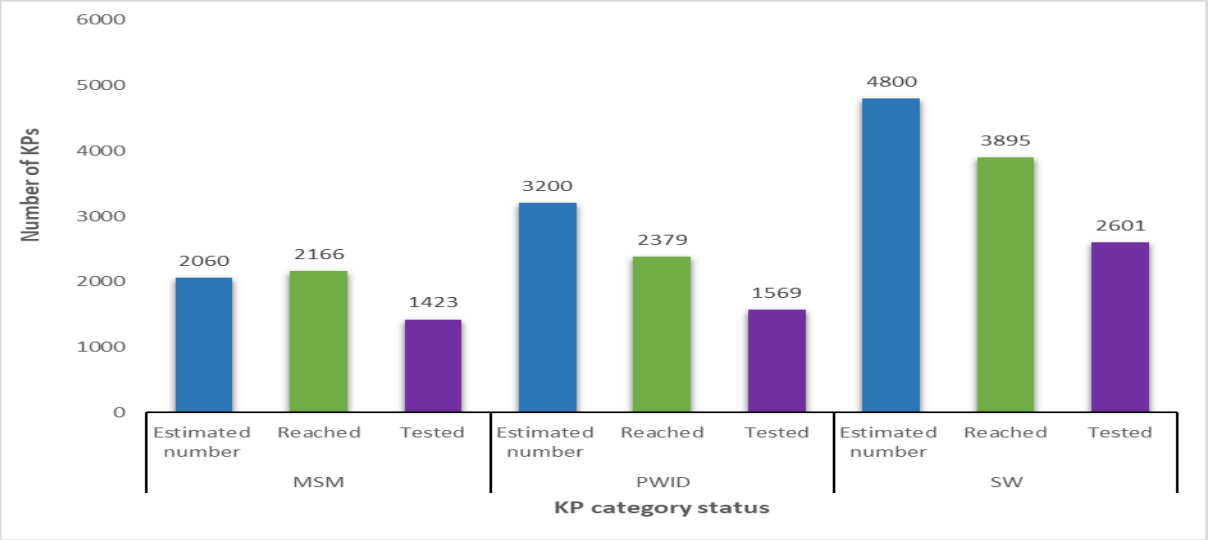
Table 2.3. 1: KPs who received HIV testing services by type of testing site, Zanzibar, 2017

Clients category and age group	Tested				Positive			
	< 14	15-19	20-24	25+	< 14	15-19	20-24	25+
MSM	0	79	313	1,029	0	0	5	11
PWID	1	49	240	1,269	0	0	5	25
SW	10	170	676	1,713	0	3	13	68
Total	11 (0.2%)	298 (5.4%)	1,229 (22.1%)	4,011 (72.3%)	0 (0%)	3 (1.0%)	23 (1.9%)	104 (2.6%)

HIV service cascade

In this year, a total of **2,166** MSM were reached through different HIV and STI interventions. Among the MSM reached, 66% of them were tested for HIV. Regarding FSW and PWID, the proportion of FSW and PWIDs reached was 81.1% and 74.3% of the estimated population respectively. Moreover, the number and percentage of KP tested for HIV and know their status was 66.8% (2,601/3,895) for SW, 65.9% (1,569/2379) PWIDS and 65.7% (1,423/2,166) for MSM as it is indicated in the figure below. This achievement was contributed to the increased number of outreach sessions conducted by KP led organizations in Zanzibar.

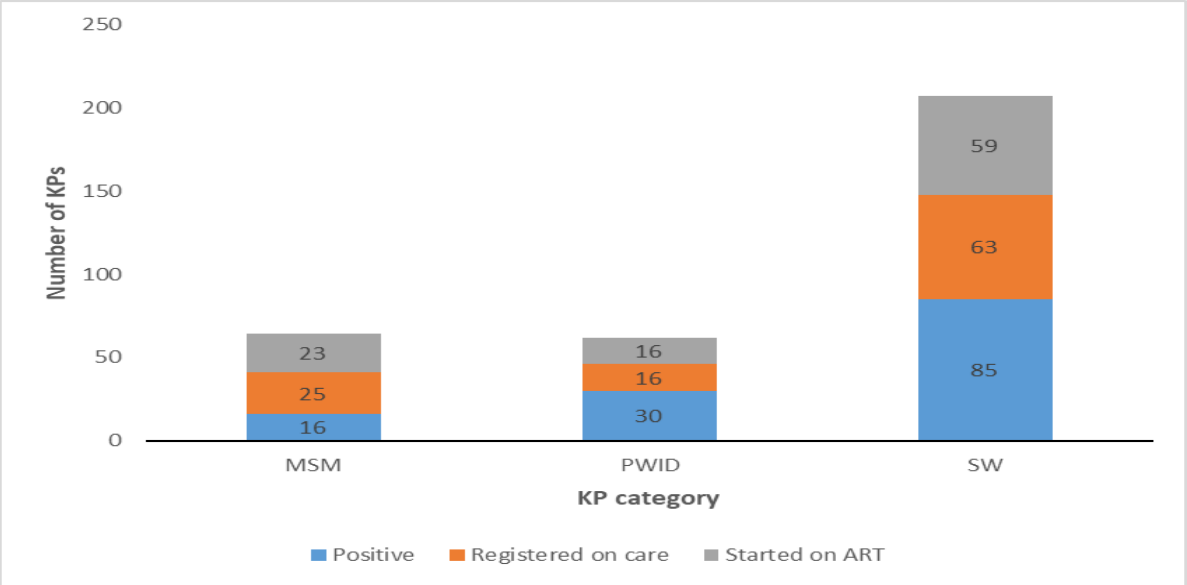
Figure 2.3. 1: KPs reached and tested by category from January to December 2017



KP ART Care Cascade

In this reporting year, a total of **104** (25 MSM, 16 PWID and 63 FSW) HIV KP clients received care in all CTCs in Zanzibar. Among those who received care 92% of MSM, 100% of PWID and 94% of FSW were receiving ART. The percentage of KPs who were on treatment is noted to reach the second 90 of HIV target across all KP categories as illustrated in the figure below.

Figure 2.3. 2: Key population tested for HIV, enrolled in care and started ART from January to December 2017



2. Number of PWIDS who were on MAT for at least six months

Number of PWIDS who were on methadone services for at least six months has increased from 194 in 2016 to 244 in 2017. This was contributed by the provision of tailored psychosocial and behavioural change sessions for individual clients.

People who inject drugs on Methadone Assisted Treatment (MAT)

As of December 2017, a total of 455 clients were ever enrolled at MAT clinic in Unguja of whom **89.5%** were male. Among **455** clients **109** (23.9%) were defaulters and **19** (4.2%) died. The number of clients who had been on MAT for six months and above by December 2017 were **244** as indicated in table 2a below: -

Table 2.3. 2: Number of heroin users who were enrolled and received MAT services at Kidongo Chekundu MAT clinic in Unguja, Zanzibar, 2017

ITEM	MALE	FEMALE	TOTAL
Clients ever enrolled	407	48	**455**
Loss to follow up (excluding death)	93	16	**109**
Death of patients ever registered	18	1	**19**
Current on Treatment for at least six months	214	30	**244**

Other services provided at MAT clinic includes, HIV, TB and Viral Hepatitis. A total of 47/455 (10.3%) were identified positive for HIV and 44/47 (93.6%) were on ART in different CTCs in Unguja. In addition, a total of **9** TB cases identified and continue with TB treatment at MAT clinic. Moreover, a total of **60** clients tested HCV positive and referred to Mnazi Mmoja Hospital for further management as shown in figure 2b bellow.

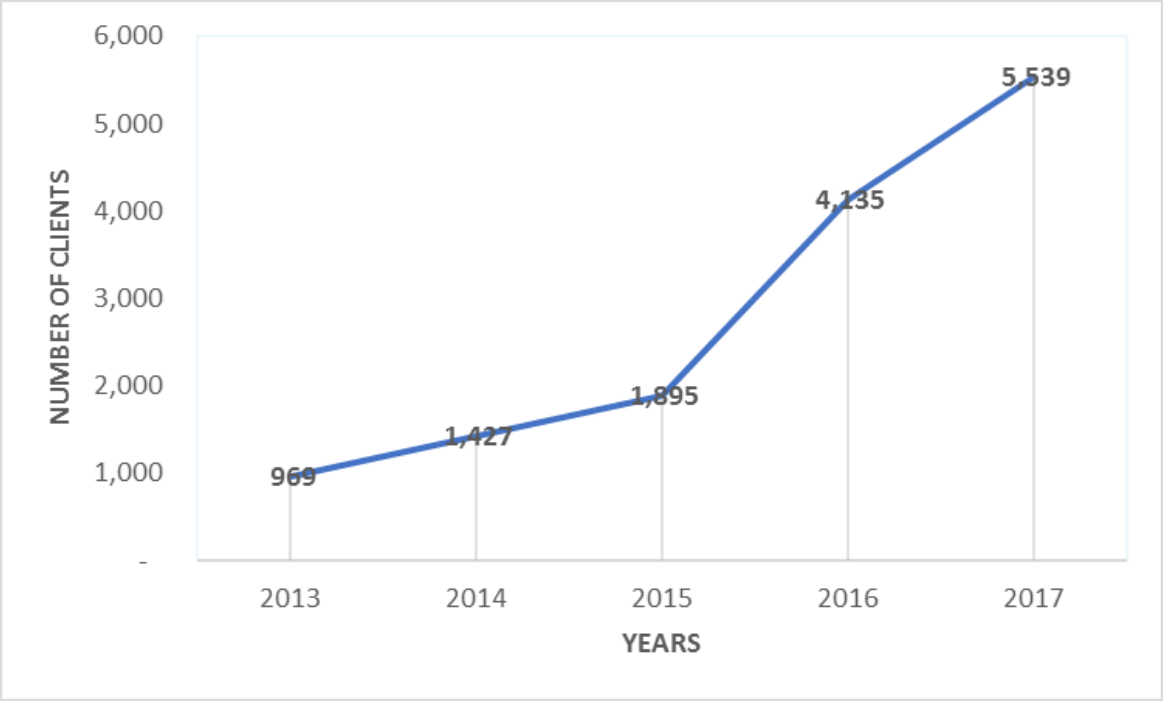
Table 2.3. 3: Services provided at MAT Clinic, January to December, 2017

ITEM	MALE	FEMALE	TOTAL
HIV positive ever enrolled	35	12	**47**
Cumulative on ART	32	12	**44**
Current TB positive	9	0	**9**
Cumulative Viral Hepatitis C positive	54	6	**60**

2.3.6 Trend of HIV testing services among KPs from 2013 - 2017

There was an increased number of KPs who received HIV testing services for the five years' period from 969 in 2013 to 5,539 in 2017 as indicated in figure number 3a below.

Figure 2.3. 3: Trend of HIV testing services among KPs from 2013 – 2017, Zanzibar



2.3.7 Challenges

- Low number of KPs tested for HIV
- Low enrolment of PWIDS at MAT clinic
- High defaulting rate among clients enrolled in MAT clinic

2.4 SEXUALLY TRANSMITTED INFECTIONS SERVICES

2.4.1 Background

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

2.4.2 Goal

The goal of STIs/RTI services is to reduce new HIV and STIs and to provide care and treatment to all people in Zanzibar.

2.4.3 Objectives

i. To improve STIs services
ii. To reduce new sexually transmitted infections among Zanzibaris

2.4.4 Programme Implementation

2.4.4.1 Capacity building

A six days STIs/RTIs training was conducted to **98** (60 from Unguja and 38 from Pemba) prescribers. The objective was to build capacity of service providers in providing proper and quality management of STIs/RTIs to patients using national STI guidelines.

In addition, mentorship was conducted to service providers on proper management of STI services. A total of **123** (73 Unguja and 50 from Pemba) services providers working in **62** (42 Unguja and 20 Pemba) health facilities were mentored. The aim of this activity was strengthen the capacity, knowledge and skills of service providers in the provision of proper management of STIs/RTIs to patients using national STI guidelines.

2.4.4.2 Service monitoring

Quarterly supportive supervision to health facilities implementing STIs services in Unguja and Pemba was conducted. A total of **112** (74 Unguja and 30 Pemba) health facilities were supervised. The objectives were to assess the quality of STIs and other related services provided to patients, but also provide support to service providers in improving quality of services to clients particularly Key population.

2.4.5 STI services indicators and trend from 2015 to 2017

SNO	Indicators	Year		
		2015	2016	2017
1	Number of health facilities providing STIs care and treatment with staff trained on STIs care and treatment	85	96	194
2	Number of women and men with an STI presenting at health facilities who are diagnosed according to the national guidelines	9,063	8,354	11,533
3	Percentage of sexual partners of an individual with an STI treated at health facilities whose sexual partners are notified of their infections	11.5%	9.6%	12.2%
4	Number of condoms distributed	15,860	8,773	136,656

1. **Number of health facilities providing STIs/RTI care and treatment with staff trained in STIs care and treatment**

Number of health facilities that provide STI services with trained staff has been increased from **96** in 2016 to **194** (80 in Pemba and 114 in Unguja) in the year 2017. This dramatically increase was due to STI/RTI management training conducted in Zanzibar, which added the number of health facilities whose service providers were trained on national STI/RTI guidelines.

2. **Number of women and men with an STI presenting at health facilities who are diagnosed according to the national guidelines**

There was an increase in STI cases diagnosed from **8,354** in 2016 to **11,106** in 2017. This increase may be due to various factors including training conducted, supportive supervision, mentorship and regular follow up to services providers. Moreover, it was noted that, in the year 2017 majority of the patients received STI services were females **8,621 (77.6%)** compared to **2,633 (22.4%)** males, whereby the most diagnosed STI cases was Vaginal

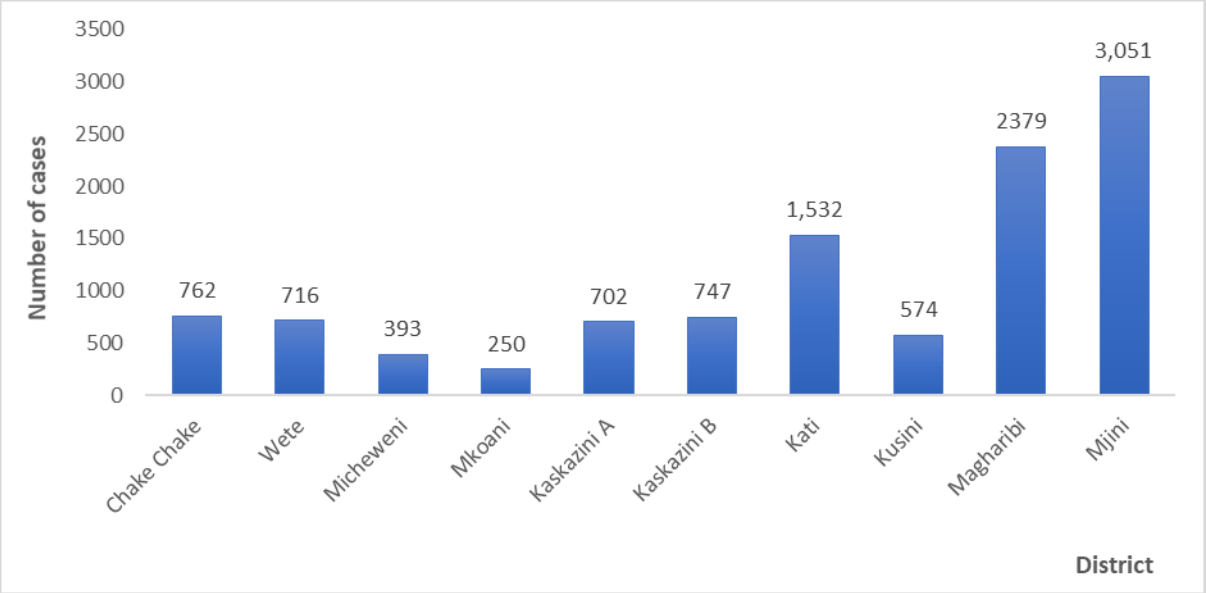
Discharge Syndrome 5,690 **(51.2%)** followed by Lower Abdominal Pain 2,585 (**23**%) as indicated in table below.

Table 2.4. 1: Number of STI/ RTI cases diagnosed by Sex and Age group, 2017, Zanzibar

Diagnosis	Age (years) and Gender						Total
Syndromic Diagnosis	Male			Female			
	0-14	15 - 24	25+	0-14	15 - 24	25+	
Genital Ulcer (GU)	4	45	96	3	43	107	**298**
Inguinal Bubos(IB)	5	6	8	1	-	3	**23**
Lower abdominal pain (LAP)				69	1,017	1,472	**2,558**
Vaginal Discharge(VD)				92	2,089	3,509	**5,690**
Urethral Discharge (UD)	4	364	1,508				**1,876**
Painful Scrotal Swelling (PSS)	14	48	99				**161**
Neonatal Conjunctivitis	284			216			**500**
Total	**311**	**463**	**1,711**	**381**	**3,149**	**5,091**	**11,106**

The Mjini district reported high number of STI cases **3,051** (**27.5**%), followed by Magharibi "B" and Kati districts with **1,759** (**15.8**%) and **1,532** (**13.8**%) respectively. Kusini Unguja, Micheweni and Mkoani districts reported few cases 393 (**5.2**%), **250** (**3.5**%), and **251** (**2.3**%) respectively as indicated in figure 2.4.1 below.

Figure 2.4. 1: Number of STI/RTI cases by District, Zanzibar, 2017



3. Percentage of sexual partners of an individual with an STI treated at health facilities whose sexual partners are notified of their infections

The percentage of sexual partners whose index are notified of their infections has slight increased from **802 (9.6%) in 2016** to **1,412 (12.2%) in 2017**. This increase might be due to the application of various techniques discussed during the STI trainings, frequent supportive supervision conducted and commitment of STI service providers in providing comprehensive STI services to clients.

4. Number of condoms distributed

Number of condoms distributed through various condom outlets has increased from **8,318** in 2016 to **136,656** in 2017 as indicated in Table **2.4.1.3** below. However, only male condoms were distributed. This increases were due to increase number of outlets but also strengthening distribution strategies including using of push system to many condom outlets.

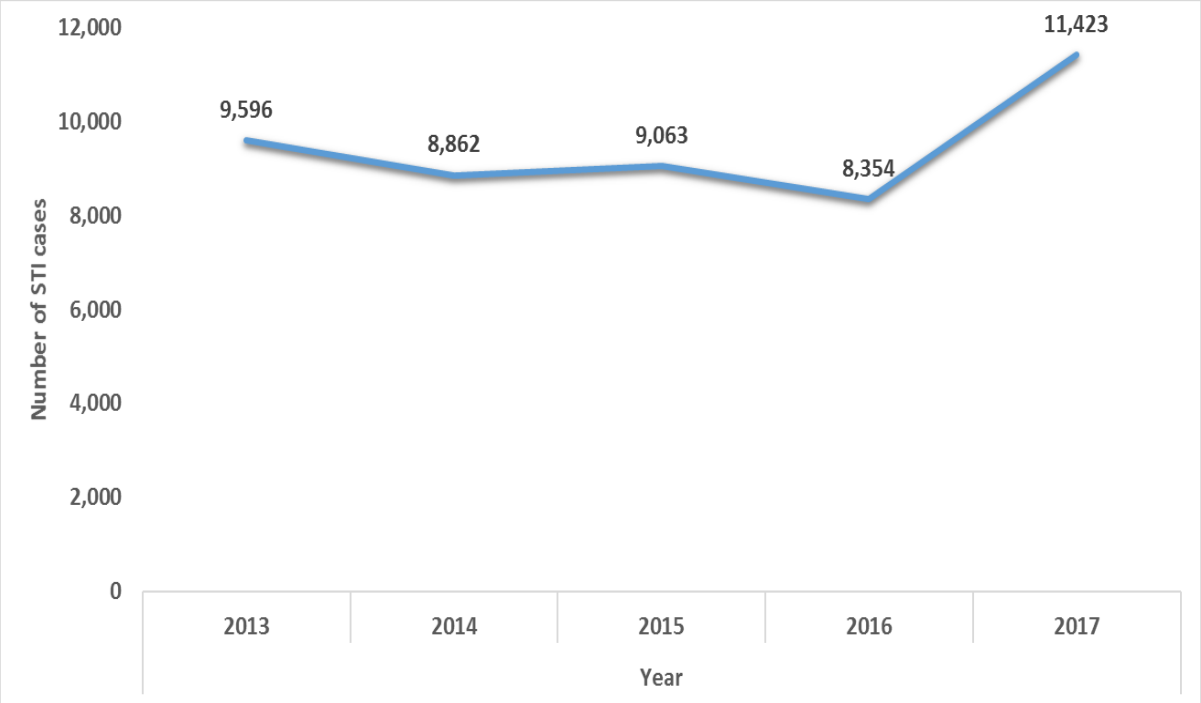
Table 2.4. 2: Number of condoms distributed in different facilities in Zanzibar, 2017

Condom outlets	Quarter				Total
	Jan - March	April - June	July - Sept	Oct - Dec	
NGOs	16,416	13,824	29,952	18,720	78,912
Public Health Facilities	15,120	8,640	8,640	5,760	38,160
Private Health Facilities	-	576	-	-	576
Army Health Facilities	720	-	3,600	11,520	15,840
Studies	-	3,168	-	-	3,168
Total	**32,256**	**26,208**	**42,192**	**36,000**	**136,656**

2.4.6 Trend of number of women and men with an STI presenting at health facilities who are diagnosed according to national guidelines, 2013 – 2017

Number of women and men with STI presenting at health facilities who are diagnosed according to the national guidelines has slowly declined from 9,596 in 2013 to 8,354 in 2016 but then has noted to significant increased from 8,354 in 2016 to 11,106 in 2017 as indicated in figure 2.4.2.1 below**.**

Figure 2.4. 2: Number of women and men with an STI presenting at health facilities who are diagnosed according to national guidelines, Zanzibar, 2013 – 2017



2.4.7 Challenges

- Inadequate requesting and ordering of STI/RTI drugs in some health facilities
- Low number of Sexual partners treated for STI at health facilities in Unguja and Pemba .

CHAPTER 3:

HIV CARE, TREATMENT AND SUPPORTING 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 12 care and treatment clinics (CTCs) in Zanzibar, 8 in Unguja and 4 in Pemba. In addition, there are three ART refilling sites in Unguja. CTC services are provided in (10) public health facilities, (1) private hospital and in (1) Non-Governmental Organization.

3.1.2 Goal

The main goal is to reduce HIV/AIDS related morbidity and mortality.

3.1.3 Objectives

1. To increase access to care and treatment services
2. To strengthen existing ART services
3. To improve linkages between care and treatment unit and other related programs

3.1.4 Program Implementation

3.1.4.1 Capacity building

Two Comprehensive basic ART training (10 days each) was conducted to a total of 60 (40 Unguja and 20 Pemba) health care workers. The objective was to build capacity of health care workers in facilitating the expansion and management, support and CTC services. In addition, a 10 day's training on Advanced adherence counselling was conducted to 31 CTC Providers (21 from Unguja and 10 from Pemba). The objective was to build the capacity of the CTC health care providers on proper adherence counselling.

Furthermore, the unit had conduct two sessions of comprehensive paediatric ART training to 60 healthcare providers (30 Unguja and 30 Pemba). The main objective was to equip them with knowledge, skills and positive attitudes to effectively prevent, diagnose and manage HIV disease in children and adolescents.

A total of 30 CTC Providers (25 from Unguja and 5 Pemba) attended 5 days Isoniazid Preventive Therapy (IPT) training. The objectives of this training were to equip CTC Providers with knowledge and skills to enable them to implement TB infection control (IC)

procedures in order to reduce TB transmission, as well as to use intensified case finding and IPT to reduce the burden of Tuberculosis among patients with HIV. Following the training five meetings with 480 (250 Unguja and 230 Pemba) members from ZAPHA+ and CTC health care providers were conducted. The aim was to provide information and create awareness on IPT services which will be provided to PLHIV at their CTCs and to minimize challenges on IPT up take in care and treatment services.

A five days training on cervical cancer screening was conducted to 25 (19 Unguja and 6 Pemba) health care workers from CTCs. The aim was to build capacity on provision of cervical cancer services to women living with HIVattending to CTC. Following cancer screening training, 3 providers from Mnazi Mmoja CTC attended 5 days training on LOOP Electrosurgical Excision procedure (LEEP) at Kibaha. The aim was to build capacity on how to use and maintain the machine and to provide proper management of cervical cancer in HIV infected women.

A total of **616** women were screened for cervical cancer, **28** Visual Inspection with Acetic Acid (VIA) Positive, **3** found with large lesion, **11** clients suspected of having cervical cancer and only **1** confirmed with cervical cancer. Eighteen **18** clients with positive VIA result received cryotherapy.

Training on gender-based violence (GBV) and violence against children (VAC) was conducted to health care providers and social welfare officers. The training was done following the assessment of GBV and VAC services in health facilities both Unguja and Pemba. A total of 27 participants including various medical cadres and social welfare officers were trained. The aim was to equip participants with knowledge and skills on provision of effective GBV and VAC services survivors.

Training on adolescent friendly care and treatment service was conducted with the aim of building capacity of adolescents and HCWs in facilitating the improvement of CTC services and support of adolescents. A total of 46 (25 Adolescents living with HIV(ALHIV), 17 health care workers and 4 ZAPHA+ Leaders) from Unguja and Pemba were trained. Following the training, seven (7) Adolescents clubs (Mnazi Mmoja, Muembeladu, Kivunge, Wete, Chakechake, Micheweni and Mkoani CTCs) were established. Also, 20 adolescents club members participated in Champions camp conducted at Kibaha. The aim was to share experience with their fellows for improving Positive Health Dignity and Prevention (PHDP) to ALHIV.

3.1.4.2 Service monitoring

Quarterly supportive supervision was conducted to **12** CTCs in Unguja and Pemba and 3 refilling sites in Unguja . The objective of the supervision was to monitor the standards and quality of services provided in CTCs according to the Zanzibar National Guidelines for the Prevention and Treatment for HIV, 2017.

In collaboration with peers and Community Home Based Care (CHBC) providers conducted defaulter tracing to 168 defaulters. A total of 54 patients out of 168 were successfully returned back into care. The rest did not return back due to various reasons including deaths, provision of wrong addresses and travel with no information.

In the effort to scale up CTC services, assessment was conducted to five health facilities which provides PMTCT services in Unguja. These facilities included Mnazi Mmoja Hospital (RCH), Mwera PHCU+, Fuoni PHCU+, KMKM Kibweni Hospital and Chukwani PHCU+. The objective was to assess the capacity of these facilities in establishing ART services comprehensively within PMTCT sites. Among them, Fuoni PHCU+ qualified to start providing ART service, meanwhile the rest needed improvements.

Annual supportive meeting conducted to **38** CT providers (35 from Unguja and 3 from Pemba). The objectives of the meeting were to provide feedback of supportive supervision, review performance and to discuss progress, challenges and propose way forward.

Five meetings on improving retention to CTC was conducted to **225** (45 participants each session) CHBC, parents and care givers of adolescent and children enrolled at CTC in Pemba. The purpose of this meeting was to improve retention to Care and Treatment for the adolescent and children.

3.1.5 HIV care and treatment indicators and trend from 2015 to 2017

SN	Indicator	Year		
		2015	2016	2017
1	Number of comprehensive care and	12	12	12
2	Percentage of adults and children with HIV still alive and known to be on treatment 12 months after initiation of antiretroviral therapy	79.3	71.3	87.5
3	Number of PLHIV attending HIV treatment and care settings, who were screened for	99%	99%	99%
4	Number of adults and children with advanced HIV infection currently receiving	3,907	4,346	5,269
5	Number of health facilities providing comprehensive TB/HIV collaborative	2	2	2

1. Number of comprehensive care and treatment clinics

By the end of 2017, twelve (12) CTCs were operational in both Unguja and Pemba. It was observed during this year an increased enrolment of **955** patients, compared to **751** patients in 2016. (See table 3.1.1). This was contributed by effective escorted referral of clients to CTCs. These clinics enrol patients referred from various entry points that include PITC, VCT, TB, and PMTCT. The remarkable increase of enrolment of HIV positive patients above 15 years was noted in Mnazi Mmoja, Mwembeladu, Bububu, Alrahma, Mkoani and Makunduchi CTCs.

Table 3.1. 1: Patients enrolment at CTC by age group and facility 2015 - 2017, Zanzibar

Facility	Below 15 yrs			Above 15 yrs		
	2015	2016	2017	2015	2016	2017
Bububu	2	2	10	64	79	127
Kivunge	2	2	2	18	41	46
Mwembeladu	1	8	13	124	146	195
Mnazi Mmoja	21	29	24	301	274	309
Alrahma	0	0	0	34	19	33
Makunduchi	1	1	2	17	16	28
Kidongochekundu clinic	0	0	0	0	1	1
ZAYEDESA	0	0	1	70	81	74
Chake Chake	1	2	3	21	19	26
Mkoani	2	0	5	5	3	17
Micheweni	0	0	0	0	5	4
Wete	1	1	6	16	22	29
Total	**31**	**45**	**66**	**670**	**706**	**889**

As of December 2017, a total of **10,192** patients have ever been enrolled in CTCs of whom **7,906** (**77.6%**) are ever started on ARVs at these facilities. However, those who were receiving care were **5,385**. Table 3.1.2 below illustrate the number of clients currently receiving care by age, sex and CTC clinics in Zanzibar.

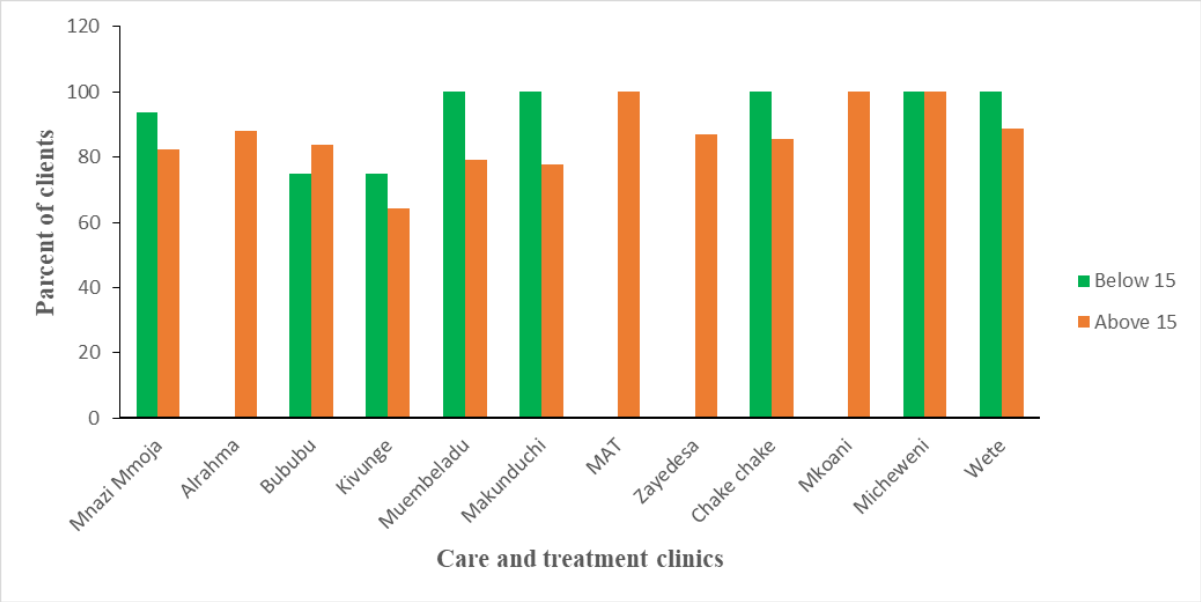
Table 3.1. 2: People living with HIV who are current on care as of December, 2017 by age group, sex and clinic, Zanzibar

Name of the clinic	Age group and sex																Total	
	< 1		1-4		5-9		10-14		15-19		20-24		25-49		50+			
	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M
Mnazi Mmoja	1	0	10	16	29	24	38	57	69	31	92	23	1,226	478	319	232	1,784	861
Mwembeladu	1	1	4	5	10	13	7	11	4	2	37	5	530	146	79	44	672	227
Al Rahma	0	0	1	0	0	1	0	2	2	0	3	2	102	16	18	16	126	37
Bububu	0	0	0	3	2	7	4	3	11	6	19	5	282	112	40	54	358	190
ZAYEDESA	0	0	1	0	0	0	0	0	1	1	14	3	100	75	22	14	138	93
Kidongo Chekundu	0	0	0	0	0	0	0	0	0	0	1	0	9	19	0	0	10	19
Kivunge	0	0	2	0	4	1	2	6	3	1	8	0	149	49	21	21	189	78
Makunduchi	0	0	0	0	2	1	3	1	1	2	5	0	65	11	11	11	87	26
Total- Unguja	**2**	**1**	**18**	**24**	**47**	**47**	**54**	**80**	**91**	**43**	**179**	**38**	**2,463**	**906**	**510**	**392**	**3,364**	**1,531**
Pemba																		
Wete	1	0	1	1	2	4	2	7	4	3	7	0	72	33	18	11	107	59
Micheweni	0	0	0	0	0	1	2	4	1	0	3	0	21	9	2	1	29	15
ChakeChake	0	0	2	3	1	4	5	2	7	3	8	2	91	37	31	18	145	69
Mkoani	0	0	0	2	2	0	1	2	4	0	1	0	30	12	3	9	41	25
Total -Pemba	**1**	**0**	**3**	**6**	**5**	**9**	**10**	**15**	**16**	**6**	**19**	**2**	**214**	**91**	**54**	**39**	**322**	**168**
Total- Zanzibar	**3**	**1**	**21**	**30**	**52**	**56**	**64**	**95**	**107**	**49**	**198**	**40**	**2,677**	**997**	**564**	**431**	**3,686**	**1,699**

2. Percentage of adults and children with HIV still alive and known to be on treatment 12 months after initiation of antiretroviral therapy

Overall percentage of patients who are still alive and known to be on treatment 12 months after initiation of antiretroviral therapy (ART) has increased from **71.3%** in 2016 to **87.5**% in 2017. This was contributed by increase number of clinicians attending clients at CTCs, improved adherence counselling and defaulter tracing by peer educators. It has been observed that children below fifteen years have high retention rate compared to adult in all care and treatment clinics. Kivunge had the lowest retention rate **75%** for under 15 years and **64.3%** for clients above 15 years compared to other clinics. In Alrahma, ZAYEDESA, Mkoani, and Kidongo Chekundu CTCs there was no child below 15 years who were started on ART in 2016, hence there was no retention of the children below 15 years (See figure 3.1.1).

Figure 3.1. 1: Percentage of adults and children still alive and on ARVs by age group and facility, Zanzibar, 2017*



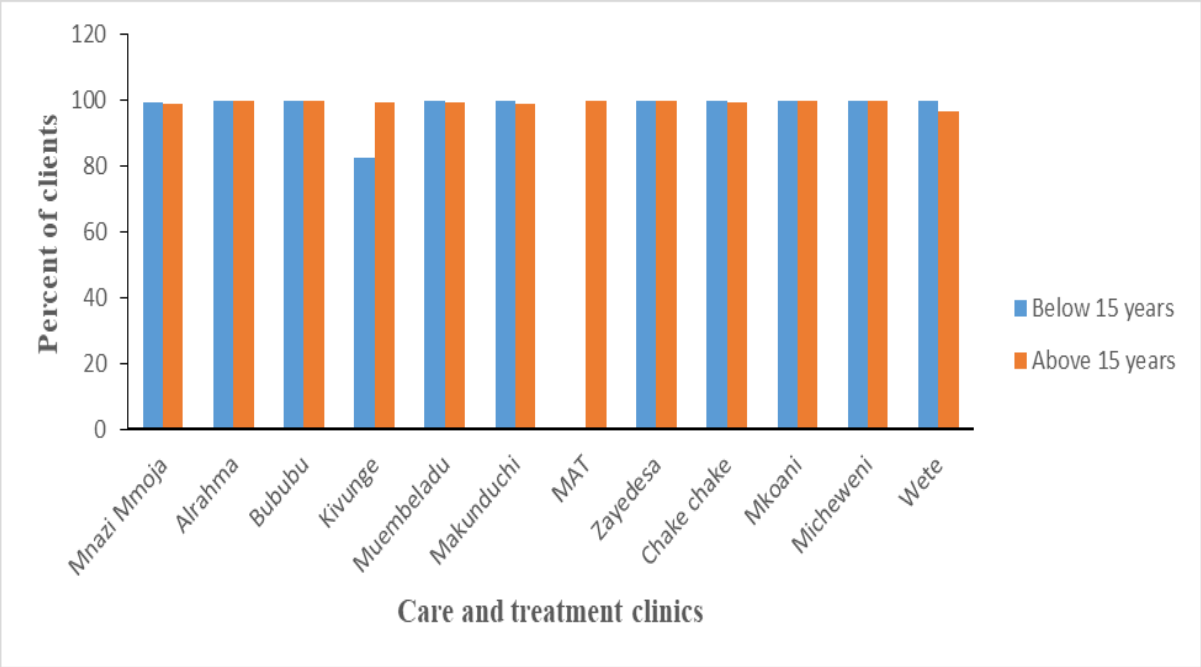
***Cohorts of January to December 2016, reported in 2017**

3. Number of PLHIVs attending HIV treatment and care settings, who were screened for TB symptoms, in the preceding 12 months

Overall percentage of CTC clients screened for TB in 2017 was **99.3%.** However, in Kivunge CTC, the percentage of patients screened for TB was below **95%**. This has been contributed by patients who were being picked drugs by their treatment supporters, and hence

were not screened. The figure below shows the number of HIV patients who were screened for TB out of those who received care during the period. Among **5,999** clients who were screened for TB, **81** were diagnosed and started on TB treatment.

Figure 3.1. 2: Percentage of HIV patients screened for TB among those who received care by facility and age group Zanzibar, 2017



4. Number and percentage (%) of adults and children with advanced HIV infection currently receiving ART

As of December 2017, patients who were currently on care were **5,385** in all CTCs and current on ARVs including transfer in were **5,269** which is **82.4% (5,269/6,393)** of patients estimated to be in need of treatment according to spectrum file of June 2017. Of these males who are current on ART are 1,662 which is **64.8%(1,662/2,566)** of male patients estimated to be in need of treatment while women who are current on ART are 3,607 which is **94.3% (3607/3,827)** of female patients estimated to be in need of treatment. Number of patients currently receiving ART has increased from **4,346** in 2016 to **5,269** in 2017 (Table 3.1.3)

Table 3.1. 3: People living with HIV who are current on ART by age group, sex and clinic as of December, 2017

Name of the clinic	Age group and sex																Total	
	< 1		1-4		5-9		10-14		15-19		20-24		25-49		50+			
	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M
Mnazi Mmoja	1	0	10	16	29	23	38	56	67	31	88	21	1,206	466	318	232	1,757	845
Mwembeladu	1	1	3	3	9	13	7	11	4	2	34	5	512	141	76	43	646	219
Al Rahma	0	0	1	0	0	1	0	2	2	0	3	2	101	16	18	16	125	37
Bububu	0	0	0	3	2	7	4	3	11	6	18	5	281	111	39	51	355	186
ZAYEDESA	0	0	1	0	0	0	0	0	1	1	14	3	96	73	22	14	134	91
Kidongo Chekundu	0	0	0	0	0	0	0	0	0	0	1	0	9	19	0	0	10	19
Kivunge	0	0	2	0	4	1	2	6	3	1	8	0	147	48	20	20	186	76
Makunduchi	0	0	0	0	2	1	3	1	1	2	4	0	63	11	11	10	84	25
Total- Unguja	**2**	**1**	**17**	**22**	**46**	**46**	**54**	**79**	**89**	**43**	**170**	**36**	**2,415**	**885**	**504**	**386**	**3,297**	**1,498**
Pemba																		
Wete	1	0	1	1	2	3	2	7	4	3	7	0	68	33	18	11	103	58
Micheweni	0	0	0	0	0	1	2	3	1	0	3	0	20	9	2	1	28	14
ChakeChake	0	0	2	3	1	4	5	2	7	3	8	2	86	36	31	18	140	68
Mkoani	0	0	0	2	2	0	1	2	3	0	1	0	29	11	3	9	39	24
Total -Pemba	**1**	**0**	**3**	**6**	**5**	**8**	**10**	**14**	**15**	**6**	**19**	**2**	**203**	**89**	**54**	**39**	**310**	**164**
Total- Zanzibar	**3**	**1**	**20**	**28**	**51**	**54**	**64**	**93**	**104**	**49**	**189**	**38**	**2,618**	**974**	**558**	**425**	**3,607**	**1,662**

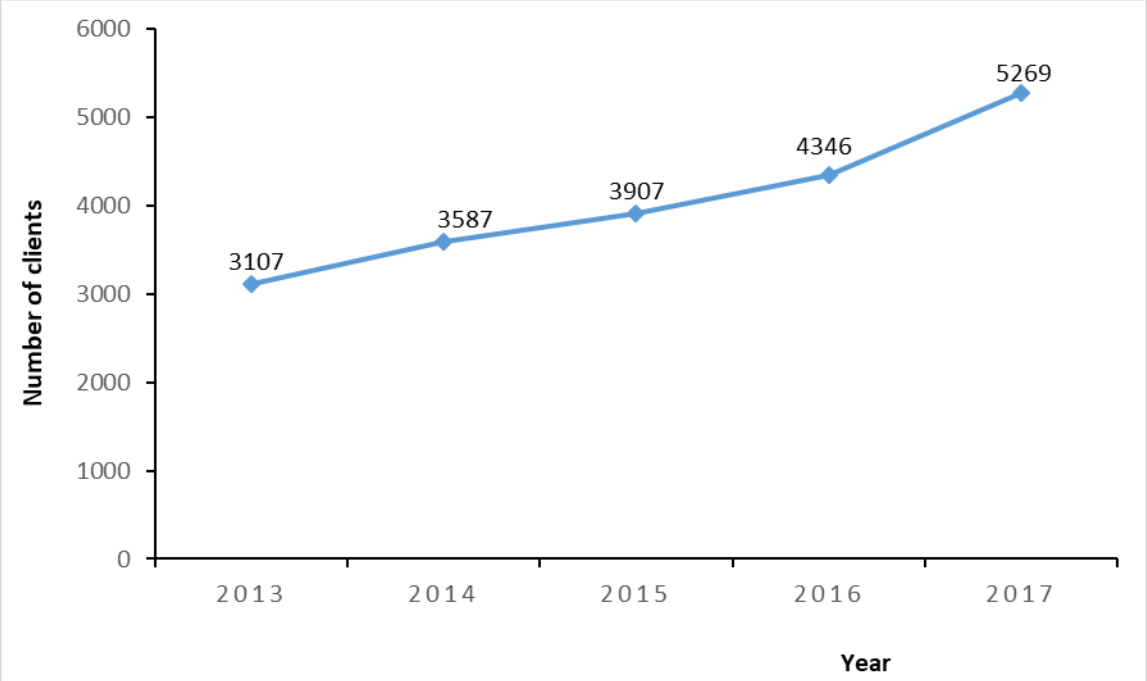
5. Number of health facilities providing comprehensive TB/HIV collaborative activities

Currently there are two sites providing comprehensive TB/HIV services (Mnazi Mmoja and Chake Chake hospitals). During this year, there were **62** TB/HIV co-infected patients who were treated for TB and receive ARV drugs in these clinics.

3.1.6 Trend of PLHIV currently on ART from 2013 to 2017

The figure below shows patients currently on ART have increased progressively from **3,107** in 2013 to **5,269** by December 2017. The increase in 2017 was contributed by adaptation of new WHO recommendation "Test and Treat approach".

Figure 3.1. 3: Number of PLHIV currently receiving ART 2013-2017, Zanzibar



3.1.7 Challenges

- Persistent of defaulters among PLHIV enrolled at CTC
- Delay of Viral load results
- Retention rate at Makunduchi and Kivunge CTCs was low

3.2 HOME BASED CARE SERVICES

3.2.1 Background

Home Based Care services in Zanzibar were established in 1988 in 3 districts Unguja and 2 in Pemba to cater for AIDS patients only. To date, HBC services have been scaled up to 144 health facilities in all 10 districts of Zanzibar. The community-based HBC volunteers are pivotal in the provision of these services at the community. HBC volunteers are working under supervision of facility-based HBC providers. Each health facility has a contact person (facility supervisor) who is accountable for all HBC services at facility level.

3.2.2 Goal

The goal of Home Based Care is to provide comprehensive home-based care services to HIV/AIDS patients and those patients with other chronic illnesses in Zanzibar.

3.2.3 Objectives of Home based care services:

1. To improve quality of HBC services.
2. To enhance capacity of HBC implementers at all levels of service provision.

3.2.4 Program Implementation

3.2.4 .1 Services monitoring

During this year HBC unit managed to conduct supportive supervision to facility-based HBC providers at 172 health facilities (92 in Unguja and 80 in Pemba). The objective of supportive supervision was to improve performance of home based care providers to deliver quality and comprehensive HBC services, including appropriate documentation.

Moreover, quarterly meetings with 200 CHBC providers (120 in Unguja and 80 in Pemba). was conducted. The objective of meeting was to share experience and challenges faced during provision of HBC services. However, incentives for CHBC were provided in all districts with the aim to motivate community volunteers to continue providing care to patients.

3.2.5 HBC Services indicators and Trends from 2015 - 2017, Zanzibar

Indicator	2015	2016	2017
1. Number of skilled facility-based HBC providers	167	167	159
2. Number of skilled community-based HBC providers	409	407	403
3. Number of adults and children provided with home based care (HBC) services	2,694	2,351	3,158

1. Number of skilled facility-based HBC providers.

The number of skilled facility based HBC providers has decreased due retirement of eight staff four in Pemba (Makongeni, Finya, Chake chake Hosp and Kengeja) and four in Unguja (Kizimbani, Welezo, Ubago).

2. Number of skilled community-based HBC providers.

Number of skilled community-based HBC providers has decreased from 407 to 403 four more community volunteers have died in 2017.

3. Number of adults and children provided with HBC services.

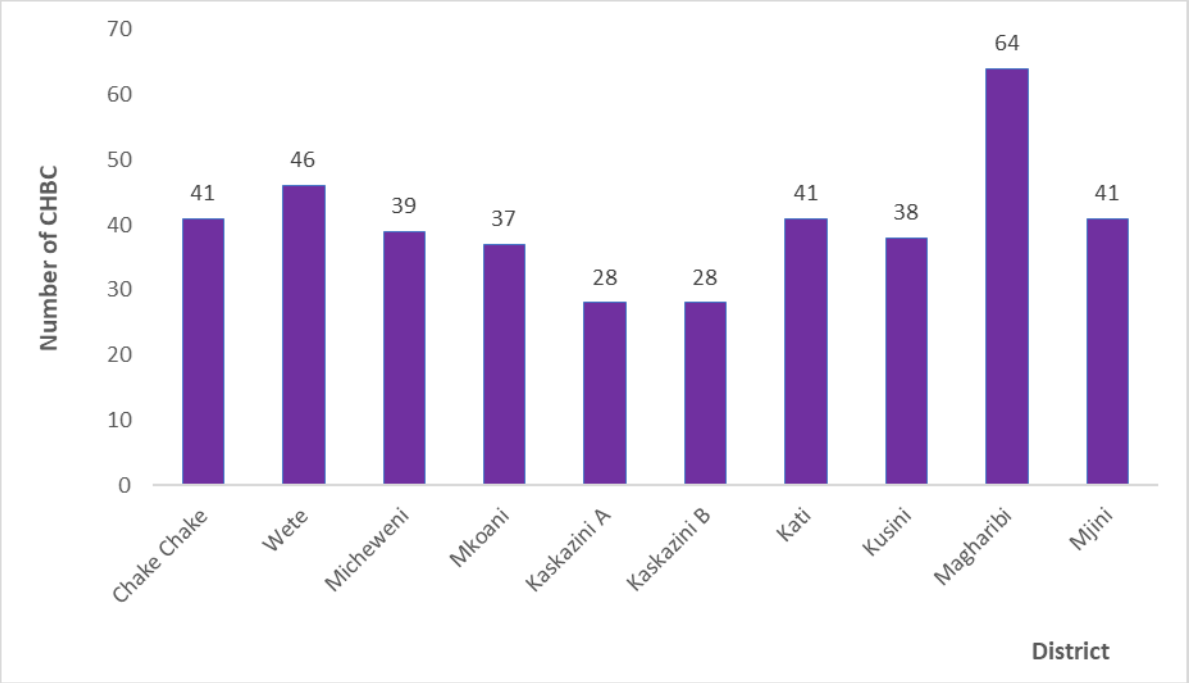
Home based provider offer of various services to HIV and other chronic disease about **3,158** patients received HBC services in which **1,211** were People living with HIV where **812** Female and **399** were male. Chronic ill patients were **1,947** (1,051 females and 896 male).

Table 3.2. 1: Number of health facilities with active HBC providers implementing HBC services by districts, Zanzibar, 2017

District	Number of HBC sites	Number of HBC providers active in field
Mjini	14	18
Magharibi	18	18
Kusini	12	16
Kati	21	22
Kaskazini A	14	16
Kaskazini B	11	12
Chake Chake	13	13
Wete	17	18
Mkoani	13	14
Micheweni	11	12
Total	144	159

The table above shows that there are 144 sites (54 in Pemba and 90 Unguja) that implement HBC services which are provided by 159 skilled service providers (102 in Unguja and Pemba 57). The number of these providers has been decreasing due to retire of eight providers four in Pemba and four in Unguja in year of 2017 last years it was 167.

Figure 3.1. 4: Number of CHBC providers by districts, Zanzibar, 2017



The table above shows that there are **403** CHBCs (in 248 Unguja and in 163 Pemba) that are currently providing HBC services, but the number of CHBC is still in adequate to curter the needs in all identified catchment areas.

More patients were provided with HBC services in 2017 which was **3,158** compared to **2,351** patients in 2016. This achievement was due to improved documentation of HBC data through proper recording and reporting of HBC into DHIS 2 database and provision of target to all health facilities in Unguja and Pemba.

Table 3.2. 2: Number of clients who received HBC services by disease category, sex and age group in Zanzibar, 2017

Age (years)	HIV patients		Other chronic diseases		Total
	M	F	M	F	
0 – 4	9	5	19	16	**49**
5 – 14	46	43	95	67	**251**
≥ 15	344	764	782	968	**2,858**
Total	**399**	**812**	**896**	**1,051**	**3,158**

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

3.2.6 Challenges

- Shortage of funds to implement HBC services
- Patients self-stigmatization its decrease enrolment in HBC services particularly on PLHIV patients

CHAPTER 4:

TUBERCULOSIS AND LEPROSY SERVICES

4.1 Background

The Ministry of Health established Zanzibar Tuberculosis and Leprosy services in 1987 with the aim of facilitating early diagnosis treatment and cure of Tuberculosis (TB) and Leprosy patients so as to reduce the incidence and prevalence of disease. All 158 public health facilities and 6 private facilities are providing TB services through direct observed therapy (DOT) and Leprosy services. A total 56 (18 in Pemba and 38 in Unguja) TB diagnostic centers do smear examination, 8 health facilities (3 Unguja and 5 Pemba) have the capacity to perform x-ray services, one Public Health Laboratory performing TB culture and two sites provide Gene x pert services (Mnazi mmoja and Chake Chake), 8 CSOs/NGOs are also involved in TB care and control in Zanzibar.

4.2 Goal

To reduce the incidence by 25% and mortality by 50% of TB and Leprosy by 2019

4.3 Objectives

1. To provide universal access to quality assured services to detect and treat 90% of all forms of estimated TB cases by 2019
2. To diagnose and properly manage all estimated MDR TB cases by 2019
3. To increase the proportion of TB patients co-infected with HIV receiving timely ART from 52% to 100% by 2019
4. To reduce new leprosy cases with disability grade 2 from 0.9 to 0.3 per 100,000 populations by 2019.

4.4 Programme Implementation

4.4.1 Capacity building

In 2017, TB unit had conduct several trainings to health care workers (HCWs) of different cadres in Unguja and Pemba:

Five days' workshop to develop training material on Programmatic Management Drug Resistance TB (PMDT) training was conducted. Following the workshop, 22 participants (19

from Unguja, and 3 from Pemba) were trained on PMDT for five days. The aim of this training was to build capacity of health care workers on PMDT interventions so as to increase MDR TB suspicious index, improve diagnosis and management of DR TB patient.
Five days' refresher trainings on Paediatric TB to 30 (25 Unguja, 5 Pemba) participants and TB/HIV management to 60 (30 Unguja, 30 Pemba) health care providers were conducted. The objective of the trainings was to build capacity of health care providers on provision of quality childhood TB and TB/HIV management.

Seventy (70) Community Home Based Care providers and DOT treatment supporters (40 Unguja, 30 Pemba) were trained on how to use SOPs and supporting treatment and provision of counselling. The aim of the training was to build capacity of community volunteers on provision of quality and effective DOT services to TB patients in their respective areas.

Moreover, two sessions of one-day workshop to link CSOs on sputum collection was conducted whereby 68 participants (36 from Unguja and 32 from Pemba) were involved. The objective was to create a link with CSOs on sputum collection and transportation.

A ten days' mentorship to HCWs providing TB, MDR TB and leprosy services was conducted in 15 health facilities (10 Unguja and 5 Pemba) identified with major issues. The aims were to provide support on identified gaps and enhance capacity of HCWs to provide quality TB, TBHIV and leprosy services.

4.4.2 Service Monitoring

Quarterly supportive supervision to health care facilities at all levels to monitor the implementation of TB/HIV, MDR-TB and leprosy activities conducted. A total of 94 (62 Unguja and 32 Pemba) health care facilities were supervised. The aim of the supervisions was to assess the performance of District coordinators and other HCWs working in TB, TB/HIV and Leprosy services. Following supportive supervision, the unit had conduct feedback meetings with health care providers to discuss supervision findings and plan a way forward to resolve the challenges identified during supervision.

In addition, the program had conduct biannual supportive supervision and feedback meetings to CSOs/NGOs implementing community TB care and control interventions in Unguja and Pemba.

Furthermore, quarterly program and cohort review meetings which involved key stake holders were conducted. The aim of these meetings were to discuss various TB, TB-HIV, MDRTB and leprosy issues including success, challenges and share best practices as well as reviewing MDRTB patients.

TB contact investigation for 444 (283 Unguja and 161 Pemba) smear positive TB patients were conducted, where by 1752 house hold members were reached and given health education, 155 TB presumptive were screened for TB, of them 36 (23from Pemba and 13from Unguja) were diagnosed with TB and 217 under-fives were provided with INH prophylaxis. In addition, the program provide mentorship on self-care services among Leprosy patients. The aim was to build capacity of people affected by Leprosy to provide self-care so as to prevent further worsening of their existing disabilities.

4.5 Tuberculosis service indicators and trend from 2015 to 2017

Indicators		**Year**		
		2015	**2016**	**2017**
1.	Number of notified cases all form of TB – Bacteriological confirmed plus clinical diagnosed new and relapse cases	855	723	948
2.	Percent of new bacteriological confirm TB	56%	50%	52%
4	Treatment success rate bacteriological confirmed TB cases	91%	91%	93%
5	Treatment success rate–-all new TB cases	92.5%	93%	92%
6	Percentage of patient who had HIV test result recorded in the TB register	93%	99%	99%
7	Proportion of registered new and relapse TB patients with documented HIV positive status	14%	15%	13%
8	Percent of HIV positive TB patient initiated on ART	86%	88%	95%
9	Percent of HIV positive TB patient on CPT	98%	90	99%
10	Number of bacteriological confirmed drug resistant TB cases	2	3	3

11	Number of cases with drug resistant TB that began second-line treatment	2	1	3

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

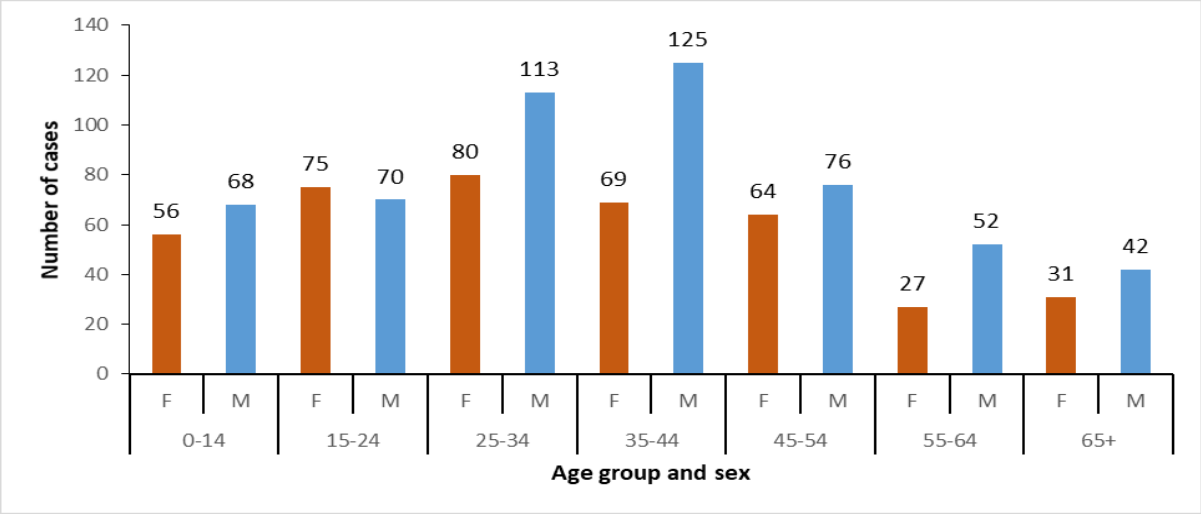
Number of notified cases has increased from **723** in 2016 to **948** in 2017 this might be contributed by strengthen sputum collection and transportation from peripheral facilities and the use of new technology of Gene X-pert, as well as involvement of CSOs which contribute **65(7%)** of notified cases. Among the notified cases, **511(54%)** were smear positive including 3 MDR-TB. In addition, **20 (2%)** retreatment cases were notified as shown in the table 4.1 below. However, the unit has not reached the set target of 1,450.

Table 4. 1: TB cases notified by type of patient and category, Zanzibar, 2017

Type of patients	AFB+	AFB-	EP	Total
New	493	209	225	**927**
Relapse	7			**7**
Failure	3			**3**
Return to control	5			**5**
Others	0	3	0	**5**
MDR TB	3	0	0	**3**
Total	**511**	**212**	**225**	**948**

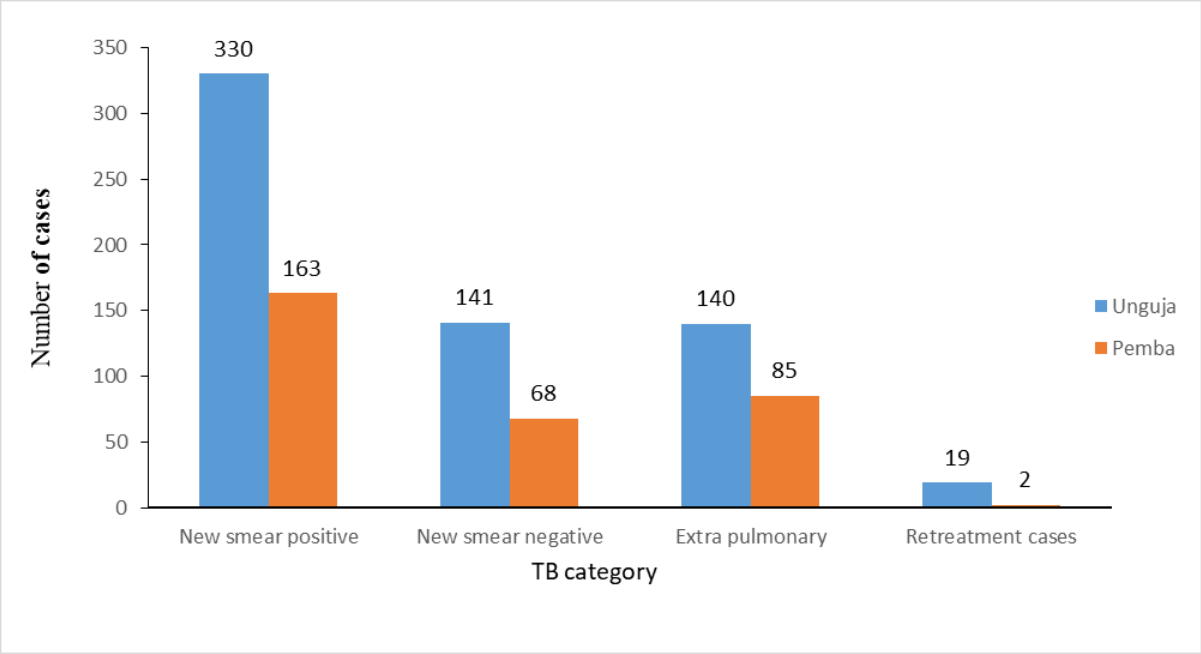
Among all patients notified in 2017, all sex and age groups were affected, but the most affected age group was 15 – 54 years with male more affected than female. Also children under 15 years of age contributed 13% of all cases.

Figure 4. 1: Age and sex distribution of all TB cases notified 2017



Among **948** patients notified in 2017, **630 (66.4%)** were in Unguja and **318 (33.6%)** in Pemba as seen in figure 4.2. below. However, Unguja Island reported higher number of retreatment cases (19) compared to (2) in Pemba which alarming the program to strengthen follow up so as to prevent the occurrence of MDR TB as shown in figure below:

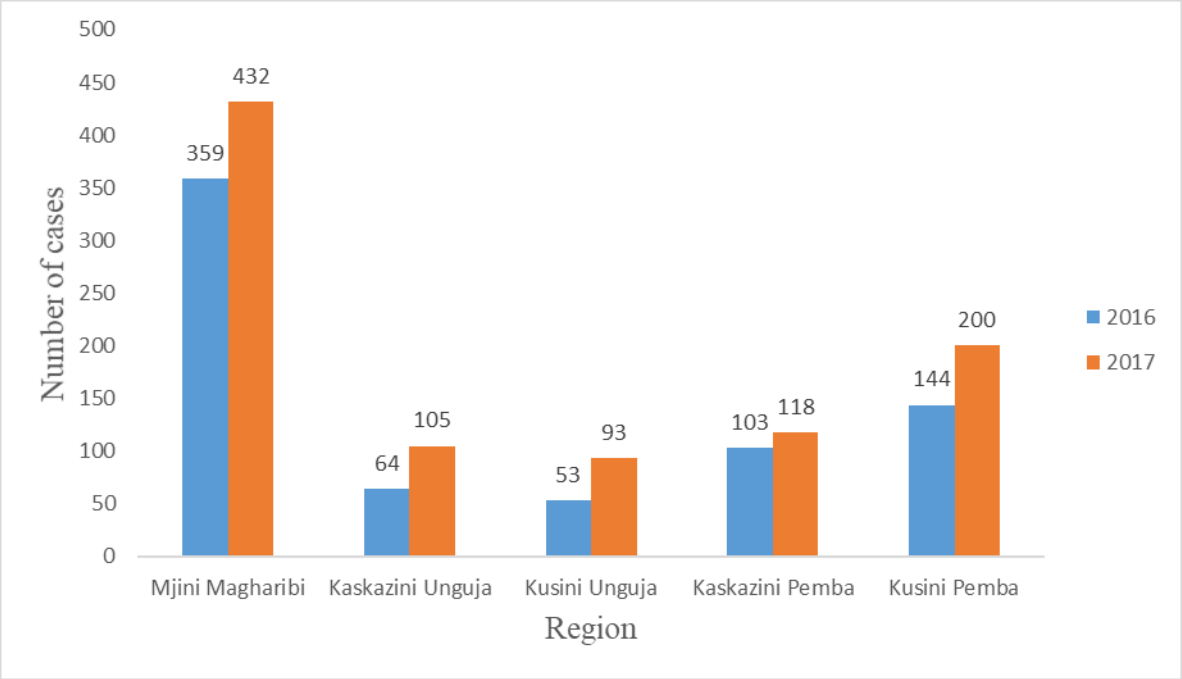
Figure 4. 2: TB case notification by category and Island, Zanzibar, 2017



In the year 2017, the number of notified TB patients is highest in Mjini Magharibi region **432 (45.5%)**, followed by Kusini Pemba **200 (21%)**. Kaskazini Unguja region reported low number of TB cases notified **105 (11 %)**, followed by Kusini Unguja **93 (10%)**, Generally,

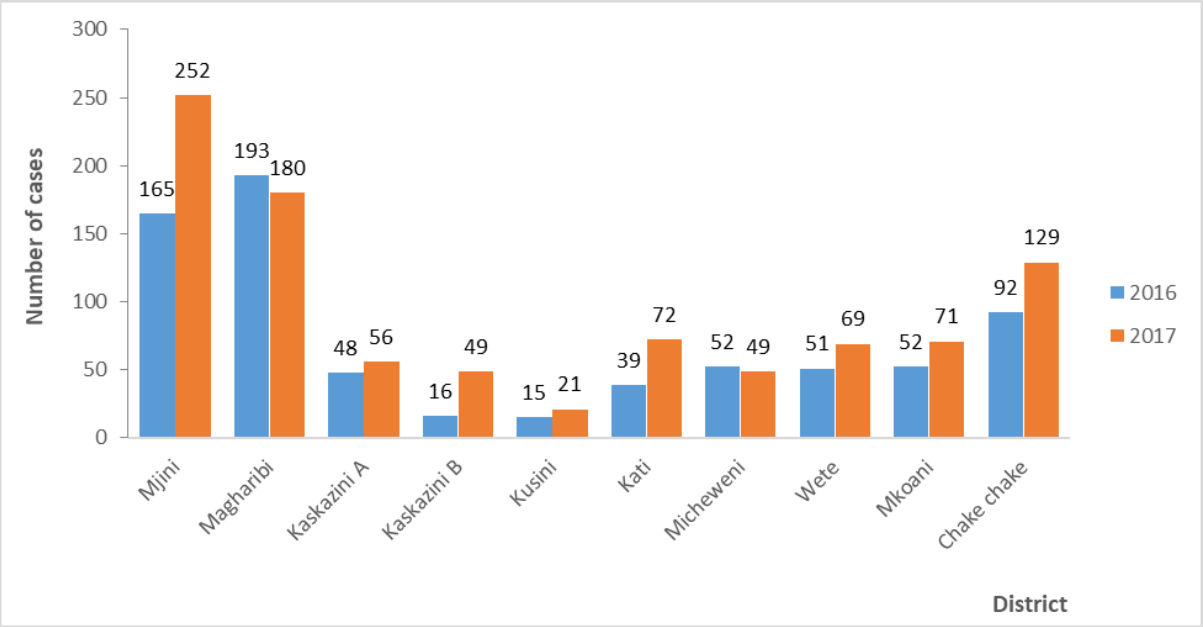
there is an increased number of TB cases notified in 2017 in most of the regions compared to the number of cases reported in 2016 (see figure 4.3. below).

Figure 4. 3: TB case notification by region, Zanzibar, 2016 – 2017



Number of notified TB patients has been increased across all districts with the exception of Micheweni and West districts. There is remarkable increased of cases in Mjini and Chake Chake district. The increase might be contributed by CSOs community intervention which mainly allocated in Urban area. As shown in figure 4.3 below.

Figure 4. 4: TB case notifications by Districts, Zanzibar, 2017



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

The proportion of new bacteriological confirmed TB has slightly increased from **50% (361/723)** in 2016 to **52% (493/948)**. The most affected group are adults between 25 to 44 years which was **229 (45%)**. Men were more affected **(59%)** than women **(41%)** as shown in table 4.2 below:

Table 4. 2: Age and sex distribution of new bacteriological confirm TB, Zanzibar 2017

Age Category	Male	Female	Total
0-14	8	15	23 (4.6 %)
15-24	43	52	95 (19.2%)
25-34	72	44	116 (22.5%)
35-44	82	31	113 (22.9%)
45-54	42	32	74 (15%)
55-64	26	17	43 (8.7%)
65+	19	10	29(5.8%)
Total	**292 (59%)**	**201(41%)**	**493 (100%)**

2. Treatment success rate bacteriological confirmed TB cases

A total of **381** bacteriological confirmed TB patients started TB treatment in 2016; among them **346** were cured and **2** treatments complete. Therefore, treatment successes rate of bacteriological confirmed TB cases was **91.3%** which is below the target of **95%** for this year. (As shown in table 4.3).

3. Treatment success rate–-all new TB cases

In the year 2017 the treatment success rate for all new TB cases registered and started treatment in 2016 was **92%** (638/695). The success rate for all new TB cases is nearly the same with 92.5% (**571/617**) in 2015. The program was not able to reach the set target of 95% due to the reason that 3.5 % of cases died and 4% transferred out. As shown is table 4.3 below

Table 4. 3: Treatment successes rate for all TB patients registered, Zanzibar, 2017

Type	Notified	Cured	T. comp	Failure	Died	Loss to follow up	Not evaluated	Total
S. positive	361	333	2	1	9	5	11	**361**
S negative	138		132		5	0	1	**138**
Ext. pulm	196		171		11	0	14	**194**
Relapse	13	9	0	0	1	1	2	**13**
Failure	3	2	0	0	0	1	0	**3**
Return	4	2	0	0	0	2	0	**4**
Others	5		5		0	0	0	**5**

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

As of 2017 **948** TB patients registered, among them **940** (**99%)** patients were tested for HIV and result recorded in the TB register. The proportion of TB patient tested for HIV has remained the same as **99%** in 2016. More effort in strengthening counselling on PITC and improving documentation is needed to reach the target of 100%.

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

There is a decrease in proportion of patients who were diagnosed with TB/HIV co-infection from 15% in 2016 to 13% in 2017. Among them **65%** (80) were from CTC and **35%** were patients from TB clinics. See figure 4.5 below.

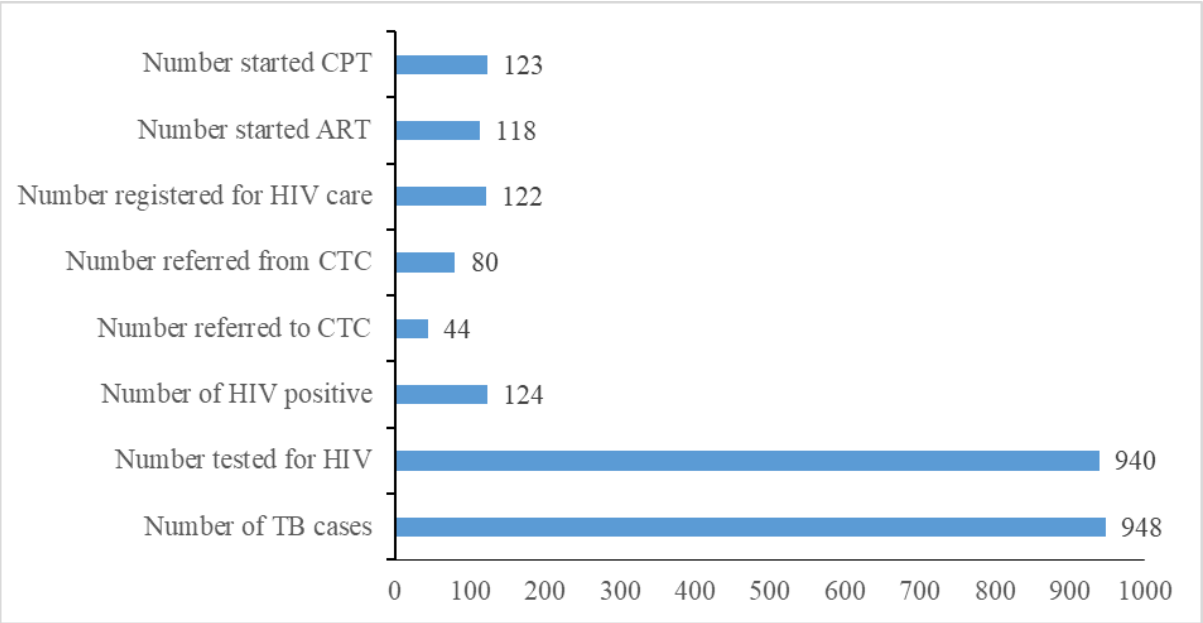
6. Percent of HIV positive TB patient initiated on ART

Among **124** TB/HIV patients diagnosed in 2017, **118** (**95%**) started ART (figure 4.5). There is an increased number of HIV positive started ART compare to 97 (88%) in 2016. Follow up on adherence counselling on ART initiation and up to date documentation is needed to ensure 100% WHO target is achieved. However, the proportion is within the program target of **95%**.

7. Percent of HIV positive TB patient on CPT

The percentage of TB/HIV patients started on CPT is **99%** (123/124), the proportion of TB/HIV patient who started CPT has increased from **90%** in 2016 to 99% in 2017. The program managed to reach above the set target of **97.7%.** This might be contributed by strengthening counseling services for co-infected patients through early provision of CPT.

Figure 4. 5: TB/HIV notification, Zanzibar, 2017



8. Number of bacteriological confirmed drug resistant TB cases

Three MDR TB cases were notified in 2017; the number is low compare to target of **11** cases. Effort has been made on strengthening follow up of MDR TB suspect, however the detection rate is still low. Efforts to determine the actual prevalence of MDR cases in Zanzibar are still ongoing.

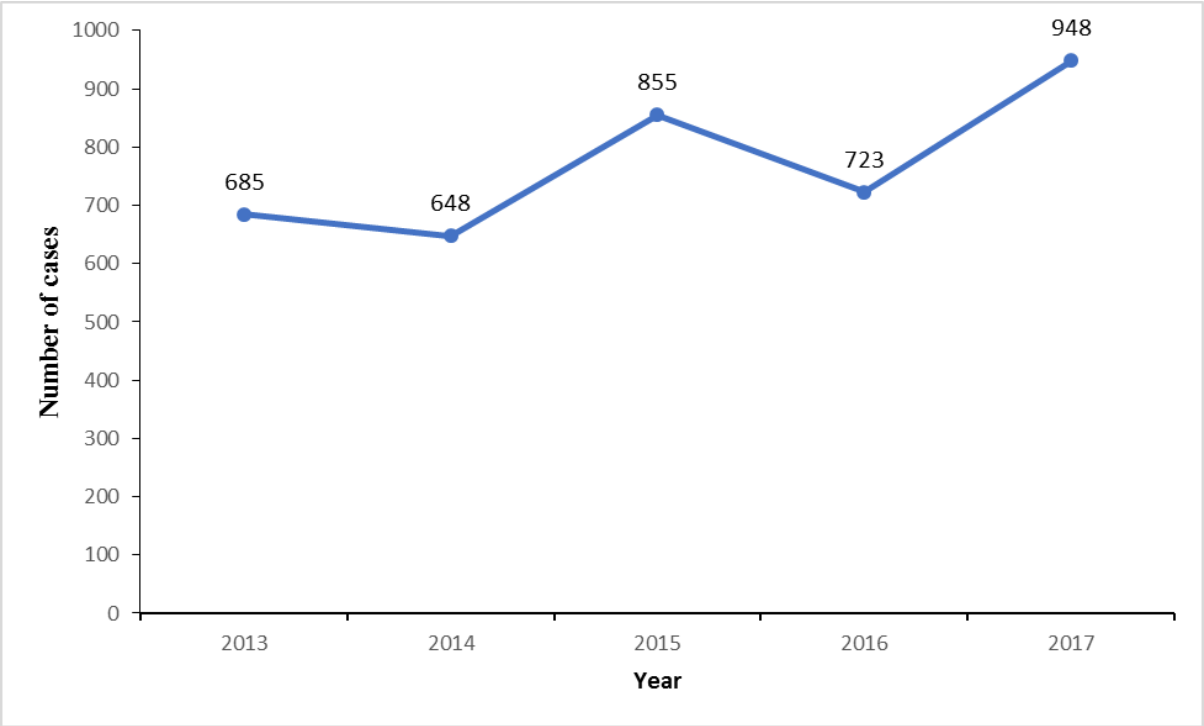
9. Number of cases with drug resistant TB that began second-line treatment

All **3** MDR cases notified in 2017 started on second-line treatment.

4.6 Trend of TB case notification from 2013 to 2017

For the past five years, the number of notified TB cases has been increased from 685 in 2013 to 948 cases in 2017. As shown in figure below.

Figure 4. 6: Trend of TB case notification from 2013 to 2017, Zanzibar



4.7 Leprosy services indicators and trend from 2015 to 2017

Indicators		Years		
		2015	2016	2017
1.	Number of all new registered Leprosy cases	104	77	98
2.	Percent of MB cases among all new cases	71	71.8	72.4
3.	Percent of children among new cases	16	19.4	20
4.	Percent of WHO disability grade 2 among new cases	5.8	9	4
5.	Rate of disability grade 2 per 100,000 population	0.01	0.4	0.06
6.	Percent of female patients among new cases	22	29	39
7.	Percent of MB Leprosy patients completing 12 months of MDT amongst those expected to complete their MDT (calculated for 1 year cohort intake)	97	98	99

1. Number of all new registered Leprosy cases

In 2017 total of **98** new leprosy cases were registered, among them, **75** (**76.5%)** were diagnosed in Unguja and **23** (24.4**%**) were diagnosed in Pemba. Of these **71** were Multi bacillary (MB), and **27** were Pauci bacillary (PB). as shown in the figure 4.7 below. The number of leprosy cases diagnosed has increased from **77** in 2016 to **98** cases in 2017. The increase might be contributed by strengthen case detection and mentorship on leprosy diagnosis and management to health care providers.

Figure 4. 7: Number of all new registered Leprosy cases by type and Island, Zanzibar, 2017

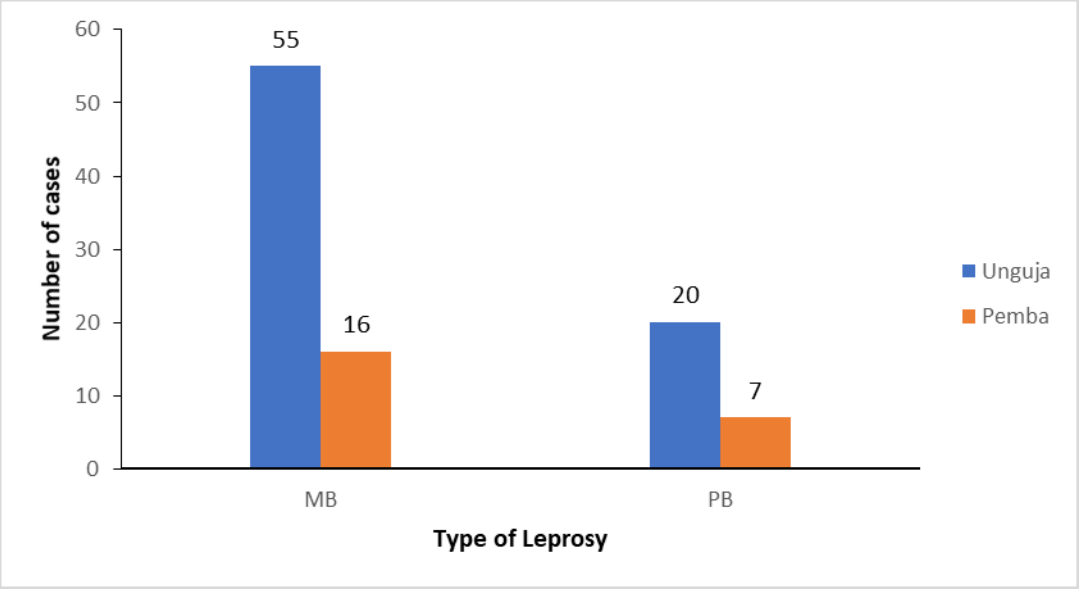


Figure 4.8 below illustrates the number of leprosy cases notified per region. Mjini Magharibi region had **45 %** of all cases notified in 2017, followed by Kusini Unguja which had **21.4%** of the cases. As explained above, both two regions of Pemba (Kusini Pemba and Kaskazini Pemba) had reported low number of leprosy cases, **11%** and **12%** respectively**.**

Figure 4. 8: Number of Leprosy notified cases by region Zanzibar, 2017

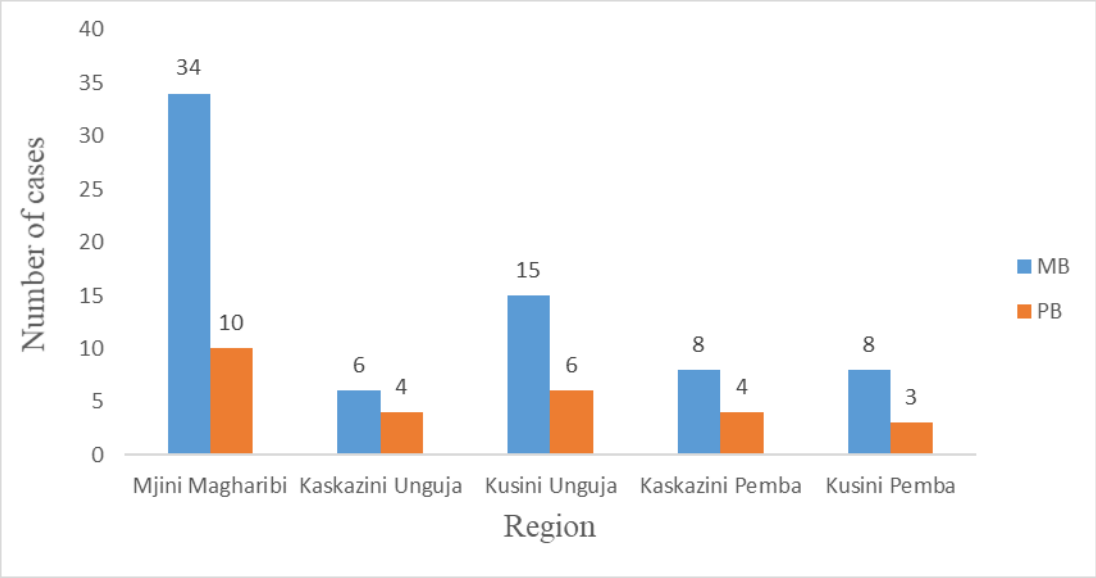
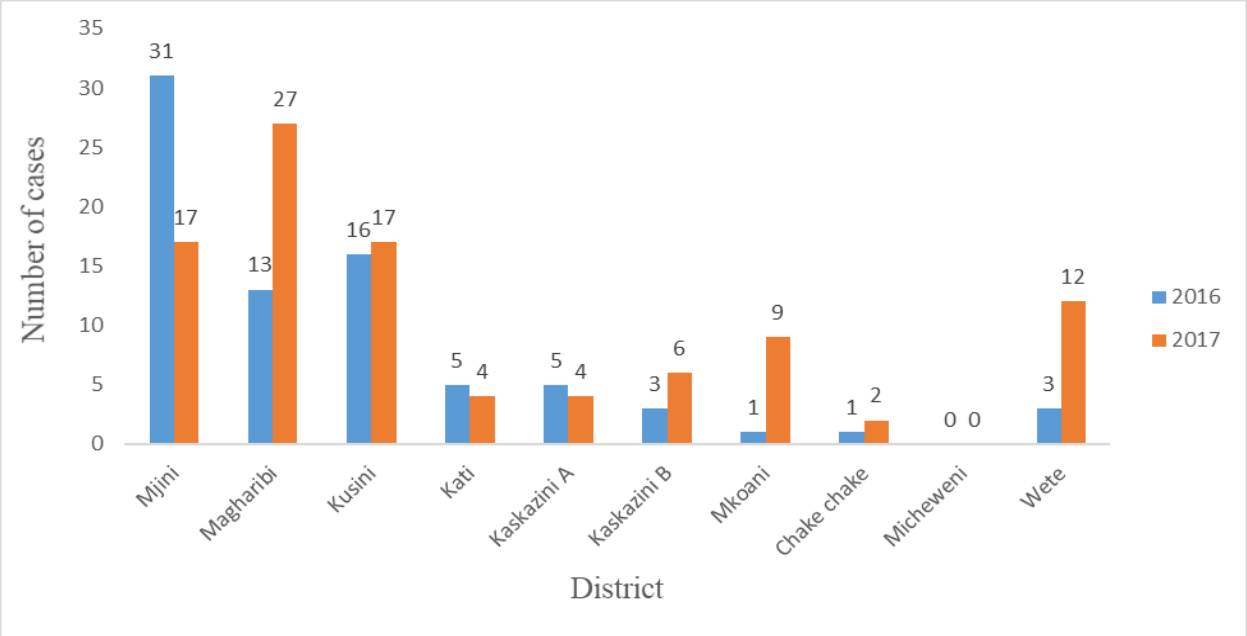


Figure 4.9 below illustrates the number of leprosy cases notified per district. It has been noted that, Magharibi district had **27 (27.5 %)** of all cases notified in 2017 followed by Mjini and Kusini districts **17 (17%).** However, the number of notified cases in Mjini district has been decreased compare to 2016. There is remarkable increase in number of notified cases in Wete district. Micheweni had no cases reported throughout the two years.

Figure 4. 9: Leprosy notification by District Zanzibar 2016 & 2017



Leprosy notification by age and sex

Among 95 new cases detected, all age groups and sex seen similarly affected by leprosy, male with the age group between 15- 44 are more affected compared to female of the same age. In addition to that male are more affected with MB type of leprosy which is more infectious as shown in table 4.4 below.

able 4. 4: Age and sex distribution and type of new leprosy cases registered during the year 2017, Zanzibar

Category	Age and Sex																GRAND TOTAL
	0-14		15-24		25-34		35-44		45-54		55-64		65+		TOTAL		
	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	
MB	2	5	4	15	6	9	5	9	3	1	0	2	2	5	22	46	68
PB	6	7	1	1	5	2	1	1	2	1	0	0	0	0	15	12	27
TOTAL	**8**	**12**	**5**	**16**	**11**	**11**	**6**	**10**	**5**	**2**	**0**	**2**	**2**	**5**	**37**	**58**	**95**

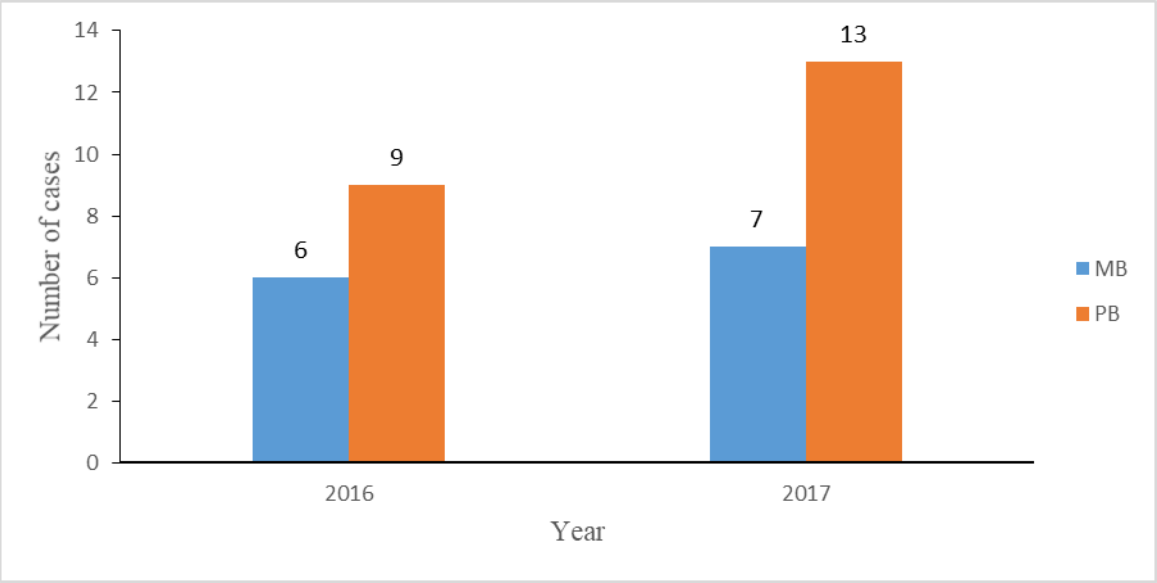
2. Percent of MB cases among all new cases

Of all **95** new cases registered and initiated treatment in 2017, the percentage of multibacillary patients, which is infectious and source of Leprosy transmission is **72.4%** (**56/77**), The percentage has almost remained the same as 2016 which was **71.5% (68/95).** This still shows that transmission among the community members is still high. It is therefore active case finding interventions are needed so as to reduce transmission of infection in the community.

3. Percent of children among new cases

The proportion of children diagnosed with leprosy in 2017 was **20%** (20/98) which is nearly the same as 2016 **19. 4%** cases. The higher proportion of children diagnosed with leprosy is an alarming of the infection in the community as shown in the figure below:

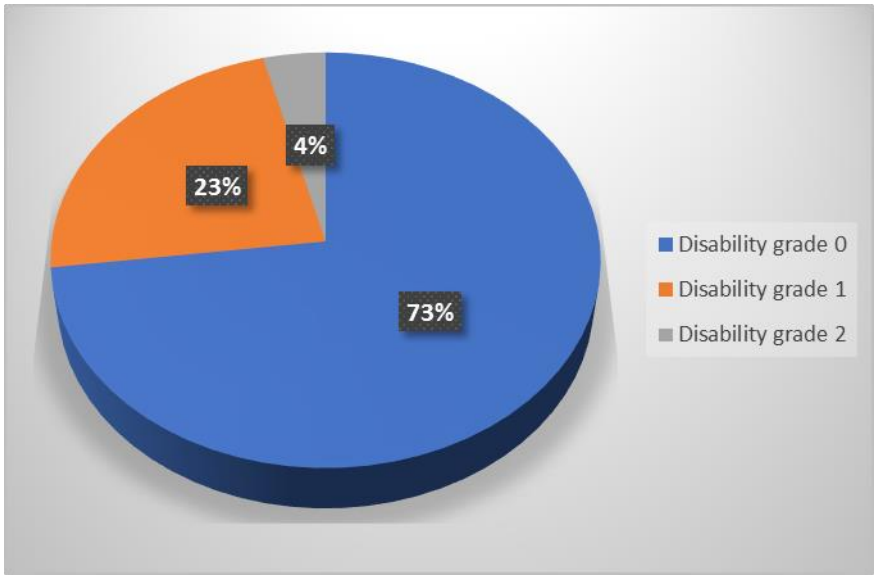
Figure 4. 10: Leprosy notification among children from 2016 -2017 by leprosy type, Zanzibar.



4. Percent of WHO disability grade 2 among new cases

Among **95** new Leprosy cases diagnosed according to WHO grading, 69 (73%) had disability grade 0, **22** (**23%**) patients had disability grade **1** and four **4**(**4%**) had disability grade 2. The percentage of Leprosy cases with disability grade 2 has decreased from **9%** in 2016 to **4%** in 2017. This might be contributed by increased capacity through mentorship conducted in health care facilities. (figure 4.11 below).

Figure 4. 11: Disability grading for newly diagnosed leprosy patients diagnosed in 2017



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

The rate for disability grade 2 per 100,000 populations among new cases in 2017 is 0.26; the proportion is above the national target of 0.35. Even though more intervention is needed to detect hidden cases within the community.

6. Percentage of female patients among new cases

Among Leprosy patients identified in this reporting year, the percentage of female patients was **39%.** There is an increase of female patients detected in 2017 as compared to **29%** in 2016.

7. Percentage of MB leprosy patients completing 12 months of MDT amongst those expected to complete their MDT.

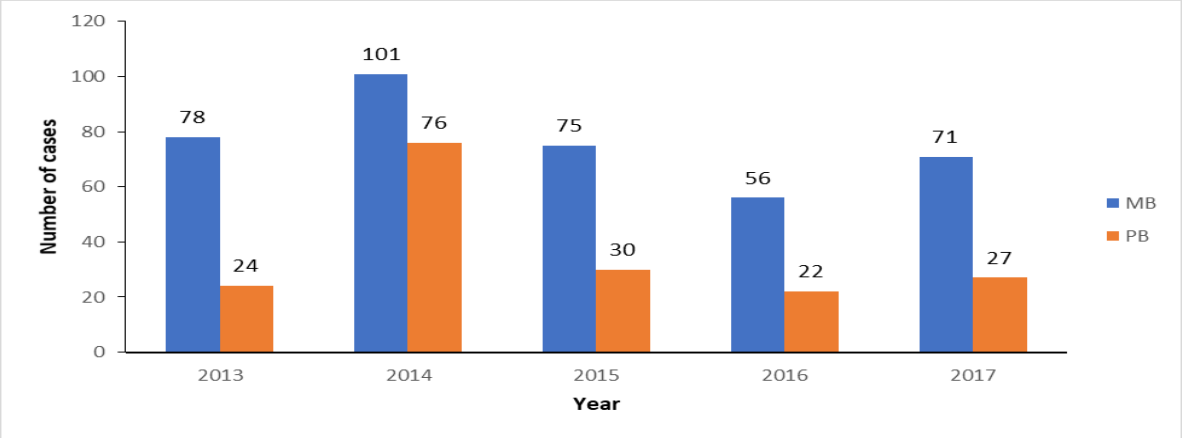
In year 2015 a total of **75** MB leprosy patients started treatment, **74** (**99%**) completed their treatments and **1** (**2%**) was not evaluated. The treatment completion rate has slightly increased compared to **98% in 2014**. In addition, out of 74 cases completed their treatment, **43** (**58%**) had no change in disabilities and **31** (**42%**) had improvement.

4.8 Trend of Leprosy case notification from 2013 to 2017

Leprosy case notification is fluctuating from 2013 to 2017; higher numbers of cases was reported in 2014 **(177)** but the number diagnosed has decreased in 2016 **(78).** The figure

below shows the trend of leprosy detection from 2013 to 2017. The significant increase in 2014 was due to active case finding conducted in Kusini district.

Figure 4. 12: Trend of Leprosy cases notification from 2013 to 2017, Zanzibar



4.9. Challenges

- In adequate TB Active Case Findings (ACF)
- In adequate knowledge of health care workers on leprosy cases identification

CHAPTER 5:

HIV AND TB LABORATORY SERVICES

5.1 Background

The laboratory services are key components of quality health care services. Laboratory unit is accountable for overseeing laboratories in HIV and TB services to ensure that tests performed, and results generated are reliable, reproducible, timely and accurate. Currently there are twelve laboratories which support HIV care and treatment sites (8 Unguja and 4Pemba), 120 HIV Testing sites (Unguja 86 and 48 Pemba), 168 HIV testing sites which provides PMTCT services within the RCH services (100 Unguja and 68 Pemba) and 56 TB diagnostic sites performing laboratory TB diagnosis in Zanzibar (37 Unguja and 19 Pemba). In addition, Public Health laboratory (PHL) in Pemba serve as reference laboratory for TB culture.

5.2 Goal

The goal is to oversee and strengthen National health laboratory services to support HIV, TB diagnosis, care and treatment services.

5.3 Objectives

1. To provide leadership in HIV/TB related laboratory services
2. To provide technical assistance in assuring operational testing systems
3. To strengthen quality systems integration, to support HIV/TB diagnosis, care and treatment in Zanzibar

5.4 Program Implementation

5.4.1 Capacity building

During this year HIV/TB laboratory unit conducted the following trainings:

Two days' orientation training on TB algorithm to **120** health care workers (60 participants Unguja and 60 Pemba). Participants involved included clinicians, laboratory technician and Health officers from health facilities provides TB services. The objective was to build capacity of Health care workers (HCWs) on new algorithm for TB diagnosis which includes Gene expert technology for presumptive TB cases.

A three days training conducted for 12 laboratory staff (8 from Unguja and 4 from Pemba) on utilization of gene expert. The objective was to orient participants on the utilization of Gene

expert machine for TB diagnosis. In addition, two sessions of five days training on TB Laboratory Quality system which focus on diagnostic sites providing TB services, involves 69 Laboratory technicians (35Unguja and **34** from Pemba). The objective was to build capacity of Laboratory staffs on Laboratory quality system.

The unit has conducted two sessions of five days training in Unguja and Pemba on laboratory Bio safety and Bio security for laboratory staff. A total of **60** participants (30 Unguja and30 Pemba) were trained. The objective of the training was to build capacity of laboratory staff on bio risk management which includes risk assessment and mitigation skills.
A five days' workshop on laboratory quality management system for 23 participants (15 Unguja and 8 from Pemba). The Objective was to build capacity of laboratory managers on the management of quality system. The participant of this workshop were laboratory Managers, quality officers, technologists and scientists from CTC laboratories.

5.4.2 Service monitoring

Supportive supervision in TB diagnostic sites at district and central levels was conducted quarterly in Unguja and Pemba. The objective of the supervision was to support HCWs to improve diagnostic services. A total of 51 (33 Unguja 18 Pemba) diagnostic centres were visited by district level in Unguja while for central level supportive supervision was conducted in 55 (37unguja and 18 Pemba) were visited.

Supportive supervision for CTC laboratory services

Quarterly supportive supervision was conducted in 12 CTCs laboratories in Unguja and Pemba (8 Unguja and Pemba). The aim was to support laboratory services delivery, identify problems, propose solutions and provide guidance on the provision of quality laboratory services.

Proficiency testing in HIV testing sites in Unguja and Pemba

Proficiency testing is used as one of the External Quality Assurance (EQA) method for HIV rapid tests in Zanzibar. The objective was to measure the performance of health care worker on HIV testing. For this year distribution of Dried Tube Samples -DTS) was done in 108 sites which includes 147 (85 PMTCT and 62 HTS) service delivery points in Unguja and Pemba.

5.5 Laboratory services indicators and trend from 2015 to 2017

Indicator	Year		
	2015	**2016**	**2017**
1. Number of laboratories with capacity to perform clinical laboratory tests for HIV care and treatment services	**6** out of **12**	**9** out of **12**	**9** out of **12**
2. Number of HIV testing sites participating in proficiency testing for HIV testing	84	31	108
3. Percent of laboratory performing smear microscopy showing adequate EQA performance according to EQA guidelines	**100%**	**97.6%**	**100%**
4. Number of health facility performing TB diagnosis using microscopy and or new technology	**53**	**55**	**56**
5.Percent of sputum samples transported to gene expert for TB diagnosis	**25.5%**	**55.6%**	**57.7%**

1. Number of laboratories with capacity to perform clinical laboratory tests for HIV care and treatment services

A total of 9 CTC laboratories provide HIV related tests which include CD4, Chemistry, and Haematology analysis, for monitoring the progress of HIV patients. Other 3 CTC laboratories have capacity to perform some of the clinical analysis but do not include CD4.These sites have system for transportation of samples to nearby health facility. Furthermore, for the year 2017 HIV viral load initiated on monitoring test in all 12 CTC sites through sample collection and transportation to the National Health Laboratory Quality Assurance and training centre (NHQATC) in mainland. The effort to capacitate Mnazi Mmoja and Chake Chake laboratory to be able to perform HVL in Zanzibar was initiated and in progress. Results are shown in table 5.1.2 below.

Table 5. 1: Number of clinical tests performed disaggregated by test type Zanzibar, 2017

QUARTERS	CD4	HAEMATOLOGY	CHEMISTRY	TOTALS
JAN - MARCH	1,235	1,045	0	2,280
APRIL -JUNE	2488	1952	149	4589
JULY - SEPT	1607	1434	866	3,907
OCT - DEC	2,190	2,190	2253	6,633
TOTAL	**7,520**	**6,621**	**3268**	**17,409**

Table 5. 2: Number of HIV Viral Load samples transported January to December 2017

QUARTERS	Total collected	Sample transported	Results return	Below 1000 copies	Above 1000 copies	Target not detected (TND)	Not read test, should be repeated
JAN - MARCH	1045	332	332	191	88	48	5
APRIL -JUNE	568	1337	1186	534	305	246	101
JULY - SEPT	608	681	894	323	160	406	2
OCT - DEC	1017	1051	706	200	103	380	19
TOTAL	**3238**	**3401**	**3118**	**1248**	**656**	**1080**	**127**

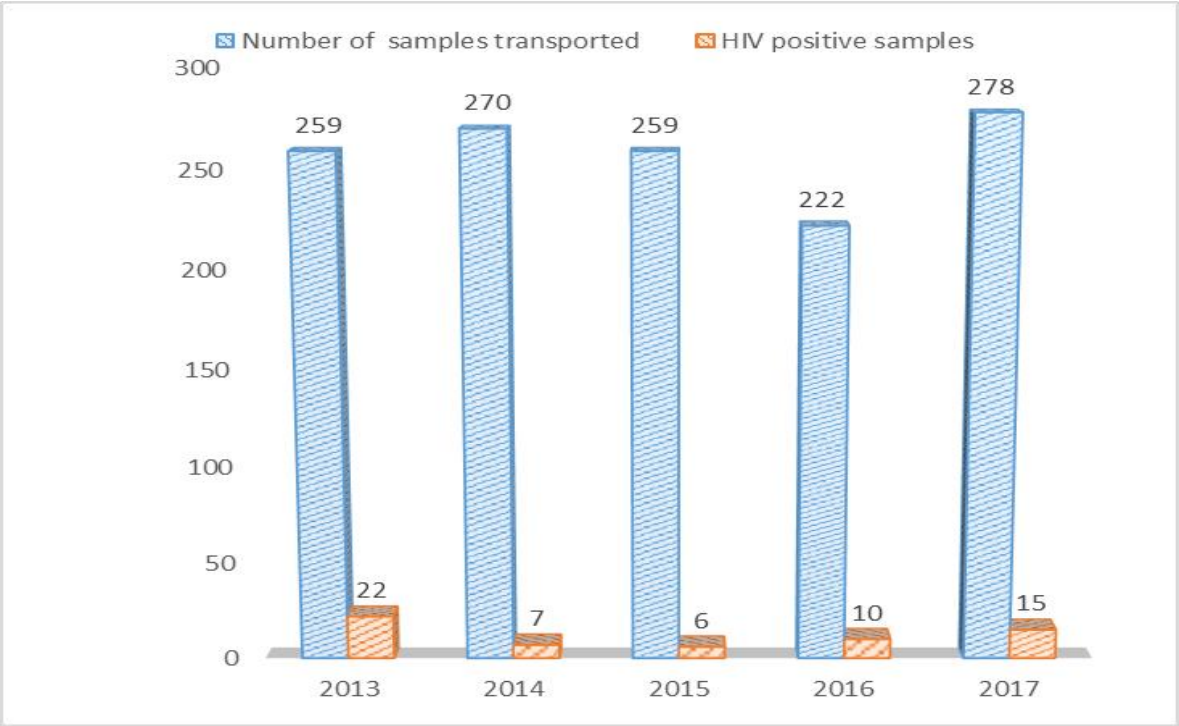
Note: Mnazi Mmoja HUB received Sample from all CTC and transported to NHLQATC.

The table above shows that sample collected for the reporting period was 3238 compared with 3401 which was transported. This was due to carry over of sample collected in the previous year which was not sent for analysis, however the sample transported to Mainland are done in phases. As of December, 3118 sample results were received as shown on the table above.

A total of 278 Samples for Early Infant Diagnosis (EID) were received from PMTCT sites and transported to Muhimbili National Hospital, Dar es Salaam. The number of samples

received from PMTCT sites increased to 278 compared to 222 in 2016. The detailed data is shown in the figure below:

Figure 5. 1: Number of DBS samples transported for HIV DNA PCR testing by year and testing results, Zanzibar, 2013-2017



2. Number of HIV testing sites participating in proficiency for HIV testing

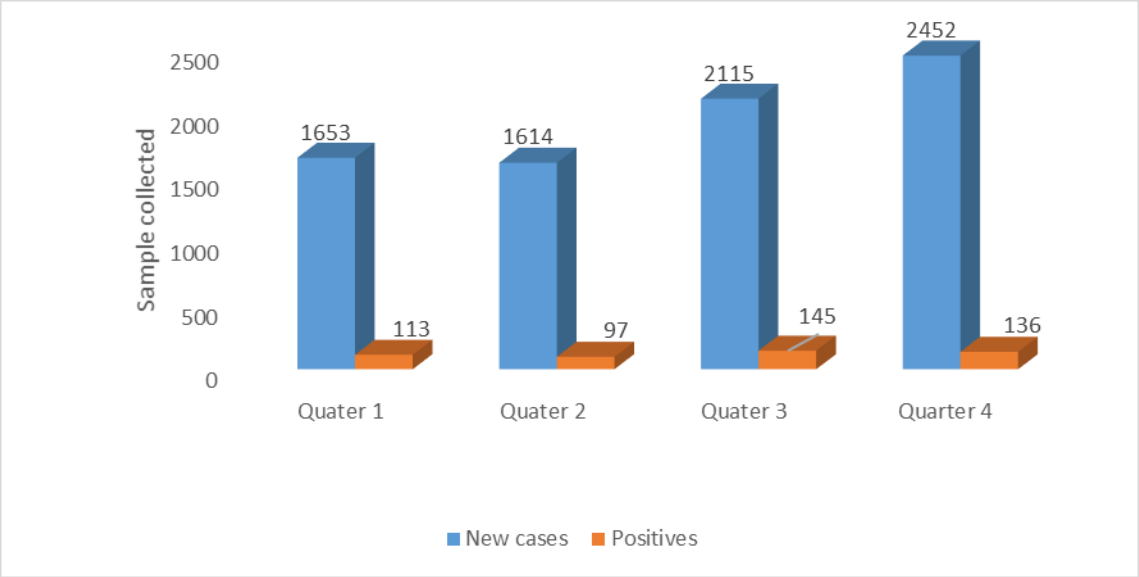
There was an increase of testing sites, from 31 in 2016 to 108 in 2017 participated in proficiency test for HIV rapid test. In this year a total of 147 DTS were distributed. This was due to availability of HIV test kits in all HIV testing sites. Out of **147** panels distributed. The results show that 120 providers who received Proficiency Testing (PT) panels and returned results their performance rate was above 98 % (acceptable).

3. Number of health facility performing TB diagnosis using microscopy and or new technology

The number of diagnostic sites with capacity to perform AFB examination increased from 55 in 2016 to 56 in2017. Also diagnostic performance increased from 5,934 samples (2016) to 7078 in 2017, while positivity rate decreased from 518 to 436 in 2017.All 56 TB diagnostic sites performs sputum examination by microscopy technique, however Mnazi Mmoja in

Unguja and Chake Chake in Pemba are using both Gene Expert and microscopy examination for diagnosis.

Figure 5. 2: Sputum examination using Microscopy examination by Quarters, Zanzibar, 2017



Percent of sputum samples transported to Gene expert for TB diagnosis

There was an increase of samples transported for gene expert from 55.6 %**(2737/4914) in 2016 to 57.6%(3627/6280) in 2017**. This technique is specific and sensitive in diagnosis of Mycobacterium tuberculosis including MDR cases, for 2017, 2 cases of MDR were detected among samples performed.

5.6 Challenges

- Underutilization of gene expert services specially in Pemba
- Delay in HVL testing and receiving of results
- Lack of feedback meeting for sites participating in Proficiency testing.

CHAPTER 6:

INFORMATION, EDUCATION AND COMMUNICATION /BEHAVIOUR CHANGE COMMUNICATION

6.1 Background

Information, Education and Communication/Behavioural Change Communication (IEC/BCC) is one of the ZIHHTLP unit responsible for creating awareness and facilitates behavioural change that put individuals at risk of contracting or transmitting HIV, STI, Hepatitis, TB and Leprosy in the community.

ZIHHTLP recognizes that information and education for behaviors change to communities are crucial in improving health status of Zanzibar population. The Programme through IEC/BCC unit is expecting to further strengthen its activities on HIV/AIDS, Hepatitis, TB and Leprosy BCC strategies.

6.2 Goal

To bridge the existing gap of information and services within the Program's units so that the intended populations both General and Key Populations are changing their behaviours positively from the risk behaviours and accessing the related services that could help in HIV, TB and Leprosy prevention in Zanzibar.

6.3 Objectives

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

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

3) To empower communities on TB, TB/HIV and Leprosy prevention, care and support through Advocacy Communication and Social Mobilization (ACSM)

6.4 Program Implementation

1. Conduct sensitization meetings on HIV/TB to the community

HIV/TB community sensitization meetings were conducted in 20 shehia (10 Unguja and 10 Pemba) which was coupled with collection of sputum samples to the TB suspects for examination. The aim of these meetings was to raise awareness on TB and HIV. During these

meetings, a total of **116** presumptive cases were identified and **5** were confirmed to have TB (smear positive). At the end of each meeting IEC materials were distributed to the attendants.

2. Meeting to establish ACSM group to coordinate involvement of CSO's and NGO's in TB and Leprosy control

Two meetings in Unguja and Pemba to ACSM members was conducted. A total of **52** participants **(27** in Unguja and **25** in Pemba**)** participated. The objective of the meeting was to facilitate coordination of ACSM interventions within the community. The participants included members from Health Promotion Unit, Civil Society Organizations, District Administrative Secretary, District AIDS committee and Public Health Officers.

3. Advocacy meeting on TB at higher level with districts officials.

Two meetings (**1** in Unguja and **1** in Pemba) to district officials were conducted. A total of **65** participants **(36** in Unguja and **29** in Pemba) participated. The objectives of the meetings were to equip the participants with knowledge of TB and to engage them fully in creating awareness to the community in TB control. The participants included District Commissioners, District Administrative Secretary, District Administrative Officers and District Planning Officers.

4. Advocacy meeting on TB/HIV and Hepatitis to members of House of Representatives

A two days meeting to members of House of Representatives was conducted in Unguja. A total of **86** members participated. The objective of the meeting was to equip members of the house (policy makers) with knowledge on TB, HIV and Hepatitis so as to facilitate in policy reforms and foster resources mobilization for improvement of services.

5. Commemorations of the World TB Day

Commemoration of World TB day was held on 24th March, 2017. The theme of this year was **"Unite to end TB"- "Tuungane kutokomeza Kifua Kikuu"**. During commemoration the panel discussion was conducted involving various stakeholders to discuss on TB situation including successes and challenges in control of the disease. Preceding the commemoration day, press conference was held whereby the Deputy Minister for Health present the theme of the year and planned strategies.

6. Follow up visits to school health clubs

Follow up visits in **25** school health clubs (**15** in Unguja and **10** in Pemba) were conducted. The objective of the follow up was to strengthen the school health clubs to ensure they are doing well in health promotion for school children population in Zanzibar especially in prevention against HIV, TB and leprosy infections.

7. Feedback meetings to school health club's teachers on HIV/TB

Feedback meetings (1 in Unguja and 1 in Pemba) were conducted following the follow up of school health clubs. A total of **28** school health club's teachers (**18** in Unguja and **10** in Pemba) participated. The objective was to provide findings which were found during follow up to school health clubs, and plan strategies for improving knowledge on HIV and TB to school children.

8. Sensitization meetings to key community leaders on male involvement in ANC services

One-day sensitization meetings in each district to key community leaders on male involvement in ANC services was conducted. A total of **300** participants (180 Unguja and 120 Pemba) include religious and shehia leaders attended. The main objective of the meetings was to sensitize them on importance and benefits of male involvement and engage them in improving uptake of PMTCT services.

9. Airing of TB and HIV Radio and Television spots

Different messages for Radio and Television (TV) spots (3 Radio and 3 TV spots) were aired in 3 TV's and 5 Radio stations for period of 6 months. The messages (spots) focused on importance of TB prevention, knowledge on TB, Adherence to TB patients, Relationship between TB and HIV as well as reduction of self and social stigma to TB patients.

10. Workshop to develop Care and Treatment IEC materials

A five-days' workshop to develop IEC/BCC materials on CTC services was held at Unguja. A total of **28** participants **(25** from Unguja and **3** from Pemba) participated. The aim of this workshop was to develop new IEC/BCC materials focusing on CTC services. Following the workshop, the materials were pre-tested at ZAYEDESA, Mnazi Mmoja and Muembeladu CTC's to improve materials for further process before printing.

Participants were able to develop **four** types of pamphlets and **two** posters as described below;

A) Pamphlets

1) “Dumu kwenye huduma na tiba ya VVU kuimarisha afya yako “
2) “Kuwa Mfuasi mzuri wa dawa za kupunguza makali ya VVU”
3) “Vunja Ukimya! Mueleze mtoto hali yake ya maambukizi ya VVU”
4) “Zijue huduma za Upimaji na matibabu ya mapema kwa anayegundulika na VVU”

B) Posters

1. “Acha kunyanyapaa wanaoishi na VVU na Kifua Kikuu”
2. “Najali Afya yangu, nimegundulika na VVU na nimeanza dawa mapema”
3. “Usitumie dawa za asili kama tiba iwapo una VVU”

6.5 Challenges

- Inadequate capacity for IEC/BCC professional staff

CHAPTER 7:

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

7.1 Background

The Strategic Information (SI) unit of ZIHHTLP with the collaboration of Health Management Information System (HMIS) unit of Ministry of Health (MoH) is the custodian of health sector HIV data in Zanzibar. The unit is coordinating, collecting, storing, retrieving, and analysing data from various projects in ZIHHTLP. ZIHHTLP is experienced in HIV data handling; hence, it works hand in hand with HMIS unit within the MoH in the production and dissemination of HIV health related data required by stakeholders. The SI unit is overseeing data collection from the following projects: Care & Treatment, HIV surveillance, PMTCT, HIV counselling and testing, Home Based Care, Laboratory and STI services.

7.2 Goal

The goal of the Strategic Information Unit is to provide information for tracking progress and informing decision makers in implementation of HIV, STI, TB and Leprosy interventions.

7.3 Objectives

- To ensure accurate, complete and timely, monitoring data collected and reported from the district level
- To monitor trends in HIV epidemic and assess risk factors for transmission among general population and KPs groups
- To enhance human capacity in SI among facility-level, district health management team, and ZIHHTLP staff
- To develop and implement health sector HIV, TB and Leprosy Monitoring and Evaluation (M&E) Plan

7.4 Implementation and M&E system performance

7.4.1 Component 1: Organizational Structure with M&E Functions

The component outlines key organizational structure, roles and responsibilities for implementing the M&E activities within the programme. Its main goal is to establish and maintain a network of organizations responsible for HIV, Hepatitis, TB and Leprosy M&E at the national, district and service-delivery levels. Strategic information unit is responsible for coordinating, monitoring and evaluation of health sector HIV, TB and Leprosy interventions. The unit has staff responsible to perform M&E functions and these include: SI coordinator, Epidemiologist, Statistician, M&E officer, Data managers, IT officer, Surveillance officer and Data clerks. These staff have clearly defined job descriptions coupled with M&E roles and responsibilities. Also, each staff is assigned a service to provide technical assistance on M&E related issues. At district level, the unit works closely with DHMTs especially district surveillance officers (DSOs) who are responsible for collection of reports from service delivery sites and data management at district level.

7.4.2 Component 2: Supportive supervision and data auditing

Supportive supervision and data auditing are integral parts of a routine monitoring system. The goal is to monitor data quality periodically and address obstacles to produce high quality data (i.e. valid, reliable, comprehensive, and timely). Supportive supervision for different services was conducted quarterly by unit coordinators accompanied by other technical and S.I officers within the programme.

7.4.2.1 HIV/STI, TB and Leprosy data verification at health facility level in Unguja and Pemba

HIV/STI& TB data verification was conducted for health facilities 153 Unguja and 71 Pemba. The verification included all identified visited that provide HIV/STI & TB services. The objective of this data verification was to assess data accuracy, completeness, consistency, availability, and timeliness to determine the overall reliability of data collected. The methodology used was to cross check reported data from the sources at sites including registers for the period of 6 months (April – September 2017) months prior to the day of data verification. During the data verification exercise, all the reports verified in the visited sites were corrected. In addition, all issues noted were shared with staff on site coupled with onsite mentorship, and strategies for improving their reporting agreed upon based on the issues observed.

7.4.2.1 Supportive supervision on HIV/STI data management to district health management teams

Supervision of DHMT in all the 10 districts of Zanzibar was conducted in both Unguja and Pemba. The objective of the supervision was to monitor how HIV data is handled at district level from availability of monthly monitoring tools, storing of data, collection and completeness of the tools from sites, data entry, analysis and use at district level. During the supervisions some successes were noted including District Data Manager (DDMs) commitment in HIV/STI&TB data handling at district level because they know all sites providing HIV/STI&TB services; they collect HIV/STI services data from all sites and enter the data in DHIS2. However, some challenges were identified, discussed with DDMs and way forward agreed upon.

7.4.3 Component 3: Human Capacity for M&E

The main goal of human resource capacity building for M&E is to establish adequate skilled human resources at all levels of the M&E system.

7.4.3.1 Training of CTC2 database Unguja and Pemba

Management and development for Health (MDH) partners facilitated training of CTC staff on updated CTC2 database. The objective of the training was to orient and update CTC2 staff on new requirements added in CTC2 database.

7.4.3.2 Training on Research Methodology

Research methodology training among its program staff organized with aim to build capacity of staff who are holding administrative posts to understand research methods and be able to undertake researches. This was done together with developing research proposals among training participants and some of the proposals were included in the Global fund grant and will be undertaken during this Global fund grant.

7.4.3.3 Data Management workshop of CTC staff Unguja and Pemba

Five days training of CTC staff on data management was conducted. The objective of the training was to orient CTC staff on various issues on data management, data quality and data use for program activities.

7.4.3.4 Training of Electronic TB and Leprosy Register among HCWs working on TB and Leprosy data Unguja and Pemba

National TB and Leprosy program in collaboration with University of Dar es Salaam Computing centre and ZIHHTLP facilitated training on Electronic TB and Leprosy Register among HCWs working on TB and Leprosy and hospital data clerks. The objective of the training was to orient staff on new register for capturing TB and Leprosy data electronically and for successfully Management and follow up of cases registered.

7.4.3.5 Refresher training of staff on DHIS2 system

Zanzibar Integrated HIV, TB and Leprosy program in collaboration with HIMS Zanzibar facilitated a 5 days refresher training of DHIS2 system among program staff and other stakeholders in the Ministry of Health. The objective of the training was to orient staff and update their knowledge into using DHIS2 system and how to produce various reports required by program for different purposes.

7.4.4 Component 4: M&E Partnership

M&E partnership refers to a cooperative relationship between people or groups of people who agree to share responsibility for achieving the requirements of the M&E plan. The goal is to establish and maintain partnerships among in-country and international stakeholders who are involved in planning and managing the national HIV/TB and Leprosy M&E system.

During the reporting period, ZIHHTLP worked with different local and international partners on the following M&E activities:

- Consultative workshop with University of Dar es Salaam computing centre and National TB and Leprosy Program technical team to improve TB and Leprosy electronic data management (ETL register)
- MDH provided technical assistance on updating CTC2 database through UCC.

7.4.5 Component 5: Monitoring and Evaluation Plan/Framework

The programme has developed the Zanzibar Health Sector HIV and AIDS Strategic Plan III - 2017-2022 that aimed at measuring the level of implementation of Zanzibar HIV/ AIDS activities and is on the process to develop new M&E plan.

7.4.6 Component 6: Survey and surveillance

In 2017, the programme has managed to do the following;

7.4.6.1 Retention study to assess factors influencing retention of PLHIV on ART program

7.4.6.1.1 Protocol development retention study

Protocol for retention study was developed and submitted to ZAMREC for approval.

7.4.6.1.2 Data collection training for retention study

Two days' data collection training was conducted for enumerators. The main Objective of the training was to orient data collectors about retention study (its objectives, methodology and data collection tools), to pilot data collection tools and revise data collection tools as a result of pilot findings.

7.4.6.1.3 Data collection for retention study

The program did data collection for retention study. This was a two-month (July to August) activity as each clinic was assigned to collect a sample proportionate to number of clients attending in that Care and treatment clinic.

7.4.6.1.4 Data analysis workshop for retention study

ZIHHTLP did analysis workshop for five days on retention study. The objectives of this activity were to do analysis on collected data for retention study that aimed at finding factors influencing retention of people living with HIV in ART Programs.

7.4.6.1.5 Formative assessment for KP

7.4.6.2.1 Protocol development for KP Formative assessment

Protocol for this assessment was developed and then submitted to ZAMREC for ethical clearance and finally was approved; this was followed by data collection training. The objective of the assessment was to collect data which will help and guide preparations for the coming third round of IBBSS study for KP in Zanzibar.

7.4.6.2.2 Data collection of Formative assessment for KP

The program did data collection of formative assessment for KP. This activity started on 2nd May to 25th May 2017. Then data collected were transcribed and translated ready for data analysis.

7.4.6.2.3 Data analysis workshop for KP formative assessment

ZIHHTLP did analysis workshop for five days on this. The objectives of this activity were to do analysis on collected data of KP formative assessment that will help guide preparations for the coming third round of IBBSS study for KP in Zanzibar.

7.4.7 Component 7: Routine monitoring

Routine monitoring provides real-time data that are used for day-to-day monitoring, coordination and planning of the HIV, STI, TB and Leprosy services. The main goal is to produce timely and high-quality routine programme monitoring data.

The programme has monitoring tools for all services. Patients/client forms/cards; registers, reporting forms together with guides are available in most of HIV, STI, TB and Leprosy health facilities. On tracking service delivery, data are recorded daily at facilities by service providers. Monthly reports for HTS, HBC, Laboratory, STI/RTI and PMTCT and quarterly reports for TB and Leprosy are prepared by service providers. The paper-based reports are collected from the facilities and sent to DHMT whereby the DSO is responsible for data entry into DHIS2 database. However, HIV care and treatment data are entered in CTC2 database at health facilities by data clerks and its reports are generated quarterly and sent to ZIHHTLP.

7.4.7.1 Monitoring tools review meetings

S.I unit in collaboration with PMTCT, HTS, HBC, STIs, TB and Leprosy units conducted a **5** days' workshop of tool review. The objective of this activity was to review the existing monitoring tools based on additional new indicators that are required by the programme to report on different reporting cycles for the government and other key stakeholders.

7.4.7.2 Strategic information indicator trends

On tracking routine programme services, data is entered into DHIS2 database. Report for three years (2015-2017) was generated from DHIS2 database to show the trends of completeness and timeliness of the HIV/TB and Leprosy data.

Table 7. 1: Strategic Information Indicator and Trend, 2015 – 2017

Indicator	Measurement	2015	2016	2017
Percent of facilities submitting complete and timely reports	Completeness	88	75	82.7
	Timeliness	50	47	54.3

The completeness of reports collected from health facilities has increased from **75%** to **82.7%** from 2016 to 2017. More than fifty percent **(54.3 %)** of the reports were entered into the DHIS2 database timely. Though there's an increase of timely and completed reports submitted there still a need to improve this in the coming years. (For detailed reporting summary for different services, **see appendix 1**)

7.4.8 Component 8: National M&E databases

The HMIS of MoH maintains a DHIS2 database as a national M&E database which houses majority of data across all health sector programmes including HIV, STI, TB and Leprosy service data. This database is regularly updated based on the need of the programme. ZIHHTLP staff have access to the DHIS2 database through a web-based interface. Despite of programme data being integrated into HMIS; the programme still hosts some databases to track case by case data as need arises including:

- HTS database: This is case by case HTS surveillance database using EPI Info software version 3.5.4. Data is collected directly from facilities to ZIHHTLP for entry. Data entry is done by SI unit staff on daily basis, cleaning on monthly basis while the analysis, presentation and interpretation is done on quarterly, semi-annually and annually.
- CTC2 database: All CTC sites have installed electronic database whereby data clerks directly enter patient level data and quarterly reports are generated and sent to ZIHHTLP office.

7.4.9 Component 9: Data Dissemination and Use

This involves a strategic and operational plan for information use that includes opportunities for data analysis and interpretation. The goal is to disseminate and use data from the M&E system to guide policy formulation and programme planning and improvement.

7.4.9.1 Data dissemination

The programme conducted dissemination meetings and produced several reports for informing the stakeholders on status and the level of implementation of various services as follows:

- Preparation and sharing of quarterly, semi-annual and annual narrative progress and detailed indicators performance-based reports for tracking HIV, TB and Leprosy interventions has been done and submitted to MOH and other relevant stakeholders.

- Strategic information unit managed to conduct a one-day dissemination meeting to different stakeholders working on TB KAP study. The objective of this meeting was to share findings of TB KAP study that was done to determine the knowledge, attitude and practice of Zanzibar community and HCW on TB so as to guide in the development and implementation of TB Advocacy Communication and Social Mobilization (ACSM) activities in the future.
- The program also did dissemination meeting of KP formative assessment study to various stakeholders. The objective of this dissemination meeting was to share findings that will help guide preparations for the coming third round of IBBSS study for KP in Zanzibar.

- Strategic information unit managed to conduct a one-day dissemination meeting to different stakeholders working on HIV services. The objective of this meeting was to share findings of the retention study that will help the MOH to plan proper interventions targeting PLHIV and hence address the unknown factors influencing retention in Zanzibar.
- The program also with the support from THPS has managed to conduct quarterly data review meeting with different stakeholders to share findings of data obtained quartely and discussing progress towards achieving targets set.

- ZIHHTLP organized a one day dissemination meeting with members of the parliament Zanzibar to disseminate findings of the current situation of Hepatitis and Tuberculosis in Zanzibar.

7.4.9.2 Data use

HIV/TB and Leprosy data were used for planning purposes e.g. designing interventions, prioritization, and resource allocation and setting targets. In 2017, the programme has used data for various activities including the following:

- Tracking patients on HIV care and treatment who were lost to follow up
- Following up HIV positive pregnant women and their exposed infants who were lost to follow up
- TB and Leprosy contact tracing
- Establishment of quality improvement plan for HIV, TB and Leprosy services
- Weekly programme services review meeting

7.4.10 Component 10: M&E advocacy, communication and culture

The main goal of this component is to ensure knowledge of and commitment to HIV, TB and Leprosy M&E among policy makers, programme managers, programme staff and other stakeholders. Commitment to M&E activities exists within ZIHHTLP whereby it is well reflected in national strategic plans and annual work plans. In addition, M&E personnel are part of management and planning team at national and district level and M&E performance is communicated in quarterly, semi-annual and annual reports. Furthermore, HIV, TB and Leprosy information are requested by different stakeholders. M&E system information products are largely disseminated within the health care system and insufficiently to the public. Dissemination of information to the public need to be strengthened through program website and newsletters.

7.4.11 Component 11: Evaluation and Research

This component involves identification of key questions for research and evaluation; coordinate studies to respond to identified needs and promote the use of evaluation and research findings.

This year, the programme managed to conduct two studies; factors influencing retention of people living with HIV in ART Programs and formative assessment for KP as a preparation for getting information that will help guide preparations for the coming third round of IBBSS study for KP in Zanzibar. The abstract for these studies are attached in Appendix III.

7.5 Challenges

- Late entry of reports at district level causing a delay in reporting at central level
- Inadequate quality of service data
- Inadequate use of data for service improvement at facility level

CHAPTER 8:

PROGRAMME MANAGEMENT AND FINANCE

8.1 Overview

The principal role of Programme Management Unit (PMU) is to coordinate and support other Programme units to implement technical roles by ensuring availability of necessary requirements to execute their duties effectively. In addition, it oversees all administrative and financial management aspects of the program including human resource, financial resource, procurements as well as tracking of the procured goods and services.

PMU is responsible for preparing financial reports and, in collaboration with other units, compiling technical reports and submission of reports to the Ministry and stakeholders. It is also responsible to ensure proper implementation of Programme work plan towards meeting its objectives.

8.2 Goal

The goal is to oversee and ensure proper execution of the program work plan and adequate availability of program resources (human, financial and materials).

8.3 Planning and administration

Programme Management Unit is responsible for the following areas: a) Policy guidance; b) Planning and budget; c) Human resource management; d) Capacity building; e) Inter and Intra Coordination; f) Procurement and provision of logistics; g) Financial management; and h) Monitoring, evaluation and reporting.

8.3.1 Policy Guidance

The Programme has the mandate to develop policy guidelines to guide staff and all HIV, TB and leprosy implementers on the processes and procedures that are necessary to ensure implementation and accountability provision of services. In this reporting period, The Programme reviewed and disseminated national guidelines for the prevention and treatment of HIV and AIDS and National Guidelines on Comprehensive HIV Interventions for Key Populations (KPs) in Zanzibar. In addition, The Programme reviewed ZHSHSP II and developed ZHSHSP III 2017/2022.

8. 3.2 Planning and budget

Programme prepares a comprehensive work plan and budget that includes Government and various HIV, TB, Hepatitis and Leprosy partners. The Government financial year runs from July to June, however some of the partners' budgets have different financial years. The final consolidated budget is then submitted to the Ministry of Health for submission to the Ministry of Finance and presentation to the House of Representatives. In addition, reprogramming of the planned activities is done where there is low chance of implementation of the activities.

8.3.3 Human resource management

Majority of ZIHHTLP staff are employees of the Ministry of Health. However, over the years, there were needs for additional staff to implement specific tasks/projects within the Programme, which development partners were willing to support on contractual basis. By December 2017, a total of 9**2** staff (82 Government and 15 on contractual basis) with different specialties were working in the Programme.

8.3.4 Capacity building

During the reporting period, technical staff from the Programme participated in Long and short term In-country, Regional and International Conferences/Meetings/Exchange visits/Training funded through HIV, TB and Leprosy partners. These include the following:

- National and International Meetings and Conferences
    - 19th International Conferences on AIDS &STIs (ICASA 2017) in Abidjan
    - 20th Conference of the Union Africa Region in Accra
    - HIV estimate Training (2 Participant)

- Training
    - MSc Project Management, Monitoring & Evaluation in health (2 participant)
    - MSc in Health System Management (1 participant)
    - Training on TB management for DTLC Dodoma (2 participant)
    - Short term management on financial management CEDHA (5 participant)

8.3.5 Inter and Intra Coordination

ZIHHTLP has continued to collaborate with development partners to support implementation of HIV, TB and Leprosy activities at all levels. Outlined in table 8.1 below are the partners providing technical support to ZIHHTLP during the year 2017.

Table 8. 1: ZIHTLP Technical Support by Partners, Zanzibar, 2017

NAME OF PARTNERS	TECHNICAL SUPPORT PROVIDED
1. Management Development for Health	• Database system strengthening
2. KNCV	• Support in strengthening TB and TB/HIV data quality
3. UN agencies	• Provide technical assistance in Guidelines review
4. THPS	• Support in strengthening TB/HIV related services
5. UCSF	• Provide technical assistance on KP surveillance
6. WHO	• Provide technical assistance on development of ZHSHSP III 2017/2022

8.3.6 Procurement and provision of logistics

Procurement unit supports other technical unit in the areas of quantification and forecasting the need, procurement and monitoring the supply plan chain for the program products. It also has a responsibility for all procurement to be done by following the Zanzibar Procurement Act.

Procurement were done using funds under the Global Fund to fight AIDS, Tuberculosis and Malaria and Domestic fund.

Core products including ARVs, HIV test kits and non-core products including STI drugs, HBC, CD4 reagents, Condom, Gene Xpert and Cartridges were procured through Pooled Procurement Mechanism (PPM). Non health products also were procured which include three

Motor vehicles and 8 Motorcycle were procured locally by using Ministerial Procurement Management Unit to support program activities.

Procurement at MOH level remained an area of importance for ZIHHTLP due to big part of program budget is procurement, and due to that, smooth and efficient procurement at MOH level are needed. Capacity building and support for Procurement Management Unit which include refurbished office and procure one motor vehicle for that unit. Also Vendor management system was procured to support procurement process.

The issue of Supply Chain Management has gained importance. Efforts were made to streamline the supply chain management of consuming units including providing training on supply chain management to health facilities staff, improving storage at Facility level. Ongoing renovation for improving storage for 83 health facilities Unguja and Pemba. New warehouse for Mnazi Mmoja Hospital was constructed.

Table 8. 2: Payment of PPM for the Year 2016-2017

S/N	YEAR	AMOUNT IN PPM (USD)
1	2016	**511,204.44**
2	2017	**2,221,129.93**

Payment under PPM was four times compared to last year and the reasons were: -

- Five Gene Xpert were procured to support testing for TB and VL.
- Products such as ARVs, HIV test kits and TB gene Xpert cartridges for next year were procured as the safe stock.
- Non-core product, which include CD4 reagents, HBC and STI drugs of year 2016 were delivered in year 2017 and their cost charged on year 2017.

8.3.7 Financial Management

Finance unit supports other technical units in the areas of financial management, budget and reporting 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 beneficiaries periodically.

The following is the overview of the financial position for ZIHHTLP for the calendar year ended December 2017. Included in this overview is analysis of ZIHHTLP Asset and Liabilities, Budget, Outflow and Inflow of the financial resource.

a. Asset and Liabilities

Asset and Liabilities are prepared under cash basis of accounting, whereby revenues and expenses are recognised at the time physical cash is actually received or paid out. Asset, expenses, liabilities and revenue are measured using current value except fixed assets are stated at historical cost.

b. Budget

Program planned to receive funds from different sources for the implementation of HIV, STI, TB and Leprosy interventions. The major planned support was from the Revolutionary Government of Zanzibar and development partners namely: Global Fund, United Nation Agencies-UNICEF through United Nations Development Assistance Plan (UNDAP), Tanzania Health Promotion Support (THPS) and Germany Leprosy Relief Association (GLRA). Table 8.2 illustrate the sources of funds and the area supported in 2017.

Table 8. 3: Source of funds from the Government and development partners and area supported, 2017

	Name of Partners	Project Title/Name	Area of Intervention Support
1.	Global Fund HIV/TB grant	Enhancement of HIV and TB Prevention, Diagnosis, Treatment and Care among Key and General Populations in Zanzibar	• Prevention of Mother To Child Transmission of HIV • HIV Care and Treatment • Home Based Care services • HIV prevention services for KPs and General population • TB prevention, diagnosis and treatment • HIV/TB • MDR TB • HIV/TB laboratory services • Information Education Communication and Behaviors Change • Strategic Information • Program management
2.	Tanzania Health Promotion Support	Provision of Comprehensive Care and Treatment Program in Zanzibar	• Strengthening of HIV Care and Treatment, PMTCT, HTS, HBC and Laboratory services • Key Population activities including MAT service • Gap filler to support Laboratory reagents and supplies

3.	United National Development Program – Tanzania (UNICEF)		• Provide bridge support on HIV health sector interventions including PMTCT, Key Population and Care and Treatment
4.	GLRA (German Leprosy Relief Association)		• Monthly supervision to the sites providing Leprosy services • Contact tracing for Multi bacillary Leprosy patients, • Health education on leprosy to the community, • Reconstructive surgery for leprosy patients • Follow up of existing self-care groups
5.	Government of Zanzibar	Developing Program	• Support HIV, TB and leprosy Programme activities.

The total budget for each support depends on the financial year of the particular partner. Every partner has got its own accounting period. Table 8.3 shows financial year and budget allocated for mentioned partners.

Table 8. 4: ZIHTLP budget from different sources per fiscal year 2015-2017

FUND SOURCE	FINANCIAL YEAR	BUDGET 2015 USD	BUDGET 2016 USD	BUDGET 2017 USD
Government	July to June	59,101.65	50,403.23	42,666.67
Global Fund	July to June	4,336,776	3,694,042	2,419,820
UNICEF	July to June	80,575	26,196.35	50,677.77
THPS	October to September	80,000	19,845	131,236.35
GLRA	January to December	12,614	9,162.42	7,330.27

c. Inflow and outflow of financial resource

Cash Inflow /Income

ZIHHTLP received funds as a cash inflow from various sources as mentioned above, the total amount received was USD 275,513.68 The following is a summary of cash inflow received (Table 8.4).

Table 8. 5: Summary of ZIHTLP funds received from various sources 2015-2017

SOURCE OF FUND	2015	2016	2017
Government	0	23,234.20	7,111.11
GLOBAL FUND	276,057.81	3,750,042.80	0
UNICEF	0	17,142.49	50,677.77
THPS	59,100.78	14,483.36	208,377.53
GLRA	12,614.00	9,162.42	7,330.27
TOTAL	**2,355,877.28**	**4,378,110.50**	**275,513.68**

Cash outflow/expenditures

The Programme managed to absorb USD 3,194,329.88 i.e. (This include the amount brought forward from previous accounting period). The table below show the details of the expenditure from different sources. In addition to that ZIHHTLP have the commitments of renovation of Kidongo Chekundu MDR-TB ward, renovation of Storage capacity and Dispensary Unit at Mnazi Mmoja and renovation of health facilities of Unguja and Pemba.

Table 8. 6: Summary of expenditure of ZIHTLP funds from various sources, 2015-2017

SOURCE OF FUND	2015	2016	2017
Government	0	0	30,345.31
PEPFAR	1,171,411.35	1,160,524.04	0
GF	332,490.00	773,864.61	2,952,189.44
UNICEF	0	17,142.49	50,677.77
THPS	64,447.36	19,596.40	153,787.09
GLRA	12,614.00	9,162.42	7,330.27
TOTAL	**1,580,962.71**	**1,980,289.96**	**3,194,329.88**

The Programme spent more funds from Global Fund and Government. This is because the funds received from previous accounting period but were spent in 2017. Absorption rate for funds received from THPS was low, mostly because there were delayed of disbursement (15 November 2017). All the Fund received from UNICEF and GLRA were fully utilized.

I. Projection of budget for the year 2017/2018

The main support of the program for the coming year is from partners as indicated in the Table 8.6 below. However, GLRA support has phased out in this year; hence there is no projection for this partner in the coming year.

Table 8. 7: Budget Projections from different sources for 2017/2018

SOURCE OF FUND	FISCAL YEAR	AMOUNT USD
GLOBAL FUND	January - December	1,534,388.00
THPS	October - September	150,000.00
UNICEF	July – June	27,000.00
GOVERNMENT	July – June	45,000.00

8.4 Challenges

- Delayed disbursement of fund from THPS.
- Long process of Approval of the activity
- Lead time of more than a year for non-core products

CHAPTER 9:
RECOMMENDATIONS

Despite ZIHHTLP having achievements in the year 2017; these were coupled with quite a number of challenges as outlined in the previous chapters. In order to enhance programme implementation and to improve quality of HIV, TB and Leprosy services, ZIHHTLP will put emphasis on the following recommendations in 2018:

- To liaise with DHMTs and hospital managers to include HTC training for new employed staff in their budget plan
- To liaise with DHMTs and hospital managers to strengthen PITC services.
- Strengthen tracking mechanisms for mother-infant pairs
- Strengthen collaboration with private health facilities to integrate PMTCT services at RCH clinics.
- Capacity building for IEC/BCC professional staff
- Engage expert patients, CHBCs in follow up of and trace back defaulted CTC clients.
- Sensitization of health care workers for request of sputum and transported to Gene-Xpert sites
- Installation and training of laboratory staff in performing HVL in Zanzibar will be emphasized
- Feedback meeting after proficiency should be conducted in order to improve testing services
- Timely procurement and distribution of STI drugs
- Conduct routinely supportive supervision to all health facilities providing STI/RTI services
- Promote and strengthen peer support programme conducted by NGOs
- Strengthen KP friendly services
- Conduct study to determine factors contributing to lost to follow up of MAT services among the clients so as to help in solving this problem.
- Lobby for fund to various donors to support viral hepatitis interventions targeting KPs
- Review and strengthen implementation of contact investigation among all infectious TB patients

- Conduct Active case finding to all TB vulnerable groups (IUDs, Under five, TB diabetes, prisoners and elderly peoples)
- Train health care providers from different health facilities on leprosy management
- Capacity building for IEC/BCC professional staff
- Liaise with partners to ensure timely disbursement of funds.
- Prepare/Issue a request in advance at least two weeks before the activity
- All non-core product should be procured locally.

Appendix I: Reporting summary for HIV, TB and Leprosy in 2017

Indicator	Percent of facilities submitting complete and timely reports				
	Completeness			Timeliness	
Service	Actual Reports	Expected Reports	Percent	Reports on Time	Percent on Time
HTS	1106	1476	74.9	709	48
RCH	2021	2100	96.2	1643	78.2
Maternity	619	720	86	436	60.6
STI	2343	2868	81.7	1669	58.2
HBC	1556	1776	87.6	1079	60.8
TB notification	622	648	96	327	50.5
Leprosy notification	604	652	92.6	308	47.2
Laboratory	101	216	46.8	67	31

Appendix II: List of Facilities providing different HIV, TB and Leprosy services by type of service and district

UNGUJA

Mjini District

S/NO	Facility	Ownership	VCT	PITC	PMTCT	TB	HBC
1	MNAZI MMOJA HOSPITAL	PUBLIC	✓	✓	✓	✓	✓
2	AL RAHMA HOSPITAL	PRIVATE	✓			✓	
3	RAHALEO PHCU	PUBLIC	✓	✓	✓	✓	✓
4	MAFUNZO PHCU	PARASTATAL	✓	✓	✓	✓	✓
5	MARIE STOPES HOSPITAL	PRIVATE	✓		✓	✓	
6	ZAYEDESA MIEMBENI	NGO	✓				✓
7	JKU PHCU	PARASTATAL	✓	✓	✓	✓	✓
8	CHUMBUNI PHCU	PUBLIC	✓	✓	✓	✓	✓
9	ZANGOC KIDONGO CHEKUNDU	NGO	✓				
10	DSAPR KIDONGO CHEKUNDU	PUBLIC	✓				
11	ZIWANI POLICE PHCU	PARASTATAL	✓	✓	✓	✓	✓
12	ZAPHA+	NGO	✓				
13	MWEMBELADU RCH	PUBLIC		✓	✓	✓	✓
14	MPENDAE PHCU	PUBLIC	✓	✓	✓	✓	
15	KWAMTIPURA PHCU	PUBLIC		✓	✓	✓	✓
16	SEBLENI PHCU	PUBLIC		✓	✓	✓	✓
17	MATARUMBETA PHCU	PUBLIC		✓	✓	✓	✓
18	UTAPOA DISPENSARY	PRIVATE	✓				
19	AFYA MEDICAL CENTRE	PRIVATE	✓				
20	SEVENTH DAY ADVENTIST DISPENSARY	FBO			✓	✓	✓
21	SHAURIMOYO PHCU	PUBLIC		✓	✓	✓	✓
22	OTTU RCH	PUBLIC			✓	✓	
23	MENTAL HOSPITAL	PUBLIC				✓	
24	K/CHEKUNDU PHCU	PUBLIC				✓	✓

Magharibi District

S/NO	Facility	Ownership	VCT	PITC	PMTCT	TB	HBC
1	KMKM KIBWENI PHCU	PARASTATAL	✓	✓	✓	✓	✓
2	BUBUBU JESHINI HOSPITAL	PARASTATAL	✓	✓	✓	✓	✓
3	ZANGOC MWANAKWEREKWE	NGO	✓				
4	SOS MEDICAL CENTRE	PRIVATE	✓		✓	✓	✓
5	FUONI PHCU	PUBLIC	✓	✓	✓	✓	✓
7	KIEMBE SAMAKI PHCU	PUBLIC	✓	✓	✓	✓	✓
8	KIZIMBANI PHCU	PUBLIC	✓	✓	✓	✓	✓
9	CHUKWANI PHCU	PUBLIC	✓	✓	✓	✓	✓
10	SELEM PHCU	PUBLIC	✓	✓	✓	✓	✓
11	ST CAMILAS DISPENSARY	FBO	✓		✓		✓
12	BWEFUMU PHCU	PUBLIC			✓	✓	✓
13	FUONI KIBONDENI PHCU	PUBLIC			✓	✓	✓
14	KOMBENI PHCU	PUBLIC			✓	✓	✓
15	MAGOGONI PHCU	PUBLIC			✓	✓	✓
16	SHAKANI PHCU	PUBLIC		✓	✓	✓	✓
17	SANASA DISPENSARY	PRIVATE			✓	✓	
18	MWANAKWEREKWE KKT DISPENSARY	FBO				✓	
19	KISAUNI PHCU	PUBLIC			✓	✓	✓
20	WELEZO CAMP PHCU	PUBLIC			✓	✓	✓
21	BEIT EL RAAS PHCU	PUBLIC				✓	✓
22	CHUINI PHCU	PUBLIC			✓	✓	✓

Kati District

S/NO	Facility	Ownership	VCT	PITC	PMTCT	TB	HBC
1	UNGUJA UKUU PHCU	PUBLIC	✓	✓	✓	✓	✓
2	ST LUKAS MACHUI	FBO	✓			✓	
3	UROA PHCU	PUBLIC	✓	✓	✓	✓	✓
4	DUNGA PHCU	PUBLIC	✓	✓	✓	✓	
5	KIDIMNI DISPENSARY	PRIVATE	✓				
6	UBAGO MILLITARY HOSPITAL	PARASTATAL	✓	✓	✓	✓	✓
7	MWERA PHCU	PUBLIC		✓	✓	✓	✓
8	KIBOJE PHCU	PUBLIC		✓	✓	✓	✓
9	CHWAKA PHCU	PUBLIC	✓	✓	✓	✓	✓
10	JENDELE PHCU	PUBLIC	✓	✓	✓	✓	✓
11	MIWANI PHCU	PUBLIC	✓		✓	✓	✓
12	UZINI PHCU	PUBLIC	✓	✓	✓	✓	✓
13	TUNGUU PHCU	PUBLIC		✓	✓	✓	✓
14	BAMBI PHCU	PUBLIC			✓	✓	✓
15	UZI PHCU	PUBLIC			✓	✓	✓
16	MARUMBI PHCU	PUBLIC			✓	✓	✓
17	PONGWE PHCU	PUBLIC			✓	✓	✓
18	NDIJANI KWABANIANI PHCU	PUBLIC			✓	✓	✓
19	NDIJANI MSEWENI PHCU	PUBLIC			✓	✓	✓
20	MWERA PONGWE PHCU	PUBLIC			✓	✓	
21	UKONGORONI PHCU	PUBLIC			✓	✓	
22	CHARAWE PHCU	PUBLIC			✓	✓	✓
23	CHEJU PHCU	PUBLIC			✓	✓	
24	TUNGUU UNIVERSITY	PRIVATE				✓	
25	MACHUI PHCU	PUBLIC			✓	✓	✓
26	MCHANGANI PHCU	PUBLIC			✓	✓	✓
27	UMBUJI PHCU	PUBLIC				✓	✓

Kusini District

S/NO	Facility	Ownership	VCT	PITC	PMTCT	TB	HBC
1	MAKUNDUCHI COTTAGE HOSPITAL	PUBLIC	✓	✓	✓	✓	✓
2	JAMBIANI PHCU	PUBLIC		✓	✓	✓	✓
3	MUYUNI PHCU	PUBLIC	✓	✓	✓	✓	✓
4	ZAYEDESA PAJE	NGO	✓				
5	KIZIMKAZI MKUNGUNI PHCU	PUBLIC		✓	✓	✓	✓
6	PAJE PHCU	PUBLIC		✓	✓	✓	✓
7	MTENDE PHCU	PUBLIC		✓	✓	✓	✓
8	KIBUTENI PHCU	PUBLIC			✓	✓	✓
9	KIZIMKAZI DIMBANI PHCU	PUBLIC			✓	✓	✓
10	MUUNGONI PHCU	PUBLIC			✓	✓	✓
11	BWEJUU PHCU	PUBLIC			✓	✓	✓
12	KAJENGWA PHCU	PUBLIC			✓	✓	✓
13	MICHAMVI PHCU	PUBLIC		✓	✓	✓	✓

North A District

S/NO	Facility	Ownership	VCT	PITC	PMTCT	TB	HBC
1	KIVUNGE COTTAGE HOSPITAL	PUBLIC	✓	✓	✓	✓	✓
2	MATEMWE PHCU	PUBLIC		✓	✓	✓	✓
3	PWANI MCHANGANI PHCU	PUBLIC		✓	✓	✓	✓
4	NUNGWI PHCU	PUBLIC		✓	✓	✓	✓
5	RGF KENDWA	PUBLIC		✓	✓	✓	✓
6	TUMBATU JONGOWE	PUBLIC	✓	✓	✓	✓	✓
7	TUMBATU GOMANI	PUBLIC		✓	✓	✓	✓
8	ZAYEDESA NUNGWI	NGO	✓				
9	MKOKOTONI PHCU	PUBLIC		✓	✓	✓	✓
10	CHAANI KUBWA PHCU	PUBLIC			✓	✓	✓
11	CHAANI MASINGINI PHCU	PUBLIC			✓	✓	✓
12	GAMBA PHCU	PUBLIC			✓	✓	✓
13	KIDOTI PHCU	PUBLIC			✓	✓	✓
14	TAZARI PHCU	PUBLIC			✓	✓	✓
15	KIJINI PHCU	PUBLIC			✓	✓	✓

North B District

S/NO	Facility	Ownership	VCT	PITC	PMTCT	TB	HBC
1	BUMBWINI MISUFINI PHCU	PUBLIC	✓	✓	✓	✓	✓
2	BUMBWINI MAKOBA PHCU	PUBLIC			✓	✓	✓
3	KITOPE PHCU	PUBLIC		✓	✓	✓	✓
4	KITOPE RC	FBO		✓	✓	✓	
5	KIWENGWA PHCU	PUBLIC	✓	✓	✓	✓	✓
6	MAHONDA PHCU	PUBLIC	✓	✓	✓	✓	✓
7	UPENJA PHCU	PUBLIC	✓	✓	✓	✓	✓
9	DONGE MCHANGANI PHCU	PUBLIC			✓	✓	✓
10	DONGE VIJIBWENI PHCU	PUBLIC			✓	✓	✓
11	FUJONI PHCU	PUBLIC			✓	✓	✓
12	KIOMBA MVUA PHCU	PUBLIC			✓	✓	✓
13	KIONGWE PHCU	PUBLIC			✓	✓	✓
14	ZINGWE ZINGWE PHCU	PUBLIC			✓	✓	✓

PEMBA

Chake Chake District

S/NO	Facility	Ownership	VCT	PITC	PMTCT	TB	HBC
1	CHAKE CHAKE HOSPITAL	PUBLIC	✓	✓	✓	✓	✓
2	GOMBANI PHC	PUBLIC		✓	✓	✓	✓
3	VITONGOJI COTTAGE HOSPITAL	PUBLIC	✓	✓	✓	✓	✓
4	ALI KHAMIS CAMP	PARASTATAL	✓	✓	✓	✓	
5	DIRA	PRIVATE	✓			✓	
7	MVUMONI PHCU	PUBLIC			✓	✓	✓
8	MGELEMA PHCU	PUBLIC			✓	✓	✓
9	SHUNGI PHCU	PUBLIC			✓	✓	✓
10	CHONGA PHCU	PUBLIC			✓	✓	✓
11	WESHA PHCU	PUBLIC		✓	✓	✓	✓
12	JKU WAWI PHCU	PARASTATAL			✓	✓	✓
13	UWANDANI PHCU	PUBLIC			✓	✓	✓
14	PUJINI PHCU	PUBLIC			✓	✓	✓
15	ZIWANI PHCU	PUBLIC			✓	✓	✓
16	PUBLIC HEALTH LAB(PHL)	PUBLIC				✓	
17	TUNDAUWA PHCU	PUBLIC		✓	✓	✓	✓
18	SDA WAWI DISPENSARY	FBO			✓		

Mkoani District

S/NO	Facility	Ownership	VCT	PITC	PMTCT	TB	HBC
1	ZAYEDESA MKOANI	NGO	✓				
2	ABDALLA MZEE HOSPITAL	PUBLIC	✓	✓	✓	✓	✓*
3	BOGOA PHCU	PUBLIC		✓	✓	✓	✓
4	MTAMBILE PHCU	PUBLIC	✓	✓	✓	✓	✓
5	KIWANI PCHU	PUBLIC		✓	✓	✓	✓
6	KANGANI PHCU	PUBLIC		✓	✓	✓	✓
7	KENGEJA PHCU	PUBLIC		✓	✓	✓	✓
8	WAMBAA PHCU	PUBLIC		✓	✓	✓	✓
9	MWAMBE PHCU	PUBLIC			✓	✓	✓
10	CHAMBANI PHCU	PUBLIC			✓	✓	✓
11	KISIWA PANZA PHCU	PUBLIC			✓	✓	✓
12	MAKOMBENI PHCU	PUBLIC			✓	✓	✓
13	MTANGANI PHCU	PUBLIC			✓	✓	
14	SHIDI PHCU	PUBLIC			✓	✓	✓
15	UKUTINI PHCU	PUBLIC			✓	✓	
16	SHAMIANI PHCU	PUBLIC			✓	✓	
17	MAKOONGWE PHCU	PUBLIC			✓	✓	

* In Abdalla Mzee Hospital, HBC services are provided by the hospital and by RCH clinic and for HBC these are considered as 2 separate sites

Wete District

S/NO	Facility	Ownership	VCT	PITC	PMTCT	TB	HBC
1	WETE HOSPITAL	PUBLIC	✓	✓	✓	✓	✓*
2	PANDANI PHCU	PUBLIC	✓	✓	✓	✓	✓
4	KAMBINI PHCU	PUBLIC	✓	✓	✓	✓	✓
5	JADIDA PHCU	PUBLIC		✓	✓	✓	✓
6	KIUYU MINUNGWINI PHCU	PUBLIC		✓	✓	✓	✓
7	CHWALE PHCU	PUBLIC	✓	✓	✓	✓	✓
8	JUNGUNI PHCU	PUBLIC			✓	✓	✓
9	FUNDO PHCU	PUBLIC			✓	✓	✓
10	KISIWANI PHCU	PUBLIC			✓	✓	✓
11	OLE PHCU	PUBLIC			✓	✓	✓
12	UONDWE PHCU	PUBLIC			✓	✓	✓
13	KIUNGONI PHCU	PUBLIC			✓	✓	✓
14	VUMBA PHCU	PUBLIC			✓	✓	
15	MZAMBARAUNI TAKAO PHCU	PUBLIC			✓	✓	
16	UKUNJWI PHCU	PUBLIC			✓	✓	✓
17	KANGAGANI PHCU	PUBLIC			✓	✓	✓
18	MAKONGENI PHCU	PUBLIC			✓	✓	✓
19	KOJANI PHCU	PUBLIC			✓	✓	
20	BWAGAMOYO PHCU	PUBLIC			✓	✓	

* In Wete Hospital, HBC services are provided by the hospital and by RCH clinic and for HBC these are considered as 2 separate sites

Micheweni District

S/NO	Facility	Ownership	VCT	PITC	PMTCT	TB	HBC
1	MICHEWENI COTTAGE HOSPITAL	PUBLIC	✓	✓	✓	✓	✓
2	WINGWI PHCU	PUBLIC	✓	✓	✓	✓	✓
3	KONDE PHCU	PUBLIC	✓	✓	✓	✓	✓
5	KIUYU MBUYUNI PHCU	PUBLIC		✓	✓	✓	✓
6	SHUMBA VIAMBONI PHCU	PUBLIC	✓	✓	✓	✓	✓
7	CHIMBA PHCU	PUBLIC		✓	✓	✓	
8	MSUKA PHCU	PUBLIC	✓	✓	✓	✓	✓
9	MAKANGALE PHCU	PUBLIC	✓	✓	✓	✓	✓
10	TUMBE PHCU	PUBLIC		✓	✓	✓	✓
11	KIUYU MAZIWA NG'OMBE PHCU	PUBLIC		✓	✓	✓	
12	KIUYU KIPANGANI PHCU	PUBLIC			✓	✓	
13	SIZINI PHCU	PUBLIC				✓	✓
14	MKIA WA NG'OMBE PHCU	PUBLIC				✓	
15	FINYA PHCU	PUBLIC			✓	✓	✓
16	KINYASINI PHCU	PUBLIC			✓	✓	✓
17	KIFUNDI PHCU	PUBLIC			✓	✓	

Appendix iii. Abstracts for studies conducted in 2017.

I. A study to identify factors influencing retention of People living with HIV enrolled in Care and Treatment Clinics in Zanzibar, 2017.

HIV continues to be a major global public health issue. In 2015, an estimated 36.7 million people were living with HIV. An estimated 25.5 million people living with HIV live in sub-Saharan Africa. The vast majority of them (an estimated 19 million) live in east and southern Africa which saw 46% of new HIV infections globally in 2015. A total of 1.4 million Tanzanians was estimated to be living with HIV in 2015. Zanzibar is typically characterized with concentrated HIV epidemic with high HIV prevalence among sex workers (SWs), people who inject drugs (PWIDs) and men who have sex with men (MSM).

In Zanzibar as of December 2016, patients who were receiving ARVs were **4,346** which is **60%** of patients estimated to be in need of treatment according to spectrum 2016 (ZIHHTLP annual report, 2016). Of these adults of 15 years and above were **4,058** and children below 15 years of age were 288. Number of patients receiving ART increased from **3,907** in 2015 to **4,346** in 2016. With the adoption of test and treat strategy, we expect will increase the number of PLHIV in ART programs. However, there's no current study done to identify factors influencing retention of PLHIV in ART programme in Zanzibar.

Objective: To assess factors influencing retention of PLHIV in ART services in Zanzibar, identify health care worker's views on factors influencing retention of PLHIV in an HIV care program and to determine the current mechanisms for monitoring retention in ART services in Zanzibar.

Methods: We conducted facility-based cross-sectional study employing both qualitative and quantitative research methods to clients attending ART programs aged 15 years and health care workers working in CTC. The structured questionnaire was developed for both clients and health workers and all analyses were done using STATA version 14.

Key findings.

Clients: We interviewed 682 HIV patients on ART from 12 Care and treatment clinics in Zanzibar. Majority of study participants were female (74.2%). Majority (40%) were in the age of 35-44 years (IQR 34-47). Almost half (48.8%) of participants were married, more than one third attained primary school (44%) and more than half (56%) are self-employed. Most

participants reside in the west district and those who have been on ART for more than 5 years (58.1%) were the majority.

There are clients who reported to have missed clinic visits after being enrolled in ART program. The biggest proportion of clients who have ever missed clinic visit for the clients recruited was that of Micheweni CTC (80%)followed by Zayedesa CTC (56.5%). The lowest proportion of clients who have ever missed clinic visit was reported in Alrahma CTC (5.0%) and Chake Chake CTC was reportedly to have none who have ever missed clinic visit among those recruited. Of the 68 clients who have ever missed clinic visit, the highest proportion were males 16.5% versus 7.7% of female. Male were twice more likely to miss clinic visits compared to female (OR 2.30, 95% CI (1.28-4.11) and P-value 0.001. The predominant age group of those who ever missed clinic visit was age group 20-24 of which the proportion was 20.0%, followed by age group 25-34 of which the proportion was 14.2%. We also saw that those who have ever disclosed their HIV status are less likely to miss clinic visits compared to those who have not disclosed their status (OR 0.23, 95% CI (0.11-0.48) and P-value < 0.001.

Of the 682 clients interviewed, 290(42.5%) think that there are beliefs that hinder clients from continuing with the use of ART. Majority have beliefs into witchcraft mentioned by 51.4% clients and the belief that traditional medicine is better by 37.2% of participants.

Health care workers: A total of 87 health care workers working into CTC were interviewed. Of these (59%) were male and the predominate age was 45-54 years (42.5%) followed by 35-44 years (27.6%). Their age ranged from 27 to 70 years (median age = 44.8 years and mode = 40 years). Majority of providers (74.7%) had college/university education and only 8% had a primary school education.

HCWs suggested that if transport fee is to be provided to PLHIV as mentioned by 9 participants could ensure clients not to discontinue using ART. Furthermore, 8 presumed that CTC providers helping PLHIV clients on their social problems might also improve retention of clients on ART services. Others (3) mentioned equipping the clinic with availability of more counselling rooms for privacy and confidentiality would ensure persons remain on ART. Improved and continued adherence counselling as mentioned by 86 participants would ensure persons not to discontinue taking ARVs, while12 and 8 participants respectively advised that provision of friendly HIV services, and enhanced patients follow up would be of beneficial.

Furthermore, it was suggested that, the provision of food support could help persons not to stop ART. Family support and motivation to patients with good adherence may help clients not to discontinue ART treatment.

II. Formative Assessment and Size Estimation among Female Sex Workers, Men who have Sex with Men, and People who Inject Drugs in Zanzibar, 2017.

This summary presents finding from the formative assessment conducted in April and May 2017 to prepare for the third integrated behavioral and biological surveillance (IBBS) survey among men who have sex with men (MSM), female sex workers (FSW), and people who inject drugs (PWID) in Unguja, Zanzibar. While it is widely accepted that HIV transmission in Zanzibar is concentrated among these key populations (KP), discrepancies exist in surveillance data collected in 2007 and 2011/2012. The third round of IBBS seeks to confirm and contextualize changes in HIV prevalence, update population size estimates, and identify and characterize risk factors for each KP. Findings from the formative assessment will inform the design and implementation of IBBS activities.

The Zanzibar Integrated HIV, Tuberculosis, and Leprosy Program (ZIHTLP), Ministry of Health, implemented the formative assessment. The University of California, San Francisco (UCSF) Global Health Sciences program provided technical assistance to protocol design, tool development, and survey implementation. The US Centers for Disease Control and Prevention (CDC) in Tanzania and Atlanta provided project oversight and technical assistance to protocol design and tool development. The US President's Emergency Plan for AIDS Relief (PEPFAR) funded this activity through the CDC and the Global Fund.

The survey team collected data through focus group discussions (FGDs), in-depth interviews (IDIs), key informant interviews (KIIs), sociodemographic questionnaires, and mapping, census or enumeration, and observation of KP at venues where they frequent or congregate. Data collectors enrolled 35 MSM, 39 FSW, and 27 PWID in the formative assessment. All participants completed a brief sociodemographic questionnaire and attended either a focus group discussion or an in-depth interview.

The formative assessment identified MSM, FSW, and PWID subgroups in Unguja and venues where they frequent or congregate, as well as the corresponding days/times they frequent or congregate at those venues. The formative assessment also explored KP

engagement in high-risk behaviors; assessed their access to and use of HIV services; investigated overlap between the three populations; explored the level of interaction between different subgroups within each KP group; and evaluated the feasibility of time location sampling (TLS) and respondent driven sampling (RDS) as methodologies for the third round of IBBS activities.

The formative assessment was implemented during a time of political intolerance towards KPs, resulting in increased police activity targeting venues frequented by KPs. In addition, data collection took place during the month leading up to Ramadan, a time when some KPs abstain from behaviors in which they normally engage (e.g., non-marital sex and substance abuse). The formative assessment found that venues frequented by KP have changed due to ongoing police activity, and that the political environment has affected the frequency with which KP are socializing at these venues. For example, MSM and FSW now frequent more rural or private venues to avoid being caught in police sweeps. The study found that the KPs in Unguja are growing or maintaining in size, and that there is minimal overlap between the populations, although some PWID are found among both FSW and MSM. Stigma and discrimination by the general population towards KPs is reported to be increasing, although all groups reported being able to access services when needed and most felt comfortable going to public health facilities.

The survey team concluded that a third round of IBBS should be done using RDS or some variant of peer-based recruitment. Given the challenges of ongoing changes in the venues frequented by KPs and the stigma related to KP behavior, a venue-based sampling strategy is likely to fail. Respondents reported that the ZIHTLP office would be a good place for the study and they would feel comfortable participating, although some expressed concern about being tested for HIV.