MINISTRY OF HEALTH SOCIAL WELFARE ELDERLY GENDER AND CHILDREN

ZANZIBAR HEALTH BULLETIN

HEALTH MANAGEMENT INFORMATION SYSTEM (HMIS) ZANZIBAR

2019

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ZANZIBAR ANNUAL HEALTH BULLETIN

2019

FOREWORD

Zanzibar Annual HEALTH BULLETIN 2019 has been produced by the Ministry of Health, Zanzibar, through Health Management Information System (HMIS). This bulletin is the 14th in a series of Health bulletins produced by the HMIS since 2006. It is a product of routine health data from each health facility that was analyzed from the District Health Information System version 2 (DHIS2).

This bulletin presents summary of health indicators and information on service utilization coverage, morbidity and mortality. It represents a wide range of data and information pertaining to Diseases Surveillance, Reproductive and Child Health services (ANC, PMTCT, IMCI, immunization and Nutrition), HIV, TB and Leprosy, Non-communicable Diseases (NCDs) and Neglected Tropical Diseases (NTDs).

Data from heath care facilities are collected daily using facility registers and are summarized on monthly basis. Designated health facility workers use District Health Information Software version 2 (DHIS2) to report data into an online database for further analysis.
Data management process was a participatory task involving representative's stakeholders from vertical programs, Hospitals, Council Health Management Teams (CHMTs), Parastatal health facilities and Non-Government Organizations (NGOs).

The bulletin shows the performance of national and international indicators that have been stipulated in the Health Sector Strategic Plan III (HSSP III), Zanzibar Strategy for Growth and Reduction of Poverty- III (Swahili acronym as MKUZA III) and the Sustainable Development Goals (SDGs). This annual bulletin provides useful information for planning, monitoring and evaluation of health activities. It is our expectations that health officials and stakeholders will use information of this bulletin for planning and decisions making in a view to inform and improve health care services in the Isles.

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It would be difficult to list all who contributed to this bulletin, however to mention few; we would like to acknowledge the special efforts made by Dr. Kalam A. Abushir, Mr. Khamis M. Khamis, Mr. Fredrik J. Makanyaga, Mr. Suleiman S. Hemed, Mr. Omar J. Othman, Ahlam S. Ali, Fatma kh. Haji and Asha H. Ali from HMIS Head Office – Unguja together with HMIS colleagues from Pemba which include Mr. Amour A. Tajo – Mr. Suleiman S. Omar and Mr. Msanifu O. Masoud.

The Planning, Policy and Research Department expresses its heartfelt gratitude to all MoH officers from different units, HMIS focal person at all levels including Health Facilities, District and Health programs, which are the base of data collection, quality assurance and use of the information at the grass-root level. Lastly, special appreciation should go to the Revolutionary Government of Zanzibar, Global Fund, UNICEF, UNFPA, WHO, USAID, Engender Health, Pathfinder, D – Tree, Boresha Afya and other International organizations for continuous financial supports and all those who contributed in one way or another during the development stage till to the end. Without their supports, this publication would not be possible.

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ABBREVIATIONS

AHB	Annual Health Bulletin
AIDS	Acquired Immuno-Deficiency Syndrome
ANC	Antenatal Clinic
ARV	Antiretroviral
BCG	Bacillus Calmette – Guérin
BEmOC	Basic Emergency Obstetric Care
C/S	Caesarean Section
CEmOC	Comprehensive Emergency Obstetric Care
CFR	Case Fatality Rate
CHMT	Council Health Management Team
CITC	Client Initiated Testing and Counseling
CPR	Contraceptive Prevalence Rate
DHIS2	District Health Information Software 2
ENT	Ear, Neck and Throat
EPI	Expanded Programme on Immunization
FANC	Focused Antenatal Care
FP	Family Planning
FSW	Female Swx Worker
HIV	Human Immuno-deficiency Virus
HMIS	Health Management Information System
HTC	HIV Testing and Counseling
HTS	HIV Testing and Counseling Services
IMCI	Integrated Management of Childhood Illness
KPs	Key Population
LLINS	Long Lasting Insecticidal Nets
MDA	Mass Drug Administration
MDGs	Millennium Development Goals
MDR TB	Multidrug-resistant tuberculosis
MMH	Mnazi Mmoja Hospital
MMR	Maternal Mortality Ratio
MoH	Ministry of Health
MSM	Men Sex Men
NBS	National Bureau of Statistics
TPHC	Tanzania Population and Housing Census
NCDs	Non-Communicable Diseases
NGOs	Non-Government Organizations
NTD	Neglected Tropical Diseases
PAC	Post Abortion Care
PB	Paucibacillary
PHCCs	Primary Health Care Centers
PHCUs	Primary Health Care Units
PITC	Patient Initiated Treatment and Counseling
PLHIV	People Living with HIV

PMTCT	Prevention of Mother-to-Child Transmission
PPH	Post-Partum Haemorrhage
PWID	People Who Inject Drugs
RCH	Reproductive and Child Health
RTA	Road Traffic Accidents
SDG	Sustainable Development Goals
STH	Soil- Transmitted Helminthiasis
STI	Sexual Transmitted Infections
TB	Tuberculosis
TB/HIV	Tuberculosis/Human Immuno-deficiency Virus
TBA	Traditional Birth Attendant
TDHS	Tanzania Demographic and Health Survey
THMIS	Tanzania HIV and Malaria Indicator Survey
TT	Tetanus Toxoid
URTI	Upper Respiratory Tract Infection
UTI	Urinary Tract Infection
VCT	Voluntary Counseling and Testing
WHO	World Health Organization
WRA	Women of Reproductive Age
ZIHHTLP	Zanzibar Integrated Hepatitis HIV TB and Leprosy Program
ZSGPR	Zanzibar Strategy for Growth and Poverty Reduction

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DEFINITION OF TERMS

Health system is the organization of people, institutions, and resources that deliver health care services to meet the health needs of target populations.

Data management is the practice of organizing and maintaining data processes to meet ongoing information lifecycle needs.

Primary data are data observed or collected directly from first-hand experience

Disease surveillance is an epidemiological practice by which the spread of disease is monitored in order to establish patterns of progression.

Bed occupancy rate is a measure of utilization of the available bed capacity.

Average Length of Stay (ALOS) refers to an average number of days that a patient stay

in a Hospital.

Case fatality rate (CFR) is a measure of the severity of a disease which show the proportion of cases of a specified disease or condition which are fatal within a specified time

Antenatal care is the routine health control of presumed healthy pregnant women without symptoms (screening), in order to diagnose diseases or complicating obstetric conditions without symptoms, and to provide information about lifestyle, pregnancy and delivery.

Family planning services are defined as "educational, comprehensive medical or social activities which enable individuals, including minors, to determine freely the number and spacing of their children and to select the means by which this may be achieved

Contraceptive Prevalence Rate (CPR) is the Family Planning indicator which measures the level of FP usage among Women of Reproductive Age (WRA).

Post-abortion care is an approach for reducing deaths and injuries from incomplete and unsafe abortions and their related complications

Skilled birth attendant is an accredited health professional such as a midwife, doctor or nurse- who has been educated and trained to proficiency in the skills needed to manage normal pregnancies, child birth and the immediate postnatal period, and in the identification, management and referral of complication in women and newborns.

Maternal death is the death of a woman occurring during pregnancy, childbirth or within 42 days of termination of the pregnancy from any cause related to or aggravated by the pregnancy or its management, irrespective the gestational age and site of the pregnancy, but not from incidental or accidental causes.

Nutrition is the intake of food, considered in relation to the body's dietary needs

Home-based care can be defined as any form of assistance provided to a sick person referred to as the patient directly in the home by family, friends and members of the local community, cooperating with the advice and support from the trained health workers

Malnutrition refers to deficiencies, excesses or imbalances in a person's intake of energy and/or nutrients.

Prevalence refers to the total number of individuals in a population who have a disease or health condition at a given time point in a specific population. It is usually expressed into percent.

Incidence refers to a rate of individuals who develop a specific disease or experience a specific health-related event (New case) during in a given time period (such as a month or year) per 1,000 populations.

Key Populations (KPs) are people that are at higher risk of being infected with HIV.

Stillbirth refers to the death or loss of a baby before or during delivery.

Perinatal death refers to a fetal death (stillbirth) or an early neonatal death (0-7 days).

Neonatal death refers to a death of a born baby during the first 28 days of life (0-27 days).

1 HEALTH SYSTEMS AND DATA MANAGEMENT

1.1 Health Systems

For the year 2019, there were **263** health facilities in Zanzibar health care system; of them, **178** (68.0%) were public owned and **85** (32.0%) were operated by private sectors. Out of **178** public health facilities, **103** (57.9%) were located in Unguja island and **75** (42.1%) are in Pemba. For the private health facilities, **71** (83.5%) were in Unguja and **14** (16.5%) were in Pemba. Table 1.1 display the distribution of these health care facilities by district, level and ownership in 2019.

1.1.1 Hierarchy of Public Health System

The Zanzibar public health care system is categorized into three levels of service delivery: -

i. Primary level: Primary Health Care Units and Centers (PHCUs and PHCCs);
ii. Secondary level: District and Regional Hospitals; and
iii. Tertiary level: Referral Hospitals; currently only Mnazi Mmoja Hospital fallen in this category. (including two specialized Hospitals).

The primary level (exclude PHCCs) are supported and monitored by the President's Office, Regional Administration, Local Government and Special Departments (PORALGSD) through Council Health Management Teams (CHMTs) which are under the Council administration while Secondary and Tertiary level are managed by the Ministry of Health. Also PHCC from Primary level are managed under MoH.

1.1.2 Health Facilities by Ownership and Level

Table 1: Distribution of Health Facilities by District, Ownership and Level, 2019

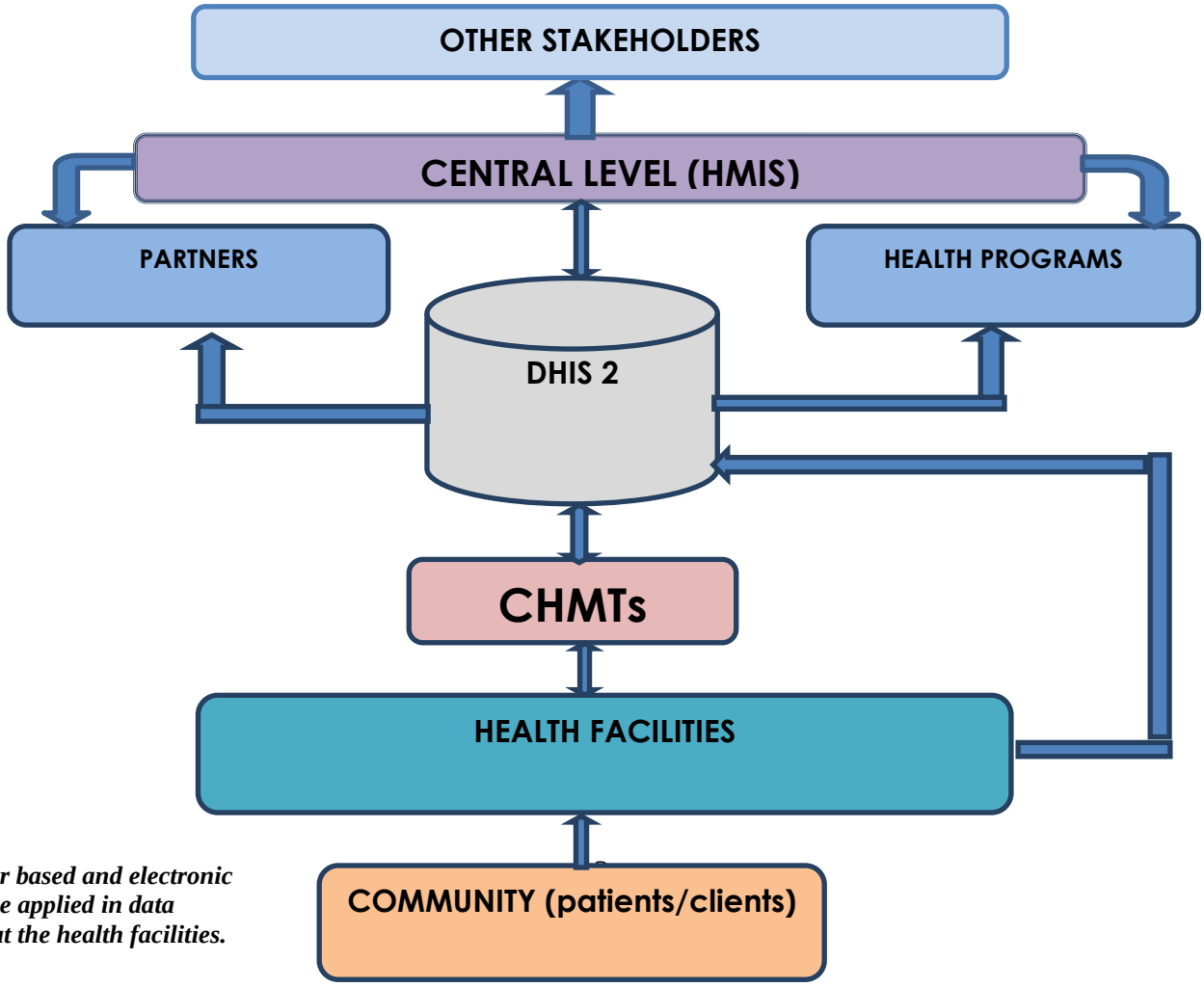
	Public Health facilities								Total Public	Private Health facilities			Total Private	Total health facilities
District	**PHCU**	**PHCU+**	**PHCC**	**District Hospital**	**Regional Hospital**	**Referral Hospital**	**Specialized Hospital**	**Parastatals**		**Faith Based**	**NGOs**	**Private for profit**		
Chakechake	12	3	1	1	0	0	0	2	**19**	1	1	5	**7**	**26**
Micheweni	11	3	1	0	0	0	0	0	**15**	0	0	3	**3**	**18**
Mkoani	13	4	0	0	1	0	0	0	**18**	0	1	0	**1**	**19**
Wete	17	3	0	1	0	0	0	2	**23**	0	0	3	**3**	**26**
Pemba	**53**	**13**	**2**	**2**	**1**	**0**	**0**	**4**	**75**	**1**	**2**	**11**	**14**	**89**
Kaskazini A	11	3	0	1	0	0	0	0	**15**	0	1	7	**8**	**23**
Kaskazini B	9	3	0	0	0	0	0	0	**12**	1	0	1	**2**	**14**
Kati	21	4	0	0	0	0	0	2	**27**	1	0	6	**7**	**34**
Kusini	9	2	0	1	0	0	0	0	**12**	0	1	1	**2**	**14**
Magharibi A	6	1	0	0	0	0	0	6	**13**	0	0	12	**12**	**25**
Magharibi B	6	4	0	0	0	0	0	0	**10**	2	0	19	**21**	**31**
Mjini	7	3	0	0	0	1	0	3	**14**	1	0	18	**19**	**33**
Unguja	**69**	**20**	**0**	**2**	**0**	**1**	**0**	**11**	**103**	**5**	**2**	**64**	**71**	**174**
Zanzibar	**122**	**33**	**2**	**4**	**1**	**1**	**0**	**15**	**178**	**6**	**4**	**75**	**85**	**263**

1.2 Data management

1.2.2 Routine Health Facilities Data Flow

In each facility, routine data are derived from the designed data collection registers that comprise of Patients'/client's details, that include age, sex, diagnosis/conditions with related treatment records depending on the type of services provided; the registers are filled on daily basis. The raw data from individual patient and or client are summarized and aggregated into weekly, monthly or quarterly reports and then entered into the electronic database platform the so called District Health Information Software version 2 (DHIS2). Each facility was granted with an access credential to allow entering completed monthly summary forms directly into the DHIS2. Once the data is entered into the DHIS2; CHMT, Central HMIS unit, health programs can access the information using unique credential access and can shared to partners and different stakeholders (figure 1). This information is used to develop Annual Health Bulletins (AHB), annual health performance report, program reports, budget speech and act as reference for different interventions.

Figure 1: Health Data Flow in Zanzibar



Note: Paper based and electronic methods are applied in data collection at the health facilities.

1.2.3 Data Quality

The quality of routine health facility data was measured using four common dimension; these are completeness, timeliness of reports submission, data accuracy and consistency. Currently, HMIS have managed to compute the rate of completed submission and timeliness of the forms. In 2019, the overall completeness stands at **87.3 percent**, however the values of submission rate of completed forms vary greatly; ranges from **34.3 percent** to **99.7 percent** in individual form.

With regards to timeliness of the forms, the overall timeliness of the forms stands at **47.5 percent** with a minimum rate of **20.3 percent** and a maximum of **53.2 percent**,

Radiology forms reported with low rate for both completeness and timeliness whereas Immunization and cold chain forms performed well with completeness of **99.7 percent**.

Notably, in a normal circumstance this indicator (rate of submission of completed forms) is expected to be **100 percent** however due to frequent opening and closing of health facilities (particularly private health facilities) within the year as well as late report submission due to lack of internet bundle leads to experience low expected value. Table 2 illustrates the submission status for the three consecutive years from 2017 to 2019 by specific forms.

Table 2: Monthly Report Completeness and Timeliness, 2017-2019

Type of Form	Reports completeness			Reports Timeliness	
	2017	2018	2019	2017	2019
Monthly disease surveillance	2427 (80.6)	2542 (85.1)	2839 (94.6)	1579 (52.8)	1271 (44.8)
Immunization and cold chain	1968 (94.8)	1993 (96.0)	2082 (99.7)	1719 (82.8)	1210 (51.8)
Reproductive and child health	1988 (94.7)	2010 (95.7)	2107 (99.2)	1635 (77.9)	1136 (53.2)
STI/RTI	2231(75.3)	2,342 (79)	2588 (87.7)	1663 (56.1)	1242 (48.0)
Maternity	-	-	780 (98.5)	-	390 (51.0)
Gender Based Violence	-	-	70 (72.9)	-	28 (40.0)
TB Notification	-	-	504 (72.4)	-	223 (44.2)
Leprosy Notification	-	-	478 (64.2)	-	224 (46.9)
Female Wards	-	-	127 (70.6)	-	52 (24.4)
Male Wards	-	-	133 (65.2)	-	53 (39.8)
Other Wards	-	-	313 (84.1)	-	100 (31.9)
Clinics	-	-	871 (69.1)	-	236 (27.1)
Theatre	-	-	236 (70.2)	-	82 (34.7)
Radiology Department.	-	-	74 (34.3)	-	15 (20.3)
Laboratory	-	-	106 (52.0)	-	45 (42.5)
Total	**-**	**-**	**1,3308 (87.3)**	**-**	**6,315 (47.5)**

2 DISEASE SURVEILLANCE

2.1 Outpatients Summary

Outpatients' visits were recorded as a primary determinant on the utilization of health care facilities. Outpatient's morbidity data were collected on monthly basis in all health facilities. The data were captured using the standardized diseases surveillance form that is disaggregated by age and sex. The selected diseases were prioritized for public health concerns, as the reduction of their prevalence is likely to have a positive impact both socially and economically on the country.

2.1.1 Outpatient Visits

A total of **2,060,837** out-patients visits (exclude special clinics) have been reported in all facilities (Unguja **1,442,839**, Pemba **617,898)** where the total number of increase was **451,059**, this represent a **28 percent** increment compared to the **1,609,778** visits recorded in 2018. For two consecutive years (2018 and 2019), Public health facilities at Pemba have experienced an increment of the patients seeking for medical care while visits at Private health facilities have decreased for both Unguja and Pemba as table 3 below demonstrate.

Table 3: OPD Attendances by Facility Ownership, 2017-2019 (exclude Special clinics)

Place	Facility ownership	Total OPD visits (%)		
		2017	2018	2019
Unguja	Public Health Facilities	441,239 (54.8)	728,575 (69.3)	998,641 (69.2)
	Parastatal	144,592 (18.0)	43,488 (4.1)	126,029 (8.7)
	Faith Based	34,019 (4.2)	22,380 (2.1)	30,416 (2.1)
	Private Health Facilities	184,719 (23.0)	257,272 (24.5)	287753 (19.9)
Total		804,569 (100)	1,051,715 (100)	1,442,839 (100)
Pemba	Public Health Facilities	207,701 (73.8)	492,227 (88.2)	565,251 (91.5)
	Parastatal	10,162 (3.6)	11,842 (2.1)	7163 (1.2)
	Faith Based	1,960 (0.7)	1,703 (0.3)	655 (0.1)
	Private Health Facilities	61,789 (21.9)	52,291 (9.4)	44,829 (7.3)
Total		281,612(100)	558,063 (100)	617,898 (100)
Zanzibar	Public Health Facilities	648,940 (59.7)	1,220,802(75.8)	1,563,983 (75.9)
	Parastatal	154,754 (14.2)	55,330 (3.4)	133,193 (6.5)
	Faith Based	35,979 (3.3)	24,083 (1.5)	31,071 (1.5)
	Private Health Facilities	246,508 (22.7)	309,563 (19.2)	332,589 (16.1)
Total		**1,086,181**	**1,609,778**	**2,060,837**

2.1.2 Outpatients for Special clinics

There is a wide range of clinics offering outpatient's special services for variety of diseases, which are treated under specialized health providers, most of the special clinic services, are provided at the secondary and tertiary level. A total of **306,803** visits (headcounts) have reported for seeking outpatients' special services, where **58.2 percent** of the visits were females. Majority of the reported visits were associated with Eye and ENT with **38.5** and **11.7 percent** respectively. See table 4 below

Table 4: Patients' headcounts in special clinics by hospital and sex, 2019

Clinics	Micheweni		Wete		Chake Chake		Abdalla Mzee		Vitongoji		Kivunge		Makunduchi		Mnazi Mmoja		Al rahma		Total
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	
Acupuncture	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,386	1,631	-	-	**3,017**
Cardiac	281	595	395	989	-	-	92	338	292	335	933	1,677	318	1510	1,137	2,529	-	-	**3,666**
Dental	379	550	2,417	2,584	1,320	2,113	2,196	2,744	202	224	2,456	3,807	1,390	1,975	3,718	5,502	1,389	1,997	**12,606**
Diabetic	245	377	374	824	349	722	652	796	91	110	544	761	395	821	2,216	3,216	-	-	**5,432**
ENT	265	342	941	1,260	2,177	3,794	2,444	3,196	-	-	452	687	-	-	6,885	9,149	-	-	**16,034**
Eye	636	768	4,843	5,206	2,611	4,955	2,233	2,946	189	268	993	1712	261	415	24,453	26,716	656	836	**52,661**
Gynae	-	-	-	4,063	-	4,092	-	2,414	-	-	-	-	-	-	-	4,709	-	2,135	**6,844**
HIV T&C*	1,277	1,313	2,944	3,735	4,712	7,961	875	1,019	684	878	4,581	8,387	685	900	5,927	5,564	-	-	**11,491**
Neurosurgery	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,342	1,774	-	-	**3,116**
Oncology	-	-	-	-	-	-	-	-	-	-	-	-	-	-	676	821	-	-	**1,497**
Orthopedic	-	-	-	-	-	-	3,017	2,388	-	-	-	-	-	-	3,034	2,031	-	-	**5,065**
Physio& Reh**	-	-	653	576	2,695	2,813	128	181	-	-	-	-	-	-	2,244	2,902	-	-	**5,146**
Psychiatric	-	-	1,198	1,453	749	1,015	1,105	1,476	-	-	155	231	106	290			-	-	**7,778**
Skin disease	-	-	868	1141	765	953	-	-	-	-	-	-	-	-	909	1,576	1,351	1,315	**5,151**
Surgical OPD	-	-	1,235	715	467	222	5,090	5,241	-	-	-	-	-	-	3,813	1,240	-	-	**5,053**
Sub-total	**3,083**	**3,945**	**15,868**	**22,546**	**15,845**	**28,640**	**17,832**	**22,739**	**1,269**	**1,815**	**10,114**	**17,262**	**3,155**	**5,911**	**57,740**	**69,360**	**3,396**	**6,283**	**136,779**
Total	**7,028**		**38,414**		**44,485**		**40,571**		**3,084**		**27,376**		**9,066**		**127,100**		**9,679**		**136,779**

2.1.3 Top Ten Procedure Performed in Major Theatre in Zanzibar

One of the main successes of the health sector in Zanzibar is the performance of medical and surgical procedures that are mostly performed at the hospital level; this shows the improvement of health care delivery management of high-risk cases.

Table 5 below ranks the most top ten procedures performed in major theatres at different hospitals within Zanzibar. For the year under review (2019), Herniorrhaphy procedure is still leading (**12.9%)** on the list of the top ten procedures with least decrement compared to 2018. The second leading procedures was laparotomy which maintain its position from 2018. Biopsy Excision that was in the 9th position in 2018, raised up to 3rd position in 2019 with **184** more cases when compared to 2018. On the other hand, the number of cases undergone Myomectomy, Appendectomy and Cystectomy procedures have been reduced than previous year.

Table 5: Ten Procedure Performed in Major Theatre in Zanzibar 2019.

2018				2019	
Procedure	**No. and %**	**Rank**	**Rank**	**Procedure**	**No. and %**
Herniorrhaphy/Herniotomy	1,051(16.9)	1	1	Herniorrhaphy/Herniotomy	1,174 (12.9)
Laparotomy	274 (4.4)	2	2	Laparotomy	360 (4.0)
Fracture Reduction	240(3.9)	3	3	Biospy Excision	309(3.4)
Myomectomy	240 (3.9)	4	4	Hydrocelectomy	221 (2.4)
Appendicectomy	213(3.4)	5	5	Appendicectomy	220(2.4)
Hydrocelectomy	177 (2.9)	6	6	Fracture Reduction	209 (2.3)
Open Reduction and Internal Fixation	175 (2.8)	7	7	Open Reduction and Internal Fixation	205 (2.3)
Cystectomy	156 (2.5)	8	8	Myomectomy	168(1.9)
Biopsy Excision	125 (2.0)	9	9	Cholecystectomy	154(1.7)
Orchidopexy	119 (1.9)	10	10	Cystectomy	151 (1.7)
Other procedure	3,932(55.4)			Other procedure	5,897(65.0)

2.1.4 Patients' Visits at Theatre and Laboratory at public hospital

For the year under review, a total of **27,262** procedures were performed in Zanzibar public hospitals, of which **35.8 percent** were conducted in Mnazi Mmoja Hospital followed by Wete and Micheweni Hospital with **14.8** and **14.7 percent** respectively. Compared to the previous years (2018), the cases of operations conducted were reduced by **363** cases. Despite of having major theatres in most of the hospitals, some of the procedures are not conducted in all hospitals. Mnazi Mmoja Hospital as a referral in Zanzibar is the only hospital that have theatres to perform different surgeries.

Out of **31,592** cases recorded, at the ENT theatre a total **1,483** cases (**4.7 percent**) went for operations and 870 cases (**1.1 percent**) of Eye problems undergo for operation. It has to be noted that these two services (ENT and eye operations) are conducted Mnazi Mmoja and Wete Hospital as shown in table 6. This invites the need of expanding these services in other hospitals.

Comprehensive laboratory services continue to expand at all levels of Health facilities. For this section it highlighted more on laboratory services on the side of Hospitals only (see table 7)

Table 6: Number of cases performed in specified theatres by public Hospital

	Theatre	Micheweni		Wete		Chake		Abdalla Mzee		Vitongoji		Kivunge		Makunduchi		Mnazi Mmoja		Total Public Hospital
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	
2018	ENT*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	349	452	**801**
	Eye	-	-	43	48	-	-	-	-	-	-	-	-	-	-	434	354	**879**
	Major	21	91	312	382	457	695	294	439	-	-	239	157	41	24	1,056	945	**5,153**
	Neuro surgery Operations/Proc.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	283	376	**659**
	Minor	3,152	1,624	1,639	1,110	816	1,233	-	-	1,015	349	1,754	724	-	-	4,907	1,810	**20,133**
	Total	**3,173**	**1,715**	**1,994**	**1,540**	**1,273**	**1,928**	**294**	**439**	**1,015**	**349**	**1,993**	**881**	**41**	**24**	**7,029**	**3,937**	**27,625**
2019	ENT*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	643	840	**1,483**
	Eye	-	-	249	186	-	-	-	-	-	-	-	-	-	-	242	193	**870**
	Major	85	169	363	258	318	775	323	589	-	-	191	237	58	42	1,179	971	**5,558**
	Neuro surgery Operations/Proc.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	146	117	**263**
	Minor	2,117	1,642	1,802	1,174	741	926	-	-	945	660	2,289	1,070	209	71	3,793	1,649	**19,088**
	Sub Total	**2,202**	**1,811**	**2,414**	**1,618**	**1,059**	**1,701**	**323**	**589**	**945**	**660**	**2,480**	**1,307**	**267**	**113**	**6,003**	**3,770**	**27,262**
	Total	**4,013**		**4,032**		**2,760**		**912**		**1,605**		**3,787**		**380**		**9,773**		**27,262**

*Eye Nose and Throat

** Neurosurgery Operations or Procedures

Table 7: Number of Tests performed in Laboratories

		Micheweni		Wete		Chake		Abdalla Mzee		Vitongoji		Kivunge		Makunduchi		M.M Hosp.		Al rahma	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
2018	Laboratory	4,353	5,868	28,967	39,940	6,964	14,149	9,534	13,010	3,291	5,690	11,577	46,565	-	-	-	-	21,268	40,173
2019	Laboratory	6,187	10,308	31,739	59,110	8,261	19,141	9,464	15,512	1,871	3,927	7,754	19,896	-	-	87,125	122,054	27,111	37,377

2.1.5 Health Facility Utilization

The utilization rate is used to measure the frequency with which the population used the health service available. It is a number which is defined by dividing total number of outpatient department visits by the specific population within the geographical area of the selected health facilities. Based on utilization rate, health facilities' in-charge, CHMTs, planners, and other officials at different level in the Ministry will be able to manage and plan which types of services are more essential to provide efficiently with available the limited resources. It is expected that each individual in a catchment area have to utilize health services at least once in a year. However, for a stable population where there is no substantially emergency affected population, the health service utilization is often between **0.5** - **1.0** consultations per person in a year. In emergency-affected populations, this may often rise to an average of **4.0** consultations per person per year. Table 7 describe detailed information on utilization rate by district and age category.

2.1.6 Outpatients Utilization rate

As Zanzibar is considered with a stable population, outpatient utilization rate has been reported at around one (1) consultation per person per year in all ages. The observed value has remained almost the same over the past three years. However, there are discrepancies among districts with the highest value of **2.5** in Mjini and Kati **(1.9)**; and the lowest value of **0.5** in Magharibi A.

2.1.7 Utilization Rates for Under 5 years

The outpatient utilization rate for children under-five years of age is recorded at **2.4** with a minimal increase of **4** decimal points from the previous year (2018); this implies that each child under the age of 5 years seek consultation in a health facility at least twice in a year. In normal circumstances, children of this age category (0 -59 months) are accepted to visit the health facility more than once per year.

2.1.8 Utilization Rates for Under 5 Years (All services)

For all services, the utilization rate for children under-five years of age is recorded at **5.9** with an increase of **1.1** points from the previous year (2018); this implies that a child under the age of 5 years visited in a health facility nearly six times in a year to seek consultation and/or other service delivered. Kaskazini A district has reported with highest value of **10.1**visits and the lowest values were observed in Micheweni district (3.4).

Table 8: OPD utilization rates for All services by age group and by district, 2017 - 2019

District	All ages (OPD)			< 5 years (OPD)			<5years (All services)		
	2017	2018	2019	2017	2018	2019	2017	2018	2019
Chake hake	1.8	1.7	1.6	3.8	3.6	3.2	7.4	7.4	6.0
Micheweni	0.9	0.9	1.0	1.8	1.6	1.9	4.3	4.3	3.4
Mkoani	0.9	1.6	1.0	1.7	1.4	1.7	6.5	4.2	4.2
Wete	1.2	1.2	1.3	2.4	2.1	2.3	5.4	6.6	8.9
Pemba	**1.2**	**1.3**	**1.2**	**2.4**	**2.1**	**2.2**	**5.9**	**5.6**	**5.7**
Kaskazini A	0.9	1.1	1.2	2.2	2.1	2.6	7.6	5.3	10.1
Kaskazini B	0.6	0.8	0.8	1.4	1.5	1.6	5.2	3.5	3.8
Kati	1.5	1.7	1.9	3	3.5	3.8	8.6	6.9	8.1
Kusini	1.2	1.0	1.7	2.4	2	3.0	9.3	5.4	7.3
Magharibi A	0.8	0.8	0.5	3.0	1.7	1.8	7.5	3.9	4.4
Magharibi B	0.4	0.6	0.8	1.1	1.2	1.5	3.9	3.2	4.7
Mjini	1.3	1.2	2.5	2.6	2.8	4.0	7	7.9	7.0
Unguja	**0.9**	**1.0**	**1.3**	**2.1**	**2.0**	2.5	**6.4**	**5.0**	**6.1**
Zanzibar	**1.0**	**1.1**	**1.3**	**2.2**	**2.0**	2.4	**6.3**	**5.2**	**5.9**

2.2 Outpatient Morbidity Data

The reported-out patient data (diagnosis and/or conditions) are generated from the OPD surveillance tally sheets commonly known as stroke forms that are filled on daily basis by the prescribers in health facilities. These data are disaggregated by age, (below and above five years) and sex. Table 9 and 10 provided top ten outpatient diagnoses reported in Zanzibar health facilities for all ages and under-fives years in 2019 respectively. However, the information provided in these tables does not include services offered from specialized clinics.

2.2.1 Top 10 Diagnoses/Conditions for All Ages for Outpatient Services

From the table 9 below it observed that, Upper Respiratory Tract Infections (URTIs) continues to persist as leading cause of morbidity in Zanzibar that accounts almost **16.1 percent** in all reported cases in OPD. This was followed by cold/cough conditions **(12.9%)** which affecting mostly under five years aged children, skin diseases (excluding chicken pox and herpes zoster) had **10.8 percent** followed by UTI and ENT. Other diarrhea disease and Pneumonia jumped one position higher compared to 2018 while Dental diseases remains at the same position as previous years.

Table 9: Zanzibar Top 10 Diagnoses for All Ages, 2017 – 2019

2017			2018			2019		
Diagnosis/Conditions	No. and %	Rank	Rank	Diagnosis/Conditions	No. and %	Rank	Rank	Diagnosis/Conditions	No. and %
URTI	320,141 (27.3)	1	1	URTI	248,938(15.0)	1	1	URTI	296175 (16.1)
*Other skin disease	105,546 (9.0)	2	2	Cough/Cold	199,124(12.0)	2	2	Cough/Cold	237805(12.9)
ENT head and neck	101,637 (8.7)	3	3	*Other skin disease	157,909(9.5)	3	3	Other skin disease	198001(10.8)
UTI	98,404 (8.4)	4	4	UTI	139,531(8.4)	4	4	UTI	165630(9.0)
**Other Diarrhoea disease	94,976 (8.1)	5	5	ENT Ear, Nose and Throat	136,263(8.2)	5	5	Ear, Nose and Throat	154926(8.4)
NCD	69,316 (5.9)	6	6	NCD	125,980(7.6)	6	6	Other Diarrhoea diseases	119603(6.5)
Pneumonia	65,580 (5.6)	7	7	**Other Diarrhoea disease	114,226(6.9)	7	7	NCD	90,171(4.9)
Dental Disease	33,185 (2.8)	8	8	Pneumonia	81,382(4.9)	8	8	Pneumonia	74,556(4.1)
Conjunctivitis	19,157 (1.6)	9	9	Dental Diseases	40,997(2.5)	9	9	Dental Diseases	58491(3.2)
Intestinal Worms	17,920 (1.5)	10	10	Conjunctivitis	25,330(1.5)	10	10	Conjunctivitis	29,923(1.6)
Other diagnosis	246,864 (21.1)			Other Diagnosis	385,879(23.3)			Other Diagnosis	415,606(22.6)

** *Other diarrheal disease – all types of diarrheal except dysentery and cholera*

2.2.2 Top 10 diagnosis in children under 5 years

In considering the top ten diseases among patients with aged under five, Cough/cold (no pneumonia) became the leading causes of morbidity, which present almost one third of all diagnosis **(37.3 percent)**. This was followed by other skin disease and Other diarrhea diseases (except dysentery and cholera) as shown in table 10.

Table 10: Top 10 Diagnosis in Children Under 5 Years Old, 2017 - 2019

2017			2018			2019	
Diagnosis/Conditions	No. and %	Rank	Diagnosis/Conditions	No. and %	Rank	Rank Diagnosis/Conditions	No. and %
URTI	149,268 (33.4)	1	Cough/Cold	199,124 (36.1)	1	Cough/Cold	237805 (37.3)
Pneumonia	52,668 (11.8)	2	*Other skin disease	70,629 (12.8)	2	Other skin disease	85691(13.4)
**Other Diarrhoea disease	50,549 (11.3)	3	Pneumonia	65, 720 (11.9)	3	Other Diarrhoea diseases	64204(10.1)
*Other skin disease	48,798 (10.9)	4	**Other Diarrhea diseases	61,664 (11.2)	4	Pneumonia	61458(9.6)
ENT head and neck	29,616 (6.6)	5	Ear, Nose and Throat (ENT)	36,862 (6.7)	5	Ear, Nose and Throat (ENT)	41949(6.6)
Urinary Tract Infections (UTI)	28,249 (6.5)	6	Urinary Tract Infections (UTI)	29.940 (5.4)	6	Urinary Tract Infections (UTI)	32015(5.0)
NCD	12,484 (2.8)	7	Conjunctivitis	12,128 (2.2)	7	Conjunctivitis	14435(2.3)
Conjunctivitis	8,686 (1.8)	8	Intestinal Worms	8,726 (1.6)	8	Intestinal Worms	9361(1.5)
Intestinal Worms	8,089 (1.8)	9	Chicken Pox	5,957 (1.1)	9	Dental Diseases	8851(1.4)
Chicken Pox	4,785 (1.1)	10	Dental Diseases	5.647 (1.0)	10	Anaemia	6381(1.0)
Other diagnosis	53,181 (11.9)		Other Diagnosis	55,519 (10.1)		Other Diagnosis	75747(11.9)

* *Other Skin Diseases exclude chicken pox and herpes zoster*

2.3 Hospital In-patient Data Services

In-patient data are crucial for hospital management, these includes number of lying days, number of admissions and deaths with associated causes, workforce and number of beds. Various hospital indicators that are vital to understand the level of health care provided and plan for further improvements are computed using these data. The following sub-sections tries to explain some of the level attained in some of the inpatients indicators.

2.3.1 Average Length of Stay

The average length of stay refers to the average number of days that patients stayed in the hospitals. It's generally measured by dividing the total number of days stayed by all hospitalized patients in a year by the number of admission or discharges[1]. It is often regarded as an indicator of efficiency; shorter stay was associated severity of the illness or may reflect the better services provided.

The average length of stay in Zanzibar tends to increase for three consecutive years from 2017 to 2019. From the table 11, the Average Length of Stay in 2019 was **2.8** days per person which increased by **4** points compared to 2018.

Table 11: Average Length of Stay, 2017 - 2019

Places	2017	2018	2019
Pemba	2.4	2.5	2.8
Unguja	2.3	2.3	2.8
Zanzibar	**2.3**	**2.4**	**2.8**

2.3.2 Hospital Admissions

This section summarizes findings from the hospital admission data collected over the last three years.

[1] Day cases and newborn in hospitals are excluded from hospital discharges.

In 2019, a total of **98,765** admissions were recorded from all Zanzibar hospitals Inpatient Departments (ward). For three consecutive years (2017 - 2019), hospitals admissions have been increasing from year to year by more than **5 percent** per year. Between 2017 and 2018, the percentage increase was **16.8** that was higher compared to that 2018 and 2019 **(5%).** Unguja hospitals contributed nearly two-third of total admissions in 2019; the overall increased of admissions is mostly driven from Unguja public facilities.

Table 12: Number of Hospital Admissions by Ownership, 2017 – 2019.

Place	Ownership	Number of admissions and (%)		
		2017	**2018**	**2019**
Pemba	Public	29,178	32,018	35,692
	Parastatal	-	-	-
	Private	-	-	-
Total		**29,178 (36.4)**	**32,018 (34.2)**	**35,692 (36.1)**
Unguja	Public	46,868	57,153	56,675
	Parastatal	816	642	676
	Private	3,334	3,853	5,722
Total		**51,018 (63.6)**	**61648 (65.8)**	**63,073 (63.9)**
Zanzibar	Public	76,046(94.8)	89,171 (95.2)	92,367
	Parastatal	816(1.0)	642 (0.7)	676
	Private	3,334(4.2)	3,853 (4.1)	5,722
Total		**80,196**	**93,666**	**98,765**

2.3.3.3 Top Ten Causes of Hospital Admission

Figure 2 below describe the reported top ten most common causes of admission for all ages in Zanzibar for the year 2017 to 2019. In recent times there have been various journals talking about the fact that NCD diseases

have been on the rise, and this has hit even Zanzibar. So from the data collected from patients admitted to various hospitals in Zanzibar, Hypertensive conditions appeared the leading cause of admission in 2019 which accounted for **7.7 percent** where it has risen from the third position from 2017 to 2018. This was, followed by Other Diarrhoea disease and Severe anaemia with **5.4** and **4.5** ` respectively. For the first time in three years, Cerebrol vascular accident which was not found in the list of top ten in previous years has ranked in the ninth position in 2019.

The figures 2 below shows the detail

Looking at the cause for admission for adults (above 13), hypertension was reported as the most common cause of admission in 2019 where, Other Diarrhoeal diseases, and incomplete abortion have been second and third with **5.4** and **4.3 percent** respectively. The figure 3 portrays the full details.

For children below 13 years, Birth asphyxia stands as a leading cause of admission for 2019, severe anaemia which was appeared in the fourth rank in 2017, while in 2018 appeared in sixth position and has risen to the second in 2019 at top ten list of hospital admission. Asthma and neonatal sepsis have appeared in the first time in top ten list of cause of admission for under 13 years since 2016. See the figure 4 for more information.

Figure 2: Percentage Distribution of Top Ten Causes of Hospital Admission in Zanzibar, All Ages, 2017 to 2019

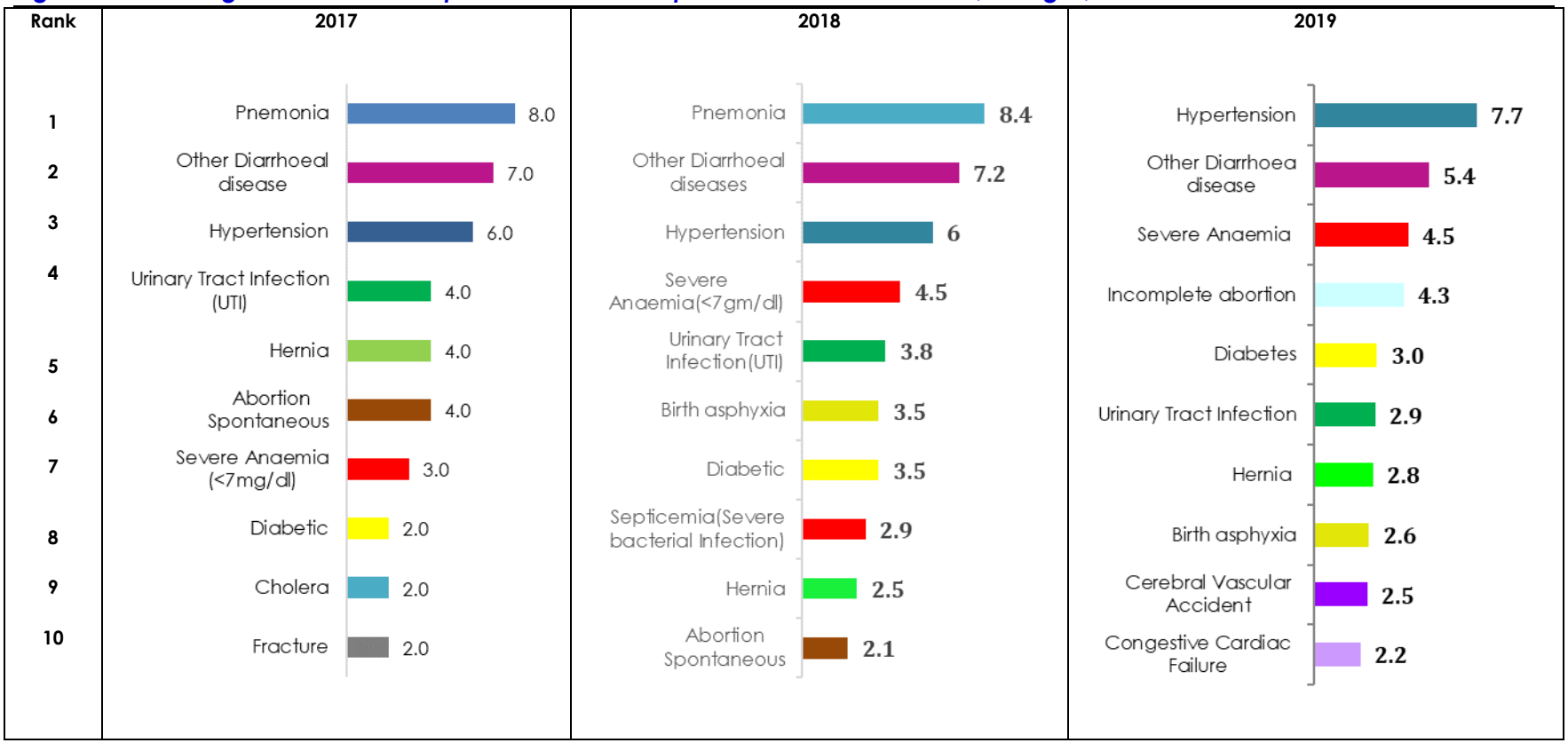


Figure 3 : Percentage Distribution of Top Ten Causes of Admissions for Adults in Zanzibar Hospitals, 2017 – 2019

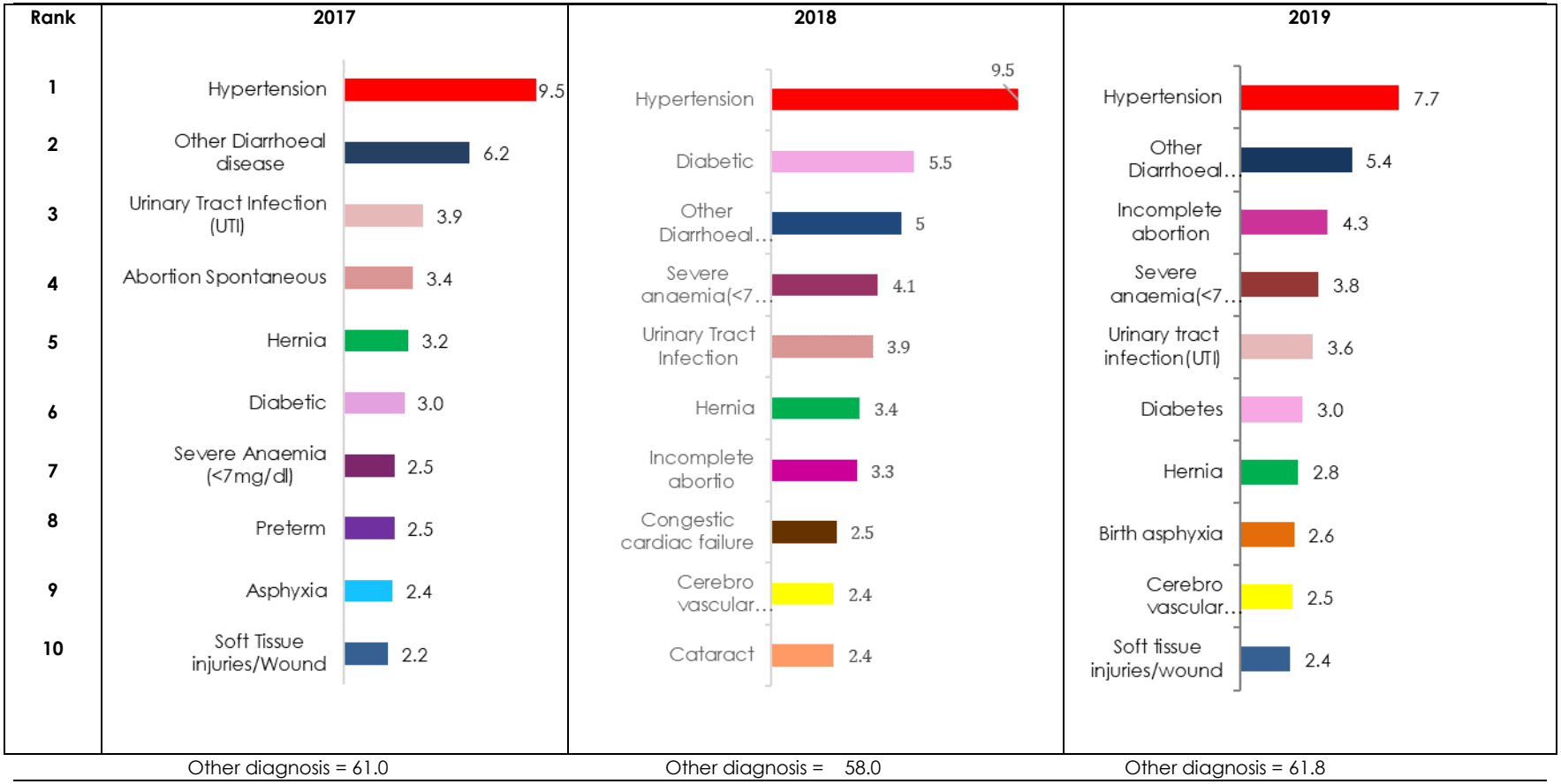
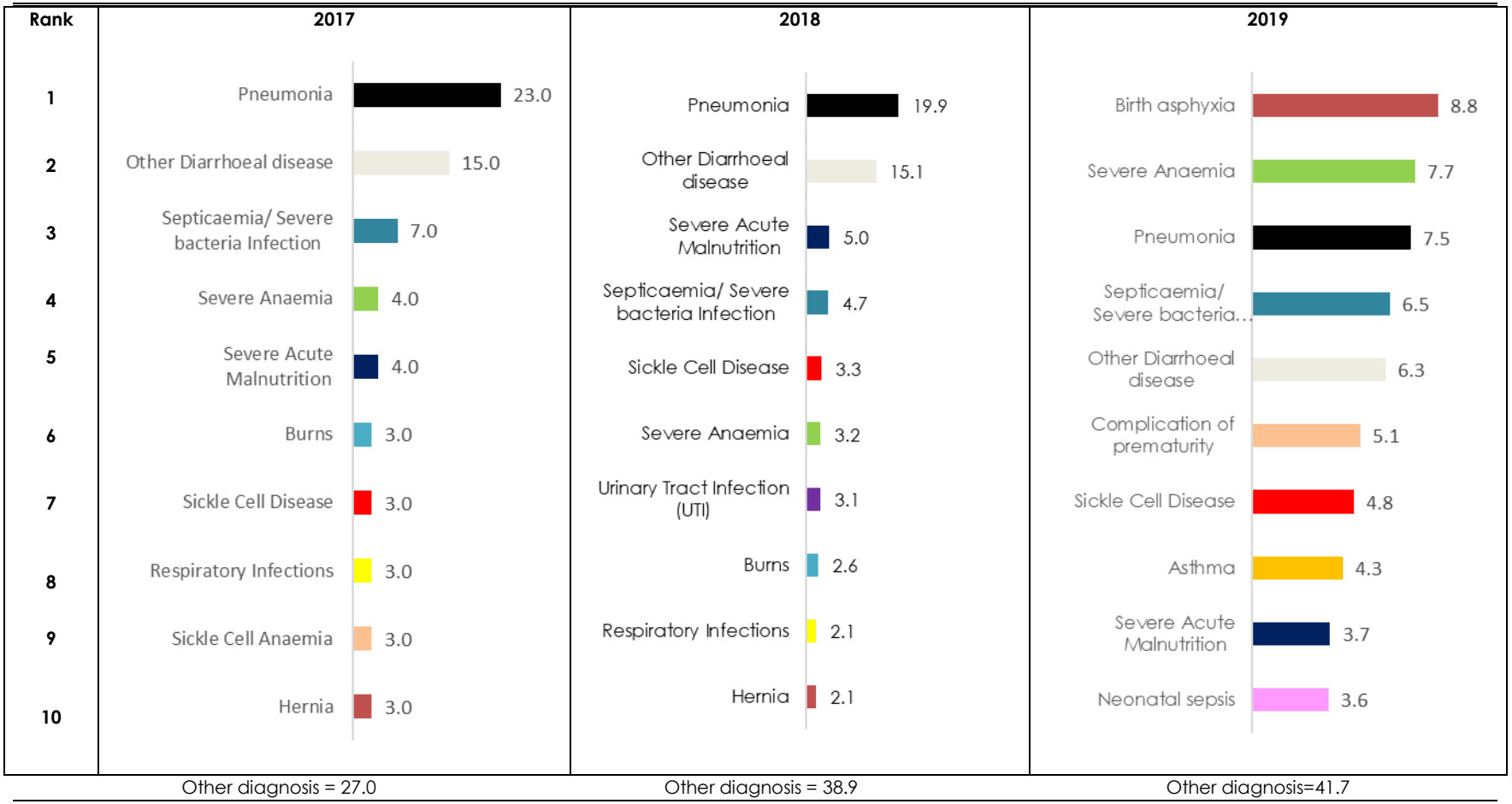


Figure 4: Percentage Distribution of Top Ten Causes of Hospital Admissions for Under 13 Years in Zanzibar, 2017 - 2019



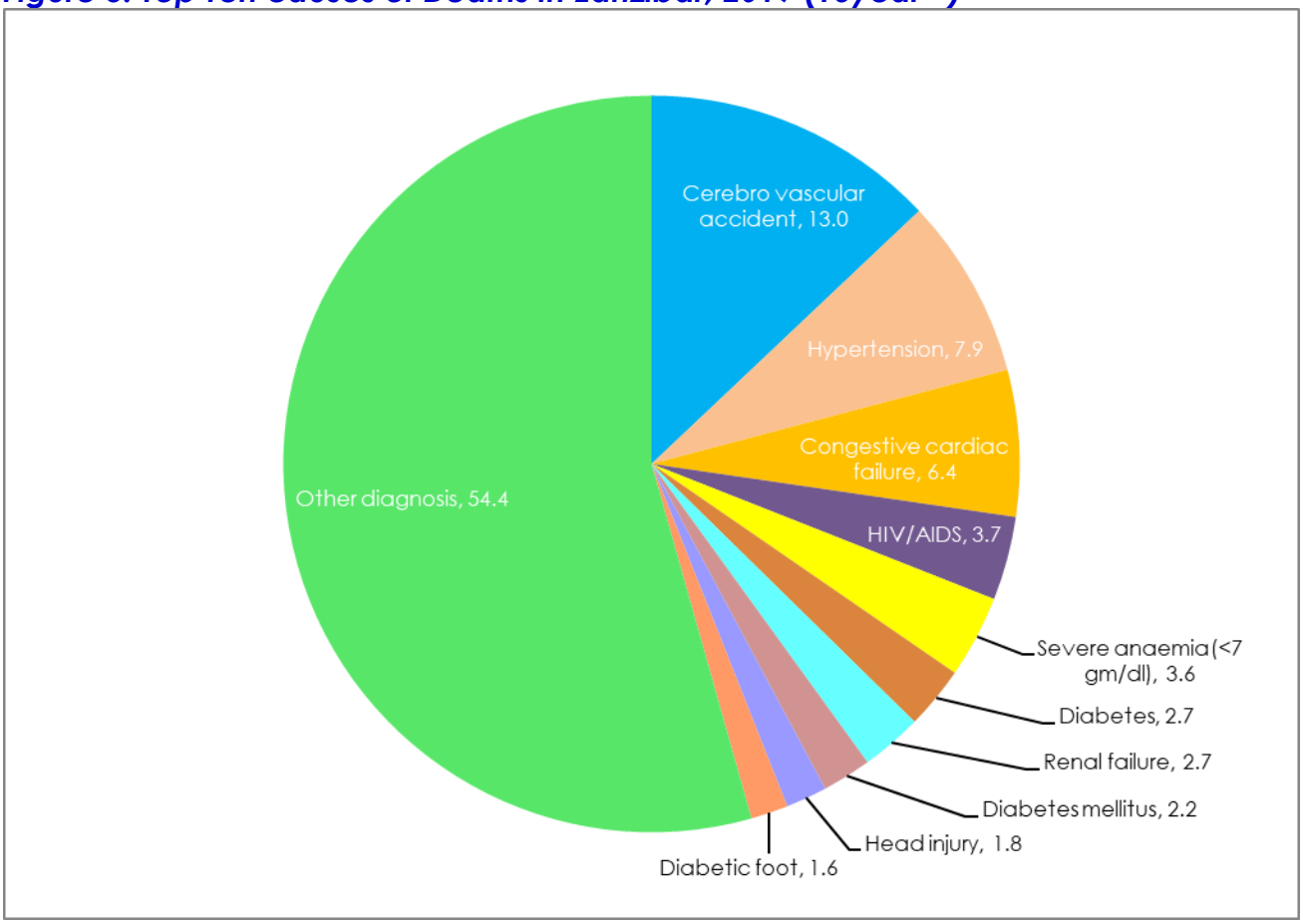
2.3.3 Hospital Top 10 Causes of Mortality

This section describes causes of deaths that occurred at hospitals at different age groups which are adults (13 years and above) and children under 13 years.

2.3.3.1 Top-10 Causes of Deaths for Adults (13 years +), 2019

Cerebro Vascular Accident (CVA) contributes about 13 percent of all adults' deaths, followed by Hypertension and Congestive Cardiac failure, which accounts **7.9** and **6.4 percent** respectively. Overall the first two cause of Death are all NCD related and account for **20.9 percent** of the cause of death. For information, more detailed see figure 5 below.

Figure 5: Top Ten causes of Deaths in Zanzibar, 2019 (13year +)



2.3.3.2 Top -10 Causes of Death for Children Under 13 Years 2019

Birth asphyxia accounting for **25.2 percent** of all deaths for under 13 years and stands as the leading cause of death in 2019, Septicemia remain as one of the deadly disease and ranked in second top with **12.4 percent** in top ten killer disease. There were experienced downtrend of the Severe Acute Malnutrition, Other diarrhoeal disease and congenital malformation from 2018 to 2019. Neonatal sepsis has come in the list of top ten causes of death for under 13 years and accounted for **3.1 percent** of all causes of deaths.

Table 13: Percentage Distribution of Top Ten Causes of Deaths in Zanzibar Hospitals for Children Under 13 Years by Rank, 2017 -2019

Rank	2017	2018	2019
1	Septicemia (23.8)	Severe Acute malnutrition (18.4)	Birth asphyxia (25.2)
2	Pneumonia (20.8)	Pneumonia (15.6)	Septicemia (12.4)
3	Other Diarrhoeal disease (10.8)	Septicemia (11.8)	Pneumonia (8.0)
4	Neonatal Infection (6.4)	Other Diarrhoeal disease (6.9)	Severe Acute malnutrition (7.9)
5	Severe Acute malnutrition (5.5)	Severe Anaemia (<7 gm/dl) (5.9)	Complication of Prematurity (6.0)
6	Severe Anaemia (<7 gm/dl) (5.1)	Sickle cell anaemia (3.1)	Severe Anaemia (<7 gm/dl) (3.2)
7	Burns (3.8)	Congenital Heart Diseases (2.4)	Neonatal Sepsis (3.1)
8	Congenital Heart Diseases (2.4)	Burns (2.4)	Congenital malformation (2.9)
9	Sickle cell anaemia (1.8)	Urinary Tract Infection (1.4)	Other Diarrhoeal disease (6.9)
10	Tetanus (1.5)	Meningitis (1.0)	Congenital heart disease
	Other Diagnosis (17.2)	Other Diagnosis (30.0)	Other Diagnosis (28.7)

2.3.4 Case Fatality Rate (CFR) in Zanzibar Hospitals

This indicator measures the severity of a disease; which is defined as the number of deaths occurred for specified disease or condition per respective number of cases admitted within a specified time. The CFR varies between the disease/condition.

2.3.4.1 Case Fatality Rate in Adult (13yrs+) Zanzibar, 2019

In 2019, all admitted cases of Multiple Neurofibromatosis and Renal cancer resulted to death (**100%** fatality rate) hence the duo was more lethal than any

other diseases. The fatality rate of top ten lethal diseases list is shown in table below for each diseases admitted case and death

Table 14: Zanzibar Case Fatality Rate for Adults (13 years+), 2019

Diagnosis	Zanzibar		Pemba		Unguja	
	Admission	Fatality	Admission	Fatality	Admission	Fatality
Multiple Neurofibromatosis	1	100.0 (1)	0	0.0 (0)	1	100.0 (1)
Renal cancer	1	100.0 (1)	0	0.0 (0)	1	100.0 (1)
Bone tumour	3	66.7(2)	0	0.0 (0)	3	66.6(2)
Cardiac asthma	3	66.7(2)	0	0.0 (0)	3	66.6 (2)
Tetanus	3	66.7(2)	7	57.1 (4)	20	20.0 (4)
Polytrauma	9	55.6(5)	0	0.0 (0)	9	55.5 (5)
Cardiomyopathies	35	54.3(19)	0	0.0 (0)	35	54.2(19)
Postpartum Haemorrhage (PPH)	13	53.8(7)	0	0.0 (0)	13	53.8(7)
Cancer of oesophagus	2	50.0(1)	0	0.0 (0)	2	50.0(1)
Infected VP shunt	6	50.0(3)	0	0.0 (0)	6	50.0 (3)

2.3.5 Zanzibar Malaria Cases and Deaths (Inpatients), 2016 - 2018

The admissions, deaths and case fatality rate of registered Malaria cases from 2017 to 2019 by adults, children and pregnancy are shown in table 15. There has been stable low fatality rate of malaria cases in Zanzibar for 2017 but tend to have continuous rise in 2018 and 2019 for the age group of 5 years and above. There was no death caused by malaria for the children of under 5 years and pregnant women in 2019.

Table 15: Malaria Cases by Admissions and Deaths (Cases fatality), 2016 - 2019

Diagnosis	Admissions			Deaths (Cases fatality %)		
	2017	2018	2019	2017	2018	2019
Malaria confirmed (5+ years)	168	207	358	2 (1.2)	4 (1.9)	8(2.2)
Malaria Confirmed (< 5 years)	72	95	124	1 (1.4)	1 (2.1)	0(0.0)
Malaria in pregnancy	6	16	12	0 (0.0)	0 (0.0)	0(0.0)

3 REPRODUCTIVE AND CHILD HEALTH

The MoH plays an important role in strengthening Reproductive Health services ensuring the availability of all quality essential reproductive health services to child adolescents and adults, man and woman equally. While the motto of MoH is to reduce the maternal deaths, still birth and new born deaths.

Reproductive Health services include Family planning, antenatal care, deliveries, postnatal care, and management of obstetric-neonatal complications, prevention and management of abortion and its complications, adolescent sexual and reproductive health and prevention and management of gender-based violence. Those services are provided in all PHCU, with the only exception of deliveries and comprehensive post abortion care (cPAC) which are provided in secondary and tertiary health facilities (Hospitals) and some selected Primary level facilities and private health facilities. The effectiveness of provision of these services depends on the availability of qualified health staffs, equipment's and other supplies.

3.1 Antenatal Care Services

Antenatal Care Services (ANC) is one of the core interventions in order to prepare pregnant mothers to safe delivery. Mothers are expected to attend eight (8) contacts during pregnancy to monitor the pregnancy development, early detection of pregnancy complications, risk factors and early management. The ANC contacts are an important opportunity to promote the use of skilled attendance at birth and healthy behaviors such as: early initiation of breastfeeding, newborn care, nutritional counseling, early postnatal care, and planning for optimal pregnancy spacing. It is recommended that the first ANC contact to be in first 12 weeks of gestation, this to ensure an early

detection and management of complications[2]. Table 15 shows the coverage of ANC contacts from 2017 to 2019.

3.1.1 ANC Coverage

In 2019, early ANC booking was reduced/changed from ANC 1st visit before 16 weeks to ANC 1st contacts before 12 weeks, where this make the implantation of current IRCH Strategic Plan and recommendations from WHO guideline.

For the data collected in 2019 shows that, the pregnant mothers attended at least one ANC contact at all health facilities in Zanzibar was about **91.6 percent** where Unguja was doing much better compared to Pemba with **98 percent** and **79.9 percent** respectively. The estimate of pregnant women who attended their first contact before 12 weeks of the gestation period was **13.1 percent**. The early booking coverage of ANC attendance in 2019 seen to go down when it compared to 2018 and then, due to reduction of period of early booking.

Although, Unguja is ahead with a general ANC first contact, but Pemba has done better on registering the ANC contact before 12 weeks (Pemba had **15.3 percent**, Unguja had **12.1 percent**).

In comparison with 2018 figures, ANC first contact, second and third coverage are lower compared to 2019, this might be contributed to the change of initial timing contact from 16 weeks to 12 weeks of gestational age.

Despite the increment of ANC-4th contact coverage from **30.3 percent** in 2018 to **35.7 percent** in 2019, the target of at least **40 percent** has not yet reached; this might be associated with late ANC booking, hence more education needed to community towards the improving the early booking. See table 16 below

[2] Focused Antenatal Care (FANC) Guideline.

Table 16: ANC coverage contacts in Zanzibar, 2017 – 2019

Place	ANC coverage	2017	2018	2019
Pemba	1st contacts before 16 weeks	26.7	33.2	*
	1st contacts before 12 weeks	*	*	15.3
	1st contact	103.3	93.6	79.9
	2nd Contact	72.4	71.3	83.3
	3rd contact	44.7	51.4	62.3
	4th contact	19.8	24.4	31.6
Unguja	1st contacts before 16 weeks	22.5	22.4	*
	1st contacts before 12 weeks	*	*	12.1
	1st contact	86.1	82	98
	2nd contact	72.3	79.6	70.1
	3rd contact	56.5	48.3	57.5
	4th contact	36.9	33	37.5
Zanzibar	1st contacts before 16 weeks	23.9	26	*
	1st contacts before 12 weeks	*	*	13.1
	1st contact	91.1	85.6	91.6
	2nd Contact	72.3	77.1	74.2
	3rd contact	52.6	49.3	59
	4th contact	31.3	30.3	35.7

3.1.2 ANC First Visits Coverage Before 12 Weeks by Districts

Looking at the ANC coverage by district the situation is not surprising as shown below, all district has shown nearly double decrease in the coverage. One of the reason that resulted to the lowering might be due to the change of the early booking of the first contact from 16 to 12 weeks that have omitted those booked at 13,14 and 15 weeks as the early booking.

Even though, Kusini was taking a lead with **28.3 percent** of the pregnant mothers contacted before 12 weeks where as Magharibi A stand at the last with only **8.4 percent**, see table 17.

Table 17: Proportion (%) of ANC first contacts before 16/12 weeks by district, 2017-2019

Districts	Before 16 weeks		Before 12 weeks
	2017	2018	2019
Mkoani	48.3	48.1	18
Micheweni	11.5	19.7	12
Wete	27.0	36.6	18.3
Chake Chake	22.9	29.6	13.4
Mjini	23.5	23.2	13.4
Kati	19.1	20.4	9.1
Kaskazini B	17.2	20.4	8.9
Kusini	33.4	43.8	28.3
Kaskazini A	30.4	32.7	19.4
Magharibi A	20.9	17.4	8.4
Magharibi B	19.4	17.1	9
Zanzibar	**23.9**	**26.0**	**13.1**

3.1.3 Tests Performed During Antenatal Visits

In accordance with the FANC Strategy, all pregnant women should be undergoing different screened including anaemia, malaria parasites, HIV, blood sugar and syphilis.

6.1.3.1 Haemoglobin, Malaria and Blood sugar test at ANC

In 2019, the Haemoglobin testing rate to pregnant women in Zanzibar raised to **67.1 percent** from **50 percent** in 2018 this is according to total contacts of pregnant women attending ANC clinics. On the other hand, both level of Malaria and blood sugar testing rate lowered compared to 2018. Malaria testing rate decrement was more than twice (from **46.5%** to **13.6%**) while the blood sugar testing rate decreased by **2.2** percentage point and reached to **38.8 percent** from **41 percent** in 2018. Initially, the policy was to test every pregnant mothers attended in the health facility in their regular ANC contact, but in recently years, only suspected pregnant mothers are tested for malaria, which contribute to lowering the number of mothers tested for malaria.

The lowering of the level of blood sugar test rate in Zanzibar was contributed to the lowering of the test in Unguja from **45.5 percent** in 2018 to **33.3 percent** in 2019 while Pemba has reported momentous increment from **33.6 percent** to **51.5 percent** in 2019. See table 18 below

Table 18: ANC testing rate for HB, Malaria and Blood sugar in Zanzibar, 2018 – 2019

Place	HB		Malaria		Blood sugar	
	2018	2019	2018	2019	2018	2019
Pemba	41.5	70.4	46.7	11.5	33.6	51.5
Unguja	53.7	65.6	46.3	14.6	45.5	33.3
Zanzibar	50	67.1	46.5	13.6	41	38.8

6.1.3.1 Positivity rate on Malaria, HB and Diabetic at ANC

It is for the first time where the malaria positivity rate at ANC has exceed **1percent** since 2016 while Diabetic and HB positivity rate remained below **1 percent** with slightly increment from 2018. The raising of malaria positivity rate was much geared in Unguja while Pemba has shown a decrease from **0.3** in 2018 to **0.03** in 2019. See table 19 below

Table 19: ANC positivity rate for HB, Malaria and Blood sugar in Zanzibar, 2018 – 2019

Place	2018			2019		
	Malaria Positivity Rate	Diabetic Incidence Rate	HB incidence rate	Malaria Positivity Rate	Diabetic Incidence Rate	HB incidence rate
Pemba	0.3	0.49	0.36	0.03	0.62	0.45
Unguja	0.71	0.56	0.3	1.4	0.89	0.42
Zanzibar	0.59	0.54	0.32	1.1	0.78	0.43

3.1.4 HIV Testing by Districts

In terms of HIV testing, almost all districts have performed higher rates of HIV testing in 2019 when compare to 2018. The best performed district in 2019 was Kati with HIV testing rate of **103.9 percent** while the least performed was Mjini with **77.9 percent.**

From the data recorded in 2019 also noticed the remarkable increase in Magharibi B HIV testing rate of **97.3 percent** from **81.4 percent** in 2018, unexpectedly Chake Chake has recorded a minimal decrease of HIV testing rate of **98.6 percent** in 2019 from **100 percent** in 2018 where Mjini have recorded high decrease of HIV testing rate from **98.5 to 77.9 percent** in 2018 to 2019

respectively. The general HIV testing rate of Zanzibar increased by **0.7 percent** in 2019 **(95%)** from **94.3 percent** in 2018. See table 20 below

Table 20: HIV testing rate and positivity rate by Districts, 2018 – 2019

	HIV Testing rate at ANC		HIV positivity rate	
District	2018	2019	2018	2019
Mkoani	91.3	95.7	0.2	0.06
Chake Chake	100	98.6	0.3	0.03
Micheweni	88.9	102.1	0.2	0.02
Wete	93.1	98.6	0.3	0.03
Pemba	**93.5**	**98.9**	**0.3**	**0.04**
Kaskazini A	102.1	99.1	0.3	0.17
Kaskazini B	96.8	102.7	0.6	0.20
Kati	100.3	103.9	0.9	0.41
Kusini	93	99.8	0.9	0.23
Magharibi A	96.5	97.2	0.8	0.28
Magharibi B	81.4	97.3	0.8	1.07
Mjini	98.5	77.9	0.8	0.27
Unguja	**94.7**	**93.2**	**0.7**	**0.44**
Zanzibar	**94.3**	**95**	**0.7**	**0.31**

6.1.3.1 HIV positivity rate by districts, 2019

The HIV positivity rate at ANC in Zanzibar is below **1 percent**, with much infection in Unguja of **0.44** while Pemba had a positivity rate of **0.04**. With respect to district, Magharibi B took a lead with HIV positivity rate of **1.07** while the lowest positivity rate recorded in Micheweni with **0.02**. See table 20 above.

3.1.5 Syphilis Testing Rate by Districts

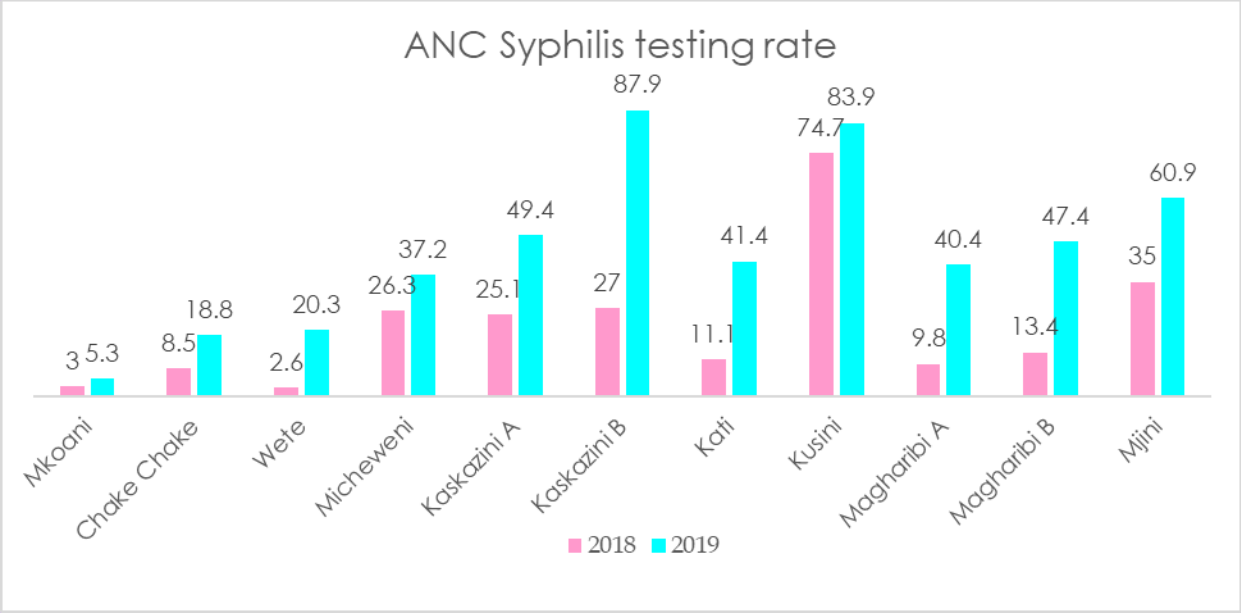
In routine service provision to ANC clients who visit the clinic at their first contact they needed to be tested for syphilis. The overall syphilis-testing rate in 2019 has reached **43.4 percent** from **32 percent** in 2018 with much increment in Pemba of **21 percent** in 2019 from **10.1 percent** in 2018 while Unguja recorded a reduction to **53.4 percent** from **59.9 percent** in 2018. See table 21.

Table 21: ANC Syphilis testing rate in Zanzibar

Place	2018	2019
Pemba	10.1	21
Unguja	59.9	53.4
Zanzibar	**32**	**43.4**

District wise, Kaskazini B has recorded the syphilis-testing rate of **87.9 percent**, which is the highest for all districts while the lowest rate recorded in Mkoani with **5.3 percent**. It is important to understand the reason of such high variation necessary to improve quality of services at all district. See figure 6 below

Figure 6: Syphilis testing rate by Districts, 2018 -2019.



3.1.6 Syphilis Positivity Rate at ANC by District

There was a slight reduction of overall syphilis positivity rate in Zanzibar from **1.1** in 2018 to **0.9** in 2019. The reduction was highly contributed in Unguja while Pemba has recorded a slight increase from **0.05 percent** in 2018 to **0.22 percent** in 2019. Along the district, Mkoani has recorded **zero percent** of syphilis positivity rate for two consecutive years; this might be due to the minimum number of pregnant mothers tested for Syphilis. Wete and Micheweni have recorded the cases of syphilis with more cases in Wete than Micheweni. See table 22 below

Table 22: Syphilis Positivity rate at ANC by District (%), 2018 – 2019

District	2018	2019
Mkoani	0	0
Chake Chake	0.22	0.19
Wete	0	0.57
Micheweni	0	0.05
Pemba	**0.05**	**0.22**
Kaskazini A	0.08	0.04
Kaskazini B	0.25	0.12
Kati	1.27	1.3
Kusini	0.08	8.7
Magharibi A	0.48	0.03
Magharibi B	3.2	1.5
Micheweni	0	0.05
Mjini	1.89	0.2
Unguja	**1.3**	**1**
Zanzibar	**1.1**	**0.9**

3.2 Family Planning

Zanzibar has good Family Planning (FP) infrastructures and availability of commodities whereby most of the population have access to these services at nearby health facilities. The Ministry has experienced no stock out for both short and long-term family planning methods.

3.2.1 Contraceptive Prevalence Rate (CPR)

Contraceptive Prevalence Rate (CPR) is the Family Planning indicator which measures the level of FP usage among Women of Reproductive Age (WRA). CPR is measured after every four years through Tanzania Demographic Health Surveys (TDHS). The recent TDHS (2015/2016) shows that CPR has slightly increased to **14.0 percent** in comparison to **12.4 percent** of 2009/2010.

3.2.2 Couple Year Protection Rate per 1000

A couple year of protection (CYP) measures the estimated protection provided by family planning services during a one-year period, based upon the volume of all contraceptives distributed free of charge to clients during that period. This indicator is used in Family Planning services to show the protection rate of unplanned pregnancy.

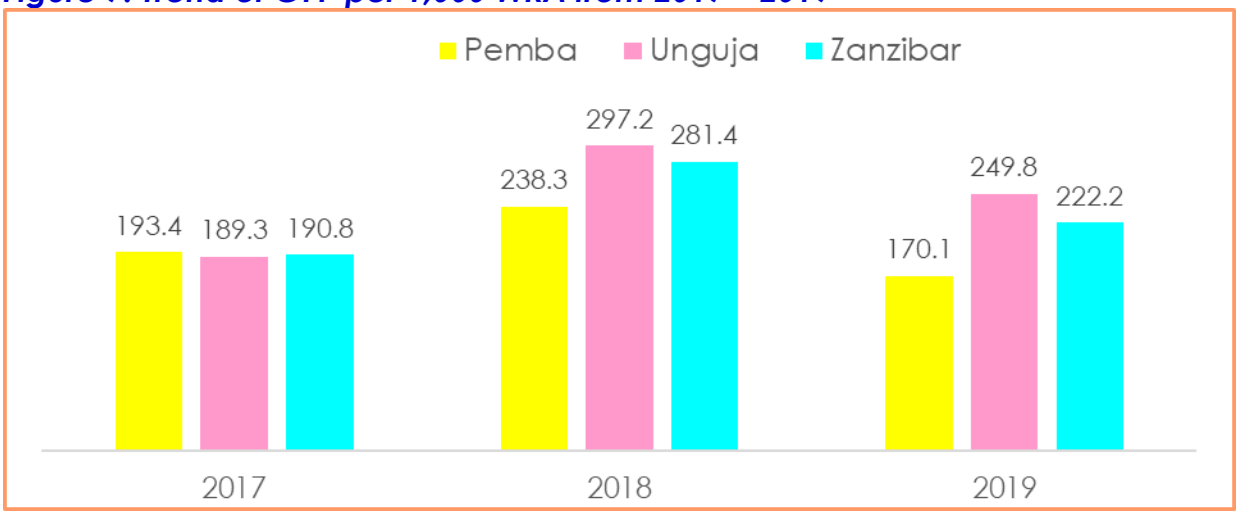
CYP is calculated using routine FP data, by multiplying or dividing the number of each commodity distributed by a factor determined from the type of commodity (method) needed to protect a couple from obtaining a birth for one year. This indicator is used as proxy indicator due to the difficulty in calculating CPR using routine data. Table 23 provides formulae used to calculate CYP.

Table 23: Couple Year Protection Rate (CYP) Indicator Determinants

Short term Method	Factor	Long term Method	Factor
Oral contraceptives (# of Cycles)	/ 13	Tubal Ligation (# Persons)	X 10
Depo Provera injection (Vials)	/ 4	Male sterilization (# of Persons)	X 15
Condom (Pieces)	/ 130	IUCD (Pieces)	X 4
		Implant (Pieces)	X 4

The CYP rate in 2019 has decreased to **222/1000** couples from **281/1000** couples in Zanzibar. This reduction was contributed from both islands with much reduction in Pemba of almost **68** for every **1000** couples, this result signifies that, in 2018 Every **238** out of **1,000** couples (WRA) in Pemba were protected from unwanted pregnancies using modern contraceptives compared to **170** couples out of **1000** in 2019. See figure 7 below

Figure 7: Trend of CYP per 1,000 WRA from 2017 – 2019



3.2.3 (CYP) by Methods

The reduction of the general CYP was contributed to the reduction of almost all CYP methods in both Unguja and Pemba, only CYP for condom method had a slight increase in both Unguja and Pemba that resulted to total increase from **2.2** to **4** for every **1000** couples. See table 24 below

Table 24: CYP by methods (per 1,000 WRA) for 2017 – 2019

Place	CYP	2017	2018	2019
Pemba	Implant	94.4	132.9	118.7
	Injection	22.4	28	16.2
	IUCD	27.9	27.6	10.6
	Condom	1.4	2.6	2.7
	Oral pills	10.1	12.1	7.8
	ML/LA (BTL)	37.2	35	14.1
Total		193.4	238.3	170.1
Unguja	Implant	105.7	177.2	152.3
	Injection	34.3	45.4	40.6
	IUCD	20.3	36.2	22.9
	Condom	1.8	2.1	4.8
	Oral pills	15.3	16.1	15.7
	ML/LA (BTL)	11.9	20.3	13.5
Total		189.3	297.2	249.8
Zanzibar	Implant	102.4	165.3	140.7
	Injection	30.8	40.7	32.2
	IUCD	22.6	33.9	18.6
	Condom	1.7	2.2	4
	Oral pills	13.8	15	13
	ML/LA (BTL)	19.5	24.2	13.7
Total		190.8	281.4	222.2

3.2.4 Family Planning New Clients' Acceptance Rate

This indicator measures the proportion of all FP clients who have never used modern family planning methods before (number of women who are taking such methods for the first time). The indicator encounters several problems, as it poses difficulties to identify whether clients are really coming for the first time or they are new to this particular method; or whether they are coming back after stopping for some time from other health facilities.

The data shows the acceptance rate of Family Planning increased continuously for two consecutive years (2017 - 2018) and has decreased in 2019 **6.8** from **7.3** at 2018. This indicates the decreasing in number of new members joining family planning in 2019. This reduction was highly contributed to Pemba that has recorded the reduction to **4.7** in 2019 from **7.3** in 2018 while Unguja has maintained the increasing trend for three consecutive years. See table 25 below

Table 25: Family Planning acceptance rate (New users), 2017 -2019

Place	2017	2018	2019
Pemba	5.9	7.3	4.7
Unguja	7	7.3	7.9
Zanzibar	**6.6**	**7.3**	**6.8**

3.2.1 Family Planning Acceptance Rate by District

All Districts of Pemba have undergone slightly increase Family planning acceptance in 2019 except Micheweni. Similarly, in Unguja only, Kati, Magharibi A and B District has increased in family planning acceptance rate. The table 26 have shown in details

Table 26: Family Planning Acceptance Rate (New client) by District 2017 – 2019

Place	2017	2018	2019
Chakechake	8.0	9.7	8.5
Micheweni	4.9	4.4	4.5
Mkoani	4.6	8.9	7.4
Wete	5.7	6.4	6.0
Pemba	**5.9**	**7.3**	**6.6**
Kaskazini A	6.3	8.1	5.9
Kaskazini B	5.2	7.7	6.5
Kati	7.4	8.7	10.2
Kusini	8.9	8.4	8.2
Magharibi A	4.2	3.6	4.9
Magharibi B	4.9	4.5	6.5
Mjini	11.5	11.4	9.4
Unguja	**7**	**7.3**	**7.9**
Zanzibar	**6.6**	**7.3**	**7.6**

3.3 Comprehensive Post Abortion Care (cPAC)

Post-abortion care is an approach for reducing deaths and injuries from incomplete and unsafe abortions and their related complications. Post abortion care is an integral component of comprehensive Post Abortion Care (cPAC) that includes five essential elements:

i. Treatment of incomplete and unsafe abortion and complications
ii. Counseling to identify and respond to women's emotional and physical health needs
iii. Contraceptive and family-planning services to help women prevent future unwanted pregnancies and abortions
iv. Reproductive and other health services that are preferably provided on-site or via referrals to other accessible facilities
v. Community and service-provider partnerships to prevent unwanted pregnancies and unsafe abortions, to mobilize resources to ensure timely care for abortion complications, and to make sure health services meet community expectations and needs.

In cPAC family Planning counseling must be provided to all clients in order to avoid immediate conception soon after the abortion. The counseling should be followed by FP Method after PAC which should last at least three months.

The use of FP methods after abortion depends on the willingness of the client, however, is highly recommended for the health care provider to initiate effective counseling approaches for clients. The family planning method after counseling is an indication of the success of the convincing power of service providers. In this case it is expected that the number of FP method after cPAC should nearly be close to or just as much as FP Counseling.

The cPAC cases reported in Zanzibar have maintain a decreasing trend for two consecutive years, from **3,080** in 2017 to **2,250** in 2018 and finally **1,311** in 2019. See table 27 below.

Table 27: Number of cPAC cases, Zanzibar 2017 – 2019

Place	Procedure	2017	2018	2019
Pemba	Misoprostol	992	154	148
	MVA		500	470
	Sharp Curettage		141	64
	Total	992	795	682
Unguja	Misoprostol	2,088	280	96
	MVA		1119	521
	Sharp Curettage		56	12
	Total	2,088	1,455	629
Zanzibar	Misoprostol	3,080	434	244
	MVA		1619	991
	Sharp Curettage		197	76
	Total	3,080	2,250	1,311

3.3.1 Family Planning Acceptance After cPAC

The table 28 below shows the number of clients who accepted FP services after cPAC where the results shows the decreasing for all methods for the year 2019. In which Depo has recorded double decrease while BTL has recorded more than tetra reduction between 2018 and 2019.

Table 28: Family Planning Acceptance after cPAC, Zanzibar, 2017 - 2019

Place	FP methods	2017	2018	2019
Pemba	Condoms users	24	7	6
	Depo users	165	169	128
	IUCD Insertion	54	39	22
	Implanon Insertions	174	165	179
	ML/LA or BTL	13	26	14
	Pills users	183	193	147
Unguja	Condoms users	91	60	42
	Depo users	435	403	127
	IUCD Insertion	71	104	43
	Implanon Insertions	208	315	153
	ML/LA or BTL	96	77	6
	Pills users	392	197	103
Zanzibar	Condoms users	115	67	48
	Depo users	600	572	255
	IUCD Insertion	125	143	65
	Implanon Insertions	382	480	332
	ML/LA or BTL	109	103	20
	Pills users	575	390	250

3.4 High Risk Pregnancies

High-risk pregnancy is the condition that puts a mother at risk of acquiring complications related pregnancy. Under normal conditions, every pregnant woman is considered to be at risk of getting obstetric complications and should be encouraged to seek early maternal health care services. Utilization of effective ANC services and deliveries by skilled attendants contribute in the reduction of maternal complications and mortality. There are some pre-pregnancy factors that are said to be triggering complications to a pregnant mother during pregnancy, delivery and post-delivery.

The table 29 shows the trend of the risk factors for ANC clients for three years, from 2017 to 2019.

Zanzibar has recorded the downward trend for pregnant mothers with > 4 gravida for the past three years. See table 29

Table 29: Pregnant mothers who were at risk (%), Zanzibar, 2017 - 2019

Place	Data	2017	2018	2019
Pemba	> 4 gravida	44	42	42.1
	Above 35 years	14.3	12.3	13.5
	Before 2 years from last birth	27.7	29	29.0
	Below 20 years	11.4	11.6	12.1
Unguja	> 4 gravida	29.7	28.6	25.2
	Above 35 years	13.6	12.7	11.9
	Before 2 years from last birth	11.9	13.5	11.9
	Below 20 years	7.4	9.7	6.8
Zanzibar	> 4 gravida	34.4	33.1	30.4
	Above 35 years	13.8	12.6	12.4
	Before 2 years from last birth	17.1	18.7	17.2
	Below 20 years	8.7	10.4	8.5

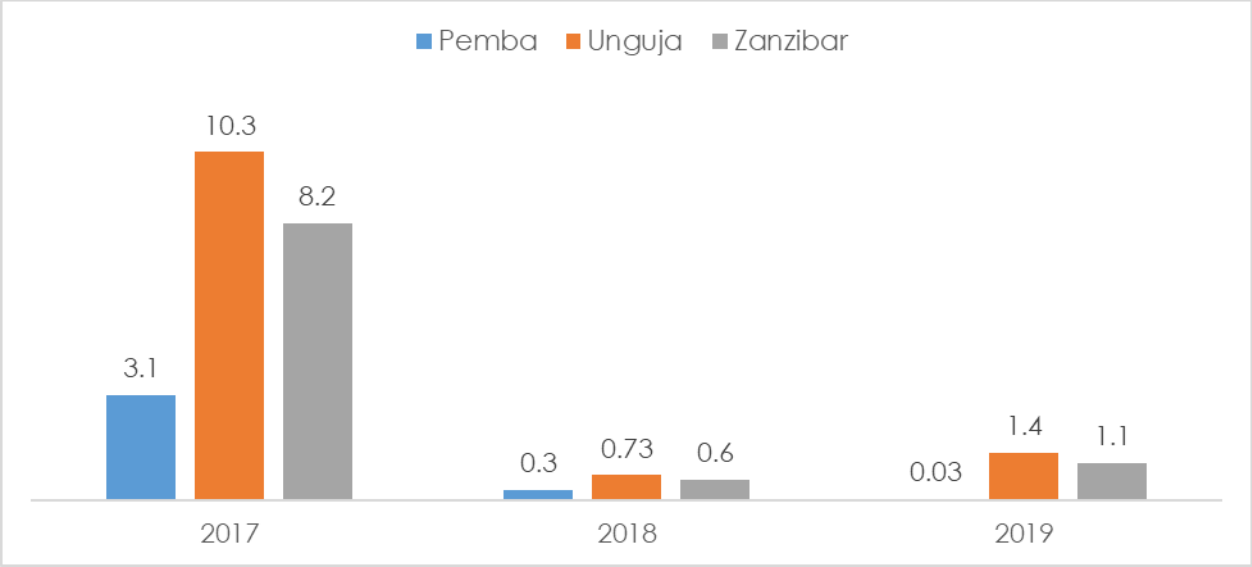
Note: *Denominator is total number of mothers attended ANC for first time in given period*

3.5 Obstetric Problems During ANC

Severe anaemia and malaria in pregnancy are co-related obstetric problems which may result in maternal deaths. Although there is high reduction of malaria in Zanzibar, severe anaemia is still an important life-threatening obstetric problem.

In Zanzibar, Malaria in pregnancy rate increased to **1.1 percent** in 2019 from **0.6 percent** in 2018. This was contributed the increment in Unguja while Pemba has maintained the decreasing trend since 2017. See figure below

Figure 8: Trend of Malaria proportional in pregnancy (%), 2017 – 2019



3.5.1 Malaria in Pregnancy by Districts

With exception to Kaskazini A in Unguja, all other district in Unguja has recorded the increase of Malaria cases for pregnant mother attended at their regular ANC contact with much increment, while Chake Chake and Wete in Pemba have reported **0 percent** malaria positivity rate for the year 2019. See table 30 below.

Table 30: Malaria Positivity rate at ANC by district, 2017 – 2019.

District	2017	2018	2019
Chakechake	0.1	0.05	0
Micheweni	0.2	0.62	0.09
Mkoani	0.3	0.13	0.03
Wete	0.7	0.42	0
Kaskazini A	0.3	1.01	0.19
Kaskazini B	1.3	0.62	0.31
Kati	1.2	0.29	0.44
Kusini	2.8	0.09	0.16
Magharibi A	3.4	0.06	3.2
Magharibi B	0.5	0.61	0.97
Mjini	0.5	1.69	2.1

3.5.2 Anaemia in Pregnancy

In Zanzibar, the overall Anaemia rate remains below **2 percent** from 2017 to 2019, even though tend to increase from **1.19** in 2018 to **1.70** in 2019 where Unguja has recorded the increase from **1.04 percent** in 2018 to **1.8 percent** in 2019. See table 31

Table 31: Rare of anaemia among ANC clients, 2017 -2019

Place	2017	2018	2019
Pemba	0.9	1.65	1.5
Unguja	2	1.04	1.8
Zanzibar	1.7	1.19	1.7

3.5.3 Anaemia Rate at ANC by District

Table 32 shows the increasing of rate of Anaemia to pregnant women for all districts with exception to Chakechake, Kaskazini B and Wete. The highest increased rate was observed at Mjini. See table 32 below

Table 32: Anaemia rate at ANC by District, 2017 -2019

District	2017	2018	2019
Chake Chake	0.9	1.61	0.99
Micheweni	0.3	1.59	1.9
Mkoani	1.7	2.18	2.8
Wete	1	1.48	0.97
Kaskazini A	2.8	2	2.6
Kaskazini B	1.2	1.57	1.5
Kati	2.1	1.05	1.8
Kusini	0.6	0.65	1.2
Magharibi A	3.2	1.53	2.2
Magharibi B	1.6	0.81	1.3
Mjini	1.7	0.62	1.9

3.6 Early Postnatal Care (EPNC)

The first week after childbirth is the most dangerous time for both the mother and the newborn. During this period, both newborn and mother are in urgent need of care. Lack of community awareness about the importance of these services is the main barrier to the maximum utilization of postnatal care services. As some community members perceive health services to be necessary only if obstetric complications occur, which make most of the mothers that have delivered to stay home hence underutilization of the services.

Table 33 shows that postnatal attendances within 48 hours and 3 to 7 days, where Wete, Magharibi B and Mkoani have recorded less number of postnatal attendance within 48 hours in 2019 compared to 2018. There was improvement on the number of postnatal attendance between 3 – 7 days in all district with exception to Wete in Pemba and Magharibi A, Kaskazini A and Kaskazini B in Unguja.

Table 33: Number of postnatal attendances within 2 days and 3-7 days by district, 2017 - 2019

Place	Attendances within 48 hours			Attendances between 3 - 7 days		
	2017	2018	2019	2017	2018	2019
Chakechake	240	941	2,760	283	476	516
Micheweni	475	1,890	3,198	504	415	447
Mkoani	741	1,047	1,039	699	729	786
Wete	701	4,643	3,510	545	794	711
Pemba	**2,157**	**8,521**	**10,507**	**2,031**	**2,414**	**2,460**
Kaskazini A	3,015	3,325	2,928	506	468	460
Kaskazini B	404	609	619	270	288	273
Kati	467	721	901	486	433	447
Kusini	1,193	1,091	1,140	314	367	389
Magharibi A	180	533	573	978	580	349
Magharibi B	1,278	2,202	1,331	485	542	638
Mjini	70	14,482	20,523	785	1,228	1,270
Unguja	**6,607**	**22,963**	**26,869**	**3,824**	**3,906**	**3,826**
Zanzibar	**8,764**	**31,484**	**37,376**	**5,855**	**6,320**	**6,286**

6.3.6 Postnatal problems observed to delivered women by district, 2019

Table 34 illustrates the number of problems identified during postnatal services.

The most common problems are severe bleeding, followed by anaemia and sepsis. Wete has recorded the highest number (8 cases) of Fistula cases in Zanzibar. While Kati has recorded almost **65 percent** (37 cases) of all sepsis cases reported in Zanzibar.

More than **80 percent** of severe bleeding cases were reported in Unguja where **67 percent** (**201** out of **300** cases) of them were recorded in Mjini district. See table 34 below

Table 34: Number of problems observed to delivered mothers during postnatal by District, 2019

Place	Anaemia	Fistula	Sepsis	Severe bleeding
Mkoani	8	1	6	33
Chake Chake	3	1	2	0
Micheweni	11	0	3	20
Wete	20	8	0	7
Pemba	42	10	11	60
Kaskazini A	45	0	2	56
Kaskazini B	6	0	1	13
Kati	7	0	37	20
Kusini	6	0	0	0
Magharibi A	14	0	6	7
Magharibi B	5	0	0	3
Mjini	25	0	0	201
Unguja	**108**	**0**	**46**	**300**
Zanzibar	**150**	**10**	**57**	**360**

6.3.7 Postnatal problems observed to children by district, 2019

Cord infection, Difficulty in breathing and Eye infection are the most common problems that are reported to children during postnatal services. Wete has recorded 105 cases of Difficulty in breathing (almost **86 percent**) of all cases reported in Zanzibar, where Unguja has recorded 109 cord infection cases **(56.7%)** of all cases reported in Zanzibar. See table 35 below

Table 35: Number of problems observed to children during postnatal by District, 2019

Place	Cord infection	Difficulty in breathing	Eye infection	Jaundices
Mkoani	33	1	19	2
Chake Chake	22	42	28	1
Wete	24	105	21	1
Micheweni	4	2	2	1
Pemba	**83**	**150**	**70**	**5**
Kaskazini A	16	1	0	0
Kaskazini B	1	19	8	0
Kati	4	0	21	0
Kusini	9	3	8	0
Magharibi A	2	0	4	0
Magharibi B	27	0	5	3
Mjini	50	2	31	7
Unguja	**109**	**25**	**77**	**10**
Zanzibar	**192**	**175**	**147**	**15**

3.7 DELIVERY

Ministry of Health Zanzibar through HMIS unit collects delivery data from recommended health facilities which provide delivery services. The health policy emphasizes all deliveries to be conducted at health facilities approved for performing deliveries with the assistance of skilled birth attendants. MOH Zanzibar uses **4.5 percent** of the total population as a proxy of expected deliveries.

3.7.1 Facility and Home Deliveries

All deliveries are subsets of home and facility deliveries. MOH calculates the number of home deliveries by subtracting facilities deliveries from expected deliveries.

3.7.1.1 Deliveries Summary

The table 36 below shows the data for facility deliveries against home deliveries in Zanzibar. The trend shows to maintain over **50 percent** of health facility deliveries for three (3) consecutive years. There was drop in facility delivery in 2019 compared to 2018 in which percentage decreased from **67.0 percent** in 2018 to **65.8 percent** in 2019 (**1.2%** decreasing), Regard the island wise, the facility delivery rate is higher in Pemba **(67.6%)** compared to Unguja **(64.9%)**. More details were in table 36 below.

Table 36: Health Facility Deliveries in Comparison with Home Deliveries (%), 2017 – 2019

Place	Type	2017	2018	2019
Pemba	Facility	68.4	68.8	67.6
	Home	31.6	31.2	32.4
Unguja	Facility	59.9	66.1	64.9
	Home	40.1	33.9	35.1
Zanzibar	**Facility**	**62.2**	**67.0**	**65.8**
	Home	**37.8**	**33.0**	**34.2**

NB: *Home deliveries based on calculation (Home Deliveries = Expected pregnancy – Facility Deliveries)*

3.7.1.2 Distribution of Deliveries in the Health Facilities by District

In Zanzibar the total live births occurred in 2019 was **48,093**. Unguja accounts to **65.5 percent** of all deliveries reported in 2019 at Zanzibar where Mjini district accounts for **46.3 percent**, **1.5 percent** increase compared to 2018. Most of the deliveries took place in Mjini where the referral hospital (Mnazi Mmoja Hospital) is located (see table 37), MMH accounts for **30 percent** of the total delivery (see table 64 in annex 3). Pemba accounts for **34.5 percent** of all facilities deliveries. In district wise the performance of facility delivery has been decrease.

Table 37: Number of Deliveries and Live Births by District, 2017 – 2019

District	Health facility deliveries			Number of Live births at facilities		
	2017	2018	2019	2017	2018	2019
Chakechake	5,059 (11.9)	5181 (12.4)	5,344 (11.1)	5,059 (11.9)	5132 (12.4)	5,296 (11.0)
Micheweni	1,452 (3.4)	2326 (5.6)	3,687 (7.7)	1,444 (3.4)	2324 (5.6)	3,691 (7.7)
Mkoani	2,780 (6.6)	2804 (6.7)	3,382 (7.0)	2,791 (6.6)	2797 (6.8)	3,389 (7.0)
Wete	4,013 (9.5)	4089 (9.8)	4,198 (8.7)	3,979 (9.4)	4038 (9.8)	4,202 (8.7)
Pemba	**13,304 (31.4)**	**14,400 (34.6)**	**16,571 (34.4)**	**13,273 (31.2)**	**14,291 (34.6)**	**16,578 (34.5)**
Kaskazini A	3,410 (8)	3,645 (8.8)	3,650 (7.6)	3,453 (8.1)	3,648 (8.8)	3,657 (7.6)
Kaskazini B	404 (1)	618 (1.5)	637 (1.3)	408 (1)	633 (1.5)	641 (1.3)
Kati	480 (1.1)	649 (1.6)	890 (1.8)	482 (1.1)	650 (1.6)	898 (1.9)
Kusini	1,199 (2.8)	1,239 (3.0)	1,160 (2.4)	1,198 (2.8)	1,247 (3.0)	1,148 (2.3)
Magharibi A	294 (0.7)	644 (1.5)	754 (1.6)	287 (0.7)	644 (1.6)	754 (1.6)
Magharibi B	1,693 (4)	1,692 (4.1)	2,173 (4.5)	1,711 (4)	1,706 (4.1)	2,169 (4.5)
Mjini	21,586 (50.9)	18,752 (45.0)	22,325 (46.4)	21,684 (51)	18,541 (44.8)	22,248 (46.3)
Unguja	**29,066 (68.6)**	**27,239 (65.4)**	**31,589 (65.6)**	**29,223 (68.8)**	**27,069 (65.4)**	**31,515 (65.5)**
Zanzibar	**42,370**	**41,639**	**48,160**	**42,496**	**41,360**	**48,093**

3.7.2 Emergency Obstetric and Neonatal Care (EmONC)

WHO estimates that around 15 percent of deliveries are likely to end with complications during Labour hence according RCH guidelines requires Emergency Obstetric and Neonatal Care (EmONC). Nearly all these lives could be saved if reasonable, good quality obstetric care is available 24 hours a day, 7 days a week.

3.7.2.1 Basic and Comprehensive Emergency Obstetric and Neonatal Care by hospitals, 2019

As one of the measures to save the life of a pregnant woman, approximately **1611** mothers have donated blood to save their lives, other services that have been provided are as shown in table below.

Table 38: Number of BEmOC, CEmOC and Neonatal Care Conducted by Hospitals - 2019

Hospital/PHCU /PHCU+ & PHCC	Antibiotics IV/IM	Antihypertensive IV/IM	Oxytocic's	Magnesium sulphate IV/IM	Manual Removal of placenta	Vacuum extraction	Neonatal resuscitation	Blood transfusion
Abdalla Mzee	392	111	2,817	132	7	2	0	145
Chakechake	567	38	4,257	41	12	35	0	213
Wete District	534	20	2,625	51	28	2	0	133
Vitongoji	11	7	301	16	1	0	0	0
Micheweni	137	7	2,196	65	20	20	0	114
Kivunge	144	25	3,391	25	10	10	0	188
MnaziMmoja	2,412	402	14,832	402	38	35	16	756
Mwembeladu	17	1	4,749	2	19	0	0	0
Makunduchi	51	25	1,029	26	3	2	0	25
Zanzibar Military	11	0	213	0	1	0	0	7
Al-Rahma	319	11	1,091	5	17	2	0	19
Mina Hospital	65	0	125	0	0	1	0	0
Tasakhtaa Global	124	22	540	8	2	12	0	9
Tawagal Hospital	13	1	282	0	0	0	0	2
PHCU	2	18	1,978	1	56	0	0	0
PHCU+	48	33	28,271	22	28	0	0	0
Total	**4,847**	**721**	**68,697**	**796**	**242**	**121**	**16**	**1611**

3.7.2.2 Number and Rate of Caesarean Sections by Hospitals from 2017 to 2019

According to WHO, since 1985, the international health care community has considered the "ideal rate" for caesarean sections to be between **10 percent** and **15 percent**. New studies reveal that when caesarean section rates rise towards **10 percent** across a population, the number of maternal and newborn deaths decreases.

Table 39: Caesarean Section Rate (%) per Hospital Delivery, 2017 to 2019

Hospital	2017		2018		2019	
	Total Deliveries	C/S	Total Deliveries	C/S	Total Deliveries	C/S
Abdallah Mzee	2,382	179 (7.5)	2,378	217 (9.1)	2,842	308 (10.8)
Chakechake	4,512	334 (7.4)	4,371	442 (10.1)	4,257	485 (11.4)
Micheweni	995	-	1,260	46 (3.7)	2,148	126 (5.9)
Vitongoji	243	-	330	-	300	-
Wete	3,176	408 (12.8)	3,046	371 (12.2)	2,856	356 (12.5)
PHCU/+	1,996	0 (0.0)	3,015	-	468	-
Pemba	**11,308**	**921(8.1)**	**14,400**	**1,076 (7.5)**	**16,571**	**1,277 (7.7)**
Kivunge	3,138	78 (2.5)	3,382	90 (2.7)	3,389	160 (4.7)
Makunduchi	1,121	26 (2.3)	1,154	42 (3.6)	1,092	52 (4.8)
Al-rahma	1,374	338 (24.6)	1,171	275 (23.5)	1,090	319 (29.3)
MnaziMmoja Maternity	13,289	1853 (13.9)	11,733	2,000 (17.0)	14,832	2,305 (15.5)
M/Ladu Maternity	6,844	67 (0.98)	4,875	-	4,809	-
Mina	278	130 (46.8)	236	120 (50.8)	126	65 (51.9)
PCHU/ +	2,778	0(0.0)	4,187	-	5,440	-
Farham Maternity Home	28	0(0.0)	33	-	44	-
Zanzibar Military Hospital (JWTZ)	198	16 (8.1)	230	9 (3.9)	215	5 (2.3)
Tasakhtaa Global Hospital	-	-	-	-	552	137 (24.8)
Tawaqal Hospital	-	-	-	-	327	88 (26.9)
Unguja	**29,048**	**2,508(8.6)**	**27,239**	**2,609 (9.6)**	**31,589**	**3,132 (9.9)**
Zanzibar	**42,370**	**3,429 (8.1)**	**41,639**	**3,685 (8.8)**	**48,160**	**4,409 (9.2)**

The overall caesarean section rate in Zanzibar remained below WHO recommendation (9.2) though there is significant variation between hospitals. The leading hospital was Mina which performs about **51.9 percent** caesarean section of all deliveries conducted at Mina Hospital followed by Al-rahma who had **34.5 percent**, Tawaqal had **26.9 percent** and Tasakhtaa Global Hospital with **24.8 percent.**

The lowest performer was Zanzibar Military Hospital (JWTZ) with **2.3 percent** while Mwembeladu was not conducting the procedure for the year 2019.

3.8 Institutional Maternal Mortality Ratio (MMR)

3.8.1 Maternal Death (Definition)

The International Classification of Diseases (ICD) defines maternal death as "the death of a woman occurring during pregnancy, childbirth or within **42** days of termination of the pregnancy from any cause related to or aggravated by the pregnancy or its management, irrespective the gestational age and site of the pregnancy, but not from incidental or accidental causes".

Basically, health care system is required to capture maternal death from both facilities and community. Currently, maternal data from the community are recorded and reported through reproductive and child health form (data set), however, such data is not reliable enough to portray the general picture of the problem.

3.8.2 Institutional Maternal Deaths

Table 40: Number of Institutional Maternal Death by Health Facilities 2017 -2019

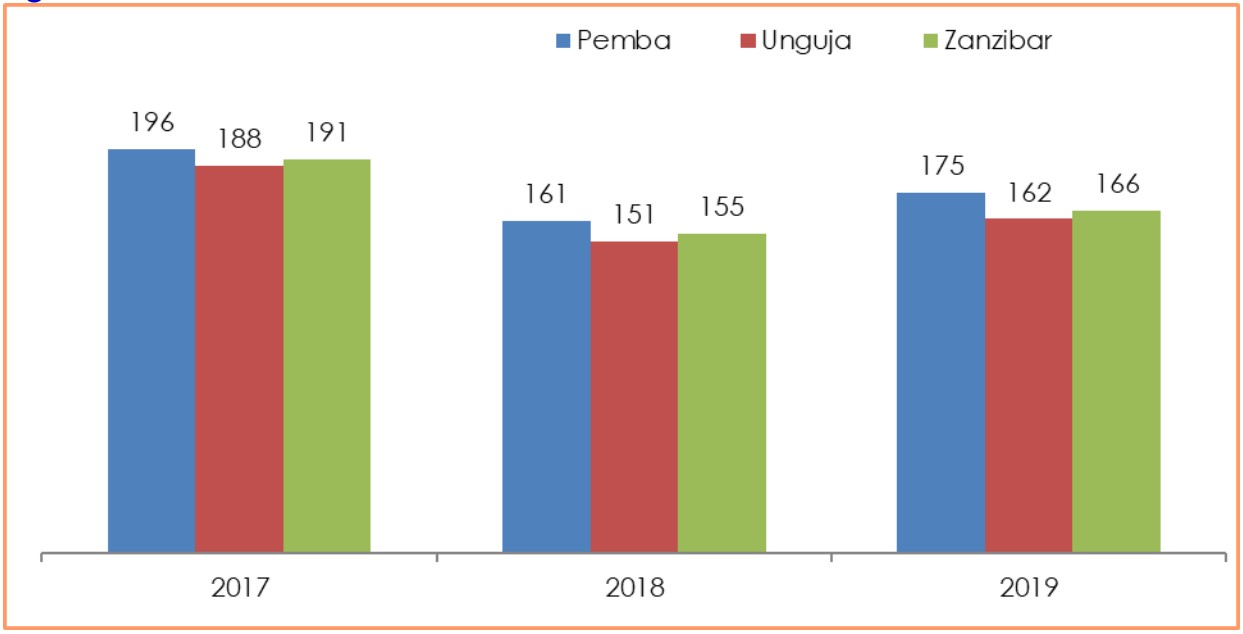
Place	Health Facilities	2017	2018	2019
Pemba	Abdalla Mzee Regional Hosp.	5	7	4
	Micheweni Cottage	2	0	6
	Vitongoji Cottage	0	0	0
	Wete District Hospital	8	6	13
	ChakeChake Hosp.	11	10	6
Total		**35**	**26**	**29**
Unguja	Kivunge Cottage	1	4	7
	Makunduchi Cottage	1	1	0
	MnaziMmoja Hospital	50	36	43
	M/Ladu Maternity Home	1	0	0
	Zanzibar Military	2	0	0
	Tawaqal Hospital			1
Total		**60**	**55**	**51**
Zanzibar		**95**	**81**	**80**

3.8.3 Institutional Maternal Mortality Ratio (MMR)

SDG set the Global Maternal Mortality Ratio (MMR) target to be less than **70** per **100,000** live births by 2030. However, in previous 3 years, Zanzibar did not meet even the MDG target which was **170** per **100,000** live births by 2016.

The figure 9 below shows that IMMR case that has shown increasing in 2019 compared with 2018. The trend of Maternal mortality ratio from 2017 to 2019 seem to be fluctuating, high mortality rate continued to be experienced in Pemba more than Unguja. However, if extra effort and commitment taken to various stakeholders, Zanzibar might reach the Global Maternal Mortality Ratio (MMR) on 2030 where the current situation for 2019 is **166** per **100,000** live births.

Figure 9: Institutional MMR from 2017 to 2019, Zanzibar



3.8.3.1 Causes of Maternal Deaths in Zanzibar

3.8.3.1.1 Case Fatality Rate

Case fatality rate typically is an important indicator which is used not only to monitor the management of cases but also as a measure of disease severity and is often used for prognosis (predicting disease course or outcome), where comparatively high rates are indicative of relatively poor outcomes. It also can be used to evaluate the effect of new treatments, with measures decreasing as treatments improve. Case fatality rates are not constant; they can vary between populations and over time, depending on the interplay between the causative agent of the disease, the host, and environment as well as available treatments and quality of patient care.

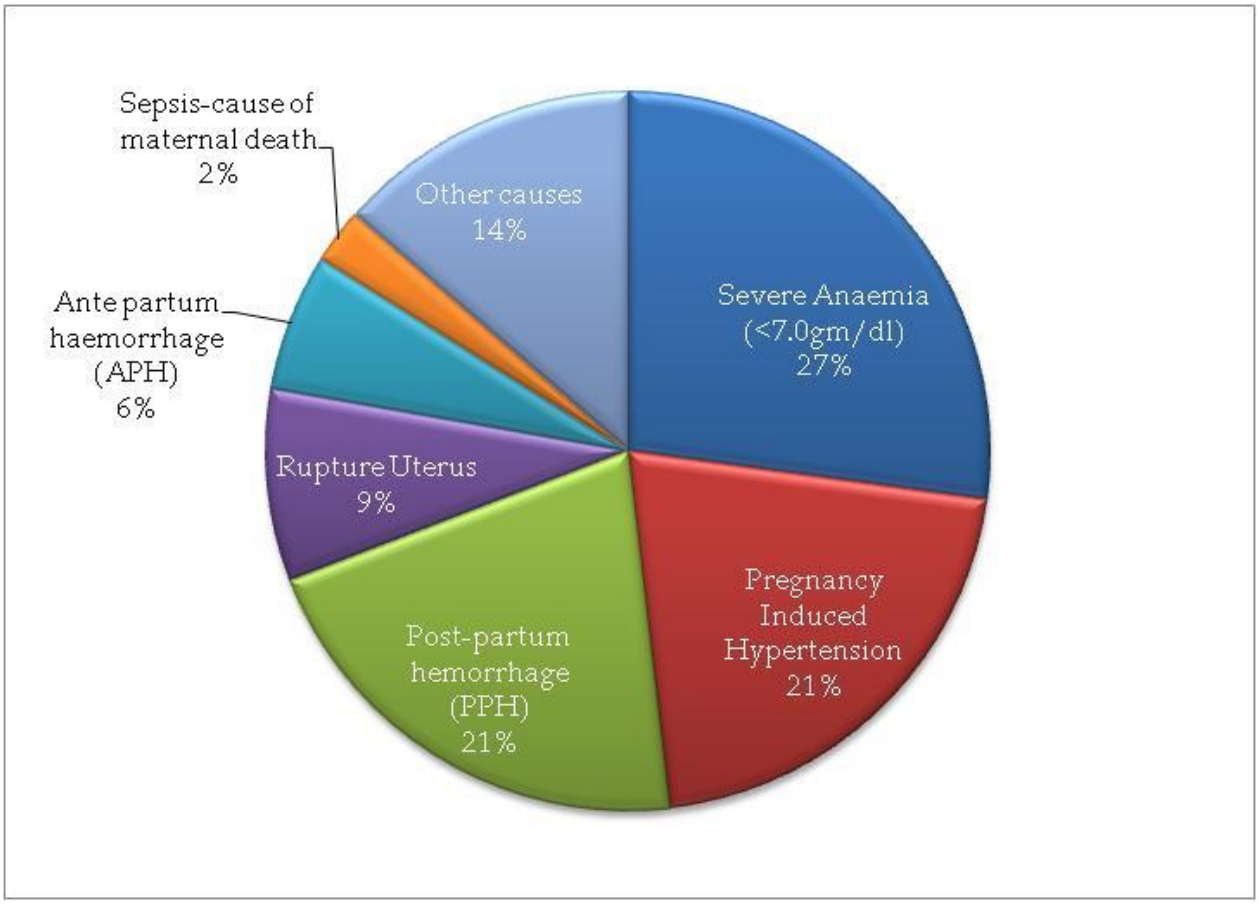
In the list of causes of maternal deaths, Severe Anaemia has been occurred as leading causes of maternal deaths and shows that **22** deaths are reported out of all cases of severe anaemia in 2019. PPH and Pregnancy Induced Hypertension follow the trend. See table 41 below.

Table 41: Case Fatality Rates (%) Due to Various Causes of Maternal Deaths 2017 - 2019, Zanzibar

Place	Data	2017		2018		2019	
		Cases	Deaths	Cases	Deaths	Cases	Deaths
Pemba	Antepartum haemorrhage (APH)	178	4 (2.2)	158	1 (0.6)	173	3 (1.7)
	Postpartum Haemorage (PPH)	311	4 (1.3)	331	7 (2.1)	443	4 (0.9)
	Rupture uterus	10	1 (10.3)	9	1 (11.1)	10	1 (10.0)
	Sepsis	29	1 (3.4)	23	1 (4.3)	48	1 (2.1)
	Pregnancy Induced Hypertension	117	5 (4.3)	253	7 (2.8)	299	8 (2.7)
	Severe Anaemia	146	6 (4.1)	305	1 (0.3)	453	5 (1.1)
Total		**791**	**21 (2.7)**	**1,079**	**18 (1.7)**	**1,426**	**22 (1.5)**
Unguja	Antepartum haemorrhage (APH)	264	4 (1.5)	177	2 (1.1)	222	1 (0.6)
	Postpartum Haemorage (PPH)	484	7 (1.4)	372	13 (3.5)	591	13 (2.2)
	Rupture uterus	38	3 (7.9)	32	1 (3.1)	32	6 (18.6)
	Sepsis	73	0 (0.0)	11	0 (0.0)	36	1 (2.8)
	Pregnancy Induced Hypertension	162	9 (5.6)	397	15 (3.8)	546	9 (1.6)
	Severe Anaemia	894	1 (0.1)	856	4 (0.5)	812	17 (2.1)
Total		**1915**	**24 (1.3)**	**1,845**	**35 (1.9)**	**2,239**	**47 (2.1)**
Zanzibar	Antepartum haemorrhage (APH)	442	8 (1.8)	335	3 (0.9)	395	4 (1.0)
	Postpartum Haemorage (PPH)	795	11 (1.4)	703	20 (2.8)	1034	17 (1.6)
	Rupture uterus	48	4 (8.3)	41	2 (4.9)	42	7 (16.7)
	Sepsis	102	1 (1.0)	34	1 (2.9)	84	2 (2.4)
	Pregnancy Induced Hypertension	279	14 (5.0)	650	22 (3.4)	845	17 (2.0)
	Severe Anaemia	1040	7 (0.7)	1,161	5 (0.4)	1265	22 (1.7)
Total		**2706**	**45 (1.7)**	**2,924**	**53 (1.8)**	**3,665**	**69 (1.9)**

Figure 10 shows that Severe Anaemia is the leading cause of maternal mortality in Zanzibar contributes about **27 percent**, followed by Pregnancy induced hypertension and Postpartum hemorrhage both accounts for **21 percent** of all maternal deaths.

Figure 10: Distribution of Causes of Maternal Death (%), Zanzibar - 2019



3.9 Perinatal death

Although being newborn is not a disease, large numbers of children die soon after birth, many of them in the first four weeks of life (neonatal deaths), and most of those during the first week (early neonatal deaths). For every baby who dies in the first week after birth, another is born dead (fetal deaths or stillbirths) are regarded as perinatal deaths.

For the year 2019, Number of stillbirths that have taken place in the health facilities have reached to **1,154** deaths, this makes the institutional stillbirth rate to be **23.4** for every **1,000** births.

With respect to perinatal death a total of **1,691** deaths were reported where institutional perinatal mortality rate reached to **34.3** per **1,000** births.

Likewise, neonatal death reported in the health facilities amounted to **594** where institutional neonatal mortality rate was **12** per **1,000** live births. See table 42 for details

Table 42: Still births and Neonatal Deaths in Zanzibar, 2019: by hospitals

HF	Perinatal Deaths				Late Neonaltl Death (8-28 days) at pediatric
	Still birth		Early neonatal death (0-7days		
	Fresh	Macerated	At Maternity	At Pediatric	
Mnazi Mmoja Hospital	229	313	25	266	38
Mwembeladu Hospital*	33	24	1		
Abdalla Mzee Regional Hospital	35	49	5	73	4
Chake Chake District Hospital	53	58	33	24	7
Kivunge District Hospital	42	43	8	16	5
Makunduchi District Hospital	6	19	7	5	2
Micheweni Cottage Hospital	21	36	9	2	1
Wete District Hospital	43	31	1	44	0
Vitongoji Cottage Hospital	1	1	2	2	0
Zanzibar Military Hospital (JWTZ)	4	3	0		
Mina Hospital	0	0	0		
Al-Rahma Hospital	7	17	2		
Tasakhtaa Global Hospital	3	9	4		
Tawaqal Hospital	1	2	0		
PHCU/+ and/ Private Disp.	32	39	8		
Total	**510**	**644**	**105**	**432**	**57**

4 IMMUNIZATION

The overall goal of immunization Program in Zanzibar is to contribute to the reduction of the under 5 morbidity and mortality with improvement of vaccination coverage to fight diseases preventable with vaccines.

The EPI program Zanzibar aimed to achieve and sustain consistently coverage rate of above **95 percent** for all antigens. To achieve this goal, the Program aims to protect more people against diseases by expanding the reach of immunization to every eligible person, including adolescents and those in age groups beyond infancy, within a context in which immunization is high on national health agendas. The program is also focusing to introduce a range of newly available vaccines and technologies. The EPI broad areas of activity include service delivery, disease surveillance and supplementary immunization activities. Immunization is one of the preventive components whereby measles vaccination has been addressed as one of the Sustainable Development Goals (SDGs) indicators. Since 2000, measles vaccines have averted nearly 15.6 million deaths globally.

Vaccination against the eleven targeted diseases is provided by EPI through strategies that include static (fixed health facilities), outreach, mobiles and national campaigns to ensure that all eligible children are reached. The Penta3 immunization coverage is used as a proxy indicator to assess the performance of the immunization program. This is the third dose of Pentavalent which comprises Diphtheria, Pertussis, Tetanus, Hepatitis-B and Haemophilus influenza Type-B.

1.1.1. Immunization Coverage for Under One Year

In calculating immunization coverage, the population of under one year (Live birth or Surviving infants) are used as the denominator based on population projections obtained from the National Bureau of Statistics (NBS2012:TPHC2012).

The summary of the routine immunization performance from 2017 to 2019 are illustrated in the Table 43.

Data of fully immunized children is collected in completion of Measles Rubella 1 for children under one year. Coverage increment of fully immunized children was contributed by proper recording at the service of point delivery.

Table 43: Immunization coverage under one year (%) by districts Zanzibar, 2017-2019

District	BCG			Penta-3			Measles-Rubella 1 (MR1)			Fully Immunized		
	2017	2018	2019	2017	2018	2019	2017	2018	2019	2017	2018	2019
Chakechake	112	118	110	80	89	89.8	56.5	93.2	89.3	55.4	82	86.3
Micheweni	127	86.5	107	94.7	71	85.2	71.7	85.5	84.2	71.3	63.3	79.1
Mkoani	108	107	119	80.2	81.5	95.6	60.6	75.5	86.6	60.3	85.3	84
Wete	122	137	111	88.1	108	90.3	65.4	99	90	64.9	96.2	86
Pemba	**117**	**115**	**111**	**85.3**	**86.2**	**90**	**63**	**91**	**87.7**	**62.4**	**78.5**	**84**
Kati	81.8	89.5	103	79.3	89	90.2	65.5	63	94.3	59.9	68	87.9
Kaskazini A	113	125	147	86.6	93.8	106	70.5	89	101.3	71.7	76.1	97.3
Kaskazini B	86.9	89.1	68	81.5	86.3	71.1	63.1	118	73.9	61.1	80	68
Kusini	91.6	90.3	83.7	96.4	96	83.7	87.8	126	114.6	86.5	97	110
Mjini	166	206	187	76.4	76	88.7	60.8	92.1	86.8	62.6	63.1	90
Magharibi A	152	122	113	110	86	81.2	98.9	97	95.1	99.2	103.4	94
Magharibi B	103	129	120	74.9	89	78.5	76.5	99	86	71.6	91.3	101
Unguja	**125**	**138**	**130**	**83.1**	**86**	**87.1**	**71.8**	**94.2**	**92.4**	**70.6**	**78.1**	**94.2**
Zanzibar	**122**	**129**	**123**	**83.9**	**86**	**88.2**	**68.4**	**92.8**	**90.7**	**67.5**	**78.1**	**90.5**

Key

0-50% Poor Performance
51-80% Progress (Average Performance)
81-95% Target (Good Performance)
>95% Over Target (Best Performance)

4.2.1 Dropout Rate for BCG – MCV/MR 1 and Penta 1-3, Zanzibar

The National dropout rate for BCG-MCV/MR1 gradual decreased from **43.5 percent** in 2017, **32.0 percent** in 2018 to **31.0 percent** in 2019. In both Unguja and Pemba the BCG-MCV1 dropout rate varies, in Unguja BCG-MCV/MR1 dropout rate decreased by **1.5 percent**, while at Pemba it increased by **0.8 percent**.

Either, the dropout rate of Penta 1-3 in Zanzibar generally decreased by **0.8 percent** compared of previous year of 2018, in Unguja the dropout rate decreased by **2.6 percent**, while at Pemba it increased by **2 percent** as the table 44 below shown.

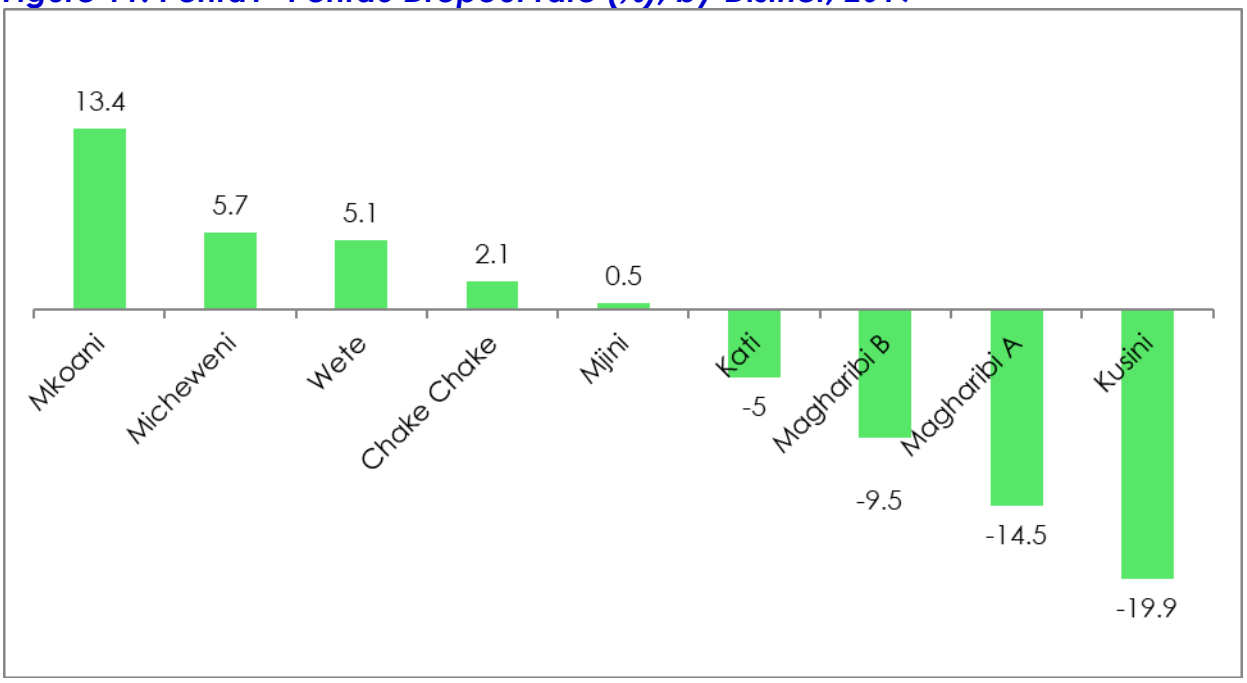
Table 44: Dropout rate by Percentage for BCG - MCV 1 and Penta1-3, 2017-2019

Place	BCG-MCV1 dropout rate			Penta 1-3 Dropout rate		
	2017	2018	2019	2017	2018	2019
Pemba	43.3	25.2	26.0	10.6	7	9.0
Unguja	43.6	35.5	34.0	10.4	6.6	4.0
Zanzibar	**43.5**	**32**	**31.0**	**10.5**	**6.8**	**6.0**

4.2.2 Penta1-3 Dropout out rate by district, 2019

Figure 11 shows the Dropout rate for Penta 1-Penta 3 at district level. Pemba districts accounted to have high Penta 1-3 dropout rate on which Mkoani lead the list. A part of Mjini, all districts from unguja shown the negative dropout rate which signifies the additional penta vaccine from penta 1 to 3, this indicates that the vaccinated children in Penta 3 was more than what was expected (to be the same as in Penta 2 and 1)

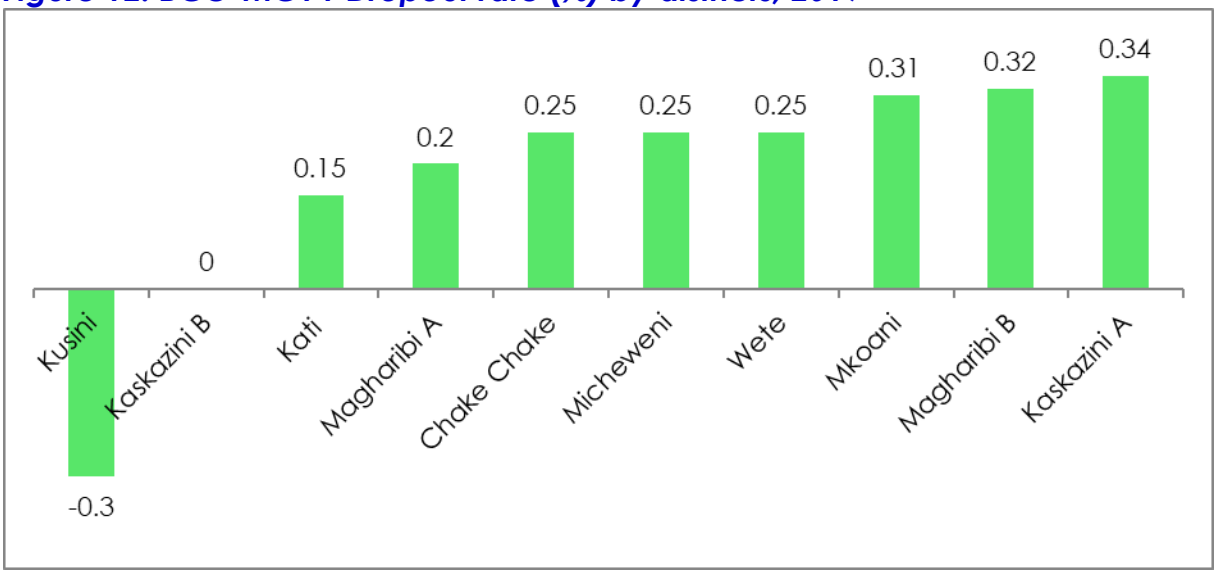
Figure 11: Penta1- Penta3 Dropout rate (%), by District, 2019



4.2.3 BCG-MCV/MR 1 Dropout Rate by Districts, 2017-2019

For the side of districts, the dropout rate of BCG-MCV1 was high at Kaskazini A which account for **0.34 percent** while Kaskazini B claimed with zero percent dropout rate of BCG-MCV1. Only Kusini District has negative dropout rate of **0.3 percent**.

Figure 12: BCG-MCV1 Dropout rate (%) by districts, 2019



4.2.4 Tetanus Toxoid Vaccine (TT)

Tetanus toxoid vaccine is given to all women of childbearing age. The vaccine is given to the pregnant mother to protect mother from tetanus and newborn from neonatal tetanus. The indicator of protection of newborn against neonatal tetanus is measured in two ways:

- Percentage of pregnant mothers who received at least two TT doses among the previously unimmunized pregnant mothers.
- The percentage of children born by mothers who received two or more doses before birth.

A child is protected at birth if the mother has received at least two doses of TT (TT2+) or the mother has received a complete vaccination in the past. Health workers records whether the infant was protected at birth by reviewing mothers TT status during first dose of DTP-Hep B- Hib (Penta1).

The overall coverage of children protection against neonatal tetanus decreased from **96.0 percent** (2018) to **92.3 percent** (2019). The TT vaccination

coverage by island, it shows that Unguja has decreased from **99.5 percent** in 2018 to **89.2 percent** (2019), whereby Pemba shows increased from **90.1 percent** (2018) to **97.8 percent** (2019). With regards to district wise, Mkoani and Wete district has reached above **100 percent** in this year. The lowest coverage was observed at Kaskazini B, where the district remains with the lowest coverage for three years consecutively, followed with Magharibi A by **84.9 percent** (2019) as the table 45 demonstrate.

Table 45:Children born protected Rate (%) by district, 2017- 2019

District	2017	2018	2019
Chake Chake	111	92	95.9
Micheweni	111.8	75.2	92.9
Mkoani	93.7	85.1	101.6
Wete	117.4	111.4	101.2
Pemba	**108.6**	**90.1**	**97.8**
Kati	98.4	86.5	93.6
Kaskazini A	78.6	91.2	99.1
Kaskazini B	56.8	74.5	65.3
Kusini	72.1	94.4	99.2
Mjini	77.8	98.3	85.2
Magharibi A	68.2	96	84.9
Magharibi B	51.2	132.2	85.7
Unguja Zone	**69**	**99.5**	**89.2**
Zanzibar	**80.4**	**96.0**	**92.3**

5 NUTRITION

Nutrition is the intake of food, considered in relation to the body's dietary needs. An adequate calories intake with and well-balanced diet, combined with regular physical activity are the cornerstone for a good health. Poor nutrition can lead to the reduction of the immune system, increased diseases susceptibility, impaired physical and mental development, and reduced productivity.

5.1 Vitamin A Supplement for Under 5yrs.

Vitamin A is a group of unsaturated nutritional organic compound which have multiple functions for growing and development, maintaining immunity system and good vision. This supplement is one of nutritional component given to children under five, either routinely or during specific campaign.

5.1.1 Routine Vitamin A Coverage for Under Five Years

The vitamin A supplement coverage was improved for three consecutive years. It rose from **18.1 percent** from 2017 to **18.4 percent** in 2018 and finally to **30.8 percent** in 2019.

The coverage in Pemba dropped down from **7.4 percent** in 2018 to **4.3 percent** in 2019 while Unguja coverage increase by **2.2 percent** point, from **24.3 percent** (2018) to **26.5 percent** (2019). This led the overall coverage to increase by **12.4 percent** from **18.4 percent** (2018) to **30.8 percent** (2019) according to the routine data collected from health facilities. Table 46 shows the percentage of children given vitamin A supplements.

Table 46: Percentage of Children Rendered with Vitamin A

Place	2017	2018	2019
Pemba	13.6	7.4	4.3
Unguja	20.3	24.3	26.5
Zanzibar	**18.1**	**18.4**	**30.8**

5.1.2 Biannual Vitamin A Supplementation and De worming for Under Five Children

Biannual Vitamin A supplementation coverage conducted in June 2019. The overall coverage for Zanzibar was **94.4 percent**, whereby Unguja enfold **92.7 percent** and Pemba **97.7 percent**. Furthermore, Mebendazole offered during June 2019 recorded the overall coverage of de worming for Zanzibar was **93.0 percent** in Zanzibar, whereby Unguja had **91.2 percent** and Pemba **96.8 percent**. Vitamin A supplementation coverage conducted in December 2019. The overall coverage for Zanzibar was **95.6 percent**, whereby Unguja enfold **93.7 percent** and Pemba **99.5 percent**. Regarding Mebendazole offered during December 2019 the overall coverage of de worming for Zanzibar was **94.3 percent**, whereby Unguja had **91.5 percent** and Pemba **100.1 percent** as illustrated in table 47 below. It revealed that in those two rounds Pemba has higher coverage compared with Unguja.

Table 47: Vitamin A Supplementation and De-worming Medications in Children Under-five Years of Age, by June and by December in 2019

Places	Vitamin A supplementation 6-59 months old				De-worming medications in children 12-59 months old			
	June 2019		December 2019.		June 2019		December 2019	
	Target	Received (%)	Target	Received (%)	Target	Received (%)	Target	Received (%)
Pemba	76,760	97.7	76,760	99.5	68,231	96.8	68,231	100.1
Unguja	155,179	92.7	155,179	93.7	141095	91.2	141095	91.5
Zanzibar	**231,939**	**94.4**	**231,939**	**95.6**	**209326**	**93.0**	**209326**	**94.3**

5.2 Severe Malnutrition Identified at OPD by District, 2017- 2019

Severe malnutrition identified on OPD has raised slightly from **0.23 percent** (2018) to **0.47 percent** (2019) in Zanzibar, but the situation was different in individual districts as shown in table 48, in Pemba, the rise was observed in Wete from **0.53 percent** (2018) to **0.71 percent** (2019), other increment was observed at Mkoani and Chake Chake, but decrement was observed at Micheweni.

With regard to Unguja district, Mjini districts show a remarkable increase from **0.05 percent** (2018) to **1.05 percent** (2019), other increment was observed at Kaskazini A, Kaskazini B, Kusini, Magharibi A and Magharibi B.

Table 48: Malnutrition rate (%) by Districts, Zanzibar, 2017 – 2019

PLACE	2017	2018	2019
Chake Chake	0.25	0.30	0.33
Micheweni	0.34	0.39	0.38
Mkoani	0.46	0.28	0.45
Wete	0.30	0.53	0.71
Pemba	**1.70**	**0.38**	**0.47**
Kati	0.49	0.40	0.41
Kaskazini A	0.43	0.23	0.55
Kaskazini B	0.32	0.11	0.23
Kusini	0.30	0.08	0.34
Mjini	0.23	0.05	1.05
Magharibi A	0.48	0.04	0.15
Magharibi B	0.33	0.21	0.32
Unguja	**0.26**	**0.15**	**0.48**
Zanzibar	**0.72**	**0.23**	**0.47**

5.3 Low birth weight

Multiple studies reveal that low birth weight has been associated with higher chance of infant mortality, the Ministry has long time concern about this important risk. Low birth weight it's typically the result of poor nutrition during pregnancy and premature delivery. Low birth weight has been increased in the

last 3 years, **6.8 percent** from 2018 to **7.4 percent** in 2019. The lack of improvement on this indicator is alarming and point out the needs of taking more actions to address this important issue (see table 49).

5.3.1 Malnutrition rate for under 5yrs (%) at OPD

The overall malnutrition rate for children under five years (OPD cases) has been decreased from **0.72 percent** (2017) to **0.23 percent** in 2018 to 0.47 percent in 2019 (See table 49).

Table 49: Low birth weight and Malnutrition rate for under 5yrs (%), 2017-2019

Place	Low birth weight			Malnutrition rate for under 5yrs (%) at OPD		
	2017	2018	2019	2017	2018	2019
Pemba	4.1	5.7	8.2	1.7	0.38	0.47
Unguja	7.9	7.8	7	0.26	0.15	0.48
Zanzibar	**6.8**	**7.1**	**7.4**	**0.72**	**0.23**	**0.47**

6 NEGLECTED TROPICAL DISEASES

The MoH through the strategy for the Neglected Tropical Diseases Control Programme aimed to eliminate three of the four most common human Neglected Tropical Diseases identified in Zanzibar through Mass Drug Administration (MDA) by 2019. Those are: Urinary Schistosomiasis (Schistosoma haematobium), Lymphatic Filariasis and Trachoma. With other identified NTDs present in Zanzibar i.e. Soil-Transmitted Helminthiasis (STH) the strategy is to reduce them so that they are no longer a public health problem.

The current strategy is in the final stages and recommends re-structuring whereby all NTDs as recommended by WHO should be under one roof hence coordination, integration and resource utilization are optimized. Currently, diseases which are not under NTD program are Trachoma, Leprosy, Rabies and Bovine TB. These diseases are controlled by the Eye Care Department, ZIHTLP and the Epidemiology Unit respectively.

6.1 Urinary Schistosomiasis

Table 50 illustrates the Schistosomiasis cases diagnosed on routine service provision. In Zanzibar the number of cases increased from **1,225** (2017) to **1,736** (2018) and reached to **1,929** in 2019, Pemba has witnessed an increase for three consecutive years, but there is slight decrease in Unguja Island from **1,106** (2018) to **954** (2019). Either, few cases were observed in two districts of Kusini (4) and Magharibi A (69) respectively as table 50 shows

Table 50: New cases of Terminal Haematuria/Schistosomiasis by Districts 2017 - 2019

Place	District	2017	2018	2019
Pemba	Chakechake	78	231	578
	Micheweni	26	48	103
	Mkoani	95	169	158
	Wete	86	182	136
Pemba		**285**	**630**	**975**
Unguja	Kaskazini A	15	346	108
	Kaskazini B	93	116	214
	Kati	203	171	139
	Kusini	176	2	4
	Magharibi A	95	93	69
	Magharibi B	36	243	106
	Mjini	319	135	314
Unguja		**940**	**1,106**	**954**
Zanzibar		**1,225**	**1,736**	**1,929**

Table 51 illustrates the Lymphatic Filariasis cases on routine service provision. In Zanzibar the number of cases decreased from **28** (2017) to **15** (2018), but the condition rises suddenly to **105** cases in 2019. This increased number observed in both islands, Unguja from **12** cases in 2018 to **66** cases in 2019, especially in Kusini from **2** cases in 2018 to **16** in 2019, and Mjini district from **9** cases (2018) to **33** in 2019. While for Pemba, there was increased number of Lymphatic Filariasis cases from **3** in 2018 to **39** cases in 2019. The district which has more cases identified is Chakechake with the reported cases of **35** in 2019 compared to **4** cases from the previous year of 2018, No cases found in other districts in Pemba for the year 2019 as the table 51 illustrate.

Table 51 also shows the Soil-Transmitted Helminthiasis cases diagnosed on routine service provision. The number of cases increased from **19,224** (2018) to **22,194** (2019) in Zanzibar. The MDA for STH is conducted together with the Schistosomiasis MDA

Table 51: Lymphatic Filariasis and Soil-Transmitted Helminthiasis new cases by District 2017 - 2019

Place	District	Lymphatic Filariasis new cases			Soil-Transmitted Helminthiasis (STH)		
		2017	2018	2019	2017	2018	2019
Pemba	Chake Chake	1	3	35	3,236	3,470	4,285
	Micheweni	0	0	0	2,746	2,793	3,199
	Mkoani	1	0	0	1,060	1,436	2,164
	Wete	2	0	4	1,581	1,991	2,030
Pemba Total		**4**	**3**	**39**	**8,623**	**9,690**	**11,678**
Unguja	Kaskazini A	13	0	0	1,885	2,105	1,973
	Kaskazini B	0	1	5	1,596	1,826	2,194
	Kati	2	0	5	834	855	809
	Kusini	0	2	16	324	196	142
	Magharibi A	0	0	3	934	1,112	1,746
	Magharibi B	3	0	4	1,760	1,280	1,395
	Mjini	6	9	33	1,906	2,180	2,257
Unguja Total		**24**	**12**	**66**	**9,239**	**9,554**	**10,516**
Zanzibar		**28**	**15**	**105**	**17,862**	**19,244**	**22,194**

7 NON COMMUNICABLE DISEASES

Currently, one of the major public health concern in Zanzibar is Non-Communicable Diseases (NCDs), which attack most of the Zanzibar residents. The MoH Zanzibar has identified and prioritized Non Communicable Diseases (NCDs) within Growth and Poverty Reduction (ZSGPR) – MKUZA and Health Sector Strategic Plan (HSSP). In this section, the most concerned will be Diabetic related, Hypertension, Cancers, Road Traffic Accidents (RTA) which are the most common NCDs presenting from the health facilities in Zanzibar.

7.1 NCD Major Concerned at OPD

Hypertension and diabetes (New Cases) are among the Non Communicable Diseases (NCDs) affecting most of the elderly people for both sexes. In recently years, these diseases have been increased though some of the social measures such as exercise and food counselling are taken into account.

In addition, Road Traffic Accidents (RTA) continue to be a problem as it continues to affect thousands of peoples mostly men as shown in table 52.

Table 52: New Cases of NCD Related at OPD – 2019 ZANZIBAR.

NCD Related	2017		2018		2019	
	Male	Female	Male	Female	Male	Female
Diabetes	951	1,135	2,287	2,999	4,118	4,583
Hypertension	3,713	7,597	6,958	12,313	7,381	13,109
Road Traffic Accidents (RTA)	2,735	1,749	4,215	2,239	2,485	1,220

7.2 Diabetes and Diabetic Complication

The table 53 below shows the effect of diabetes with multiple complications such as neuropathy, heart diseases and strokes, eye complications leading to blindness, Nephropathy, Neuropathy, Retinopathy and diabetic foot ending in amputation. Some of the modifiable risk factors that contribute to developing diabetes such as smoking, overweight, physical inactivity, inappropriate use of alcohol, and poor diet; the table below shows the data that reflect the diabetic clinics in Zanzibar.

Table 53: Diabetes and its Complication from Diabetic Clinic at all Hospital in Zanzibar, 2019.

Hospital Name	Diabetes mellitus T1		Diabetes mellitus T2		Complications							
					Diabetic Nephropathy		Diabetic Neuropathy		Diabetic Retinopathy		Diabetic foot	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Abdalla Mzee Regional	2	8	5	11	0	0	26	35	1	0	20	30
Al-Rahma	0	0	84	79	0	0	0	0	0	0	0	0
Chake Chake District	-	-	-	-	-	-	-	-	-	-	-	-
Kivunge Cottage	23	24	11	11	12	6	44	65	18	24	9	2
Makunduchi Cottage	1	1	8	11	1	0	3	9	3	2	3	5
Micheweni Cottage	0	1	4	4	1	0	6	3	17	26	8	12
Mnazi Mmoja	22	28	108	95	8	7	56	41	2	2	21	19
Vitongoji Cottage	3	1	19	40	0	2	6	14	5	12	1	2
Wete District Hospital	11	28	55	84	0	0	2	0	0	1	2	3
Sub - total	**62**	**91**	**294**	**335**	**22**	**15**	**143**	**167**	**46**	**67**	**64**	**73**
Total	**153**		**629**		**37**		**310**		**113**		**137**	

8 TUBERCULOSIS AND LEPROSY

8.1 Tuberculosis

For the year 2019, a total of **967** cases of all forms of TB cases were notified and registered from health care facilities, children under 15 represented **11percent** of all cases.

Number of notified cases for pulmonary bacteriological confirmed has gradually decreased from **511** (2017) to **367** (2018) up to **321** (2019). Either, the number of pulmonary clinical diagnosed observed to be increased from **212** (2017) to **378** (2018) up to **476** (2019), while for Extra pulmonary also marked decreased in three years consecutively. Other parameter demonstrated in the table 54 below.

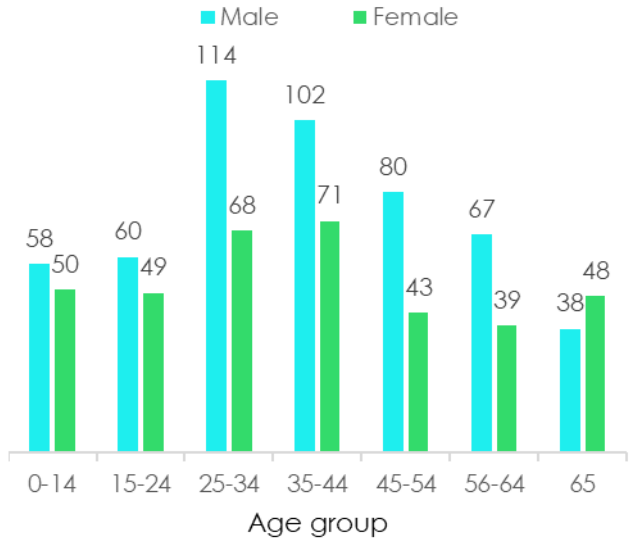
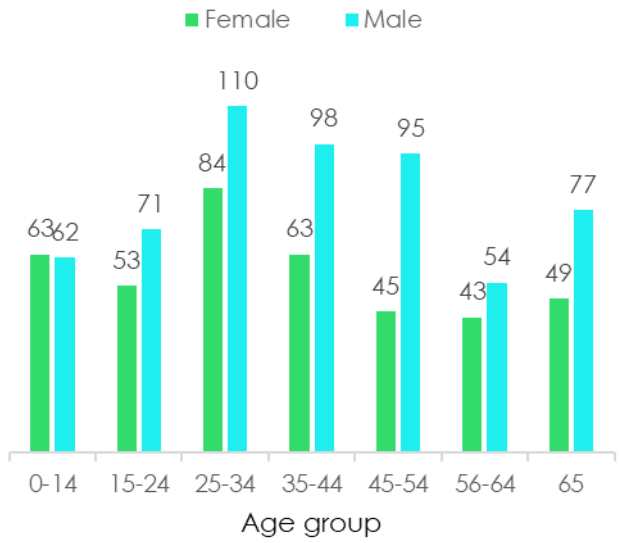
Table 54: TB Cases Notified by Type of Patient and Category, Zanzibar, 2017-2019

Type of patients	Pulmonary Bact. Confirmed			Pulmonary Clinically Diagnosed			Extra Pulmonary			Total Cases (2019)
	2017	2018	2019	2017	2018	2019	2017	2018	2019	
New	493	334	276	209	364	450	225	199	179	**905**
Relapse	7	15	23							**23**
Failure	3	6	4							**4**
Return to control	5	5	13							**13**
Others	0	0	0	3	14	17	0	0	0	**17**
MDR TB	3	7	5	0	0	0	0	0	0	**5**
Total	**511**	**367**	**321**	**212**	**378**	**467**	**225**	**199**	**179**	**967**

8.1.1 Age and Sex Distribution of All TB Cases Notified 2019

In 2019 a total of **967** TB cases have been registered across all patients age and sex group, among them **400** they were female and **567** were female, the most affected age group were 25 – 34 and 35-44 years, the male reported more cases in all age group. Either, the number of children (under 15) affected of TB were also increased compared of 2018 with 2019 as the figure 13 shows

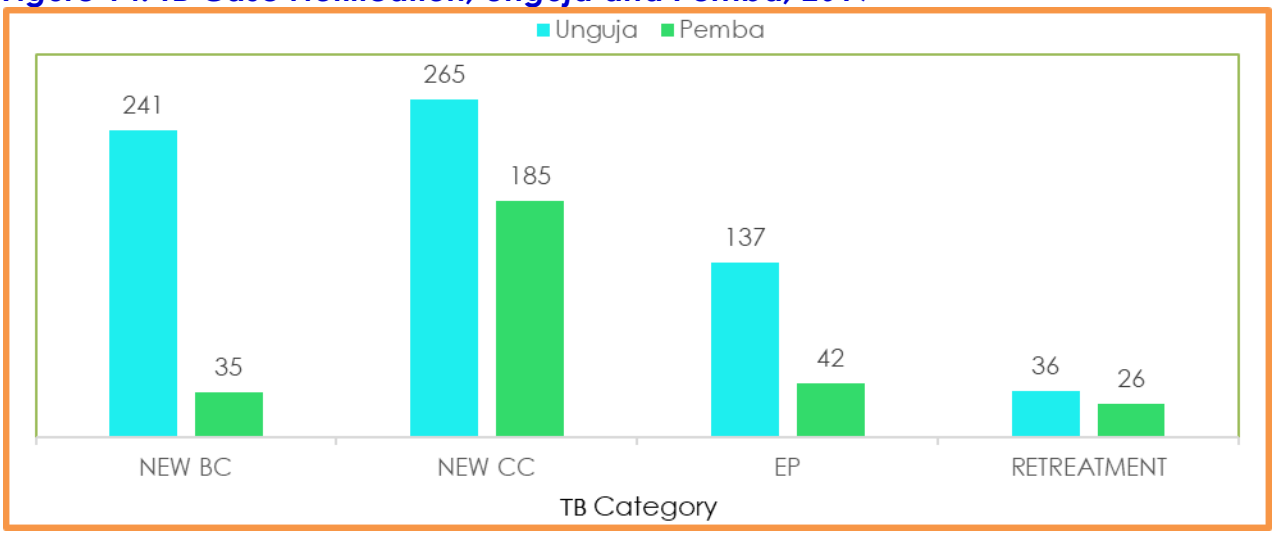
Figure 13: Age and Sex distribution of TB Cases Notified between 2018 and 2019, Zanzibar

Age and Sex distribution of TB Cases Notified in 2018, Zanzibar	Age and Sex distribution of TB Cases Notified in 2019, Zanzibar
	

8.1.2 TB Case Notification, Unguja and Pemba)

Among **967** patients notified in 2019, **679 (70%)** were in Unguja and **288 (30%)**in Pemba as seen in figure 23. below. The number of retreatment cases increased from **47** in 2018 to **62** in 2019, which alerts the program to strengthen follow up to prevent the occurrence of MDR -TB in Zanzibar as shown in figure below

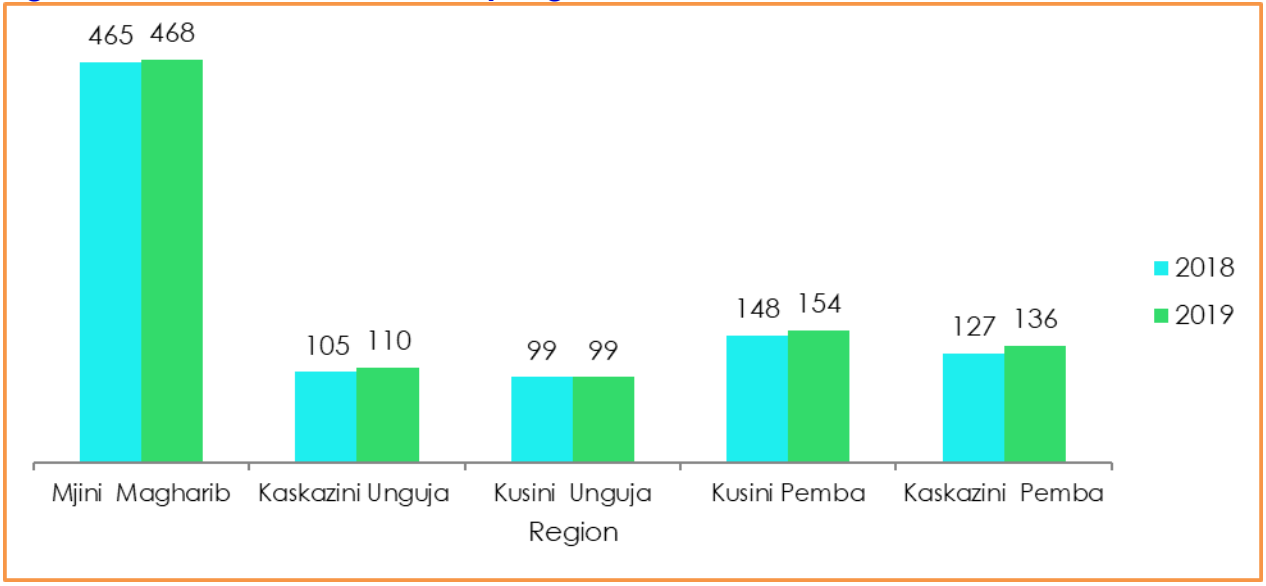
Figure 14: TB Case Notification, Unguja and Pemba, 2019



8.1.3 TB Case Notification by Regions

In the year 2019, the number of notified TB patients is highest in Mjini Magharibi region **468** (48.3%). Kaskazini and Kusini Unguja regions reported low number of TB cases notified **110** (11%) and **99**(10%) respectively. Generally, there is no remarkable increased TB cases notified in 2019 in all region to the number of cases reported in 2018 (see figure 15 below

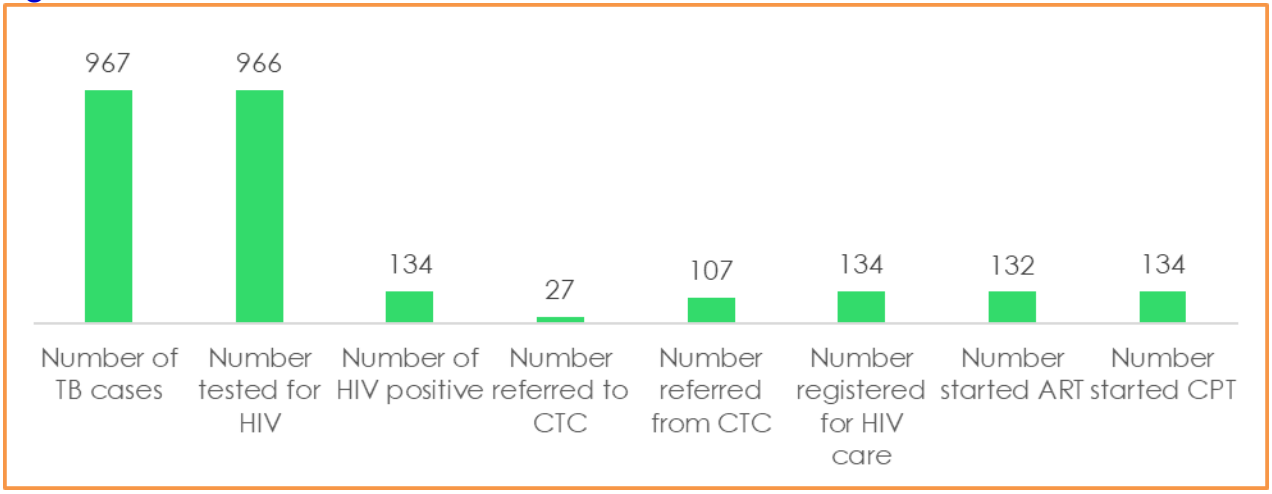
Figure 15: TB case notification by region, Zanzibar, 2018 – 2019



8.1.4 TB/HIV NOTIFICATION

Of all **967** TB patients notified, **966** (99.8%) patients were tested for HIV and result recorded in the TB register. Among those tested, **134** (14%) patients had co-infection i.e TB/HIV, and **132** (99%) had started to use ART as elaborated in figure 16 below.

Figure 16: TB/HIV notification, Zanzibar, 2019

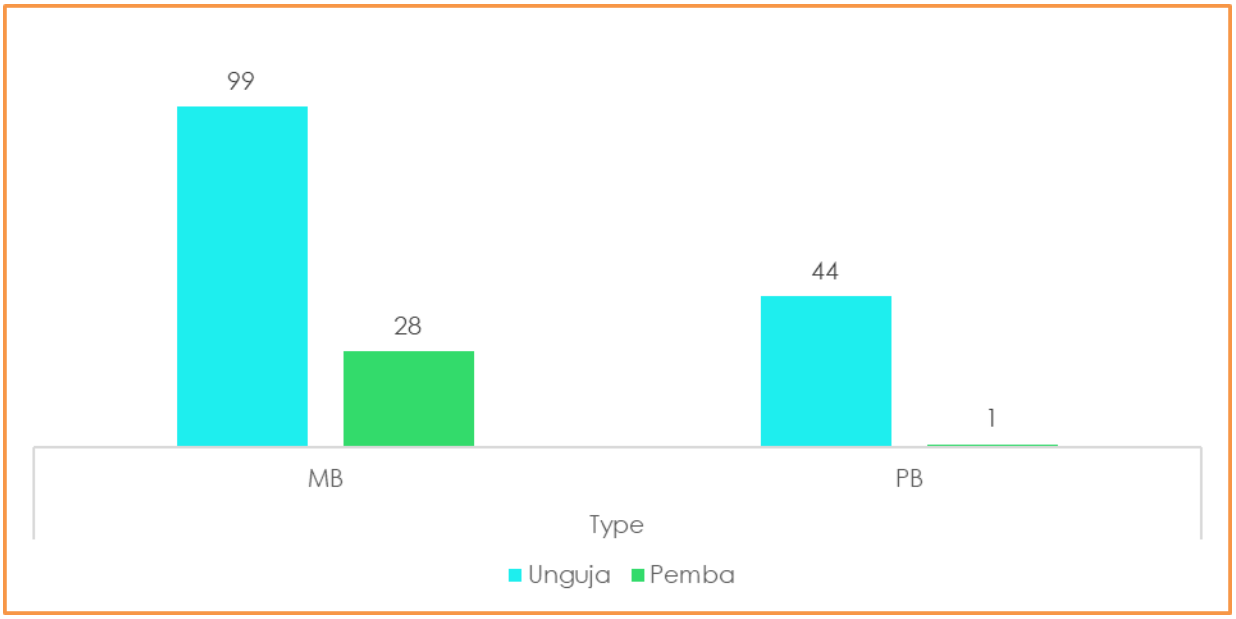


8.2 LEPROSY

Leprosy control is aimed at prevention of disability from the disease through early detection and treatment of all Leprosy patients. Although Multi-Drug Therapy (MDT) results are good in Zanzibar, the number of newly detected Leprosy patients with disabilities has not declined. In 2019, the total number of Leprosy cases registered was **172**.

In 2019, a total number of new leprosy cases registered was **163**. Among all cases, **137**(84%) **were** diagnosed in Unguja and **26**(16%) were diagnosed in Pemba; **93** (74%)were Multibacillary (MB) and **44** (26%)were Paucibacillary (PB)as shown in the figure 17 below. Moreover, number of new leprosy cases diagnosed has tremendously increased from **82** in 2018 to **163** cases in 2019.The increased might be contributed by active case finding, training and mentorship on leprosy diagnosis and management in Unguja and Pemba.

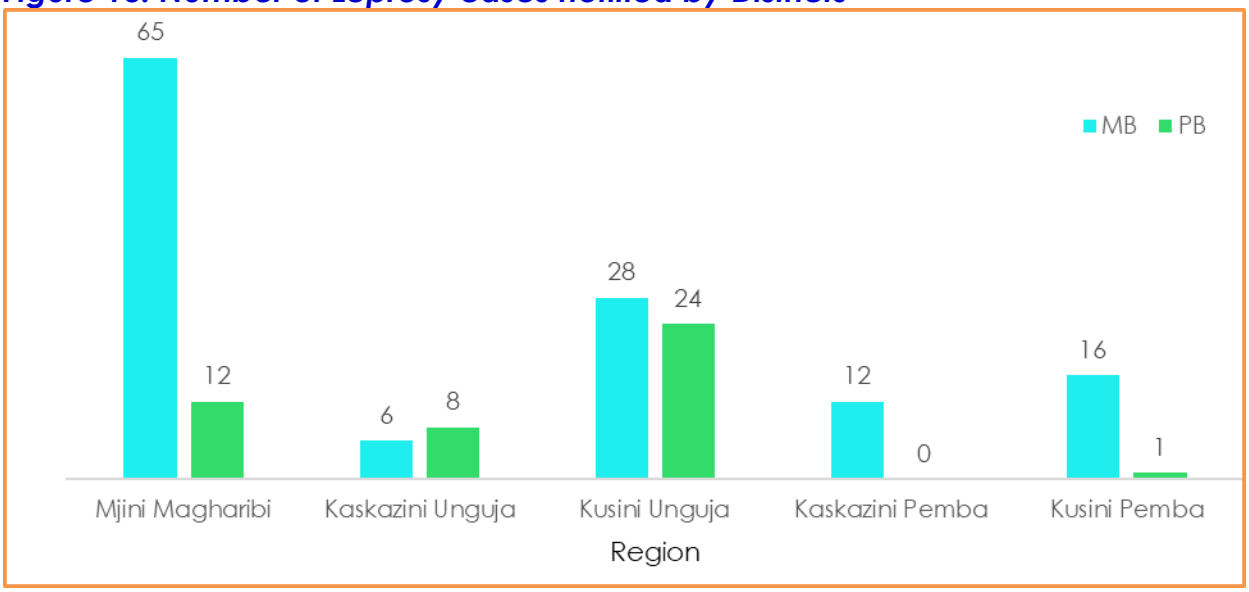
Figure 17: Number of all registered Leprosy cases by type and Island, Zanzibar, 2019



8.2.1 Leprosy notified cases by region Zanzibar, 2019

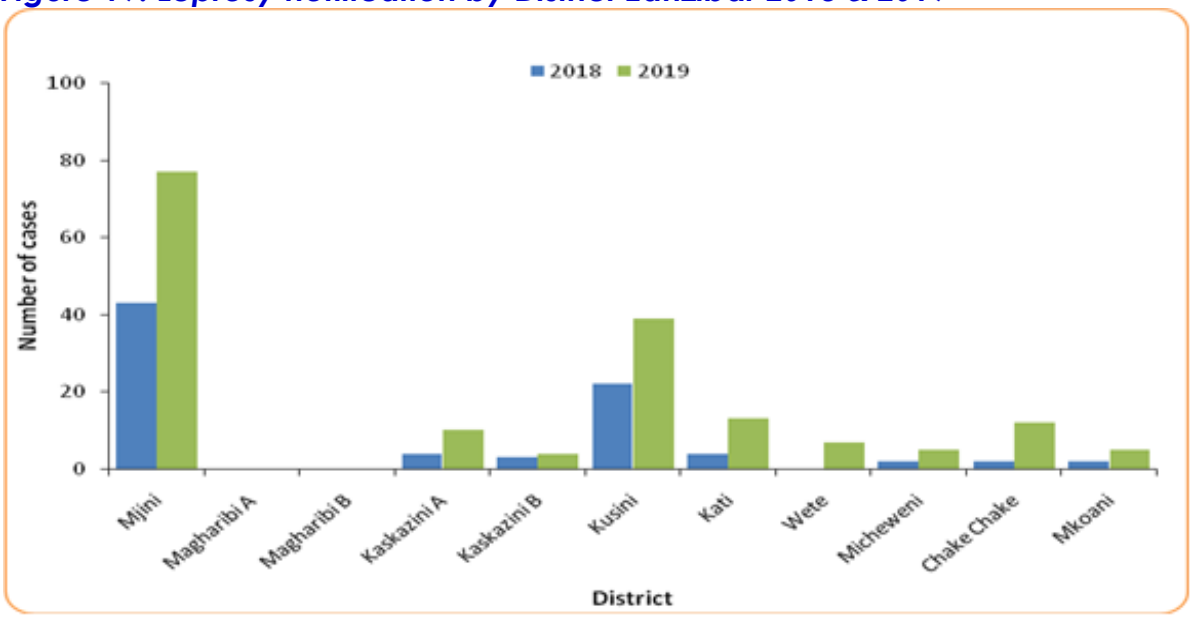
Of all cases notified in in 2019, Mjini Magharibi region had high number of leprosy case **77**(45%). Kaskazini Unguja and Pemba regions reported low number of leprosy cases, **14**(8%) and **12**(7%) respectively.

Figure 18: Number of Leprosy cases notified by Districts



Number of notified leprosy patients has increased in 2019 across all districts except for Magharibi A and Magharibi B which report zero patient. The notable increase was from Mjini and Kusini district which might be contributed by active case finding conducted in school's health program and training of health care workers as shown in figure 19 below.

Figure 19: Leprosy notification by District Zanzibar 2018 & 2019



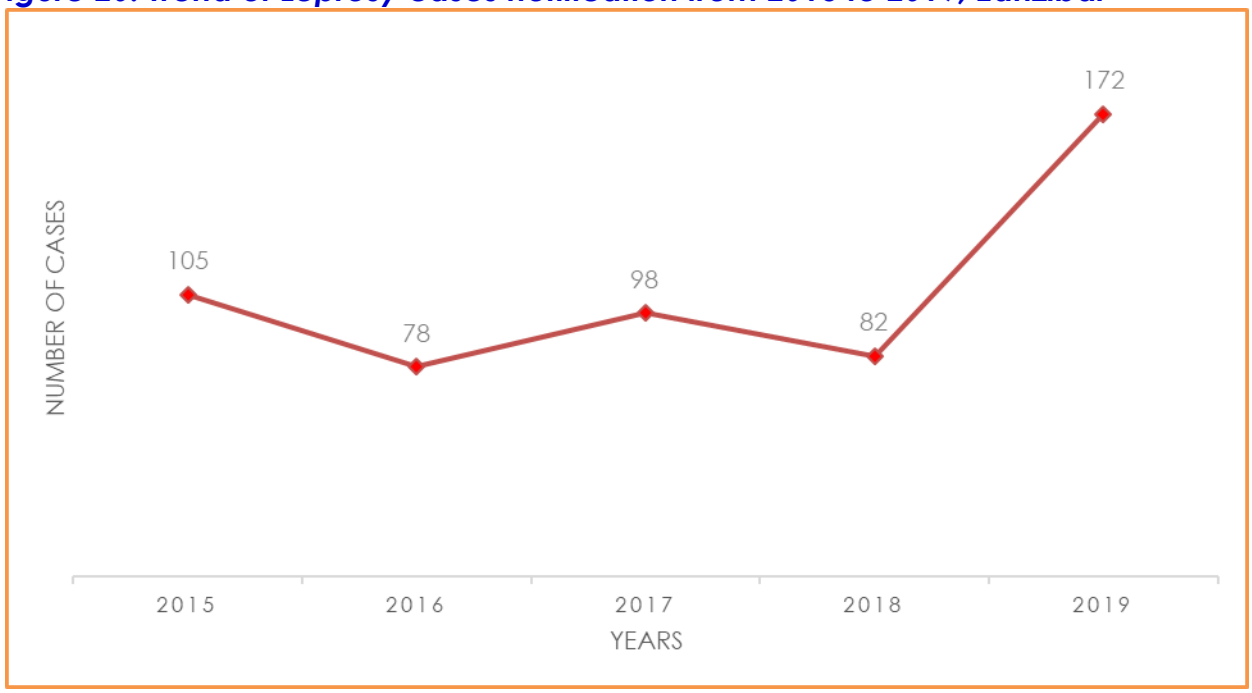
Among **172** cases detected, all age groups and sex were affected by leprosy, however males of most age groups were more affected compared to female of the same age. In addition to that male were more affected with MB type of leprosy which is more infectious

Table 55: Age, sex and type of leprosy cases registered during the year 2019, Zanzibar

Type	0-14		15-24		25-34		35-44		45-54		55-64		65+		Total	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
MB	10	3	12	10	11	10	23	11	11	3	9	3	7	4	83	44
PB	13	4	3	7	3	2	0	2	2	2	2	0	2	3	25	20
Total	**23**	**7**	**15**	**17**	**14**	**12**	**23**	**13**	**13**	**5**	**11**	**3**	**9**	**7**	**108**	**64**

Among **163** cases notified in 2019, **143** (87.3%) were diagnosed in Unguja and **29** (17.7%) were diagnosed in Pemba as in the figure 20 below). Number of all registered Leprosy cases by type and Island, Zanzibar,

Figure 20: Trend of Leprosy cases notification from 2015 to 2019, Zanzibar



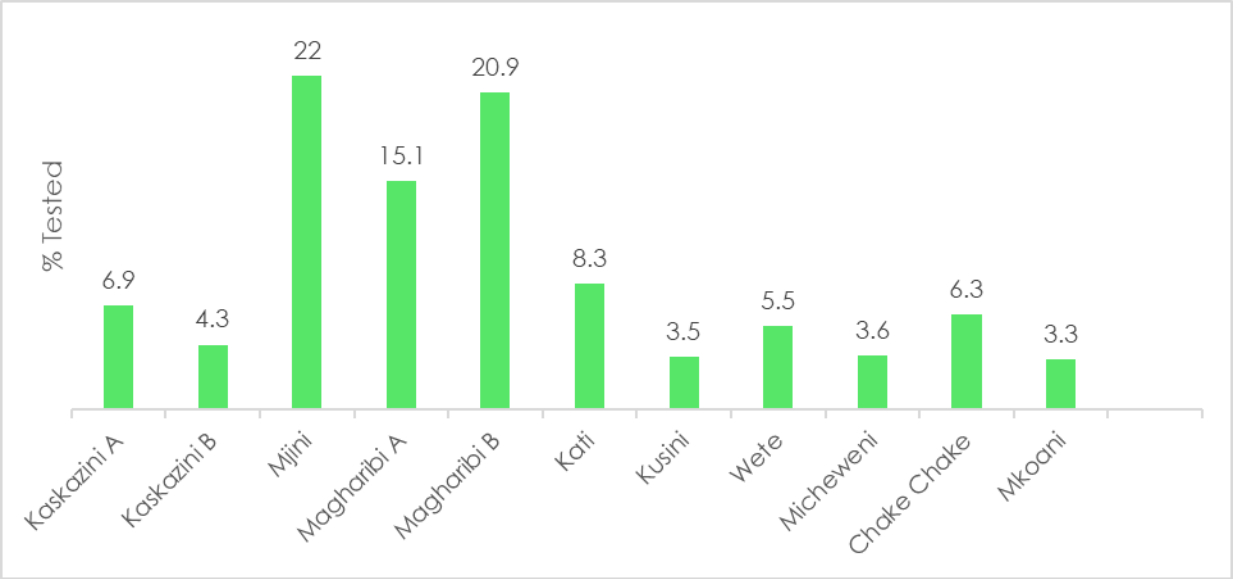
8.3 HIV AND STI

8.3.1 HIV testing services

HIV testing and counseling (HTC) services were established in 1988 in five (5) public hospitals. By 2019, HIV Testing Services (HTS) were provided in **168** (110 Unguja and 58 in Pemba) sites in Zanzibar. Of them, **152** are government facilities, **5** are NGOs, **3** are FBOs and **8** are private hospitals. These services were offered through two main approaches including Client Initiated Counseling and Testing (CITC)/Voluntary Counseling and Testing (VCT) and Provider Initiated Testing and Counselling (PITC). Among the **168** sites; **13** provide VCT services only, **106** provide PITC services only and 4**9** provide both PITC and VCT services.

The figure 21 below shows the proportion of people counselled and tested by district. Only Mjini and Magharibi 'B' districts had testing levels above the national target **(22.0% and 20.9% respectively)** of testing **18 percent** of the general population as indicated in table 56

Figure 21: Percent of population received HTS by district, Zanzibar, 2019



HIV Test and Result by Sex and Age Group

The overall proportion of HIV positive cases among tested was **0.7 percent** (1,915/271,123). HIV positivity rate was highest in client tested residing outside Zanzibar **(3.6%)**, followed by Kusini and Kati which had highest positivity rate of **1.1%** and **1.0%** respectively, while Wete district had the least **(0.2%)**. Positivity rate was higher in Unguja **(0.8%)** as compared to Pemba **(0.3%)** as indicated in table 56

Table 56: HIV proportion among clients tested by district of residence, Zanzibar 2019

District	Number Tested for HIV	Number HIV Positive	% of HIV Positive
Kaskazini A	18,626	81	0.4
Kaskazini B	11,750	73	0.6
Mjini	59,592	494	0.8
Magharibi A	40,872	303	0.7
Magharibi B	56,543	425	0.8
Kati	22,404	227	1.0
Kusini	9,389	101	1.1
Unguja	**219,176**	1704	0.8
Wete	14,881	37	0.2
Micheweni	9,830	26	0.3
Chake chake	17,054	73	0.4
Mkoani	8,963	31	0.3
Pemba	**50,728**	**167**	0.3
Outside Zanzibar	1,219	44	3.6
Total	**271,123**	**1,915**	**0.7**

8.3.2 HIV Cases by age and Gender 2019

Out of all people **(271,123)** who received HIV testing and counseling services, more than half **152,855** (56.4%) were females. Regarding the testing results, females had slightly higher positivity rates **(0.8%)** than their males' counterparts **(0.6%)**. Moreover, most of those who tested HIV and received results **(51.1%)** had ages between 25 and 49 years.

Table 57: HIV proportion among clients tested by age and sex, Zanzibar, 2019

Age Group (Years)	Female			Male			Total		
	Tested HIV	HIV positive	% positive	Tested HIV	HIV positive	% positive	Tested HIV	HIV positive	% positive
<1	2,565	4	0.2	2,622	4	0.2	5,187	8	0.2
1-4	6,300	11	0.2	6,524	7	0.1	12,824	18	0.1
5-9	3,535	4	0.1	3,641	3	0.1	7,176	7	0.1
10-19	21,551	51	0.2	11,582	20	0.2	33,133	71	0.2
20-24	34,492	228	0.7	20,675	53	0.3	55,167	281	0.5
25-49	75,269	882	1.2	63,245	482	0.8	138,514	1,364	1.0
50+	9,143	76	0.8	9,979	90	0.9	19,122	166	0.9
Total	**152,855**	**1,256**	**0.8**	**118,268**	**659**	**0.6**	**271,123**	**1,915**	**0.7**

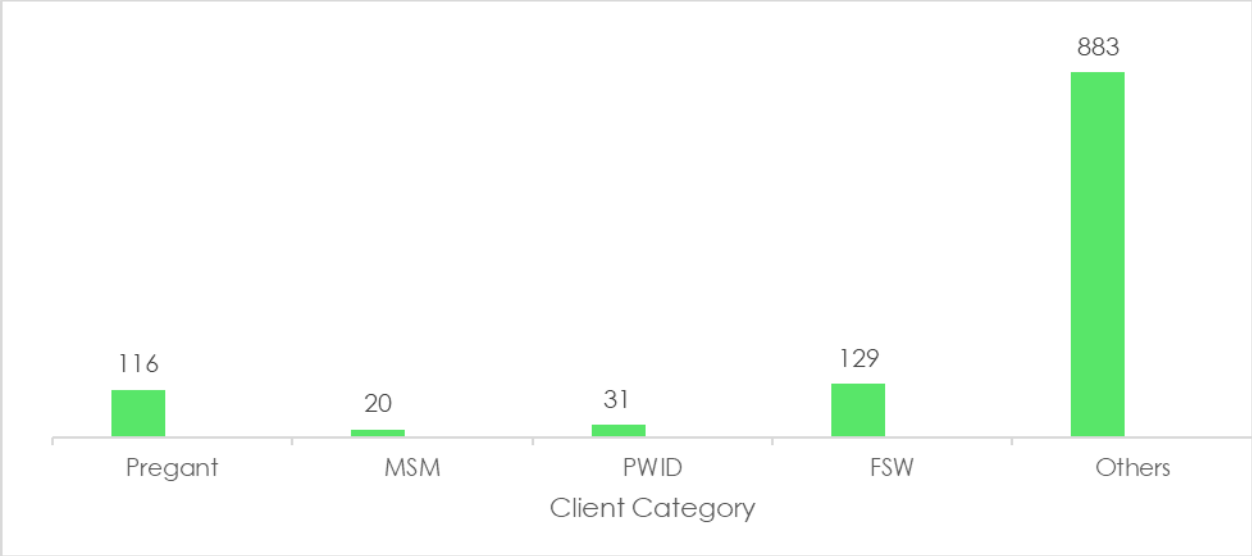
8.3.3 Clients enrolled at ART

Table 58: Number of new PLHIV started on ART by age and sex, Zanzibar, 2019

Age category	Sex		Total
	Male	Female	
0 –11 months	3	5	8
1 – 4 years	4	14	18
5 – 9 years	3	4	7
10 – 14 years	6	7	13
15 – 19 years	0	31	31
20 – 24 years	26	137	163
25 – 49 years	290	542	832
≥ 50 years	59	48	107
Total	**391**	**788**	**1,179**

Most of clients who are enrolled at ART clinic were age group 25 – 49 and few enrolled from age group 5 - 9. Among new PLHIV started on ART in 2019, **10 percent** (n=116) were pregnant women as illustrated in the figure 22 below.

Figure 22: Number of new PLHIV started on ART by categories, Zanzibar, 2019



8.4 Key Populations (KP) Services

Ministry of Health (MoH) through Zanzibar Integrated HIV, Hepatitis, TB and Leprosy Programme (ZIHHTLP) is mandated to coordinate and implement all health services related to KPs interventions. Key Populations (KPs) are populations 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 have been documented to be at higher risk of acquiring HIV infection, those are Men having Sex with other Men (MSM), Sex Workers (SW) and People who inject drugs (PWID).

A total of **16,677** Key Populations were reached through NGOs (4,361 MSM, 6,783 FSW and 4,533 PWID) while tested for HIV were **11,850** (MSM 2,670, FSW 5,509 and PWID 3,671) as indicated in the table 59 below

Table 59: Number of Key Populations (KPs) reached, counselled and tested for HIV January – December 2019

Type of KP	Reached	Tested	Positive	% positive
MSM	4,361	2,670	33	1.2%
FSW	6,783	5,511	253	4.6%
PWID	4,533	3,674	44	1.2%
TOTAL	**16,677**	**11,855**	**330**	**2.8%**

8.4.1 *Methadone Assisted Therapy*

In 2019, a total of **181** (171 males and 10 female) new patients were in the services at Kidongo Chekundu MAT clinic in Unguja as of December 2019, a total of **879** (816 males and 63 female) clients were ever enrolled in MAT services. However, **22 percent** (572/2,600) of PWID were enrolled and currently receiving MAT services in Unguja which is above the set target of **17 percent** in 2019, of whom **92.7 percent** were male as indicated in table 60 below

Table 60: MAT services at Kidongo Chekundu MAT clinic in Unguja, Zanzibar, 2019

ITEM	Male	Female	Total
New patient enrolled from Jan - Dec. 2019	171	10	**181**
Client ever enrolled as of December 2019	816	63	**879**
Recovered clients	11	0	**11**
Death of patients, ever registered	38	3	**41**
Lost to follow up (Excluding death and recovered clients)	299	15	**314**
Current on Methadone (Current on care)	530	42	**572**
Other services			
HIV positive patient registered at MAT CTC	36	16	**52**
On ART	33	15	**48**
TB suspect	12	1	**13**
Started Ant TB	1	1	**2**

8.4.2 *Percentage of PWID receiving OST for at least 6 months by December 2019*

Percentage of PWID who were on Methadone services for at least six months is **65.1 percent** (503/773) which is below the target of **80 percent** in 2019 as indicated in table 61 below. This decline was due poor adherence to rules and regulations provided to MAT clients.

Table 61: Number of heroin users retained on MAT services for at least six months at Kidongo Chekundu MAT clinic in Unguja, Zanzibar, 2019

ITEM	Male	Female	Total
Client ever enrolled as of July 2019	807	62	**869**
Recovered clients	11	0	**11**
Death of patients, ever registered	38	3	**41**
Clients required to be on service	758	15	**773**
Current on Treatment for at least six months	459	44	**503**

3 ANNEX

Table 62: ANC Contacts by District

District	ANC 1st contact before 12 weeks	ANC 1st contact 12 weeks and above	ANC 1st Contact	ANC 2nd contact	ANC 3rd contact	ANC 4th contact
Chakechake	732	4729	5461	4451	3394	1955
Micheweni	600	4380	4980	4044	2691	1036
Mkoani	760	3452	4212	3611	2674	1233
Wete	946	4235	5181	4425	3588	2051
Pemba	**3038**	**16796**	**19834**	**16531**	**12347**	**6275**
Kaskazini A	933	3937	4870	4007	3096	1641
Kaskazini B	249	2538	2787	2221	1789	1044
Kati	423	4213	4636	3315	2601	1666
Kusini	514	1304	1818	1534	1377	1043
Magharibi A	728	7987	8715	6522	5315	3300
Magharibi B	819	8253	9072	5500	4397	2468
Mjini	1648	10627	12275	7881	6813	5382
Unguja	**5314**	**38859**	**44173**	**30980**	**25388**	**16544**
Zanzibar	**8352**	**55655**	**64007**	**47511**	**37735**	**22819**

Table 63: Number of Family planning new clients, 2019

Place	2019
Chakechake	2,354
Micheweni	1,248
Mkoani	1,954
Wete	1,778
Pemba	**7,334**
Kaskazini A	1,877
Kaskazini B	1,598
Kati	2,435
Kusini	1,110
Magharibi A	2,645
Magharibi B	6,733
Mjini	7,522
Unguja	**23,920**
Zanzibar	**31,254**

Table 64: Delivery at health facilities

District	Health Facilities	Number of mothers delivered at facilities			Number of Live births at facilities		
		2017	2018	2019	2017	2018	2019
Chakechake	ChakeChake Hosp.	4,512	4,371	4,257	4,504	4,323	4,244
	Vitongoji Cottage	243	330	300	245	330	300
	Pujini PHCU +	84	207	289	86	207	289
	Tundauwa PHCU+	118	119	195	120	118	199
	Wesha PHCU+	102	154	263	104	154	264
Micheweni	Micheweni Cottage	995	1,260	2,148	984	1,249	2,144
	Konde PHCU+	265	454	609	267	461	614
	K/Mbuyuni	-	12	144	-	14	147
	Makangale PHCU+	73	175	177	76	176	177
	M/Ng'ombe PHCU	59	134	255	58	133	258
	Wingwi PHCU +	60	291	314	59	291	315
Mkoani	Sizini PHCU			40			36
	Abdalla Mzee	2,382	2,378	2,842	2,391	2,364	2,843
	Bogowa PHCU+	191	149	146	192	152	151
	Chambani PHCU	-	10	13	-	10	12
	Michenzani PHCU	-	39	67	-	40	67
	Kengeja PHCU+	203	206	247	204	209	250
	Ukutini	4	22	29	4	22	29
	Wambaa PHCU			38			37
Wete	Wete Hosp.	3,176	3,046	2,856	3,141	2,991	2,856
	Ukunjwi PHCU	34	55	83	34	54	83
	Fundo PHCU +	125	155	164	125	155	165
	Junguni PHCU	163	194	202	163	194	201
	Kojani PHCU+	263	241	273	263	243	274
	Makongeni PHCU+	29	57	161	29	56	162
	M/Takau	109	194	241	109	197	241
	Uondwe	114	147	147	115	148	147
	Kangagani PHCU			71			73
Pemba (Total)		**13,304**	**14,400**	**16,571**	**13,273**	**14,291**	**16,578**
Kaskazini A	Kivunge Cottage	3,138	3,384	3,389	3,173	3,383	3,394
	Kendwa PHCU	101	114	182	101	115	183
	Matemwe PHCU +	55	47	29	56	50	30
	Nungwi PHCU+	82	60	40	89	61	41
	P/Mchangani	34	40	10	34	39	9

Kaskazini B	B/Misufini PHCU+	198	251	281	199	254	281
	D/Vijibweni PHCU+	55	122	139	56	129	138
	Kitope Church Disp.	18	16	5	18	16	5
	Kitope PHCU	62	71	67	63	73	68
	Mahonda PHCU +	40	120	100	40	122	102
	Kiongwe PHCU	31	38	45	32	39	47
Kati	Chwaka PHCU	38	55	65	39	55	65
	Uroa PHCU+	6	0	1	6	0	1
	Mwera	372	438	564	375	438	568
	U/Ukuu	52	118	108	50	117	109
	Uzini	12	38	152	12	40	155
Kusini	Makunduchi	1,121	1,154	1,092	1,118	1,161	1,078
	Bwejuu	27	37	17	28	37	19
	Jambiani PHCU +	50	47	50	50	48	50
	Muyuni PHCU +	1	1	1	2	1	1
Magharibi A	Zanzibar Military Hospital	198	230	215	188	230	213
	Bumbwisudi	10	100	210	12	98	212
	Akbar Hospital	-	-		-		
	Mtofaani	58	130	143	59	130	141
	Selem	28	184	186	28	186	188
Magharibi B	Fuoni PHCU +	1,200	1,093	1,233	1,211	1,100	1,234
	Farham Martenity Home	28	33	44	28	32	44
	Mina	278	236	126	274	244	130
	Chukwani Maternity Home+	187	300	255	198	300	255
	Kombeni	-	30	188	-	30	189
	Tawakkal Hosp			327			317
Mjini	Al-rahma	1,374	1,171	1,090	1,356	1,160	1,141
	Chumbuni PHCU	-	364	287	-	367	288
	Tasakhtaa Global Hospital	-	238	552	-	239	555
	Mwembeladu	6,844	4,875	4,809	6,867	4,767	4,806
	MnaziMmoja	13,289	11,733	14,832	13,383	11,634	14,713
	Sebleni	79	371	647	78	374	637
	Mpendae			108			108
Unguja (total)		**29,066**	**27,239**	**31,589**	**29,223**	**27,069**	**31,515**
Zanzibar		**42,370**	**41,639**	**48,160**	**42,496**	**41,360**	**48,093**

HMIS/ DHIS Indicator descriptions					
	Indicator	**Type**	**Numerator**	**Denominator**	**Description**
1	Utilization rate OPD < 5yrs	No	Total headcount under five years at OPD	Total population under five years	The rate of which the population under five years uses the OPD services of the facility.
2	Utilization rate (all service) <5yrs	No	Total headcount under five years attended all service	Total population under five years	The rate of which the population under five years uses all services of the facility (OPD +Immunization).
3	Utilization rate OPD (all Age)	No	Total headcount all age attended OPD	Total population	The rate of which the total population Attended OPD.
4	Underweight for age rate under 5 years	%	Underweight for age (red and grey cases) <5 yrs	Total attendance growth assessment	Underweight for age under 5yrs rate
5	Underweight for age rate under 5yrs (severe)	%	Underweight for age (red) under 5 years	Total attendance for growth assessment all (green, grey, red)	Underweight for age under 5 rate (severe)
6	Children under 5 years weighed	%	Number of children weighed under five years	Population under 5 years	Proportion of population < 5 years attending growth assessment.
7	Vitamin A coverage under 5 years	%	Vitamin A supplement to children under 5 years	Target Population under 5 year (x2)	For the provision of vitamin A supplements
8	Diarrhoea incidence under 5 years	%	Diarrhoea cases under 5 years	Population under 5 years	Prevalence of Diarrhoea in the catchment area for children under five years old.
9	Pneumonia incidence under 5 years	%	Pneumonia < 5 years new	Population under 5 years	For measuring pneumonia incidence in the catchment area.
10	Anaemia incidence under 5 years	%	Anaemia cases under 5 years	Population under 5 years	Prevalence of Anaemia in the catchment area for children under five years old.
11	URTI incidence under 5 years	%	URTI cases under 5 years	Population under 5 years	Prevalence of URTI in the catchment area for children under five years old.
12	Measles Incidence < 5 years	%	Measles cases	Population under 5 years	

13	Under 5 death rates	per1K	Death of children under 5 hospital and community	Population under 5 years	Rate of deaths for under 5 children including all reported community deaths under 5 years and neonatal deaths reported by the maternity wards.
14	BCG under 1-year coverage	%	BCG dose under 1 year	Target population under 1 year	BCG doses given to children under 1 year by population under 1 year.
15	OPV1 under 1-year coverage	%	Oral Polio 1st dose	Target Population under 1 year	For Oral Polio 1 doses coverage in the catchment area
16	OPV3 under 1-year coverage	%	Oral Polio 3rd dose	Target Population under 1 year	For Oral Polio doses coverage in the catchment area
17	DPT- HepB 3 under 1-year coverage	%	DPT- HepB 3 doses under 1 year	Population under 1 year	
18	Measles under 1-year coverage	%	Measles dose under 1 year	Target population under 1 year	For the coverage of measles in the catchment area
19	Fully immunized under 1-year coverage	%	Fully Immunized under 1 year	Target Population under 1 year	Monitor the rate of full immunized for children under 1yrs
20	DPT -HepB 1-3 Doses drop-out rate	%	DPT1 - DPT3 Doses	DPT1 doses given	It monitors how many didn't turn up for the DPT 3 after the DPT 1
21	Antenatal first visit coverage	%	Antenatal first visit	Potential antenatal clients in population	Antenatal first visit coverage
22	Antenatal visits before 12 weeks rate	%	Antenatal 1st visit before 12 weeks	All first visits	Rate of the antenatal 1st visits attended before pregnancy being in 12 weeks
23	Children born protected from Tetanus	%	Children born protected from tetanus	Expected deliveries (4.5% of the total population)	The indicator for the % of mothers delivering while protected from Tetanus
24	Malaria rate in pregnant women	%	Pregnant women diagnosed for malaria	Antenatal first visits	Pregnant women diagnosed for Malaria
25	Anaemia rate in pregnant women (11gm%)	%	Pregnant women treated for anaemia	Total antenatal first visits	Anaemia rate in pregnant women
26	Deliveries by health skilled attendant	%	Deliveries by health staff	Expected deliveries (4.5% of the total	All health facility deliveries + home deliveries attended by health facility staff.

				population)	
27	Institution Maternal Mortality Ratio	per100 K	Maternal Deaths in the ward	Live Births in the ward	The ratio of institution maternal death in the ward 100,000 per and live birth in the ward
28	Delivery rate in facility to women under 20 years	%	Pregnancy women under 20 years	All ANC cases	Delivery rate in facility to women under 20year.
29	Low birth weight rate	%	Total live births under 2500 g	Total live births	Rate of infants born with weight < 2500g
30	Perinatal mortality rate	per1K	Still births + early neonatal deaths (1-14 days)	Total births (live + still)	Perinatal mortality rate in based on both community data and data from the maternity wards.
31	Still birth rate	%	Total still births	Total births	Rate of still birth (fresh + macerated) in facility, maternity ward and community those reported
32	Malaria incidence under 5 years	%	Total Malaria Positive cases at OPD 5years	Total Population under 5 years	Malaria Incidences
33	Malaria incidence rate (all ages)	%	Total Malaria Positive cases at OPD (all age)	Total population	Malaria incidence rate (all ages), incl. malaria in pregnancy.
34	HIV prevalence in the tested clients	%	HIV tested positive	All the clients tested	Those clients who tested in the VCT centers
35	Male Urethral discharge Syndrome rate	per1K	Male Urethral discharge syndrome treated	STI treated new episode	Male Urethral discharge Syndrome rate
36	Condom distribution rate	%	Condoms distributed (HIV/STI clinics)	Male population over or equal to 15 years	Condoms distributed through family planning services and HIV/STI clinics.
37	Oral Pills new client's coverage	%	Oral Pills new clients	(WRA)	
39	Injection new client's coverage	%	Injection new clients	(WRA)	Injection new clients' coverage in the WRA catchment population.
40	Condom new client's coverage	%	Condom new clients	(WRA)	
41	Tubal Ligation new client's coverage	%	Tubal Ligation new clients	(WRA)	

42	Family Planning new client's coverage	%	Family Planning new clients	(WRA)	
43	Couple Year Protection rate (CYP) Oral contraceptives	Per K	Oral pills items dispensed	WRA multiply by 13	# of WRA protected by Oral Pills out of 1000 WRA per one year
44	Couple Year Protection rate (CYP) injection	Per K	Injection item dispensed	WRA multiply by 4	# of WRA protected by injection out of 1000 WRA per one year
45	Couple Year Protection rate (CYP) Tubal Ligation	Per K	ML/LA (BTL)+ML/LA or BTL after PAC	WRA divide by 15	# of WRA protected by Tubal Ligation out of 1000 WRA per one year
46	Couple Year Protection rate (CYP) IUCD	Per K	IUCD Dispensed	WRA divide by 5	# of WRA protected by IUCD out of 1000 WRA per one year
47	Couple Year Protection rate (CYP) Implanon	Per K	Implanon item dispensed	WRA divide by 4	# of WRA protected by Oral Pill out of 1000 WRA per one year
48	Couple Year Protection rate (CYP) Condoms	Per K	Number Condom dispensed	WRA multiply by 250	# of WRA protected by condoms out of 1000 WRA per one year
49	IPT coverage in ANC clients	%	Total IPT	Total antenatal first visits	Coverage of IPT at ANC - all doses
50	HIV prevalence in antenatal care clients	%	HIV tests positive among ANC clients	Total ANC first visit	
51	Caesarean Section Rate	%	Number of caesarean sections at the facility	Expected delivery	Rate of caesarean sections at facilities providing delivery services.
52	Data Coverage EPI	%	Number of received and captured EPI forms	Expected number of EPI forms	Based on DHIS2, submitted EPI forms
53	Data Coverage RCH	%	Number of received and captured RCH forms	Expected number of RCH forms	Based on DHIS2, submitted RCH forms
54	Data Coverage Disease Surveillance (OPD)	%	Number of received and captured OPD Forms	Expected number of OPD Forms	Based on DHIS2, submitted OPD forms
55	Data Coverage Maternity Ward	%	Number of received and captured Maternity Ward forms	Number of expected Maternity Ward forms	Based on DHIS2, submitted Maternity forms
56	TT2+ to Pregnant	%	TT2+ doses given to pregnant	Estimated pregnant	

	Women rate		women	women in population (4.5%)	
57	AFP Incidence rate	per100 K	AFP cases	Total Population	Proportion of population who are reported as having Acute Flaccid Paralysis.
58	Post Natal care before 7 days rate	%	PNC at 7 days	Expected deliveries (4.5% of the total population)	Proportion of deliveries coming for PNC before 7 days.
59	HIV testing rate for ANC client	%	Antenatal client first visit tested	Total antenatal first visits	
60	DPT-HepB 1 under 1-year coverage	%	DPT-HepB 3 -dose given under 1 year	Population <1-year coverage	
61	Syphilis testing rate for ANC client	%	ANC clients tested for syphilis	ANC 1st visit attendance	
62	Syphilis prevalence in antenatal care clients	%	ANC clients tested positive for syphilis	ANC clients tested for syphilis	
63	IPT coverage in expected deliveries	%	IPT all	Expected deliveries	
64	Delivery complication rate	%	Total delivery complications	Total deliveries	Proportion of all institutional delivers for which complications were reported.
65	DPT-HepB 1 - measles drop-out rate	%	DTP-HepB 1st dose minus Measles 1st dose under 1 year	DTP-HepB 3rd dose	The drop-out rate (how many children are losing out of the immunization program between the 1st DPT-HepB and the Measles dose for < 1 year.
66	Deliveries in institutions	%	Institutional deliveries	Expected deliveries (4.5% of the total population)	Proportion of expected deliveries in institutions.
67	Malaria confirmed incidence under 5 years	%	Malaria confirmed for under five years	population under five years	Malaria confirmed incidence under 5 years
68	Home delivery attended by TBA	%	Home delivery attended by TBA	Expected deliveries	Home deliveries attended by Traditional birth attended
69	Malnutrition	%	Malnutrition under	Population	

	under 5 years		five years	under five years	
70	Family Planning Acceptors per 10000 WRA	per10K	Total family Planning new Clients	WRA	

MINISTRY OF HEALTH SOCIAL WELFARE ELDERLY GENDER AND CHILDREN

ZANZIBAR HEALTH BULLETIN