

M-HSCC Myanmar

Oversight Visit to Sagaing Region 13-19 May 2019 Summary Report

# Table of Contents

1. Introduction	3
2. Cross-cutting, systemic issues and recommendations	5
2.(a). Health Information Systems (HIS)	5
2.(b). Human Resources for Health (HRH)	6
2.(c). Health Financing	7
2.(d). Procurement and Supply Chain Management (PSCM)	8
2.(e). Service-delivery	8
2. (f). Coordination	9
3. Specific Programmatic Findings, Recommendations	10
3.(a). Malaria	10
3.(b). Tuberculosis	11
3.(c). HIV	12
3.(d). Reproductive, Maternal, Child and Adolescent Health (RMCAH)	14
3.(e). EPI	15
4. Conclusions	15
Annex-1: Oversight Visit Participant List	17
Annex-2: Oversight Visit Agenda	
Annex-3: HRH in Sagaing Region	20
Annex-4: Acronyms	22

# MHSCC Executive Working Group Oversight Visit Sagaing, 13 - 19 May 2019

### 1. Introduction

The Myanmar Health Sector Coordinating Committee (M-HSCC) Oversight Visit to Sagaing Region was undertaken on 13 to 19 May 2019. Under the leadership of Dr. Thandar Lwin, Deputy Director-General, Disease Control and Chair of the Executive Working Group (ExWG), seven other members of the ExWG or their representatives participated in the visit as well as staff from the national programmes on HIV/AIDS, TB and Malaria and the MHSCC Secretariat [see Annex 1]. The Oversight Visit encompassed Monywa, Ye-U, Shwebo, Pinlebu, Indaw, Katha, Tigyaing, and Saigang Townships. Thirty-four venues were visited [see Annex 2] in the one-week period during which discussions were held and interviews conducted with health care workers and volunteers, primarily through a pre-established interview schedule and facility checklist developed for this purpose. Hospitals, health centers, warehouses and other relevant facilities were also inspected. The scope of the Oversight Visit was to review current progress and challenges in the implementation of the HIV, TB and Malaria programmes. A particular focus was given to harm reduction strategies for people who inject drugs (PWID) given the importance of this determinant in northern Myanmar. Observations and findings were also considered on Reproductive, Maternal, Neonatal, Child and Adolescent Health (RMNCAH) and cross-cutting public health issues.

The region represents Myanmar's largest geographical area with around 5.6 million inhabitants and a population growth rate of 1.16 in 2018. Sagaing is composed of 10 districts and one self-administered area accounting for a total of 37 townships, including three townships under the Naga Self-Administered Zone. In terms of health facilities, the region has 37 Township Hospitals, 102 Station Hospitals, 2 Urban Centers, 37 Maternal Child Health (MCH) units, 5 School Health Teams, and 248 Rural Health Centers (RHC) and 1,193 sub-RHCs<sup>1</sup>. Out of the 1,872 sanctioned Midwife positions for the region, 1,731 are currently in place with less than 8% vacancies. Overall, however, there is 40% vacancies across the different health staff categories. As further documented in this summary report, strengthening human resources in health is essential to ensure effective implementation of public health programmes, prevention and service-provision [Annex 3].

This region also has its own specific trends in communicable diseases. It is to be noted that it is one of the regions or states facing a significant drug use problem with added burden on blood-borne diseases as well as having other psycho-social and economic consequences. While in general there is a decreasing trend of HIV, TB and Malaria in Southern Sagaing, the disease burden for HIV and TB is possibly increasing in parts of Northern Sagaing either because of more limited access to healthcare in the hard-to-reach and remote areas or because of specific determinants such as high rate of injecting drug use. In Pinlebu and Indaw Townships, for example, new TB cases seem to be somewhat stable or in slight decline, however Katha Township is experiencing an increase in TB. For its part, the situation in Nagaland<sup>2</sup> is hampered by poor logistics and communication problems as well insufficient human resources. Mobility and work-related migration in the population to and from other parts of Myanmar also lead to additional challenges in coverage of prevention and adherence to health care.

<sup>&</sup>lt;sup>1</sup>Unless otherwise indicated, all data in this report are taken from presentations delivered and distributed at the venues visited or health profile leaflets and venue information provided prior to the Oversight Visit.

<sup>&</sup>lt;sup>2</sup>The Oversight Visit agenda did not include Nagaland and data and analysis on this area is, therefore, based on a presentation by the regional health authorities. Further assessment of the situation in Nagaland may need to be considered, including possibly a separate mission by MOHS and Development Partners.

Hence, the overall epidemiological trend of communicable diseases for Sagaing Region is diverse. The total TB cases for the past three years recorded – including from MOHS and Implementing Partners (IP) data – fluctuated from 11,334 (2016) to 10,418 (2017) and to 11,817 (2018). The mortality rate for TB (sputum smear+) per 100,000 population was 0.09 as per the Regional Health Department (RHD) documentation. Treatment Success Rate (TSR) for the majority of the townships is above the target of 85%, with only 11 townships not yet achieving that target. Leshi Township in Naga Self-Administered Zone has the lowest success rate with around 75%. By 2018, TB screening among people living with HIV (PLHIV) reached 98%. However, Isoniazid Preventive Therapy (IPT) provision for newly enrolled PLHIV in Antiretroviral Treatment (ART) still needs to be improved – only 391 patients received IPT while 1,235 patients were eligible for this therapy.

As far as HIV is concerned, the positivity trend among key populations in 2018 was the highest among PWID with 24% prevalence in 2017-18, while it was 5% among men who have sex with men (MSM) and 6.5% among female sex workers (FSW). Although specific prevention and harm reduction programmes and those for other key populations are in place, coverage needs to be expanded. Positivity rates among pregnant women in Sagaing has been declining steadily from 0.75% in 2011 to 0.17% in 2018. In 2017, of 110,674 pregnant women tested for HIV, 202 were found to be living with HIV. Of the latter, 163 received anti-retroviral therapy either as prophylaxis (pARV) with only 34 being placed on life-long ART. In contrast, in 2018, of the 120,132 pregnant women tested for HIV, 205 were diagnosed as living with HIV, 68 of them received pARV and 135 women were given life-long ART. All women living with HIV should be on life-long ART. While an increasing number of HIV positive women were being put on life-long ART by 2018, early infant diagnosis (EID) still needs improvement – only 138 infants received EID out of 238 exposed babies in 2018.

Regarding ART initiation for all adults and children, 83% received ART out of the 4,106 new HIV positive cases detected in 2018. Although ART coverage is increasing, full transition of ART has not yet taken place to the public sector and, in fact, there may be a need to sustain local level transitional arrangements for reaching PWID and their partners with ART for a period of time, such as also through 'satellite' treatment centers.

With regard to the Malaria programme, Annual Blood Examination Rate (ABER) has significantly increased (8.1%) in 2018, while Annual Parasite Incidence (API) and Malaria mortality rate are decreasing at 1.9 and 0.02, respectively. This significant success needs to be followed through with the implementation of Malaria elimination activities. Health authorities, such as the Township Medical Officers (DMO), need to enhance their attention to the implementation of the National Malaria Elimination Strategy.

As far as immunization is concerned, the overall regional coverage for BCG, OPV and Pentavalent3 were for the last three years between 93% and 100%. EPI and Immunization coverage in Nagaland is still low and Routine and Crash Strategy for Nagaland in 2018 was 20% and 80%, respectively. It was also noted that for the hard-to-reach areas, like Nan Yung Township in Northern Nagaland, immunization with Routine Strategy was only 3% and Crash Strategy was 97%, which shows the need for innovative approaches for better routine coverage. For Measles, regional coverage was 89.5%, 88.4% and 91.4% in 2016, 2017 and 2018, while for TT2 coverage it was 91.2%, 97.5% and 93.2% over the same three years.

Regarding other critical health indicators, it is important to note that the reported Infant Mortality Rates (IMR) and Under-Five Mortality Rates in Sagaing showed a marginally increasing trend: 10.3 cases in 2016, 13.6 cases in 2017 and 16.3 cases in 2018 for IMR per 1,000 Live Births (LB). In the case of the Under-5 Mortality Rate, the trend was 14 cases in 2016, 17.7 in 2017 and 18.6 in 2018. Turning to the Maternal Mortality Rate (MMR), there was a sharp decline in mortality rate in 2018 with 87.6

reported cases in 2018 as compared to its highest peak with 194 cases in 2017. Despite improvements in receiving antenatal care services and institutional deliveries, the recent data does not seem to be aligned with these improved trends. This may be partly attributable to recent improvement in reporting flow to the township health department from the primary and secondary health care facilities in the most recent reporting period.

#### Summary

This introductory section of the Summary Report highlights elements of progress achieved towards the elimination of malaria and in certain interventions for HIV and TB observed during the Oversight Visit. Nevertheless, there is a more mixed epidemiological picture for TB and HIV epidemics in the Region, including in relation to injecting drug use. There is also a broader concern on extent of progress in Maternal Child Health (MCH). On a positive note, there seems to be improved capacity in tracking health information and more disaggregated analysis of trends and programmatic responses.

On the other hand, there are unique challenges for health in Sagaing in terms of geographical remoteness of many townships, communication and transportation, drug use, migration and, most urgently, limitations in human resources in health.

The remaining sections of this report will look at both learnings on cross-cutting as well as specific health issues, with a focus on highlighting observations, challenges and presenting some key recommendations for the MHSCC.

### 2. Cross-cutting, systemic issues and recommendations

The Oversight team noted that the Public Sector and Implementing Partners' (IP) health facilities and services were, in general, well-maintained and managed by dedicated and competent staff. However, some long-standing systemic cross-cutting challenges may be impacting on greater effectiveness and efficiency of health programmes. In certain locations, the coordination between local health authorities and IPs was commendable and could be expanded in the future to include private sector general practitioners (GP). In other locations, coordination under the leadership of local health authorities, was more limited and there was still a need to remind IPs to contribute to reporting on HIV/AIDS, TB and Malaria (ATM) as well as on other health issues. Coordination of service-provision focused on key as well as other vulnerable populations could also be strengthened between the public health sector and the IPs. This is not only to avoid overlapping services, but also to complement geographical coverage of prevention, treatment and continuum of care. In addition, referral mechanisms and links between the IPs themselves could also be improved.

Observations, challenges and key recommendations are presented in this section on health information systems (HIS), human resources for health (HRH), health financing, procurement supply chain management (PSCM), service-delivery, and coordination.

### 2.(a). Health Information Systems (HIS)

It was positively noted during the field visit that the use of the District Health Information System (DHIS-2) software was increasingly taking place in both public health and medical service departments.

With regard to improving data analysis and applying tools effectively using DHIS-2 software, there was still need for further and/or refresher training for the designated focal points in health facilities. One important challenge identified in HIS was that direct and timely reporting by IPs to local health departments was not yet systematic. This came to light particularly on the issue of mandatory TB case notification where it is crucial to have updated information on TB cases through the numerous IPs working on TB.

The effective usage of the DHIS-2 data, including for programme monitoring, evaluation and forecasting of disease prevention activities also needs to be further encouraged. Where training has not yet been conducted on this, there is need to proceed with such trainings as has already been planned. On the other hand, where training has already been conducted, supervisors must ensure that the acquired skills are applied and DHIS-2 is used in a proper manner. Lack of proper use of DHIS-2 limits local-level planning and more effective use of scarce resources. The policy and Standard Operating Procedures (SOP) on reporting and inclusion of data must be applied by both IPs and public health facilities. The IPs need to follow the national reporting guidance and suggested mechanisms in accordance with their Memorandum of Understanding (MoU) with MOHS. Local authorities must draw on combined data sets from different sources to get a clearer understanding of local disease burden. Examples of inconsistency between data entered in DHIS-2 and paper-based reporting was also found to be cause of concern during the visit.

On another matter, the MHSCC Oversight Visit also noted the potential for wider use of the World Bank-supported information, education and resources tablets provided to health care workers to access a range of documentation and tools. At township level, it was observed that access to the MOHS-provided tablets was limited to one or two staff members per health facility, while there was a wider distribution of tablets noted in some RHCs. It was acknowledged that additional tablets will be provided with GAVI funding. A wider and strategic use of the tablets and its wealth of resources should be encouraged.

Lastly, Information Technology (IT) knowledge of the data encoder, virus protection and maintenance of IT equipment should be strengthened across health facilities. Policies and guidelines regarding maintenance and replacement of IT equipment should be developed considering additional funds needed to ensure sustainable and effective usage.

### Recommendations

<u>Access and use of data</u>: A clear protocol for reporting and sharing of data using DHIS-2 is urgently needed. Public health facilities and IPs must apply reporting guidelines more vigorously to ensure data is available at local level. Training on DHIS-2 needs to be undertaken. The basic level of the health system, such as Sub-Centers and RHC, must have better access to data, including from IPs for analysis and prioritization of responses to local health problems.

### 2.(b). Human Resources for Health (HRH)

A significant number of sanctioned posts particularly in public health are vacant - some for prolonged period of of time. Conversely, some of the principle health facilities experienced high staff turn-over requiring continued investment in mentoring and training of new staff. Agreements have also been established with certain IPs, such as UNION, for the latter to second staff to public health facilities, including ART centers in public health facilities. This has partially contributed to reducing gaps in human resources. One critical issue observed in Katha township is that there are still vacant posts for

doctors, nurses and health assistants - 36.9%, 66.3% and 42.9% respectively against the sanctioned posts.

The issue of recruitment and sustainability of community health volunteers was also raised in the observations on human resources. Some health care officials reported that it was increasingly becoming difficult to recruit community health volunteers. The example was given on the contribution of malaria volunteers to public health care deemed as a positive experience across Myanmar. How long-lasting their contribution could be, however, was somewhat more uncertain due to the limitation in various forms of support to volunteers, including incentives, patient referral fees, etc. The mission met with malaria volunteers who reported to have referred suspected TB cases for further investigations. It was recommended to do a mapping of Integrated Community Malaria Volunteers (ICMVs) and other volunteers to ensure there is no overlap between volunteers deployed by different institutions and organizations. In Pinlebu and Katha, for example, Integrated Community Case Management (iCCM) was included into malaria volunteer work among various IPs. It may be recommendable to review these approaches and see whether they should be reinforced and scaled-up.

#### Recommendations

<u>Human Resources</u>: Alternative solutions for human resource need to be established, including task shifting in health sector and greater reliance on national and local non-governmental organizations as well as the private health sector in service-provision agreements with MOHS.

<u>Community Health Volunteers</u>: A mapping of community health volunteers' coverage, functions and lessons learned on different outreach approaches needs to be done. The work conditions and existing incentives for volunteers needs to be assessed prior to suggesting a regional or national strategy to reinforce their role and coverage.

### **2.(c).** Health Financing

Apart from the regular MOHS budget, the existence of different funding streams for health care was highlighted during the Oversight Visit. This includes World Bank financing, Global Fund on AIDS, TB and Malaria (GFATM) and other multi or bilateral funds, including Access to Health (Access), GAVI, USAID HIV/AIDS Flagship (UHF) project and USAID-FHI 360. Although there are Standard Operating Procedures (SOP) for the use, management and reporting on external funds at the decentralized and local level, these procedures need to be systematically reinforced. Upcoming GAVI funding will include payments in advance through UN agencies to the MOHS at the state or regional level and, subsequently, channeled to townships which will distribute to health facilities. This will be through direct payments and not on a reimbursement basis. Hence, significant mitigation mechanisms need to be put in place to ensure correct use of funding and adherence to proper accounting standards. Additional human resources, particularly those with accounting expertise, will make it easier for MOHS staff to manage grants or funds at local level.

Frequently, IP staff and health volunteers reported that a substantial number of beneficiaries contacted through various outreach services were reluctant to seek further diagnosis, treatment or simply opted to drop out of current treatment (e.g. those in ART, MMT, etc.) due to high out-of-pocket expenditures. Places visited during the Oversight Visit do face challenges with regard to their remoteness and transportation options and cost, which hamper diagnosis, treatment adherence and regular follow-up. Hence, out-of-pocket expenditures associated with health services utilization - even where the actual services are free - are considerably higher for the rural population.

To this effect, part of the UNION's Multi-drug resistant (MDR) TB project activities, included socioeconomic and nutritional support in cash, support for ensuring medical appointments are adhered to as well as regular home visits for patients. While such comprehensive support obviously is resource intensive, it seemingly does play a pivotal role in successful treatment rates. The upcoming national health financing policy will most probably not cover all costs associated with seeking health services: non-medical support (e.g. cash, transportation costs or food) provided to TB and/or HIV is, in many instances, critical to ensure that all clients get treated and there is continued adherence.

#### Recommendations

<u>Accounting</u>: Reinforce implementation of SOPs, training and/or recruitment of staff with accounting competence. Establish financing mitigation mechanisms and adherence to accounting standards. Recruiting additional human resources, particularly those with accounting expertise, will make it easier for MOHS to manage funding and budgets at local level.

### 2.(d). Procurement and Supply Chain Management (PSCM)

Stockouts of non-communicable disease (NCD) drugs (e.g. antihypertensive drugs) were found in a few of the health facilities visited. Conversely, an overstock of some anti-TB drugs (e.g. injection Streptomycin and Ethambutol tablets) was also found in some facilities. To this effect, forecasting of medicines, commodities and supply needs should be done on a regular basis to ensure that there are no stockouts across health programmes and townships, and careful consultation is needed with the programmes before ordering the stock quantity. It was also noted that three-month Depo injections were received through three different procurement channels: CMSD, regional health programme and from a regional tender. To this effect, a more unified channel for drug supply is needed. Lastly, a checklist approach was taken to assess strategy storing strategy in warehouses.

#### **Recommendations**

<u>Forecasting, Procurement:</u> Forecasting needs in medicine, commodities, supplies and equipment should be done on a regular basis to ensure that there are no potential or actual stockouts in the region. It is also recommended that the public health sector use a unified channel for procurement.

<u>PCSM system</u>: Rather than pursue specific integration of ATM warehouses in Monywa in the Region, it was advised to wait for the development of a national PSCM system and warehouse storages across all the MOHS programmes.

### 2.(e). Service-delivery

In general, the visited MOHS facilities seemed to provide the range of prevention, diagnosis and treatment service-delivery options, but scope and quality was partially hampered by limitations in human resources. While national strategy guidelines were adhered to, there were issues raised on the need to reinforce the implementation of the malaria elimination strategy and more specific interventions on TB and HIV, such as IPT and initiation of ART for children under specialist consultation.

In specific reference to HIV, while more effective referral processes took place for ART, a multidisciplinary approach is required to cover all continuum of care needs of patients and their families while ART transition process continues towards the public sector. This includes ensuring the availability of ARV supplies, improving out-patient department (OPD) consultation rooms at hospitals together with more effective counselling by trained public health staff and peers. Outreach and adherence support are also needed to keep the patients in the continuum of care and to meet their family support needs. Based on the presence of PLHIV and TB support groups or of representative chapters of the community networks of people living with or affected by HIV or TB, the MOHS should consider placing in health services and supporting peer outreach workers or counselors. This will ensure greater adherence and nutritional and other forms of support for the individuals and families concerned.

Routine testing of TB/HIV as per national guidelines is being undertaken within health care settings. Routine TB testing of diabetes patients, Hepatitis C Virus (HCV) testing and treatment of TB/HIV coinfected patients must be further adhered to and strengthened. Funding for Hepatitis C treatment should also be secured.

With regard to a specific issue of service-delivery in prisons or other closed settings, the AHRN 'release package' was noted as a positive development to be encouraged at the national level. More broadly, policy guidelines should be developed in coordination between MOHS and the focal ministry on prisons - Ministry of Home Affairs - for follow up with persons recently released. Prison medical services and IPs were not informed in advance when prisoners were released across the country in mid-2019. While human rights issues and Government pardons are positive developments in governance at the national level, it is important to ensure that treatment adherence for those living with HIV is not affected when prisoners leave prisons and are re-integrated into society.

### Recommendations

<u>'Last mile'</u>: Adapted and intensified programmatic efforts should be made to strengthen specific service-delivery that would ensure further progress to achieve 'last-mile' towards the elimination of malaria and elimination of Mother-to-Child transmission of HIV by 2025.

<u>TB, HIV, HCV:</u> Routine TB testing of diabetes patients, Hepatitis C Virus (HCV) testing and treatment of TB/HIV co-infected patients must be further adhered to and strengthened. Funding for HCV treatment should be further secured.

<u>Prison settings:</u> National policy guidelines should be developed in coordination between MOHS and focal ministry on prisons - Ministry of Home Affairs - for follow up with persons recently released. Information on ART and drug treatment services should be included in release packages provided to prisoners before their release.

### 2. (f). Coordination

According to the administrative level monthly or quarterly coordination meetings under the leadership of MOHS officials should take place where relevant data can be shared, analysis undertaken, agreement reached on referral issues and mutual support provided to strengthen service provision to clients. Where relevant, this should take place focusing on different health issues and across geographical areas. The participation of IPs, GPs and community-based networks should be prioritized in these forums.

#### Recommendations

<u>Effective coordination</u>: Quarterly or monthly coordination meetings are to be held at regional, district and township level under leadership of health authorities. The purpose is to exchange data, joint analysis, referrals and offer mutual support. IPs, GPs and community representatives should be included in coordination.

## **3. Specific Programmatic Findings, Recommendations**

### 3.(a). Malaria

Malaria cases have declined over the last five years in the region, in districts, in townships across the public health facilities visited. The Regional Health Department reported a decline from 8,774 outpatient cases in 2016 to only 3,231 in 2018. However, as numbers go down, there seem to be issues with reaching elimination goals by maintaining a sustained attention of General Practitioners to malaria. Preventive measures such as LLIN distribution are mostly on target. The tools are currently available for malaria control and elimination and human resources have been trained on elimination goals, but this has not yet been fully translated into action.

One of the main challenges is that the National Malaria Control Programme (NMCP) presentations made during the Oversight Visit did not systematically include partners' data. It was, hence, difficult to interpret the true malaria situation in the townships. Systematic partner reporting to local health authorities is recommended. Central and regional NMCP often get the data from partners' headquarters but not from the partners in the field. It seems that central and regional NMCP can be said to be 'data rich but information poor', while at the local level they are both 'data poor and information poor'. It is essential that data be made available at the local level for planning and for targeted interventions.

On the specific issue of ICMVs, 38 volunteers are being deployed by Myanmar Health Assistant Association (MHAA) through support of Access to Health Funds in Shwebo Townships at the ward level for TB case-finding activities, but it is not providing malaria services. It is strongly recommended that these ICMVs should also provide malaria services and support the township in elimination activities. NMCP should provide a list of endemic villages and request MHAA to provide malaria services

### Recommendations

<u>Elimination of Malaria</u>: Plans for the elimination of malaria must be prepared by townships as soon as possible. Townships which has reached the elimination threshold (Annual parasite incidence less than 1) should start malaria elimination activities without any delay. Township Medical Officer should own the township malaria elimination programme.

<u>Integration</u>: It is necessary to provide comprehensive malaria prevention, and control/elimination training to health care workers beyond the NMCP. This could be combined with trainings on other communicable diseases.

## **3.(b).** Tuberculosis

The TB data reviewed during the course of the Oversight Visit gave a rather mixed picture of confirmed TB cases in the region. While some areas have seen a decline over the last three years, the Regional Health Department reported less encouraging numbers for the whole region. There were 2,002 new TB sputum positive cases in 2016 which had risen to 2,316 in 2028. It was also noted that the ending of the 'Challenge TB Project' without proper project exit plan to the region has resulted in a number of IPs having to stop certain TB activities. This situation is being mitigated by funds from the GFATM reinvestment plan.

Despite a significant human resources challenge, TB case-finding and diagnosis were deemed successful as was TSR at most venues. The hard-to-reach areas which are difficult to follow up on create challenges for treatment adherence and providing continuous patient support. Active Case Finding and enhancement of community awareness on TB should be further strengthened.

In most places, utilization of GeneXpert to diagnose Multi-drug resistant (MDR) TB was found to be adequate, but there was still room for improvement, including in Indaw Township. The Oversight Visit found that the gap between MDR-TB notified and treatment enrollment was narrowing down from 73% in 2014 to only 12% in 2018 (notified 123 cases/treatment enrolled 108 cases). To enforce mandatory TB case notification, IPs particularly Myanmar Medical Association (MMA) and Population Services international (PSI) must adhere to reporting as per the national guidelines and reporting formats.

ART initiation in HIV/TB co-infected patients still needs to be improved with a gap of 59% (391 out of 666) as should IPT provision to TB/HIV coinfected patients. Also, systematic TB testing of patients with diabetes needs to be implemented. In 2018, only 391 patients were on IPT out of 1,235 eligible cases among 3,378 newly enrolled PLHIV in care and treatment programmes. Treatment including prophylaxis for Under-5-Years-old must be further emphasized and implemented by MOHS and all partners. This is particularly concerning given that the childhood TB proportion were in some cases high.

While anti-TB drugs were mostly found to be in supply, there is a need to enhance collaboration between National TB Programme (NTP) and local health authorities to ensure proper and timely availability of drugs. In a few places, ICMVs found it difficult to refer TB patients and in some cases people who were referred to MOHS facilities did not want to go - partly due to cost and difficulties with transportation and access. It was noted that AHRN needs to increase its collaboration with NTP with regard to their TB mobile team activities and ensure complementary coverage of activities.

### Recommendations

<u>Continuity in investment</u>: Further funding for the 'Challenge TB Project', previously supported through USAID, should be mobilized through GFATM support.

<u>TB/HIV response</u>: ART initiation for TB/HIV co-infected patients must be improved as well as IPT provision. In addition, systematic TB testing of patients with diabetes needs to be implemented. Treatment including prophylaxis for Under-5-Years-old, must be further emphasized and implemented by MOHS and all partners.

<u>Case Finding</u>: Active Case Finding (ACF) and enhancement of community awareness on TB should be further strengthened. The efficient use of community health volunteers is recommended.

<u>GeneXpert</u>: Utilization of GeneXpert should be done systematically and efficiently and where needed in close coordination between facility service points.

## 3.(c). HIV

Although lower than the national average, HIV prevalence is rising slowly in Sagaing from 0.39% among adults (over 15+ years) in 2014 to 0.43% in 2018. Regarding HIV infection, it is an increasing trend in Northern Sagaing townships due to injecting drug use. In terms of modes of transmission, sharing of needles among drug injectors accounts for 60% of infection and 28% are reported to have taken place through sexual transmission between those at-risk and their sexual partners. In 2018, ART was given to 86% of HIV positive patients. Viral load suppression was 86% of the tested 2,787 ART patients, and PLHIV screened for TB was 100%, but IPT provision was only 31%. Twelve ART centers, 14 decentralized sites and 14 Methadone Maintenance Therapy (MMT) centers are in place the provision of HIV and drug treatment services in the Region.

The prevalence of HIV in Saigang has notably risen among PWID in recent years to 24% though still below the national average of 26% as estimated in 2016 or 34.9% as estimated based on Integrated Bio-Behavioral Surveillance (IBBS) in 2017. IBBS 2017 as well as programmatic data indicate that, in certain townships, prevalence among PWID is higher than the region's average. During the Oversight Visit, for example, the Myanmar Anti-Narcotics Association (MANA) community outreach and drop-in center in Pinlebu Township indicates prevalence at around 30% among PWID.

Prevalence levels in the Region remain slightly lower among MSM and FSW at around 5% and 6.5%, respectively, which is lower than the national averages. Through Key Populations mapping and population size estimate (PSE) among KPs, it is estimated that there are 19,000 PWID (2017), 12,150 MSM (2015) and 5,800 FSW (2015) in the region. For PWID, the region accounts for around 23% from the national estimate of the total number of PWID in the country of 93,000 in 2018. Other than HIV, there is also high Hepatitis C (HCV) prevalence (43%) among PWID which is largely linked to sharing of contaminated needles, syringes and other injection paraphernalia.

In terms of the comprehensiveness of the HIV response – including prevention and the cascade or continuum of care – it should be noted that testing, ART and viral load (VL) testing are all on the increase. For the 90-90-90 cascade, out of the estimated 18,000 PLHIV in the region, 75% (1st 90) were aware of their HIV positive status, 61% (2nd 90) of those aware of their status were on treatment and 54% (3rd 90) experienced viral suppression as of end of 2018.

ART now reaches 10,935 in the region. In 2018, the percentage of those on ART increased in the last 12-months period. Most ART is provided through the combination of public health sector and UNION which accounted for 96% of the ART provided as of end of 2018 (source: DHIS-2). Currently, 21 of the 37 townships have either ART centers or Decentralized Centers (DCs) – the latter follow-up on but do not initiate treatment except for several populations – pregnant women, PWID and TB/HIV co-infected. In the case of PWID, at least one satellite site is providing ART in agreement with NAP given difficulties of linking PWID with public health services in certain geographic areas. ART is also provided in five prisons within the region. Routine VL testing has increased substantially over the last year though still insufficient to cover the need.

TB screening of people living with HIV on treatment is around 98% (2017, 2018). There is increasing TB/HIV collaboration, although there is still room for improvement. Prevention of mother-to-child transmission (PMTCT) is also increasing with positive outcomes. By 2018, all townships were

implementing PMTCT services. The prevalence of HIV among pregnant women is around 0.2% and is on the decline since the beginning of this decade. Most pregnant women are tested for HIV and, nearly two-thirds of those tested positive are receiving ART. Despite of this, there are still challenges in the cascade of PMTCT to ensure the elimination of mother-to-child transmission across townships. There is low coverage of HIV exposed infants through Early Infant Diagnosis (EID).

In terms of prevention among key populations (KP) or other vulnerable populations (OVP), while there has been increased investment recently, coverage in some townships remains relatively low and, in some remote areas are still non-existent. Reaching those engaged in same sex contacts or sex for money transactions is challenging in predominantly rural and remote communities, making it difficult to invest in focused service-provision centers for such KPs.

Prevention among KPs and, in particular, among PWID and partners, needs to be expanded, including provision of condoms, peer outreach, clean needles and syringes, MMT, ART, sexual and reproductive health, overdose management, and other health care. Currently, three IPs (i.e. AHRN, MANA, SARA) are providing harm reduction services for PWID in 13 out of 37 Townships. Indicators of coverage of ART among PWID are estimated to be lower than among other KPs.

The gaps in service-provision in Sagaing are aggravated by limited domestic and external investment in support of human resources. MOHS and the DOPH in the region have been making efforts to reverse this tendency. In 2018-19, a sub-national operational planning was undertaken in the region based on the National Strategic Plan-III (NSP) for HIV. Efforts are also being made to increase investment of domestic and external resources, including from the GFATM, PEPFAR and Access to Health (Access) in order halt the transmission of HIV in the region.

In the context of drug use and its health consequences, however, there is a need to focus on a more comprehensive approach to drug use and harm reduction. For example, as part of harm reduction, an average of 229 needles were distributed per PWID per year in the region which falls short of the national average of 397 (2017). By 2017, more than 4.3 million needles and syringes were distributed through the Needle Syringe Program and 3,823 persons were on MMT by September 2018. While programmatic mapping has been able to identify 125 hot spots for injecting drug use in the region, less than half of these sites are covered by services. Even in townships where outreach services are in place, their coverage remains low as compared to the need. Prevention of sexual transmission to partners of PWID is also low given limited reporting of condom use with regular partners (2017).

Rather comprehensive harm reduction activities including MMT were observed in several townships both at MoHS and IP facilities. As they are functioning in a very challenging situation, there is need for more multi-stakeholder involvement and support from communities is necessary for more effective results. Despite that ART is provided at MMT centers, high drop out from MMT is still a concern due to cheap and easy availability of heroin, travel distance to seek care and high travel cost. AHRN conducts collection of used needles and clean-up activities on a regular basis in the communities. However, it was still noted that the needle and syringe return rate must improve. Advocacy should be done with communities and religious leaders to create more support for harm reduction activities including needle exchange and condom distribution and the importance such efforts have for public health and the well-being of the communities.

### Recommendations

<u>Advocacy:</u> A comprehensive and sustained advocacy campaign is needed to address drug use with a focus on young people, harm reduction, drug treatment and social integration. This should involve Ministries of Health and Sports, Education, Home Affairs and Social Welfare.

<u>Harm Reduction</u>: Targeted advocacy in support of harm reduction should focus on local authorities, health care workers, and community and religious leaders to create more momentum for service-provision and overcome community-level obstacles. It is also essential to secure greater acceptability in communities through better needle and syringe return rates wherever harm reduction services are in place.

<u>Scaling-up services:</u> Additional mobile, drop-in and MMT centers delivering harm reduction should be established following needs assessment across districts and townships (e.g. Katha). It is also suggested to establish additional drug treatment services for more comprehensive response to drug use, including MMT (e.g. in Pinlebu). This would result in an increase in and partners covered by services and lower the relatively significant drop-out rate from MMT.

<u>Integration of Prevention:</u> Specific competence in delivering HIV prevention and harm reduction information and services should be created among health care workers and community volunteers. Given the limited number of and resources among the existing IPs working with PWID and/or other KPs, there is need to involve public health care workers and CBOs who are not working on HIV across all townships.

<u>e-MTCT:</u> PMTCT and pediatric guidelines must be followed across health services. Pregnant women who test HIV positive must be offered ART and children must have access to pediatric care as part of the target to eliminate mother-to-child transmission. EID must be improved through coordination between townships for testing of infants under two months of age. Drug dispensing nurses must be assigned to pediatric HIV clinics.

<u>Community service provision:</u> HIV and TB self-help groups and local chapters of national networks of people living with or affected by HIV or TB should include nutritional support as part of the continuum of care and support they provide. In addition, community members requested support for specific counselling programmes for adolescent PLHIV and educational support programmes for orphans.

<u>Viral Load</u>: As part of the national viral load scale-up plan, there should be an increase in centers undertaking viral load testing to ensure that all patients on ARVs undergo viral testing every six months.

### **3.(d).** Reproductive, Maternal, Child and Adolescent Health (RMCAH)

Antenatal Care coverage has increased in Sagaing from 98.6 to 100% over the last three years. The rate of institutional deliveries has also increased from 39.1 to 42.5 in the same period. Despite an increase in service provision, however at the outcome level IMR is regrettably going up from 12.58 (2016) to 13.92 (2017) and 14.05 (2018). A similar trend is seen for Under-5 Mortality Rate (Under-5 MR), which has gone from 15.84 to 16.82 to 17.10, and for MMR going from 79 to 87 to 100 per 100,000 in the last three years. It is a concern that an increase in institutional deliveries and a relatively high number of midwives in place have not, seemingly, resulted in an improvement in IMR, Under-5 MR and MMR. This might be due to improved reporting mechanism. An in-depth analysis should be made to understand what explains this situation. The increase in birth rate may also indicate the need for an analysis on whether there are sufficient family planning services and commodities are available.

It is to be noted that MCH teams also experience challenges in vacancies and, in some places, have few or no facilities dedicated to MCH. The challenges of provision of services in these remote or hard-to-reach areas, not least during the rainy season, is also affecting MCH services. Under 5-year malnutrition is still a concern in some townships [e.g. 10% in Katha district] which highlights the need to implement nutrition support, especially in remote parts of the region. Lastly, it was observed that IP interest in working on RMNCAH is still low for this region and should be promoted.

#### Recommendations

<u>Analysis of MCH outcomes</u>: Infant, under-five and maternal mortality rates reported in the Region remain unexplained. While this could be partly a consequence of increased and improved reporting across the Region, more analysis is needed to identify what the underlying causes are and to find ways to address them.

### 3.(e). EPI

With regard to Immunization and EPI, the results for most of the Region are encouraging. However, in Nagaland, immunization activities are conducted through Routine and Crash strategy. The Immunization coverage by using routine and crash strategy for Nagaland in 2018 was 20% and 80%, respectively. It was also noted that for the very hard-to-reach area, such as Nan Yung Township, Immunization with routine strategy is only 3% and crash strategy is 97% which demonstrates the need for innovative and effective approaches for better routine Immunization coverage.

#### Recommendations

<u>Nagaland:</u> MOHS will approach Access to Health Fund (Access) as well as other donors regarding the urgency to strengthen EPI, health services and health information in Nagaland.

### 4. Conclusions

The Oversight Visit provides observations and findings on Malaria, TB, HIV, RMNCAH, and EPI in Sagaing Region as presented in this Summary Report. While this does not cover health comprehensively and all essential issues, such as non-communicable diseases, nevertheless it does provide strategic guidance for improving health outcomes for the Region. Further investment of human, technical and financial resources as well as in planning and monitoring and evaluation, is required to respond to the various contextual factors affecting health. This additional investment would be in terms of generating futher evidence, operational planning, cost-effective deployment of health care workers, task-shifting and adapted intervention approaches. Once approved by the MOHS, recommendations made in this report should be considered in program-specific plans for Sagaing. While challenges are daunting in this Region, there is clear possibility of reaching substantive results and health outcomes over the coming years.

Please note that in addition to this Summary Report, a Full Report of the Oversight Visit to Sagaing on 13-19 May 2019 is also available on the MHSCC website: <u>https://www.myanmarhscc.org/</u>, including detailed background on each of the venue visited as well as the findings and recommendations of relevance to that venue. An additional report on findings and detailed recommendations on the HIV situation and response resulting from the Oversight Visit has also been prepared.

### **Annex-1: Oversight Visit Participant List**

### **Executive Working Group Members and Representatives**

- 1. Dr. Thandar Lwin, Deputy-Director General, Department of Public Health, MOHS
- 2. Mr. Oussama Tawil, Country Director, UNAIDS
- 3. Ms. Karen Cavanaugh, Director, Office of Public Health, USAID
- 4. Dr. Wai Lwin, Health Adviser, DFID
- 5. Dr. Badri Thapa, WHO
- 6. Dr. Sid Naing, Country Director, Marie Stopes International
- 7. Daw Nwe Zin Win, Executive Director, Pyi Gyi Khin
- 8. Dr. San San Myint Aung, President, Myanmar Maternal and Child Welfare Association

### National Programme Staff

- 1. Dr. Htun Nyunt Oo, Programme Manager, NAP
- 2. Dr. Kyawt Mon Win, Assistant Director, NMCP
- 3. Dr. Htet Myat Win Maung, Assistant Director, NTP
- 4. Dr. Kay Khaing Kaung Nyunt, Assistant Director, NAP

### **MHSCC Secretariat Team**

- 1. Mr. Ole Hansen, Technical Officer, WHO
- 2. Dr. Tun Tun Naing, Programme Officer, UNAIDS
- 3. Dr. Han Tun Khaing, Liaison Officer, UNAIDS
- 4. Dr. K Zar Yu, Communication Officer, UNAIDS

# Annex-2: Oversight Visit Agenda

### Myanmar Health Sector Coordinating Committee Sagaing Region Oversight Visit Agenda, 13 to 19 May 2019

Data	Venue	Tourshins to be visited	Duration	
Date	No.	Townships to be visited	Duration	
	1	Regional Health Department, Monywa, Sagaing Region	13:45 – 15:00	
	2	Monywa General Hospital (MGH)	15:15 – 16:15	
13.5.19	3	Regional NAP Center and Hospital Compound	16:15 – 17:45	
(Mon)	4	Regional TB Center and Regional NMCP Center	16:15 – 18:15	
	5	UNION (HIV) at MGH	17:45 –18:15	
	6	Methadone Site at MGH	18:45 – 19:45	
	7	Urban Health Center, Monywa	8:30 - 9:30	
14 5 10	8	Monywa – PSI (TB), Myittar Oo Private Hospital	9:30 - 10:15	
14.5.19 (Tuo)	9	Thar-Si RHC	11:00 -12:00	
(Tue)	10	Kha Tat Kan (N) Sub-Center	14:20 –15:20	
	11	Meeting with IPs and CBOs at Urban Health Center, Monywa	16:00- 17:30	
	12	Township Health Department, Ye-U	10:0011:30	
45 5 40	13	Shwebo District Health Department	14:00 - 15:00	
15.5.19	14	Shwebo District Hospital	15:00 - 16:00	
(Wed)	15	Shwe Bo – MHAA office (Interview with MHAA Volunteers)	16:00 - 17:00	
	16	Shwebo - AHRN (TB/HIV)	17:00 - 18:00	
16.5.19	17	Township Health Department, Pinlebu	14:30 - 15:30	
(Thurs)	18	Pinlebu – Interview with PSI volunteers and field workers (TB/HIV/Malaria)	15:30 16:00	
	19	Pinlebu - MANA (HIV) (Kyauk-Inn-Kone Village)	16:00 - 16:45	
17.5.19	20	Township Hospital, Indaw	9:15 - 10:15	
(Fri)	21	Indaw - AHRN (HIV) (Aung ZayYa Quarter)	10:15 - 11:00	

	22	District Health Department, Kathar	13:00 -14:30
	23	Kathar – UNION (TB)	14:30 - 15:00
	24	Kathar –MMA, No. (4), Quarter, Neik-Pan Road, Near MAB Bank. (Malaria/TB)	15:00—16:00
	25	Kathar – PGK, NO.9, Block, Near Fire Station Part (1), Kathar (HIV)	16:00 - 17:00
	26	Kathar – MCC, Quarter (4), Ward (9) (Malaria)	17:00 - 18:00
18.5.19	27	Kathar – Meeting with IPs (7 IPs)	8:00 - 10:00
(Sat)	28	Township Health Department, Tigyaing	11:30 - 12:30
	29	District Health Department, Sagaing	8:45 – 9:45
	30	Sagaing General Hospital (HIV, TB and Hospital)	9:45 - 10:45
19.5.19	31	Sagaing – UNION (TB)	9:45 – 10:45
(Sun)	32	Public Health Department (Malaria, SH, Leprosy, Immunization)	10:45 - 11:45
	33	Sagaing - Alliance CBO (HIV), Say Yone Gi Road, Nandarwun Ward	10:45 - 11:45
	34	Sataung Station Hospital	13:30 - 14:30

# Annex-3: HRH in Sagaing Region

Sr. No	Designation	2018			
		Sanctioned	Appointed	Vacant	Vacancy (%)
1	Regional Health Director	1	1	0	0%
2	Deputy RHD	3	3	0	0%
3	District Public Health Officer	10	2	8	80%
4	Assistant Director	13	6	7	54%
5	Deputy Public Health Officer	30	8	22	73%
6	TL, AS, Dy –TPHO	625	88	537	86%
7	ТНА	11	8	3	27%
8	HA 1	53	44	9	17%
9	Health Assistant	441	288	153	35%
10	THN	98	44	54	55%
11	LHV	379	181	198	52%
12	PHS 1	291	75	216	74%
13	Midwife	1872	1731	141	8%
14	PHS 2	1881	928	953	51%
	Total	5708	3407	2301	40%

## Table 2: Sagaing, Monywa and Shwebo Health Workforce – Total Summary

	Sanction	Appointed	Vacant	Vacancy (%)
Sagaing Regional Public Health Department, Health Manpower of Public Health (2018)	5708	3407	2301	40%
Health Manpower in Sagaing Region (NAP)	142	17	125	88%
Health Manpower of Sagaing Region (NTP)	160	22	138	86%
Health Manpower of Sagaing Region (NMCP)	182	86	96	53%

Monywa Urban Health Center (District and Township Health Manpower)	361	191	170	47%
Monywa Urban Health Center (Township Health Manpower)	217	144	73	34%
Sagaing District public health Department	65	23	42	65%
Township Public Health Department - Shwebo NAP team (District)	4	1	3	75%
Township Public Health Department - Shwebo NAP team (Township)	4	2	2	50%
Township Public Health Department - Shwebo NAP team (District + Township)	8	3 (+3)	5	62.5 %
Township Public Health Department - Shwebo NTP team (District)	4	0	4	100%
Township Public Health Department - Shwebo NTP team (Township)	4	1	3	75%
Township Public Health Department - Shwebo NTP team (District + Township)	8	1	7	87.5
Township Public Health Department - Shwebo NMCP team (District)	5	0	5	(100 %)
Township Public Health Department - Shwebo NMCP team (Township)	3	1	2	(66.7%)
Township Public Health Department - Shwebo NMCP team (District + Township)	8	1	7	(83.35 %)
Shwebo General Hospital (200 bedded) Health Manpower	594	318	276	46%
Sagaing Township Public Health Department Manpower	300	188	112	37%
Sagaing RHC, S/C Manpower	146	115	31	21%

## Annex-4: Acronyms

ABER	Annual Blood Examination Rate
ACF	Active Case Finding
ACT	Artemisinin-based Combined Therapy
AD	Assistant Director
ADB	Asian Development Bank
AHF	AIDS Health Foundation
AHRN	Asian Harm Reduction Network
AIDS	Acquired Immunodeficiency Syndrome
AMW	Auxiliary Midwives
AN	Antenatal
API	Annual Parasite Index
ART	Anti-retroviral Therapy
ARV	Antiretroviral
ATM	AIDS, Tuberculosis and Malaria
BCG	Bacillus Calmette–Guérin
BHS	Basic Health Staff
СВО	Community-Based Organization
CHD	Child Health Development
CHV	Community Health Volunteer
CHW	Community Health Worker
CPI	Community Partners International
DC	Decentralized Center
DFID	Department for International Development
DHS	Demographic Health Survey
DHIS	District Health Information System
DMO	District Medical Officer
DOTS	Directly Observed Treatment, Short course
DUNS	Data Universal Numbering System
Dy	Deputy
DyDG	Deputy-Director General
EAO	Ethnic Armed Organization
EHO	Ethnic Health Organization
EID	Early Infant Diagnosis
EmOC	Emergency Obstetric Care
eMTCT	Elimination of Mother-to-Child Transmission
EPI	Expanded Programme on Immunization
ExWG	Executive Working Group
FDA	Food and Drug Administration
FHI	Family Health International
FSW	Female Sex Worker
GF	Global Fund
GFATM	Global Fund on AIDS, Tuberculosis and Malaria
GH	General Hospital
GP	General Practitioner
HA	Health Assistant

HAART	Highly Active Antiretroviral Therapy
HCV	Hepatitis C Virus
HIS	Health Information System
HIV	Human Immunodeficiency Virus
HMIS	Health Management Information System
HRH	Human Resources for Health
HQ	Headquaters
HSS	Health System Strengthening
НТС	HIV Testing and Counseling
HTS	HIV Testing Service
iCCM	integrated Community Case Management
ICMV	Integrated Community Malaria Volunteer
IDP	Internally Displaced Populations
IDU	Injecting Drug Use
IEC	Information, Education and Communication
IMR	Infant Mortality Rate
INGO	International Non-Governmental Organization
IOM	-
IP	International Organization of Migration
	Implementing Partner
IPD	In-Patient Department
IPT	Isoniazid Preventative Therapy
IRC	International Rescue Committee
IT	Information Technology
JHPIEGO	Johns Hopkins Program for International Education in Gynecology and Obstetrics
JICA	Japan International Cooperation Agency
КАР	Key Affected Populations
KDHW	Karen Department of Health and Welfare
KEHOC	Karen Ethnic Health Organizations Consortium
KNU	Karen National Union
KP	Key Population
KPSC	Key Population Service Center
LHV	Lady Health Volunteer
LHW	Lady Health Worker
LLIN	Long Lasting Insecticidal Nets
MAM	Medical Action Myanmar
MANA	Myanmar Anti-Narcotics Association
MCC	Myanmar Council of Churches
MCH	Maternal Child Health
MGH	Monywa General Hospital
MHAA	Myanmar Health Assistants Association
M&RH	Maternal and Reproductive Health
MMCWA	Myanmar Maternal Child Welfare Association
MDHS	Myanmar Demographic Health Survey
MICS	Multi-Indicator Cluster Survey
MHSCC	Myanmar Health Sector Coordinating Committee
MMA	Myanmar Medical Association
MMR	Maternal Mortality Rate
MMT	Methadone Maintenance Therapy

MOHS	Ministry of Health and Sports
MOU	Memorandum of Understanding
MRS	Medical record system
MSI	Marie Stopes International
MSM	Men who have Sex with Men
mSupply	Software for supply chain management
MW	Midwives
MWD	Myawaddy
NAP	National AIDS Programme
NHL	National Health Laboratory
NHP	National Health Plan
NCA	Nation-wide Ceasefire Agreement
NCD	Non-Communicable Diseases
NGO	Non-Governmental Organization
NMCP	National Malaria Control Program
NPT	Nay Pyi Taw
NSP	National Strategic Plan
NTP	National Tuberculosis Program
NVP	Nevirapine
OPD	Out-Patient Department
OpenMRS	Software for medical record system
OG	Obstetrics and Gynecology
01	Opportunistic Infections
OVP	Other Vulnerable Populations
pARV	prophylaxis Anti-retrovirals
Pf	Plasmodium falciparum
Pv	Plasmodium vivax
PSCM	Procurement Supply Chain Management
PGK	Pyi Gyi Khin
PLHIV	People Living with HIV
PMTCT	Prevention of Mother to Child Transmission
PITC	Provider Initiated Testing and Counselling
PSE	Population Size Estimate
PSI	Population Services International
PWID	People who Inject Drugs
QC	Quality Control
RDT	Rapid Diagnostic Test
RHC	Rural Health Centre
RHD	Regional Health Department
RMNCAH	Reproductive, Maternal, Neonatal, Child and Adolescent Health
RO	Regional Officer
RTA	Road and Traffic Accidents
SARA	Substance Abuse Research Association
SC	Sub-center
SDC	Swiss Agency for Development and Cooperation
SHD	State Health Department
SHG	Self Help Group
SOP	Standard Operating Procedure
-	

SPU	SUN Primary Health
SR	Sub-Recipient
SRH	Sexual Reproductive Health
STD	Sexually Transmitted Disease
STI	Sexually Transmitted Infection
ТВ	Tuberculosis
TL	Team Leader
3MDG	Three Millennium Development Goal
ТМО	Township Medical Officer
ТРНО	Township Public Health Officer
TSR	Treatment Success Rate
ТТІ	Tetanus Toxoid Immunization
U5	Under five
UHC	Universal Health Coverage
UN	United Nations
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
UNOPS	United Nations Office for Project Services
USAID	United States Agency for International Development
VBDC	Vector Borne Disease Control
VHW	Village Health Worker
VL	Viral Load
WHO	World Health Organization