Meeting Report

HIV and STI guidelines dissemination workshop for Asia and the Pacific

Bangkok, Thailand
8-11 August 2016
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NOTE

The views expressed in this report are those of the participants of the HIV and STI guidelines dissemination workshop for Asia and the Pacific and do not necessarily reflect the policies of the conveners.

This report has been prepared by the World Health Organization for those who participated in the HIV and STI guidelines dissemination workshop for Asia and the Pacific in Bangkok, Thailand from 8 to 11 August 2016.
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The World Health Organization (WHO) Headquarters and Regional Offices for Eastern Mediterranean, South-East Asia and the Western Pacific organized a four-day “HIV and STI guidelines dissemination workshop in Asia and the Pacific” in Bangkok, Thailand from 8 to 11 August 2016. The main objective of the workshop was to provide Member States and partners a better understanding of the technical elements of WHO HTS 2015 and ART 2016 guidelines and support national adaptation and implementation of recommendations in the guidelines. The meeting was organized

Consolidated guidelines for antiretroviral drugs, key populations, strategic information, HIV Testing services and STI are intended to simplify guidance and harmonize all guidelines based on a public health approach to reach the 90-90-90 global targets by 2020 and the Sustainable Development Goal of ending AIDS and STI epidemics by 2030. New recommendations from other guidelines published separately, such as infant feeding and HIV drug resistance surveillance, were also covered in the workshop. The consolidated guidelines for key populations had been disseminated earlier in 2014 and therefore were not included in this workshop.

Specific areas of focus at the workshop included innovative approaches to improving HIV testing and quality laboratory services; pre-exposure prophylaxis (PrEP) to high risk populations; effective and efficient approaches to service delivery, including differentiated care and task shifting; treat all and new antiretroviral drugs; routine viral load monitoring scale-up; co-infections management; supply chain management; HIV drug resistance surveillance and coordinated with antimicrobial resistance initiatives; 10 Global Indicators to monitoring the HIV response and individually-level patient monitoring with unique identifiers; community and civil society engagement and financial support; and transitioning to sustainable HIV programming, including domestic financing, innovative approaches, and regionally pooled procurement of commodities.

The guidelines sessions commenced with presentations on technical elements and key recommendations, followed by country presentations and plenary or panel discussions. One session was set aside for partners to share resources, and a side evening session was held on lessons learned from the elimination of mother-to-child transmission (EMTCT) in Thailand.

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and the Pan America Health Organization (PAHO) region. On the last day of workshop, the participating countries drafted adaption and implementation plans.

The participants represented the Ministries of Health from 20 Asian and Pacific countries, partner organizations and WHO collaborating centres, as well as participants from country, regional and headquarters of WHO. The countries represented were Bangladesh, Bhutan, Cambodia, China, India, Indonesia, Islamic Republic of Iran, Lao People's Democratic Republic, Lebanon, Malaysia, Myanmar, Mongolia, Nepal, Oman, Pakistan, Papua New Guinea, Philippines, Sudan, Timor-Leste, and Viet Nam. Partners included APCOM, The Asia Pacific Council of AIDS Service Organisations (APCASO); Asia Pacific Network of Positive People (APN+); Asia Pacific Network of Sex Workers (APNSW); Australian National Reference Laboratory; Australian Prince of Wales Hospital; Coalition of Asia Pacific Regional Networks on HIV and AIDS; The Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM); International AIDS Society (IAS); Japan National Centre for Global Health and Medicine; Tuberculosis and Malaria (GFATM), Mahidol University, Marie Stopes; Medecins Sans Frontieres, the Thai Red Cross AIDS Research Center, Thai Ministry of Health, TREAT Asia, UNAIDS, UNC Chapel Hill Institute for Global Health & Infectious Diseases, UNDP, UNESCAP, UNICEF, US Agency of International Development (USAID), US Centers for Disease Control and Prevention (CDC), US President’s Emergency Plan for AIDS Relief (PEPFAR), and Youth Lead.
INTRODUCTION

1.1 MEETING ORGANIZATION

The World Health Organization (WHO) Headquarters and Regional Offices for Eastern Mediterranean, South-East Asia and the Western Pacific invited participants from the Ministries of Health from 20 countries and civil society, bilateral, multilateral, and international non-governmental organizations to a four-day workshop in Bangkok, Thailand from 8 to 11 August, 2016. The overall aim of the workshop was to promote and support country adoption and adaptation of the new WHO guidelines and support implementation to improve performance of national programmes. Technical elements of the new WHO HIV and STI guidelines were presented, and participants engaged in a dialogue on how to start adaptation and implementation during plenary and panel discussions, identified operational and programmatic implications for implementing guideline recommendations, and prepared draft country roll-out plans, including priority actions, challenges and opportunities, and technical assistance needs required.

1.2 MEETING OBJECTIVES

The objectives of the meeting were:

1) to explain the technical elements of the WHO guidelines for HIV and STI;
2) to describe available implementation tools to adapt guidelines recommendations for country contexts;
3) to draft plans and next steps for sequencing the adaptation and implementation of new WHO recommendations; and
4) to discuss how to start adaptation and implementation of new policy recommendations.
2.1 OPENING SESSION

The representatives from WHO, UNAIDS, PEPFAR, GFATM, and APN+ provided opening remarks. An overview was introduced on the WHO guideline development process, linkages with the Global Health Sector HIV strategy and the Sustainable Development Goal 3. Four of the guidelines are consolidated guidelines covering HIV testing, key populations, ART, and strategic information.

Participants were briefed that while developing guidelines, WHO applies the public health approach to ensure the widest possible access to high-quality services at the population level and the Grading of Recommendation Assessment, Development and Evaluation (GRADE) process to review the quality of the evidence and judge the confidence in the true effects. The process involves systematic reviews, including network meta-analysis and qualitative reviews, costing analyses, and community and global consultations. WHO monitors where countries are in adapting the guidelines. While there are regional differences in the uptake of the policies, many countries have adapted or are planning to soon adapt Treat All and PMTCT Option B+. However, viral load testing is still low around the world and particularly in the Asia and Pacific. In addition to the guidelines, WHO has published Global Health Sector Strategies along the five strategic directions of Universal Health Coverage. WHO and UNAIDS targets are fully aligned.

2.2 TREAT ALL: WHEN TO START AND WHAT TO USE

The 2016 WHO ART guidelines recommend to Treat All people diagnosed with HIV regardless of WHO clinical stage and at any CD4 cell count. This is based on evidence, specifically from the TEMPRANO and START trials, showing impact on HIV morbidity, disease progression, HIV transmission, and minor and non-significant side effects of antiretrovirals. The benefits of early initiation outweigh the risks of ARV drug resistance and toxicity. Although evidence for early initiation among adolescents is lacking, there is indirect evidence of reduced mortality and improved growth especially among 5-10 year old with
CD4>500. The gains appear limited for vertically infected adolescents, so treatment should take place in childhood.

The guidelines provide alternative first line and second line options, including new drugs (i.e., DTG, EFV400, DRV/r and RAL); addresses sequencing of first, second and third line regimens; and when individual genotyping is needed. WHO expects DTG to become more affordable in the next couple of years. In 2018, the fixed dose combination with TDF/FTC/D TG is expected to be available for under $100 per treatment year.

Better reach and linkage is critical to achieve Treat All given that 20 million needing to be on treatment are still not being diagnosed and late presentation to care persists. Decreasing external funding will pose challenges for treatment services sustainability, necessitating more efficient approaches such as differentiated care, enabling environment, and community engagement. Countries can treat the sickest first, then prioritize sero-discordant couples, pregnant women, and key populations; plan for task shifting and decentralization; and reinforce adherence and community support. Furthermore, with Treat All the pre-ART period can be eliminated to reduce the loss to follow-up and deaths which occur mostly during pre-ART.

Major research gaps include implementation science on interventions to improve timely uptake and retention along the cascade, on the impact of earlier initiation on health services in the context of decentralized care, toxicity monitoring and other laboratory markers as predictors in places where CD4 is not used. Several operational studies are being conducted, but studies are missing from Asia and the Pacific which the region could take on.

In Malaysia, Test and Treat is a main priority in the National Strategic Plan for ending AIDS, and new testing venues near key population have been opened. Nepal has a new national HIV strategy adopting Treat All, focusing on reach and retain given that 33% are still to be diagnosed and 37% of those still missing for ART. Lebanon has followed WHO guidelines for treatment since 1998 and is adopting Treat All, and has high adherence because of the low number of patients on ART but has challenges with large influx of refugees. Challenges shared by the countries include late diagnosis and enrolment in care,. Panel discussions raised further concerns with funding decline, drug resistance, and low HIV testing uptake as major
concerns for Treat All. Solutions included sustaining financing mechanisms, efficiencies such as decreased clinic visits, task shifting, addressing legal and political contexts, raising awareness, and reducing discrimination. (Drug resistance concerns are addressed in Section 2.14 below.)

2.3 GLOBAL STI STRATEGY AND NEW STI GUIDELINES

The new global health strategy for STI 2016-2021 shares a similar vision as HIV: zero new infections, deaths, and discrimination. The strategies prioritize Neisseria gonorrhoea, Treponema pallidum and Human papillomavirus. Chlamydia is not included because it is harder to measure and screening is still expensive. Priorities across three strategies are linkages and integration of services (particularly with a lack of funding for STI), antimicrobial resistance, particularly gonococcal resistance, treat all, and adolescents. There is now a move from dual to triple elimination of HIV, syphilis and hepatitis.

STI treatment guidelines are being currently being updated for gonorrhoea, Chlamydia, genital herpes simplex, and syphilis. These guidelines will address syndromic approaches, which do not perform well, and laboratory diagnosis. Dual therapy (Ceftriaxone 250mg or Cefixime 400mg plus Azithromycin 1 gram) will be recommended over single therapy for gonorrhoea. Quinolones are no longer recommended because of resistance. The drug of choice for syphilis is benzathine penicillin, which is most effective, although there is an issue of shortages in some countries. WHO is advocating drug production of more benzathine penicillin. The doses are being simplified for herpes.

With increased availability of diagnostics for STI, there should be less syndromic management in the coming years. Syndromic management should be validated by etiological surveillance, and countries should revisit the STI syndromic management guideline. STI costing tool using SPECTRUM is being developed and will be available for countries to cost national STI strategies. Drug Resistance monitoring for STI can be carried out together with AMR surveillance. WHO recommends countries to conduct etiological studies every 3-5 years.

Countries and partners stressed the importance of community involvement in program planning and implementation, healthcare provider competency and retention, and adequate political support to achieve STI prevention and treatment objectives.
2.4 HIV TESTING SERVICES (HTS)

HIV counselling and testing is now referred to as HIV testing services (HTS) to embrace counselling, linkage to appropriate services, quality assurance and delivery of correct results. New guidance highlights are: 1) lay provider testing, 2) quality HTS and delivery of correct results (given that 0.7-10% misdiagnosed occurs) and that only 17% of 48 countries are aligned with WHO HIV testing strategies, 3) retesting prior to care enrolment or treatment, 4) coverage and focus, with the ‘test for triage’ strategy, and 5) linkage to prevention, treatment and care, with attention to link to prevention. Upcoming recommendations will detail 6) self-testing services with different models, including supervised testing; kits are already available in the market, and 7) partner notification, which has not been widely implemented so far.

There were concerns by country participants that the retesting policy is too broad and not applicable in certain countries with high quality HTS. There are not many pilots yet on self-testing, but most are being introduced using a community support model where self-testing is supported by a supervisor.

Timor-Leste in their presentation showed that community-based testing has improved testing uptake significantly in their country. Sudan is updating its strategy to include test for triage, although challenged by test kit stock out. China is exploring anonymous urine testing through internet-based platforms and university screening programs. Thailand is using internet-based supervised self-testing, and need to make more available sensitive tests through finger prick given high seroconversion among key populations.

During the discussion, emphasis was placed on community empowerment, and for civil society, that means the community must be able to articulate their needs and rights and help customize and downstream the guidelines to the local community context. Another perspective voiced was that community-based organizations do not necessarily have access to all those who are at risk. There are concerns that high volume of testing have been returning low positive diagnoses, and that index case finding is critical, including partner notification as well as social network tracking. Requests were made to share country experiences on balancing partner notification versus patient privacy. Emphasis was made also on the need to think outside the box of HIV and address the legal issues which regulate HIV along with other diseases. Countries expressed interest in HIV self-testing and emphasized the need for legal and policy adaptation to accommodate HIV testing conducted in community as well as
self-testing. There was a call for WHO to convene high-level meeting on community-based testing and HIV self-testing to support policy adaptation in countries.

2.5 SIDE EVENT ON LESSONS LEARNED FROM ELIMINATION OF MOTHER-TO-CHILD-TRANSMISSION (EMTCT) IN THAILAND AND PAHO

A four-hour evening session on EMTCT covered background on the validation mechanisms, perspectives from the first SEARO-WPRO regional validation team, and Thailand and PAHO experiences.

Validation for elimination of mother-to-child transmission of HIV and syphilis occurs at three levels. At the national level, the data is reviewed and report is prepared. At the regional level, the regional validation team (RVT) and Secretariat conduct review including in-country assessment and prepare a regional validation report, confirming the data and process to recommend validation to the global validation secretariat at WHO headquarters and the global validation advisory committee of independent experts. The recommendations are presented to the WHO Director General. Validation involves 1) program and services assessment, 2) data verification and impact assessment, 3) laboratory data assessment, and 4) human rights, gender equality and community engagement review. Countries must achieve a set of HIV and syphilis impact and process targets to be validated. Alternative applications of the validation criterial are still under consideration for countries with small populations, where rates tend to be unstable and sensitive. An operational guidance is being finalized to help countries prepare for in-country validation. Under discussion is revalidation every 2-3 years.

Thailand was the first country in Asia to eliminate MTCT of HIV and syphilis. The Thai validation process took place over 16 months. Key recommendations for validation preparation were to obtain high level MOH endorsement, have a full time focal point person, budget for working group meetings, and establishing working groups for the four program areas (data, lab, program, human rights). The RVT, consisting of experts covering the four areas of validation listed above, spent one week in country (in addition to preparatory work) reviewing national plans and strategies and data, visiting selective facilities, and conducting interviews with multiple stakeholders. The RVT provided their perspectives that team members should include expertise in epidemiology and data synthesis and that national program transparency is needed in order to access all required data. Recommendations to
better facilitate the work in country are to have more preparatory time and immediate clarifications on the large volume and complexity of data. For the human rights, gender equity, and community engagement review, the RVT needs to directly speak with PLHIV, pregnant women, and community representatives, and to review the legal context for human rights and protections.

PAHO shared EMTCT experience from the Americas and Cuba, the first country globally to achieve EMTCT. The region had high political and financial commitment to mother and child health, setting the stage for EMTCT. Cuba’s validation timeline is similar to that of Thailand. Lessons learned from the Americas is the importance of leadership, strong health systems, application of the public health approach, strong partnership within the UN system and with technical partners, streamlined vertical programs, universal access, and an environment which advances human rights and gender equity. PAHO is now applying new approaches to meeting the high demand of countries (currently 16) wishing to undergo validation. These include a step-by-step validation preparation guide, validating clusters of countries sharing geographic proximity and similar characteristics, and virtual validation assessments. PAHO points out the importance of retaining all PMTCT indicators in the GARPR to have data for EMTCT.

Some countries voiced concerns over costs given the demanding validation process requiring strong healthcare systems and testing coverage being over 95%. A discussion ensued on whether it would be cost-effective to focus testing on high yield settings rather than wide ANC HIV testing coverage. However, PAHO shared the perspective that the conversation should be around priorities and not cost, as made evident through a cost-effective analysis for the WHO HIV testing services guidelines, which showed that even in low-prevalence settings, routine provision of ANC HIV testing is cost-effective. The importance of a strong health system was stressed, and EMTCT of HIV and syphilis serve as quality indicator for maternal and child health services. The delivery of PMTCT services, including HIV and syphilis screening, was considered the responsibility of governments and essential components of maternal and child health services.

Although countries have unique challenges for EMTCT, essential foundations for success and sustainability for EMTCT include strong national ownership and leadership, sustained political commitment, enabling legal and policy environment, well-developed health systems, enhanced community systems, and well-coordinated partnerships. Bhutan, Sri Lanka, Timor
Leste, Maldives, Malaysia, and Mongolia, which are candidate countries for validation of EMTCT in the near future, shared their plans. Large countries including China and India saw sub-national validation being advantageous as it would nurture ownership by sub-national units and subsequently assist with national elimination.

2.6 PRE-EXPOSURE PROPHYLAXIS (PREP)

The WHO recommends that PrEP be offered as an additional prevention choice for people at substantial risk for HIV infection (incidence around 3 per 100 person-years or higher) as part of a combination prevention package (i.e., condoms and lubricants, harm reduction, HTS and links to ART). This recommendation is based on evidence of >70 and up to 95% effectiveness, very low adverse events and resistance, feasibility in adaptation in many settings and different populations, increasing interest and demand, and cost-effectiveness. Randomized controlled trials show the need for high adherence of >70% to achieve effectiveness.

WHO is drafting an implementation guideline with tools adaptable across countries and which will address hepatitis B issues as well to ensure that PrEP discontinuation does not cause hepatitis B virological and clinical relapse, an argument for why PrEP cannot be conducted outside of a clinical setting. Countries are concerned that the definition of substantial risk is too confining especially for countries with low prevalence. Clarification made was that incidence as defined is population-specific, not a country wide incidence, and that countries can adapt as needed based on their local context.

The Philippines shared concerns on cost and sustainability and the concerns voiced by transgender women on interactions with their hormone therapy. Lessons learned by APCOM in getting PrEP to MSM in Asia are that PrEP must be promoted through peers along with health providers, detailed information is needed on the prescription, and services must be affordable and non-judgmental. APCOM’s advocacy efforts have included online videos and information, but even with this advocacy, there are few countries taking up PrEP. A regional PrEP task force is being developed for making PrEP available in urban centres across Asia, with substantial discussions taking place in at least 6 countries.

Countries in the region that are currently or will soon be implementing PrEP include India, Malaysia, Myanmar, Philippines, Thailand, and Viet Nam. Lao is having consultations on
PrEP, and concerns arose about adherence and drug resistance, finding balance between PrEP and condoms promotion, and costing. Viet Nam plans to include PrEP in new national guidelines, but have concerns over funding sources since health insurance will not cover PrEP. UNICEF plans a demonstration project in 15-19 year olds, targeting 2500 adolescents in Thailand over four years.

Concerns were raised over the transition off PrEP once pilot projects end. A current project shared that there has already been ministry commitment to continue covering costs using public funds. Other projects are reviewing co-payment and self-payment schemes in the pilot projects. There is interest in including PrEP in Global Fund concept notes, and recommendations were made that there be Global Fund PrEP indicators for countries to do so.

2.7 HIV ASSOCIATED TB, HEPATITIS AND OTHER CO-MORBIDITIES

Guideline updates emphasize strengthened approach, early treatment, and strong infection control. TB continues to be the leading cause of death among PLHIV, but not enough patients are being tested for HIV and isoniazid preventive therapy (IPT) provision is low. Everyone coming to a TB clinic should be tested for HIV. WHO recommends starting ART early in TB patients within the first 8 weeks, but within 2 weeks for those with profound immunosuppression (CD4<50), and using Xpert MTB/RIF rather than conventional microscopy culture and drug susceptibility testing (DST). Seriously ill patients should go on immediate presumptive treatment, and a new algorithm using urine LF-LAM assay or gene expert may be used for diagnosis of active TB. It is important that countries report the global and national core indicators for TB included in the Consolidated Strategic Information Guidelines to ensure quality delivery.

Malaysia and India provided examples of integrated TB/HIV programming through joint TB/HIV frameworks and adaptation of WHO recommendations including the “Three Is”. India is using Xpert-MTB/RIF, with one available in every district, and has begun daily Anti TB treatment in high HIV burden sites and all HIV TB coinfected patients across the country. Challenges remain including staff motivation, desiring incentives with perceived additional workload, monitoring and reporting, and decreased funding. Experiences were shared about integrated services, diagnostics, and procurement, which will be needed moving into the future of ambitious SDG 3 goals and limited resources. Most countries have vertical
programs and may try as much as possible to integrate, but for institutionalized change, will need WHO high level advocacy.

Through a poll of the audience, most countries in the region are in process of implementing IPT. Many still have, reservations toward implementing IPT with ART. Immediate IPT decreases severe morbidity. Drug interactions are manageable, and physician advice can help shift the views of patients who worry about taking multiple drugs. Annex 13 in the consolidated treatment guidelines addresses drug interactions with new drugs for hepatitis and TB. With respect to resistance, close monitoring among HIV patients in Myanmar has produced no observations of significant increase in multidrug resistant TB.

Co-infections and co-morbidities updates on co-trimoxazole (CTX) prophylaxis, skin and oral infections, cryptococcal, and non-communicable diseases are available in the new guidelines. For late presenters, packaging and bundling together CTX with anti-TB, anti-fungal, anti-bacterial and anti/protozoal, and anti-helminth will reduce mortality significantly among late presenters. Where malaria is high, CTX can be used for life. It was also pointed out that PLHIV will increasingly develop cardiovascular diseases, diabetes, cancers, and other non-communicable diseases. Prevention and risk reduction on cardiovascular diseases should be included in HIV services. There should be also depression management, for which the WHO Mental Health Gap Action Programme (mhGAP) intervention approach is available.

The hepatitis programme is ahead in this region than elsewhere in the world. The hepatitis guidelines cover how to stage and how to treat. For hepatitis B, 3TC should not be used because of resistance, and tenofovir alone is recommended. For hepatitis C, WHO recommends use of oral direct acting antiviral regimens and phasing out interferon-based regimens due to the serious side effects and interactions with ARVs. In the next 2 months, hepatitis testing guidelines on how and who to screen will be published by WHO.

### 2.8 PMTCT AND PAEDIATRIC HIV

Most countries have adopted the new guidelines to treat all pregnant women living with HIV. The new drugs DTG and EFV-400 are not yet recommended for pregnant women and children because safety trials are pending. The recommendations of treatment regimens for children have been updated since 2013 guidelines to include earlier start in newborns, and the better
tolerated and heat-stable LPV/r pellet formulation for children above three months of age and Raltegravir (integrase inhibitor) is an option in special circumstances. For adolescents (age 10-19), and treatment are similar to adults except that DTG and EFV400 are not yet recommended

Although implementation could be difficult, a new conditional recommendation is to add nucleic acid testing (NAT) at birth in order to diagnose and treat infants to prevent early mortality. Point-of-care technology and rapid diagnostic tests will aid in decentralization and task shifting. Provider initiated testing and counselling (PITC) for older children is infrequently implemented despite WHO recommendations since 2013, so the new guidance expands on the previous recommendation to specify settings in which testing should be offered in generalized epidemics and concentrated epidemics

Infant prophylaxis studies show that multidrug prophylaxis reduces perinatal transmission in high risk situations, and prolonging prophylaxis reduced MTCT in the absence of maternal ART. The new guidance now recommends two tiers of prophylaxis for low and high risk situations. These guidelines defined high-risk infants as those: born to women with established HIV infection who have received less than four weeks of ART at the time of delivery; or born to women with established HIV infection with viral load >1000 copies/mL in the four weeks before delivery, if viral load measurement is available; or born to women with incident HIV infection during pregnancy or breastfeeding; or identified for the first time during the postpartum period, with or without a negative HIV test prenatally..

New in the 2016 guidelines on HIV and infant feeding is to not restrict breastfeeding. Mothers living with HIV should breastfeed for at least 12 months and can continue for longer while fully supported for ART adherence, per national guidelines and according to national context.

During the discussion period, countries raised the point that much of the evidence comes from Africa and not Asia and the Pacific, and suggest that how guidelines are applied will be based on the countries’ epidemics, populations and funding restrictions. Suggestions were also made that conversation with mothers about benefits of breastfeeding and non-breastfeeding can take place. Some national guidelines are still recommending formula feeding, and it may be worthwhile to have more discussions in the region on infant feeding
and HIV, especially with countries’ concerns about low treatment adherence in breastfeeding mothers.

### 2.9 STRATEGIC INFORMATION – CASCADE, CASE-BASED SURVEILLANCE AND PATIENT MONITORING

The Consolidated Strategic Information Guidelines recommends 10 global and 50 national indicators. These indicators help monitor the national and global HIV responses, so the more accurately the countries report into GARPR, the more reliable the estimates. The current global estimates are that of 36.7 million PLHIV, 60% are diagnosed, 46% of diagnosed are on ART, and 38% of those on ART are virally suppressed. Incidence is 2.1 M and mortality is 1.1 M. There is a treatment gap of 53% in WPRO, 61% in SEARO, and 89% in EMRO.

WHO has developed an online Country Intelligence tool that consolidates policy and key issues, GARRP, AMDS, country support data, drug resistance and hepatitis data. The data will be updated every three to six months. The tool is important for updating country uptakes of key WHO recommendations. The target is that 90% of countries have consistent data and use on gaps in cascade and access strategies to fill them.

WHO encourages strengthening case-based surveillance and patient monitoring (guidance forthcoming) to obtain individual-level, longitudinal data across the cascade of care. Guidance on unique identifiers being developed with UNAIDS, and while recognizing difficulty in applying unique identifiers, they are needed to understand gaps and issues across the care cascade.

Myanmar shared experiences in transitioning from paper-based to electronic based systems called E-health, capturing longitudinal patient data using unique identifiers, and scaling up DHIS2 to link data also other diseases such as TB and malaria. However, DHIS2 is being funded through GFATM, and there is uncertainty how the system will be sustained beyond GFATM. Sudan is performing cross-sectional analyses across the cascades, and will need to conduct a longitudinal cohort study to understand retention across the cascade, which is manageable given the small number of patients on ART (=6000) and EMR systems in all ART clinics. The panel discussion stressed the importance of conducting local, subnational
individual tracking especially of key populations in order to know where to target interventions and where retention and adherence is a problem. Follow-up is needed on STI strategic information collection for key populations.

2.10 SUPPLY CHAIN MANAGEMENT FOR HIV, TB, STI AND HEPATITIS

The key lessons learned from earlier transitions are that careful and comprehensive planning, data visibility, and inclusion of supply chain professionals early on are needed for good supply chain management. Robust supply chain mechanisms will be required as countries roll out ‘test and start’ and differentiated service delivery models. The critical stages of planning for ‘test and start’ are detailed in the guidelines. Multi-month scripting was introduced as one of the means of supply chain management for antiretroviral drugs. Multi-month scripting has the advantage of decongesting the clinics, but also allow for a patient centred services. Key considerations for multi-month scripting are being able to identify and define stable patients, which is not straightforward. The definition of stable patients will affect the forecasting and projection of ARV needs. Supply chain management for multi-month scripting and test and start will require matching ARV delivery to the number of months of multi-month scripting and ensuring that all stocks needed for month-scripting and test and treat are available in country. Good management of patient records and visits, forecast planning tools, monitoring on the refill rate, stocking according to plan, and understanding of potential bottlenecks are needed. A modelling tool for multi-month scripting is available from Supply Chain Management Systems and Global Health Supply Chain.

Common challenges shared by participating countries include poor quality of data for forecasting, uncertainty of timing of grant approval, the lack of enough bids for tender, noncompliance of suppliers, difficulty in procuring paediatric ARVs at small quantities, and management of commodities with short shelf life.

2.11 LAB STRATEGY, COMMODITIES AND VIRAL LOAD SCALING UP

The guidelines include new recommendations for HIV testing diagnostics. CD4 remains an important indicator of risk of severe disease, but guidelines recommend that routine CD4 monitoring can be stopped where viral load is widely available. Viral load is preferred for diagnosis and treatment failure confirmation. Dried blood spots (DBS) and point of care viral
load machines are becoming more available and can facilitate viral load testing scale-up. Aeview around the platforms that can accept DBS are available in the guidelines, although
WHO does not make recommendations on which to use. WHO prequalification of in vitro
diagnostics are available on the WHO website. Different products for viral load are
undergoing prequalification review, and Xpert is far along the review process. Point of care
NAT may be able to be used in the future for multiple services like ANC and PrEP.
Performance of rapid diagnostic tests (RDTs) differs based on age. Sensitivity of RDTs is
low in children 4-18 months.

The WHO prequalification programme involves strong inspection, but it is important for
countries to validate test kits for the country’s context to ensure that the tests do not share
common false reactive. The first test should have superior sensitivity and the second and third
should have higher specificity. Test kits sometimes fail, so countries should test batches
before putting onto the market and have an active mechanism for required recalls as needed.

Quality assurance is important and requires external quality assessment (EQA), quality
control of day-to-day processes, good record keeping and documentation (which is the
biggest cause of wrong results returned), and good training and support for personnel. Two
studies show misclassification of results ranging from 2.6% to 10.3%. NRL Australia
observed during laboratory inspections subpar laboratory conditions where there were high
potential for specimen contamination and staff infection. Good training, including training
of-trainers, and implementation of quality management systems can address these issues.
Linkages between clinicians/veterinarians, epidemiologist and laboratory experts are also
important. Clarification was made that EQA systems need to be adapted for point-of-care
testing. Whereas point-of-care testing normally uses whole blood finger prick, the ideal
sample for EQA is plasma because DBS loses viral load during transportation.

Papua New Guinea and Myanmar shared their strategies for HIV viral load scale-up. Lack of
funding resources were raised as an obstacle for scaling up viral load, and GFATM
responded that they have a clear policy of financial support for this and inclusion in concept
notes are vital for their consideration for support.

In relation to the issue on misdiagnosis, countries sought guidance on how to re-test for HIV
infection once patients are on ARVs. Currently, WHO does not recommend retesting of
people on ART, as there are potential risks of incorrect diagnosis. This is a complex issue that
will require further review by the HIV diagnostics team at headquarters. The best approach would be to prospectively preempt this situation by implementing re-testing before ART initiation. For retrospective testing, RDTs or antibody tests are discouraged due to lower sensitivity of these tests once patients are on ARVs. People on ARV drugs, including those with undiagnosed with acute HIV infection who are started on PrEP, may produce fewer antibodies or delay the production of antibodies, and therefore lengthen the window period. This may be a particular challenge for RDTs using oral fluid specimens. Nucleic acid testing (NAT) technologies that detect and measure the level of the virus in DNA may help to detect the virus, but which may be suppressed while patients are on ARVs as well. Countries are encouraged to review the guidance from the previous HIV misdiagnosis meeting, available at http://www.who.int/hiv/pub/meetingreports/hiv-misdiagnosis-report/en/index4.html.

2.12 SERVICE DELIVERY

The guidelines differentiate service delivery approaches to meet specific patient needs: patients presenting well, patients presenting with advanced disease, stable patients, and unstable patients. The key recommendations on differentiated ART delivery are to reduce clinic and ARV pick up visits (3-6 months) for stable patients and task shifting, particularly using trained lay providers to distribute ARV in community settings. Adherence support interventions should be provided to all people. A new recommendation around integrated service delivery is to provide family planning, STI services and adolescent-friendly services in HIV care settings.

Civil society shared options for ART delivery models. These include healthcare worker-managed groups for stable patients such as adherence clubs; facility-based individual models which separate ART refill visits from clinical consultations; and out-of-facility individual models where clients receive ART outside of the healthcare facilities.

Data is currently inadequate to support same-day accelerated ART initiation. Countries would need to consider the number of visits required to prepare the patient, and what obstacles must be removed before implementation. Three RCTs near completion will provide more information on same day ART initiation implementation.

Viet Nam has implemented decentralized testing using lay providers and is planning to implement self-testing, but stigma and discrimination still proves to be a major barrier to
service access among key populations. Iran, with an epidemic driven by injection drug use, has scaled up harm reduction interventions, has had high methadone maintenance therapy (MMT) uptake, and is providing a comprehensive package of HTS, ART delivery, STI and TB treatment, and hepatitis prevention, vaccination and treatment. Yet Iran now is challenged by increased methamphetamine use, for which treatment is limited and methadone is not the correct treatment.

Enabling legal environments are critical to reach and retain key populations. The current administrative policy on drugs in the Philippines was raised as a major concern. At the global level, the WHO, UNAIDS and UNDP human rights advisors are meeting to offer immediate actions to assist and improve the situation in the Philippines.

2.13 PARTNER RESOURCES

Partners shared tools and resources available for guidelines implementation. IAS has tools for differentiated care (www.differentiatedcare.org). GFATM also has a toolkit for differentiated care and additionally guidance on strategic investment for adolescents, available on its website. GFATM introduced the online platform for supply chain management, wambo.org, which provides a marketplace for affordable quality-assured medicines and health tools. MSF shared information and toolkits for various adherence strategies and viral load monitoring. PEPFAR has issued technical considerations which rely on WHO for formal guidance, Site Improvement through Monitoring Systems (SIMS), supply chain management planning tool for multi-month scripting and test/start, and various analytical tools for country factsheet development. The Interagency Task Team on the Prevention and Treatment of HIV Infection in Pregnant Women, Mothers and Children (IATT) has a knowledge hub (www.knowledge-gateway.org/emtct) and operational guidance (www.emtct-iatt.org). UNAIDS mentioned the Asia HIV datahub site for epidemic and progress monitoring.

Countries raised again the issue of external funding resources decline and transition towards domestic financing, which was deferred to a later session dedicated to this topic. PEPFAR deferred also a question on funding limitations for countries with sex work programmes not taking the anti-prostitution pledge.
ARV toxicity monitoring optimises treatment impact and generates evidence on key toxicity issues to guide ART policies and regimen choice. WHO recommends that countries use a standardized approach to integrate toxicity monitoring into national monitoring and evaluation systems, using a minimum set of indicators monitoring the magnitude of toxicities and their impact on treatment discontinuation. Approaches to toxicity monitoring include active toxicity surveillance at sentinel sites, nested active surveillance in existing patient monitoring of ART, PMTCT or PrEP cohorts, and a pregnancy registry for birth outcomes, maternal health and infant health.

HIV drug resistance (HIVDR) is a threat to country programme success, with greater ART failure among patients, increased transmission, and increased costs to shift to second and third line regimens. WHO is not recommending routine use of resistance testing for patient management, but surveillance at the population level which should be integrated into the national strategies. Surveillance will address whether first and second line, PrEP and PEP regimens will be effective to inform national policy. Research can be undertaken for questions not answerable by surveillance.

Early warning indicators (EWI), consisting of 8 quality of care indicators, are the foundation of HIVDR monitoring and do not require drug resistance testing. EWI reporting should be annual. Surveillance protocols, which involve resistance testing, include pre-treatment HIVDR (PDR), acquired HIVDR (ADR), and HIVDR in infants <18 months. Details can be found in the HIV Drug Resistance Surveillance guidance. Reference labs in Canada and Mexico provide HIVDR testing free of charge.

The EWI report for 2015 has been published and covers 59 countries, and show that globally, loss to follow-up is increasing over time and currently at 20% and VL suppression is only 19% (although this is more likely due to low coverage of VL testing, and viral load suppression should be higher among those who received VL tests). Virological failure is three times higher with HIVDR. Studies show higher levels of HIVDR today, up to 20% in some countries, and levels of NNRTI resistance are as high as 40%. WHO recommends that countries implement PDR. ADR results would help to adjust viral load suppression rates for those not retained in care. PDR and ADR can be combined and implemented every 3 years to save costs. HIVDR among children elsewhere show worrying high average resistance of
NNRTI at 55%, and goes up to 80% in some countries. HIVDR among children has not been conducted in this region and WHO recommends some countries to undertake this. Surveillance among key populations would be considered research to inform interventions.

The Global Action Plan (GAP) for HIVDR being drafted has 5 strategic objectives: surveillance, research and strengthened programme data, response, laboratory capacity, and enabling mechanisms. The GAP will be launched at the end of 2016 and will provide recommendations for the HIVDR threshold to trigger action in countries. The full cost of implementing the Action Plan only represents 0.03% of the investment needed in the HIV response. WHO recommends that countries build HIVDR in their antimicrobial resistance (AMR) strategies, using the GAP as the basis. All the messaging around AMR at the global level includes HIVDR. Countries completed a questionnaire on current surveys and challenges in implementing the GAP.

### 2.15 SUSTAINABLE FINANCING

In the WPRO region, HIV, Hepatitis and STI unit is working with Health Policy and Financing unit and other units to strengthen domestic financing and sustainability of priority public health programmes in the countries. Countries are transitioning from vertical HIV, TB, malaria funding to disease control systems that are supported by legal and regulatory framework. The analytical framework for sustainable financing mechanisms include review of health system architecture and context (governance, financing, and essential functions and services), programme mapping and prioritization and funding gap, coordination and integration possibilities and cost sharing.

UHC plays an important role in sustaining HIV response. The Kaiser/UNAIDS 2016 study estimated globally that $26.2 billion in HIV funding will be required for low- and middle-income countries by 2020, yet donors have reduced investment by more than $1 billion last year compared to 2014. There has been UHC scale up in Asia. Thailand has four insurance schemes, one of which enables migrants to register for health insurance covering ARVs. The Thai government pays for MMT, 2 HIV tests annually, ART, CD4 and VL and drug resistance, STI diagnosis and treatment for certain key populations, and TB and HCV treatment. Yet Thailand has yet to reflect in the UHC agenda in palliative care and key affected population community services, and stigma and discrimination is still a barrier to key
population access. Mongolia shared challenges and progress in transitioning to domestic financing and will have a transition plan by end of 2016.

Discussions covered the need for health system-wide approach for analysis and development of sustainable mechanism, involvement of all stakeholders including partners and communities in the process, seeking more efficient approaches, and domestic funding for prevention services currently provided by civil society and communities. GFATM is in proactive engagement with Ministries of Finance to increase funding for key elements in drug procurement and human resources and key population interventions.

2.16 COUNTRY PLANNING FOR IMPLEMENTING WHO GUIDELINES AND STRATEGIES

Using a template provided to each country group, countries developed adaptation and implementation plans and ranked their priorities for each guideline area. A summary of the plans were presented by region.

The majority of low rankings were for PrEP and PEP. The following explanations for low and moderate priority ratings were provided:

SEARO

Timor-Leste rated low priority for differentiated care because there is currently too low capacity which needs to be substantially improved before introducing more complicated, differentiated care. Also, there is no plan to conduct HIVDR surveys. There is need for support from WHO regional and country office, and guidelines will have to come in a phased approach. Partners clarified that differentiated care can help reduce costs.

Bhutan stated that the primary healthcare system is strong and reaching the population and can effectively take care of all patients, so HIV testing services by lay providers and differentiated care is not applicable.

India, Myanmar and Timor-Leste rated PrEP as low priority. For India, PrEP is low priority because there are other competing priorities. India will focus on community consultations and has differentiated care slightly different from the WHO guidelines. Indonesia wanted to ensure there is quality of care for existing services before introducing PrEP. Myanmar had a
funding gap and therefore needs to prioritize testing, ART and viral load testing over PrEP. Stigma and discrimination is too high in Timor-Leste in order to implement PrEP.

**WPRO**

China, Cambodia, Malaysia and Papua New Guinea again ranked PrEP as low priority. China currently has no budget for PrEP but will reconsider the issue after completing trials. Malaysia’s and Cambodia’s immediate concern is increasing coverage and getting people treated, and will need community consultation before moving ahead. Additionally for Malaysia, PrEP must first be cost effective. Cambodia needs a feasibility study before advocating for PrEP within the Ministry. For Papua New Guinea, PrEP must be consistent with key population services, which needs to be strengthened before adapting PrEP. Lao is interested in PrEP but prevalence is low, and is concerned that PrEP will result in low condom use given that STI is very high in Lao. Lao understands that PrEP must be provided in combination with condoms, there is concern that in practice those on PrEP will feel protected and not take other preventive measures.

Viet Nam and China ranked PEP as low priority because there are already PEP guidelines for occupational and sexual exposure and therefore need not focus on PEP policy development at this time. Likewise, Lao PDR and Papua New Guinea rated PEP low because the systems are already in place. Lao considers PEP very important and has included it in health systems for over ten years, but there has been very low PEP use and low report of sexual assault. Papua New Guinea provides PEP for sexual assault already.

Mongolia does not have capacity for pharmacovigilance because they do not yet know how to conduct pharmacovigilance. Lao PDR, Mongolia, Philippines, and Papua New Guinea all rated NCD low given low resources. The Philippines where there is high HCV, has low OST priority, although there may have been a misunderstanding that the pain killer being injected was not an opioid and will look into this.

**EMRO**

Lebanon, Pakistan and Sudan ranked PrEP low or moderate. For Pakistan, the main issue is low access to MSM, and reach need to be improved first before PrEP. Pakistan, Sudan and Oman rated NCD moderate. HIV testing services were moderate for Sudan.
**Support request summary**

The country plan template included country support needs. Funding and technical support needs were indicated across all program areas. Myanmar specifically requested assistance with awareness raising advocacy and mentoring to strengthen the lab system. Oman and Bhutan called for staff training support. China and Iran needed support for negotiating drug prices for their Treat All programs. Cambodia specified its requirement for a feasibility study on HIV self-testing and PrEP and monitoring tools for Treat All. Lebanon saw wide need for support by WHO, decision makers and universities for staff training, technical assistance, financial capability and social advocacy for all programmes. India’s support needs focused on training, especially with burden estimates. Papua New Guinea requests partner collaboration (with FHI, UNICEF and other organizations) to strengthen its PMTCT and paediatrics programmes. Philippines specified support needed for its transition plan, Treat All, feasibility studies, and high level advocacy on sensitive issues.
CONCLUSIONS AND RECOMMENDATIONS

3.1 CONCLUSIONS

Over four days, WHO and partners reviewed in-depth new and revised recommendations of the WHO consolidated guidelines. Clarifications on technical elements were provided, as well as exemplary examples from countries already implementing WHO guidelines. Bilateral, multi-lateral and international non-government organizations shared insights and implementation tools. Cutting across all issues with adaptation and implementation are the need for sustainable funding, particularly for community-based work. The countries developed initial country plans with commitments for policy adaptation and implementation. A separate session was held to share experiences on EMTCT and the validation process.

3.2 RECOMMENDATIONS

3.2.1 Recommendations for Member States

To achieve the Sustainable Development Goal of ending the AIDS and STI epidemics by 2030, Member States are encouraged to adapt and implement new WHO recommendations in the National approach, specifically by:

1) undertaking strategic and innovative approaches to identify those not yet diagnosed and support HIV testing services with quality laboratory services to achieve the first 90 global targets;

2) introducing pre-exposure prophylaxis (PrEP) for those in need;

3) adapting effective & efficient approaches to treatment and service delivery, including service delivery approaches for key populations, such as differentiated care, introduction of new ARV (DTG), scaling up routine viral load monitoring, managing co-infections & morbidities, and strengthening supply chain management to meet the second and third 90 global targets;
4) ensuring implementation of HIVDR surveys and integration to regional and national strategic plans and antimicrobial resistance initiatives to achieve the third 90 global target;

5) implementing 10 Global Indicators to monitor the HIV response, focusing on the cascade and patient monitoring and case-based surveillance using unique identifiers;

6) engaging and financially supporting community and civil society, especially as service delivery is decentralized; and

7) transitioning to sustainable HIV response through domestic financing, innovative approaches, and regional pooled procurement of commodities.

Immediate next steps recommended upon returning to the country were to further disseminate the new guidelines and recommendations with national programmes, technical working groups, and stakeholders using the slides set and materials provided. WHO country, regional and, if needed, headquarters and partners are available for support in moving forward the new agendas and recommendations.

3.2.2 Recommendations for WHO

WHO will:

1) provide technical support as requested by countries;

2) develop a platform for experience sharing across countries and regions, and link countries to the appropriate partners, in adapting and implementing new guidelines;

3) support countries in accessing tools and resources and further collaboration with partners; and

4) monitor progress of countries in adapting and implementing new guidelines.
ANNEXES
## ANNEX 1: COUNTRY IMPLEMENTATION PLANS

<table>
<thead>
<tr>
<th>Country</th>
<th>HTS services – Lay provider testing</th>
<th>Treat All</th>
<th>Differentiated care</th>
<th>New TB recommendations</th>
<th>Routine Viral Load scale-up</th>
<th>HIVDR survey</th>
<th>PMTCT</th>
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<th>NCD and HIV</th>
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### ANNEX 2: DAILY PROGRAMME

#### Day 1 (Monday, 8 August)

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<tr>
<th>Time</th>
<th>Session</th>
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<td>8:30 - 9:00</td>
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<tr>
<td>9:00-10:30</td>
<td><strong>Session 1: Opening/Introduction</strong></td>
<td><strong>Moderator:</strong> Razia Pendse</td>
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<tr>
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<td>1) Welcome remarks (5 min each)</td>
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<td>- WHO</td>
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<td>- PEPFAR</td>
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<td>- GF</td>
<td>Obinna Onyekwena</td>
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<td>- CSO</td>
<td>Shiba Phurailatpam</td>
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<td></td>
<td>2) Objectives and overview of programme (5 min)</td>
<td>Linh-Vi Le</td>
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<td>3) Introduction of participants (5 min)</td>
<td>Yu Dongbao</td>
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<td>Administrative announcement</td>
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<td>4) Overview of Global Health Sector Strategies for HIV, STI and hepatitis, guideline development process, link between guidelines, global priorities and implementation in countries (15 min)</td>
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<td>Plenary discussions (10 min)</td>
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<td>10:30-11:00</td>
<td>Break</td>
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<tr>
<td>11:00-12:30</td>
<td><strong>Session 2: TREAT ALL: When to Start and What to Use</strong></td>
<td><strong>Co-chairs:</strong> Zhao Yan, Obinna Onyekwena</td>
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<td></td>
<td>(Rationale to move to Treat All and implementation challenges – Adults, Adolescents and Children)</td>
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<td>Presentations:</td>
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<td></td>
<td>- When to Start ART in PLHIV (10 min)</td>
<td>Meg Doherty</td>
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<td></td>
<td>- What to Use in Adults, Adolescents, and Pregnant Women (10 min)</td>
<td>Meg Doherty</td>
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<td></td>
<td>- Country experiences (7 min each)</td>
<td>Salina Md Taib</td>
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<td>Malaysia</td>
<td>Sushil Kumar Shakya</td>
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<td>Nepal</td>
<td>Mostaf El Nakib</td>
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<td>Lebanon</td>
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<td>- Q&amp;A (10 min)</td>
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<td></td>
<td>Panel discussion (40 min)</td>
<td><strong>Moderator:</strong> Steve Mills</td>
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<tr>
<td>12:30-13:30</td>
<td>Lunch</td>
<td>Do Thi Nhan, Htun Nyunt Oo, Gaston Djomand, Obinna Onyekwena, Praphan Phanuphak, Vladanka Andreeva</td>
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<tr>
<td>13:30-15:00</td>
<td><strong>Session 3: Global STI strategy and new STI guidelines</strong>&lt;br&gt;Presentations:&lt;br&gt;  - WHO STI Global strategy and guideline for STI (20 min)&lt;br&gt;  - Country experience: (7 min each)&lt;br&gt;      Lao PDR&lt;br&gt;      India&lt;br&gt;  - Q&amp;A (10 min)&lt;br&gt;Panel Discussion (40 min)</td>
<td>Seif Al Abri, Wing Sie Cheng, Teodora Wi, Khanthanouvieng, Sayabounthavong, TLN Prasad</td>
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<td>15:00-15:30</td>
<td>Break</td>
<td>Kay Thi Win, Zayasaikhan Setsen, Pandup Tshering, Gaston Djomand,</td>
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<tr>
<td>15:30-19:30</td>
<td>EMTCT Side event</td>
<td>Katayoun Tayeri, Gaston Djomand, Naoko Ishikawa, Marta Abenia dos Santos,</td>
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<tr>
<td>19:30</td>
<td>Reception</td>
<td>Tarig Abdalla, Abdallrahim Elfadul, Zhao Yan</td>
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**Day 2 (Tuesday, 9 August)**

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<th>Time</th>
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<tr>
<td>8:30-10:00</td>
<td><strong>Session 4: HIV Testing Services (HTS)</strong>&lt;br&gt;Presentations:&lt;br&gt;  - WHO guidelines on HIV testing service (15 min)&lt;br&gt;  - Country experiences (7 min each):&lt;br&gt;      Timor-Leste&lt;br&gt;      Sudan&lt;br&gt;      China&lt;br&gt;  - Q&amp;A (10 min)</td>
<td>Katayoun Tayeri, Gaston Djomand, Naoko Ishikawa, Marta Abenia dos Santos, Tarig Abdalla, Abdallrahim Elfadul, Zhao Yan</td>
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</table>
Panel Discussions (40 min)

**Moderator:**
Massimo Ghidinelli

**Panellists:**
Ryan Figueiredo  
Ly Penh Sun  
Tarun Paudel  
Nittaya Phanuphak  
Vladanka Andreeva

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<tr>
<th>Time</th>
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<tr>
<td>10:00-10:30</td>
<td>Break</td>
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<tr>
<td>10:30-12:30</td>
<td><strong>Session 5: Pre-exposure prophylaxis</strong></td>
<td><strong>Co-chairs:</strong> Tarun Paudal, Nittaya Phanuphak</td>
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<td></td>
<td>Presentations:</td>
<td>B.B. Rewari</td>
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</table>
|               | 1. WHO guidelines on PrEP and implementation (15 min) | Rosario Jessica  
               | 2. Country and community experiences (7 min each): | Tactacan-Abrenica  
               | Philippines | Ryan Figueiredo  
               | APCOM        | Beena Kuttiparambil |
|               | 3. UNICEF Thailand PrEP Project for adolescent (10 min) |                                          |
|               | 4. Q&A (10 min)                            |                                          |
| 12:30-13:30   | Lunch                                      |                                          |
| 13:30-15:00   | **Session 6: TB/HIV/Hepatitis and other co-morbidities** | **Co-chairs:** Bounpheng Philavong, Thierry Roels |
|               | Presentations:                             | Meg Doherty                              |
|               | 1. Addressing HIV/TB/Hepatitis co-infections: (15 min) | Sovannarith Samreth  
               | 2. Country experiences (7 min each): | B.B. Rewari  
<pre><code>           | Cambodia | Mukta Sharma |
</code></pre>
<p>|               | India                                      |                                          |
|               | 3. Q&amp;A (10 min)                            |                                          |
| 15:00-15:30   | Break                                      |                                          |
| 15:30-16:30   | <strong>Session 7: PMTCT and Paediatric HIV</strong>    | <strong>Co-chairs:</strong> Ly Penh Sun, Annette Sohn  |
|               | Presentations:                             | Satvinder Singh                         |
|               | 1. What’s new in PMTCT: diagnosis, ARV for PMTCT, EID and infant feeding, etc. (15 min) | Zhao Yan |
|               | 2. Challenges for scaling up ART in children in China (10 min) |                                          |</p>
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<tr>
<th>Time</th>
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<tr>
<td>16:30-17:30</td>
<td><strong>Session 8: Strategic information – cascade, case-based surveillance and patient monitoring</strong>&lt;br&gt;Presentations:&lt;br&gt;- Consolidated Strategic Information: Framework to Use Data to Fill Gaps in 90,90,90 and Treat All (20 min)&lt;br&gt;Panel discussions (40 min)</td>
<td>Co-chairs: Tarig Abdalla Abdallahim Elfadul, Steve Mills&lt;br&gt;Michel Beusenberg &amp; Linh-Vi Le</td>
<td><strong>Moderator:</strong> Taoufik Bakkali&lt;br&gt;<strong>Panellists:</strong>&lt;br&gt;Htun Nyunt Oo, El Sheikh Abdalla Elsheikh Ali, Steve Mills&lt;br&gt;APN+</td>
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**Day 3 (Wednesday, 10 August)**

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<th>Time</th>
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<th>Moderator</th>
<th>Panellists</th>
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<tr>
<td>8:30-10:00</td>
<td><strong>Session 9: Supply Chain Management for HIV, TB and STI and Hepatitis</strong>&lt;br&gt;Presentations:&lt;br&gt;- PSM Operational Considerations for the revised ARV Guidelines (20 min)&lt;br&gt;- Challenges at country level (7 min each): India Cambodia Lebanon&lt;br&gt;- Q&amp;A (10 min)&lt;br&gt;Plenary discussions (40 min)</td>
<td>Co-chairs: Triya N. Dinihari, Obinna Onyekwena&lt;br&gt;Robert Ferris&lt;br&gt;B.B. Rewari&lt;br&gt;Ly Penh Sun&lt;br&gt;Mostaf El Nakib</td>
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<td>10:00-10:30</td>
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<td>10:30-12:30</td>
<td><strong>Session 10: Lab strategy, commodities and viral load scaling up</strong>&lt;br&gt;Presentations:&lt;br&gt;- Laboratory Diagnostics (15 min)&lt;br&gt;- Planning for Lab Capacity Building (15 min)&lt;br&gt;- Country experience (7 min each): Papua New Guinea Myanmar</td>
<td>Co-chairs: Umair Malik, Gaston Djomand&lt;br&gt;Meg Doherty&lt;br&gt;Wayne Dimench&lt;br&gt;Nick Mawe Dala&lt;br&gt;Htun Nyun Oo</td>
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<td>12:30-13:30</td>
<td>Lunch</td>
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<td>13:30-14:30</td>
<td><strong>Session 11: Partner Resources</strong></td>
<td><strong>Co-chairs:</strong> Meg Doherty, Vladanka IAS, MSF, PEPFAR, GFATM, IATT</td>
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<td>Partner brief overview (5 min)</td>
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<td>Materials sharing</td>
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<td>14:30-15:00</td>
<td><strong>Break</strong></td>
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<td>15:00-16:30</td>
<td><strong>Session 12: Service delivery (key population, task shifting)</strong> –</td>
<td><strong>Co-chairs:</strong> Thandar Lwin, Carol Langley</td>
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<tr>
<td></td>
<td>(Differentiated care models and service delivery)</td>
<td>Mukta Sharma</td>
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<td>Presentations:</td>
<td>Katayoun Tayeri</td>
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<td></td>
<td>- WHO consolidated guideline on service delivery (20 min)</td>
<td>Do Thi Nhan</td>
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<td></td>
<td>- Country experience (7 min)</td>
<td>Theinghi Aye</td>
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<td>Iran</td>
<td>Tara Mansell</td>
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<td>Viet Nam</td>
<td>Inad Rendon</td>
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<td></td>
<td>MSF experience</td>
<td>Ernest Noronha</td>
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<td>IAS</td>
<td>Tony Lisle</td>
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<td></td>
<td>New Guideline for Effective Programming for Gay Men in Asia</td>
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<td>Sharing of experiences : UNDP, UNAIDS</td>
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<td>Plenary discussion</td>
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<td><strong>Day 4 (Thursday, 11 August)</strong></td>
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<tr>
<td>8:30-10:30</td>
<td><strong>Session 13: Monitoring ARV Drug Toxicities and HIV Drug Resistance (e.g. adherence, VL, toxicity)</strong></td>
<td><strong>Co-chairs:</strong> Nguyen Quoc Thai, Hideki Miyamoto Yu Dongbao Silvia Bertagnolio</td>
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<td>Presentations:</td>
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<td>- ARV Toxicity Monitoring in the Treat All Agenda (15 min)</td>
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<td>- HIV DR Overview and key recommendations: HQ (15 min)</td>
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<td>- Global HIVDR action plan: HQ (15 min)</td>
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<td>Breakout group work (30 min)</td>
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<td>Plenary discussions (45 min)</td>
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<td>10:30-11:00</td>
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<tr>
<td>11:00-12:30</td>
<td><strong>Session 14: Sustainable financing mechanism for HIV program</strong></td>
<td>Regional experience: Western Pacific Region</td>
<td>Srinivas Tata, Michael Cassell</td>
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<td>UHC package and financing for HIV prevention and treatment (10 min)</td>
<td>Naoko Ishikawa</td>
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<td>Mongolia transition plan for HIV and TB program</td>
<td>Mukta Sharma</td>
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<td>Panel discussions (25 min)</td>
<td>Unurjargal Ayurzana</td>
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<td>12:30-13:30</td>
<td>Lunch</td>
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<td>13:30-15:15</td>
<td><strong>Session 15: Country planning for implementing Global Health Sector Strategies for HIV, STI and Hepatitis (e.g. prioritisation, costing and sequencing recommendations)</strong></td>
<td>Planning for country updating and adaptation of the WHO new guidelines and strategies, and introduction to country planning GW (15 min)</td>
<td>Yu Dongbao</td>
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<td>Individual country group work with partners (90 min)</td>
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<td>Break (please take during country planning)</td>
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<td>15:15-16:30</td>
<td>Group work feedback (45 min)</td>
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<td>16:30-17:00</td>
<td><strong>Closing: Conclusions, recommendations and way forward</strong></td>
<td></td>
<td>Meg Doherty</td>
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ANNEX 3: LIST OF PARTICIPANTS

Bangladesh

1. Prof. Dr Abul Khair Md. Shamsuzzaman
   Director, Disease Control and Line Director, Communicable Disease Control
   Directorate General of Health Services (DGHS)
   Mohakhali, Dhaka-1212
   Tele: 02 9880948
   Mobile: +88 01715 566084
   E-mail: zaman.tushar@gmail.com

2. Dr Belal Hosssain
   Assistant Director and Deputy Programme Manager
   National AIDS/STD Programme
   Directorate General of Health Services (DGHS)
   Mohakhali, Dhaka-1212
   Mobile: +88 01711894740
   E-mail: drbelalphossain4963@gmail.com

Bhutan

3. Dr Pandup Tshering
   Director
   Department of Public Health
   Ministry of Health
   Thimphu
   Tele: 17610512
   E-mail: ptsheing@health.gov.bt

4. Mr Namgay Tshering
   Program Officer
   Department of Public Health
   Ministry of Health, Thimphu
   Tele: 17743149
   E-mail: ntshering@health.gov.bt

5. Mr Chador Wangdi
   Program Officer
   National AIDS Control Program
   Department of Public Health, Thimphu
   Email: chador@health.gov.bt

Cambodia

6. Dr Sovannarith Samreth
   Chief, AIDS Care Unit
   National Center Dermatology
   Venerology and HIV/AIDS Control
   Phnom Penh
   Email: sovannarith@nchads.org

China

7. Dr Penh Sun Ly
   National Center for HIV/AIDS
   Dermatology and STD (NEHADS)
   No. 245 H, Street 6A
   Khan Chroy Changvar
   Phnom Penh
   Tele: 85523432040
   Email: penhsun@nchads.org

India

8. Dr Zhao Yan
   Vice Director of Division
   National Center for AIDS/STD Control and Prevention, Chinese CDC
   Beijing
   Email: Zhaoyan1973@sina.cn

9. Dr Wang Qian-Qiu
   Director, Department of STD Clinical Management
   Chinese Academy of Medical Sciences Institute of Dermatology, CAMS
   Nanjing
   Email: doctorwqq@163.com

Indonesia

10. Dr Kuldeep Singh Sachdeva
    Deputy Director-General (STI)
    National AIDS Control Organisation
    Department of Health and Family Welfare
    Chanderlok Building, 36, New Delhi – 110001
    Tel: 011-43509 600
    Email: drsachdevak@gmail.com

11. Dr T L N Prasad
    Technical Expert (STI)
    National AIDS Control Organisation
    Department of Health and Family Welfare
    Chanderlok Building, 36, New Delhi – 110001
    Tel: 011-43509 600
    Email: ellenturlapati1@gmail.com

12. Dr Triya Novita Dinihari
    Head of Section
    Sexual Transmitted Infections
    Directorate of Communicable Diseases Prevention and Control
    Ministry of Health
    Email: tndinihari@yahoo.com
13. Ms Victoria Indrawati  
Staff, Directorate of Communicable Diseases Prevention and Control  
Ministry of Health  
Email: victoria_indrawati@yahoo.com

**Islamic Republic of Iran**

14. Dr Katayoun Tayeri  
National HIV/AIDS Care and Treatment Consultant  
HIV and AIDS fellowship  
Iranian Research Center of HIV and AIDS  
Tehran University of Medical Sciences  
Ministry of Health and Medical Education  
Ministry of Health  
Tele: +982166581583/+982181455055  
E-mail: k.tayeri@gmail.com

15. Dr Behnam Farhoudi  
Member of National HIV/AIDS Care and Treatment Committee  
Ministry of Health  
Email: b_farhoudi@yahoo.com

**Lao PDR**

16. Dr Bounpheng Philavong  
Director  
National Centre for HIV/AIDS and STI  
Vientiane  
Email: pbounpheng@gmail.com

17. Dr Khantananouvieng Sayabounthavong  
Deputy Director  
National Centre for HIV/AIDS and STI  
Vientiane, Lao PDR

**Lebanon**

18. Dr Mostafa El Nakib  
National Programme Manager for HIV/STI  
Beirut Museum St Glass B  
Glass Building 4th  
Beirut  
Tele: +961 3 620435  
E-mail: docstevee@gmail.com

19. Dr Jacques Mokhbat  
LAUMCRH  
Zahar St, Achrafieh  
Beirut  
Tele: +961-2-200800

**Malaysia**

20. Dr Salina Md Taib  
Senior Assistant Director  
HIV/STI Sector  
Disease Control Division  
Ministry of Health Malaysia  
Tele: +60388834271/019-2190795  
Email: drmtsialina@moh.gov.my

21. Dr Suganthi Thevarajah  
Consultant Dermatologist  
Department of Dermatology  
Hospital Kuala Lumpur  
Tele: +6016-9176993  
Email: suganthi.thevarajah@gmail.com

**Mongolia**

22. Dr Zayasaikhan Setsen  
HIV/AIDS Clinician  
National Center for Communicable Disease  
Nam Yan Ju Street, Bayanzurkh district  
Ulaanbaatar  
Tele: (976) 11-458787  
E-mail: setsenzaya@gmail.com

**Myanmar**

23. Dr Thandar Lwin (Ms)  
Director (Disease Control)  
Department of Public Health  
Ministry of Health and Sports  
Republic of the Union of Myanmar  
Naypyitaw

24. Dr Htun Nyunt Oo (Mr)  
Deputy Director (HIV/STD)  
Department of Public Health  
Ministry of Health and Sports  
Republic of the Union of Myanmar  
Naypyitaw

**Nepal**

25. Dr Tarun Paudel  
Director  
National Centre for AIDA and STD Control  
Ministry of Health and Population  
Federal Democratic Republic of Nepal  
Kathmandu

26. Dr Sushil Kumar Shakya  
Consultant Medical Gernalist  
National Academy of Medical Science (NAMS)  
Ministry of Health and Population  
Federal Democratic Republic of Nepal  
Kathmandu

**Oman**

27. Dr Seif Al Abri
Director General for Disease Surveillance and Control
Ministry of Health
P.O.Box 2657, Muscat 111
Mobile: +968 99350255
E-mail: salabri@gmail.com

Papua New Guinea

28. Dr Nick Mawe Dala
   National Program Manager – STI/HIV
   Department of Health
   Waigini, Papua New Guinea
   Email: mnickdala@gmail.com

29. Dr Peniel Boas
   Specialist Medical Officer - STI/HIV
   Department of Health
   Waigani, Papua New Guinea
   Email: pjboas@gmail.com

Pakistan

30. Dr Umair Malik
   Treatment Coordinator National AIDS Control Programme
   Tele: 92 51-9255622
   Mobile: 92-3465311718
   E-mail: drumairmalik@gmail.com

31. Dr Tayyaba Rashid
   Treatment Coordinator HIV/STI
   Punjab
   Tele: 92-42-37802425
   Mobile: 92-303-4446565
   E-mail: tayyaba.rashidpacp@gmail.com

Philippines

32. Dr Rosario Jessica Tactacan-Abrenica
   Medical Specialist III
   San Lazaro Hospital
   Manila, Philippines
   Email: rtactacanabrenica@yahoo.com

33. Boel B.Espinas
   DOH-Regional Office VII
   Ogrnena Blvd., Sambag II, Cebu City
   Philippines

Sudan

34. Dr Tarig Abdalla Abdallrahim Elfadul
   Director
   Communicable and Noncommunicable Diseases Control Directorat
   Mobile: +249912307211
   E-mail: tarigabdallrahim@gmail.com

35. Dr Abdelmounem Eltayeib Abdo Gado
   Secretary, Sudanese Society of Gastroenterology
   Khartoum, Sudan
   Tele: +249123447744, +249912279856
   E-mail: munem2002@hotmail.com

Timor-Leste

36. Dr Marta Abenia dos Santos
   National HIV-AIDS Programme Manager
   Ministry of Health
   Democratic Republic of Timor-Leste
   Dili, Timor-Leste

37. Ms Ediana Tavares da Silva
   Monitoring and Evaluation Officer HIV-AIDS
   Ministry of Health
   Democratic Republic of Timor-Leste
   Dili, Timor-Leste

Viet Nam

38. Dr Do Thi Nhan
   Head, Treatment and Care Unit
   Vietnam Authority of HIV/AIDS Control
   Ministry of Health, Hanoi,
   Email: dothinhan@gmail.com

39. Dr Nguyen Quoc Thai
   Head, ICU - Infectious Disease/
   Department Head, Patient Safety
   Bach Mai Hospital
   Hanoi, Viet Nam
   Email: thai2vn@gmail.com

Partners and Institutions

40. Dr Wing Sie Cheng
   Regional Adviser, HIV and AIDS
   The United Nations Children's Emergency Fund
   East Asia and the Pacific Regional Office (UNICEF EAPRO)
   19 Phra Atit Road, Bangkok-10200,
   Thailand,
   Tele: +6623569464
   Email: wscheng@unicef.org

41. Dr Chris Hirabayashi
   Regional Adviser
   Child Survival and Development
   The United Nations Children's Emergency Fund (UNICEF EAPRO),
   19 Phra Atit Road, Bangkok-10200,
   Thailand
   Email: khirabayashi@unicef.org

42. Dr Kyoko Shimamoto
Regional MNCH Specialist
The United Nations Children's Emergency Fund
(UNICEF EAPRO)
19 Phra Atit Road, Bangkok-10200
Thailand
Email: kshimamot@unicef.org

43. Ms Beena Kuttiparambil
Chief of HIV and Adolescents Programme
The United Nations Children's Emergency Fund
19 Phra Atit Road, Bangkok 10200, Thailand
Email: kbeena@unicef.org

44. Ms Shirley Mark Prabhu
HIV/AIDS Specialist (Knowledge & Advocacy)
The United Nations Children's Emergency Fund
(UNICEF EAPRO), 19 Phra Atit Road
Bangkok-10200, Thailand
Email: smarkprabhu@unicef.org

45. Ms Lori Thorell
Regional ICT for HIV and Systems Strengthening
The United Nations Children's Emergency Fund
(UNICEF EAPRO), 19 Phra Atit Road
Bangkok-10200, Thailand
Email: lthorell@unicef.org

46. Dr Su Myat Lwin
HIV Specialist
The United Nations Children's Emergency Fund
23-A, Inya Myaing Road
Shwe Daung Gya Ward 2, Bahan Township
Yangon 11201, Myanmar
Email: smlwin@unicef.org

47. Dr Annefrida Kisesa-Mkusa
Regional Adviser (HIV and AIDS)
The United Nations Children's Emergency Fund
Regional Office for South Asia (ROSA)
P.O. Box 5815, Lenknhath Marg
Kathmandu, Nepal
Email: akisesa@unicef.org

48. Dr Birendra B Pradhan
HIV/AIDS Specialist-Health Section
United Nations Children's Emergency Fund
Regional Office for South Asia (ROSA)
Railway Station Road, P.O. Box 3015
Kathmandu, Nepal
Tel: 01-523200(ext.1206), 5203205(Res.)
Mobile: 9841328003
Email: bpradhan425@gmail.com

49. Dr M. Ziya Uddin
HIV/AIDS Specialist
United Nations Children's Emergency Fund
BSL Office Complex
1 Minto Road, Dhaka 1000
Tel: (880-2) 55668088 ext. 7016
Fax: (880-2) 9335641-42
Mobile: (880) 01711638255
Email: zuddin@unicef.org

50. Dr Frances Laisa Ledu Vulivuli
HIV/AIDS Programme Officer
UNICEF Office for Pacific Islands Countries
3rd floor, FDB Building
360 Victoria Parade, Suva, Fiji
Email: fvulivuli@unicef.org

51. Dr Thierry Roels
Director
Global AIDS Programme Thailand
Asia Regional Office
Thailand MOPH –US CDC Collaboration Center
Building 7, 5th Floor
Department of Disease Control
Ministry of Public Health
Nonthaburi, Thailand 11000
Tel: 662 580 0669
Fax: 662 591 2909
Email: thr6@cdc.gov

52. Mionelle Kim
Regional HIV Team Leader
United States Agency for International Development
Atheyee Tower, 25th Floor
63 Wireless Road, Lumpini, Pathumwan
Bangkok 10330
Email: mcassell@usaid.gov

53. Dr Robert Ferris
USAID-Office of HIV/AIDS
Chief, Division of Prevention Care & Treatment
Office of HIV/AIDS, USAID
1300 Pennsylvania Ave NW
Washington, DC 20004
United States of America
Email: rferris@usaid.gov

54. Dr Gaston Djomand
Medical Officer
HIV Prevention Branch
Division of Global HIV/AIDS and TB Center for Global Health
Center for Disease Control and Prevention

42
55. Dr Obinna Onyekwena  
Disease Advisor, HIV  
Technical Advice and Partnerships Department  
Strategy, Investment and Impact Division  
The Global Fund to Fight AIDS, Tuberculosis and Malaria  
Chemin de Blandonnet 8  
1214 Vernier-Geneva, Switzerland  
Tele: +41 58 791 1117; Fax: +41 58 791 1701  
Mobile: +41 79 275 0141  
Email: obinna.onyekwena@theglobalfund.org

56. Dr Vladanka Andreeva  
Strategic Intervention Adviser  
UNAIDS Regional Support Team for Asia and the Pacific  
Rajadamnern Nok Avenue  
Bangkok 102000, Thailand  
Email: andreevav@unaids.org

57. Dr Taoufik Bakkali  
Strategic Information Adviser  
UNAIDS Regional Support Team for Asia and the Pacific  
Rajadamnern Nok Avenue  
Bangkok 102000, Thailand  
Email: bakkalit@unaids.org

58. Tony Lisle  
Regional Programme Adviser  
UNAIDS Regional Support Team for Asia and the Pacific  
Rajadamnern Nok Avenue  
Bangkok 102000, Thailand

59. Maria Elena G. Filio-Burromeo  
UNAIDS Regional Support Team for Asia and the Pacific  
Rajadamnern Nok Avenue  
Bangkok 102000, Thailand

60. Aries Valeriano  
UNAIDS Regional Support Team for Asia and the Pacific  
Rajadamnern Nok Avenue  
Bangkok 102000, Thailand

61. Khin Cho Win Htin  
UNAIDS Regional Support Team for Asia and the Pacific

Rajadamnern Nok Avenue  
Bangkok 102000, Thailand

62. Ye Yu Shwe  
UNAIDS Regional Support Team for Asia and the Pacific  
Rajadamnern Nok Avenue  
Bangkok 102000, Thailand

63. Dr Rangsima Lolekha  
Chief of HIV Prevention and Care among Children, Adolescents and Family Section  
Global AIDS Program Thailand  
Bangkok, Thailand

64. Mr Shiba Phurailatpam  
Regional Coordinator  
Asia Pacific Network of Positive People  
51/2, 3rd & 4th floor Ruam Rudee Bldg.III  
Soi Ruam Rudee, Ploenchit Rd., Lumpini, Pathumwan,  
Bangkok 10330 Thailand  
Email: shiba@apnplus.org

65. Mr Ryan Figueiredo  
APCOM Secretariat  
66/1 Sukhumvit 2 Road, Klongtoey  
Bangkok 10110, Thailand  
Email: ryanf@apcom.org

66. Mr Shankar Silmula  
APCOM Secretariat  
66/1 Sukhumvit 2 Road, Klongtoey  
Bangkok 10110, Thailand  
Email: shankars@apcom.org

67. Dr Sureeporn Punpuing  
Director/Associate Professor  
Mahidol University  
Salaya, Phutthamonthon District  
Nakhon Pathom, Thailand  
Tele: (662) 441-0201-4, 441-9666  
Email: sureeporn.pun@mahidol.ac.th

68. Dr Annette H. Sohn  
TREAT Asia  
Exchange Tower  
388 Sukhumvit Road, Suite 2104  
Klongtoey, Bangkok 10110  
Office: +66 2 2663 7561; Fax: +66 2 2663 7562  
Email: annette.sohn@treatasia.org

69. Prof Praphan Panuphak  
Director  
The Thai Red Cross AIDS Research Centre  
104 Rajdamri Road,  
Bangkok 10330, Thailand
70. Mr Ernest Noronha  
Policy Analyst  
HIV Health and Development Asia-Pacific Regional Centre  
United Nations Development Programme  
3rd Floor United Nations Service Building  
Rajdamnern Nok Avenue, Bangkok 10200 Thailand  
Tel: +66 (0)2 304 9100 Ext. 5326  
Email: ernest.noronha@undp.org

71. Mr Srinivas Tata  
Chief  
Social Policy and Population Section  
Social Development Division  
United Nations ESCAP  
Bangkok 10200, Thailand  
Tel: 662-288-1667  
Email: tatas@un.org

72. Mr Tristram Price  
Associate Social Affairs Officer  
United Nations ESCAP  
Bangkok 10200, Thailand  
Tel: 662-288-1667  
Fax: 662-288-1030  
Email: price@un.org

73. Dr Napat Chitwarakorn  
Medical Physician, Pulmonologist  
WHO Collaborating Centre for Training and Research on HIV/AIDS  
Bamrasnaradura Infectious Diseases Institute  
Department of Disease Control  
Ministry of Public Health  
Bangkok, Thailand  
Tel: 66 831232585 (Mobile)  
Email: napatc@yahoo.com

74. Ms Natt Kraipet  
51 Sukhumvit 26 Alley  
Klong Tan, Klong Toei  
Bangkok 10110, Thailand  
Email: natt.aptn@gmail.com

75. Dr Carol Langley  
Senior Technical Advisor, Care and Treatment  
Office of the US Global AIDS Coordinator  
Washington, D.C.  
U.S. Department of State  
Tel: (202) 663-1651  
Email: LangleyCL@state.gov

76. Dr Sid Naing  
Country Director  
Marie Stopes Myanmar  
524/10, New University Avenue Road  
Saya San Ward, Bahan Township  
Yangon 11201, Myanmar  
Tel: +95-1-544-423  
Fax: +95-1-401-496  
Mob: 09-501-2478  
Email: sidnaing@gmail.com  
sidnaing@mariestopess.org.mm

77. Ms Tara Mansell  
Associate Project Manager  
HIV Programmes  
International AIDS Society  
Avenue de France 23, CH-1202  
Geneva, Switzerland  
Tel: +41 22 710 08 21  
Email: tara.mansell@iasociety.org

78. Ms Maria Lourdes S. Marin  
Coordinator  
Coalition of Asia Pacific Regional Networks on HIV and AIDS (7 sisters)  
420/1 Satharanasukwisit Building  
Mahidol University  
Ratchawithi Road, Phayathai  
Bangkok 10400, Thailand  
Tel: +662-354 8543  
Email: malu_7sisters@yahoo.com

79. Mr Jeffry Acaba  
Youth Lead  
75/12 Ocean Tower II, 15th Floor  
Soi Sukhumvit 19, Klong Toey Nua  
Wattana, Bangkok – 10110, Thailand  
Email: jpacaba@gmail.com

80. Ms R.D. Marte  
Executive Director  
Asia Pacific Council of AIDS Service Organizations (APCASO)  
70 Soi Muban Khlongtoei Niwet  
Khlong Toei, Bangkok10110, Thailand  
Email: rdmarte@apcaso.org

81. Ms Kay Thi Win  
Coordinator  
Asia Pacific Network of Sex Workers  
APNSW Secretariat Office  
75/12 Ocean Tower II, 15th Floor,  
Sukhumvit Soi 19, Klong Toey Nua,  
Wattana, Bangkok 10110, Thailand  
Email: secretariat@apnsw.info

82. Steve Maibel  
Asia Pacific Network of Sex Workers  
APNSW Secretariat Office  
75/12 Ocean Tower II, 15th Floor,  
Sukhumvit Soi 19, Klong Toey Nua,
Wattana, Bangkok 10110, Thailand

83. Nicolette Burrows
Asia Pacific Network of Sex Workers (APNSW)
75/12 Ocean Tower II, 15th Floor, Sukhumvit Soi 19, Klong Toey Nua, Wattana, Bangkok 10110, Thailand

84. Jonas Bahas
The Asia Pacific Council of AIDS Service Organisations (APCASO)
66/5, 33 Tower, Sukhumvit 33 Road, Klongtoey Nua, Wattana, Bangkok 10110, Thailand
Phone: +66 (0)2 044 8800

85. Dr Hein Hten Soe
Medecins Sans Frontieres (MSF) Holland
5/59, Ayeyadanar Street, Thirigon Villa Waizayandar Road, Thingangyun Tsp Yangon, Myanmar
Email: kachin-med-dep3@oca.msf.org

86. Dr Theingi Aye
5/59, Ayeyadanar Street, Thirigone Villa Waizayandar Road, Thomgangyun Tsp, Yangon, Myanmar
Tele: (and Fax) +95 (0)1 8551264,(0)1-1221308

87. Mr Wayne Dimech
General Manager
National Serology Reference Laboratory Victoria, Australia
Email: wayne@nrl.gov.au

88. Dr Charles George
Department of Microbiology
South Eastern Area Laboratory Services
The Prince of Wales Hospital
Australia
Email: Charles.George1@health.nsw.gov.au

89. Dr Hideki Miyamoto
Bureau of International Health Cooperation
National Center for Global Health and Medicine
Shinjuku-ku, Tokyo, Japan
Email: hmiyamoto@it.ncgm.go.jp

90. Dr Takeshi Nishijima
National Center for Global Health and Medicine AIDS Clinical Center
Shinjuku-ku, Tokyo, Japan
Email: tnishiji@acc.ncgm.go.jp

91. Dr Weiming Tang
UNC Project China
UNC Chapel Hill Institute for Global Health & Infectious Diseases
Guanzho, China
Email: weimingtangscience@gmail.com

WHO Secretariat Headquarters

92. Dr Meg Doherty
Coordinator - Treatment and Care (TAC)
Department of HIV and Global Hepatitis Programme
Building D, 4th Floor, room 45021
World Health Organization
20, Avenue Appia, 1211 Geneva 27, Switzerland
Tel: +41 (22) 791 3814
Mobile: +41 (79) 468 2803; Fax: +41 (22) 791 4834
Email: dohertym@who.int

93. Dr Michel Beusenberg
Information Officer
Department of HIV and Global Hepatitis Programme
World Health Organization
20, Avenue Appia, 1211 Geneva 27, Switzerland
Tel: +41 (22) 791 2384
Mobile: +41 (79) 302 75 73
Email: beusenbergm@who.int

94. Dr Satvinder (Vindi) Singh
Interagency Task Team for PMTCT and Paediatrics
HIV Department
World Health Organization
Building D, 4th floor, 20, avenue Appia
1211 Geneva, Switzerland
Tel: +41227914449
Mobile: +41792517368
Tele: singhv@who.int

95. Dr Silvia Bertagnolio
HIV Drug Resistance
Antiretroviral Treatment and HIV Care Unit
HIV Department
World Health Organization
20, Avenue Appia, 1211 Geneva 27, Switzerland
Tel: +41 (22) 791 3958
Mobile: +41 (79) 728 8078
Email: bertagnolios@who.int

96. Dr Teodora Elvira Wi
Medical Officer (STI)
Department of Reproductive Health and Research
World Health Organization
20, Avenue Appia, 1211 Geneva 27, Switzerland
Tele: +41 22 791 4575
Mobile: +41795965706
Email: wit@who.int

PAHO

97. Dr N Massimo Ghidinelli
Unit Chief, HIV, Hepatitis, Tuberculosis and Sexually Transmitted Infections
Department of Communicable Diseases
World Health Organization
Regional Office for the Americas
Pan American Sanitary Bureau
525, 23rd Street N.W, Washington
D.C.20037
U.S.A, Tele: +1 43614
Email: ghidinellim@paho.org

SEARO

98. Dr Razia Pendse
Regional Adviser HIV/STI/HEP
World Health Organization
Regional Office for South-East Asia
E-mail: sendsera@who.int

99. Dr Dongbao Yu
Technical Officer – Epid.
World Health Organization
Regional Office for South-East Asia
E-mail: yud@searo.who.int

100. Mr Sonam Wangdi
Junior Public Health Professional
World Health Organization
Regional Office for South-East Asia
E-mail: wangdis@who.int

101. Mr K.R. Raveendran
Admin Assistant– HIV/AIDS
Regional Office for South-East Asia
Email: raveendrank@who.int

SEA Country Offices

102. Dr Kamar Rezwan
National Professional Officer – VBD
WCO Bangladesh
Email: rezwank@who.int

103. Mr Ugyen Wangchuk
National Professional Officer
WCO Bhutan
Email: wangchuku@who.int

104. Dr B.B. Rewari
National Professional Officer-ART
WCO India
Email: rewarib@who.int

105. Dr Beatricia Iswari
National Professional Officer
WCO Indonesia
Email: iswarib@who.int

106. Dr Tiara Nisa
National Professional Officer
WCO Indonesia
Email: misat@who.int

107. Ms Phavady Bollen
Technical Officer-HIV/AIDS
WCO Myanmar
Email: bollenp@who.int

108. Dr Masami Fujita
Medical Officer (HIV/AIDS)
WCO Myanmar
Email: fujitam@who.int

109. Dr Nihal Singh
Medical Officer-Communicable Diseases
WCO Nepal
Email: singhn@who.int

110. Dr Mukta Sharma
Technical Officer, HIV/STIs and TB
WCO Thailand
Email: sharmamu@who.int

EMR

111. Dr Kutbuddin Kakar
National Professional Officer
HIV,TB, Malaria, NTDs & Global Fund
WHO Representative Office in Pakistan
NIH Premises Park Road, Chak Shahzad, Islamabad
Tele:(+5 GMT): +92 (0) 51 9255077
Mobile:+92(0)3008564097, 03005190935
E-mail: kakarqut@who.int

112. Dr El Sheikh Abdallah Elsheikh Ali
National Professional Officer, HIV/AIDS
WHO Representative Office in Sudan
Khartoum, Sudan
Tele: +249912333462.
E-mail: gliel@who.int
113. Dr Naoko Ishikawa  
Medical Officer - HIV Care and Treatment  
HIV, Hepatitis and STIs Unit  
WHO - Regional Office for the Western Pacific  
Email: ishikawan@who.int

114. Ms Linh-Vi Le  
Epidemiologist  
HIV, Hepatitis and STIs Unit  
WHO - Regional Office for the Western Pacific  
Email: leli@who.int

115. Dr Shinsuke Miyano  
Technical Officer – HIV, Hepatitis and STIs  
Communicable Disease Control Team  
WCO Papua New Guinea  
Email: miyanos@who.int