



## **Best practices in Tuberculosis and HIV/AIDS in SAARC**

**SAARC Tuberculosis and HIV/AIDS Centre**

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## Table of Contents

Foreword.....	iii
Abbreviations.....	iv
1. TB SITUATION IN THE SAARC REGION.....	1
2. BEST PRACTICES IN TUBERCULOSIS CONTROL PROGRAMME IN THE SAARC REGION....	4
AFGHANISTAN.....	5
BANGLADESH.....	7
BHUTAN.....	10
INDIA.....	12
MALDIVES.....	17
NEPAL.....	20
PAKISTAN.....	22
SRI-LANKA.....	24
3. HIV/AIDS SITUATION IN THE SAARC REGION.....	27
4. BEST PRACTICES IN HIV/AIDS CONTROL PROGRAMME IN THE SAARC REGION.....	29
AFGHANISTAN.....	30
BANGLADESH.....	32
BHUTAN.....	40
INDIA.....	43
MALDIVES.....	49
NEPAL.....	51
PAKISTAN.....	58
SRI-LANKA.....	62
<i>REFERENCES:</i> .....	66

## **Foreword**

It is accepted that Tuberculosis and HIV/AIDS are, globally, the major cause of communicable diseases related to mortality. Each disease has uniquely different prevention, treatment and control mechanism.

In spite of the remarkable global awareness on Tuberculosis and HIV/AIDS, still there is lot to be done to stop the Tuberculosis and HIV epidemic. There is an urgent need for more action to move towards the 2015 UN target to achieve Universal Access to prevention, treatment, care and support.

The SAARC TB & HIV/AIDS Centre has been coordinating the efforts of Member States in combating Tuberculosis and HIV/AIDS epidemic. Along with the other regular activities, STAC brings out reports and publications regularly in order to disseminate information related to TB and HIV/AIDS.

This document is prepared to provide information about best practices on treatment, care and support on Tuberculosis and HIV/AIDS in SAARC Member States. Best practices comprise examples of programmes, projects and activities that have been shown to contribute towards making interventions successful. We have made maximum efforts to focus on the detail information on the “Best Practices” and epidemiological information about Tuberculosis and HIV/AIDS situation in SAARC Member States.

STAC is grateful to SAARC Member States, UN Agencies and other International Stakeholders for their support.

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## Abbreviations

AAS	Ashar Alo Society
AHWs	Auxiliary Health Workers
AIDS	Acquired Immune Deficiency Syndrome
AIDS	Acquired Immuno - Deficiency Syndrome
ANC	Antenatal Clinic
APLHIV	Association of People Living with HIV
APN+	Asia Pacific Network of People Living with HIV/AIDS
ART	Antiretroviral Therapy
ART	Antiretroviral treatment
ARV	Anti-retroviral
ASHA	Accredited Social and Health Activists
BBDs	Blood Borne Diseases
BCC	Behaviour Change Communication
BPHS	Basic Package of Health Services
BPHS	Basic Package of Health Services
CAT-S	Community Access to HIV Treatment Care and Support Services
CCC	Community Care Centre
CDC	Centres for Disease Control and Prevention
CHBC	Community and Home Based care
CHBC	Community and Home Based Care
CLHIV	Children Living with HIV
CSO	Civil Society Organisation
CSO	Civil Society Organizations
CSOs	Civil Society Organizations
CTB	Child TB
CTC	Central Drug Addiction Treatment Centre
DMU	Drug Management Unit
DNC	Department of Narcotics Control
DOTS	Directly Observed Treatment Short course

DRS	Drug Resistance Surveillance
DR-TB	Drug Resistance Tuberculosis
DST	Drug Susceptibility Test
EIHS	Expanded integrated health services
EMPHASIS	Enhancing Mobile Population's Access to HIV & AIDS services, Information and Support
EPHS	Essential Package of Health Services
EQA	External Quality Assurance
eVT	Elimination of Vertical Transmission
EWIs	Early Warning Indicators
FATA	Federally Administered Tribal Areas
FCHVs	Female Community Health Volunteers
FDC	Fixed-dose combination
FGD	Focus Group Discussion
Fhi	Family Health International
FLD	Fibrotic Lung Disease
FP	Family Planning
FSW	Female Sex Worker
GDF	Global Drug Facility
GFATM	The Global Fund to Fight AIDS, Tuberculosis and Malaria
GIS	Geographical Information System
GLC	Green Light Committee
GNH	Gross National Happiness
HA	Health Assistant
HBV	Hepatitis B Virus
HCV	Hepatitis C Virus
HIV	Human Immunodeficiency Virus
HPA	Health Protection Agency
HRD	Human Resources Development
HSS	HIV Sentential Surveillance
HSWs	Hijra or transgender Sex Worker

IBBS	Integrated Biological Behavioral Surveillance Survey
icddr,b	International Centre for Diarrhoeal Disease, Bangladesh
IDUs	Injecting Drug Users
IEC	Information, Education and Communication
IEDCR	Institute of Epidemiology, Disease Control and Research and National Influenza Center
IOM	International Organization of Migration
IP	Impact Population
IvRS	Interactive voice Response System
KAB	Knowledge Attitude and Believe
KAPs	Key Affected Populations
KP	Key Population
LED	Light-Emitting Diode
LPA	Line Probe Assays
M&E	Monitoring & Evaluation
MARP	Most at Risk Population
MD	Doctor of Medicine
MDG	Millennium Development Goal
MDR	Multi-Drug Resistant
MLM	Male Labor Migrants
MMT	Methadone Maintenance Therapy
MOH	Ministry of Health
MoPH	Ministry of Public Health
MoU	Memorandum of Understanding
MRC	Migrant Resource Center
MSM	Men who have Sex with Men
MSWs	Male Sex Workers
NACO	National AIDS Control Organization
NACP	National AIDS Control Program
NASP	National AIDS/STD Program
NCASC	National Centre for AIDS and STD Control

NDRS	National Anti-TB Drug-resistance Survey
NFM	New Funding Model
NGO	Non-Governmental Organization
NHIP	Nepal HIV Investment Plan
NNCB	National Narcotics Control Board
NTP	National Tuberculosis Programme
OPMIS	Online Programme Management Information System
OST	Opioid Substitution Therapy
PAL	Practical Approach to Lung Health
PHC	Public Health Centre
PHI	Peripheral Health Institution
PHNS	Public Health Nursing Sister
PIMS	Patient Information Management System
PLHIV	People Living with HIV/AIDS
PMTCT	Prevention of Mother-to-Child Transmission
PPM	Public-Public and Public-Private Mix
PPP	Public-Private-Partnership
PSA	Public Service Announcement
PWIDs	People Who Inject Drugs
RNTCP	Revised National TB Control Programme
RTI	Reproductive Tract Infection
SAARC	South Asian Association for Regional Co-operation
SAARC	South Asian Association for Regional Cooperation
SBTC	State Blood Transfusion Council
SIM	Strategic Management Unit
SLD	Second Line Drug
SNRL	Supranational Reference Laboratory
SRs	Sub-Recipients (GFATM )
SSP	Saath-Saath Project
STI	Sexually Transmitted Infection
TANSACS	Tamil Nadu State AIDS Control Society

TasP	Treatment as Prevention
TB	Tuberculosis
TG	Transgender
UNAIDS	Joint United Nations Programme on HIV and AIDS
UNICEF	United Nations Children's Fund
UNODC	United Nations Office on Drugs and Crime
USAID	United States Agency for International Development
VCT	Voluntary Counseling and Testing
VDC	Village Development Committee
WHO	World Health Organization



## 1. TB SITUATION IN THE SAARC REGION

The SAARC region, with an estimated annual incidence of 3.1 million TB cases, carries 32% of the global burden of TB incidence. Four of the eight Member Countries in the Region are among the 22 high burden countries, with India accounting for 23 % of the world's TB cases. Among 3.1 million incident TB cases, 2.1 million are notified new and relapse cases.

**Table 01: Estimates of the burden of diseases caused by TB in the SAARC Region, 2014**

Country	Population ('000)	Incidence		Prevalence (Including HIV)		Mortality (Excluding HIV)	
		Number ('000)	Rate*	Number ('000)	Rate*	Number ('000)	Rate*
<b>Afghanistan</b>	32000	60	189	110	340	14	44
<b>Bangladesh</b>	159000	360	227	640	404	81	51
<b>Bhutan</b>	745 <sup>a</sup>	1 <sup>a</sup>	164	0.196 <sup>a</sup>	190	.072	12 <sup>a</sup>
<b>India</b>	1295000	2200	167	2500	195	220	17
<b>Maldives</b>	352	0.15	41	0.2	56	<0.01	2
<b>Nepal</b>	28000	44	158	60	215	4.9	17
<b>Pakistan <sup>a</sup></b>	185000	508	275	632	342	49	27
<b>Sri Lanka <sup>a</sup></b>	20571	13	66	21	103	1.2	5.9
<b>Total</b>	<b>1720668</b>	<b>3186</b>	<b>185</b>	<b>3963</b>	<b>230</b>	<b>370</b>	<b>22</b>

Source: <sup>a</sup> data and report sent by Member States, NTP and Global Tuberculosis Report 2015

\* Rates are per 100 000 population

### Notification, Case Detections and Treatment Success

A total 2166867 cases were notified in 2014 in the SAARC region. The overall case detection rate in the region in 2014 for all types of TB cases was 63 % (53 to 89%) and treatment success rate of 89% (84 to 93%) (Table 02).

**Table 02: Case detection (2014) and Treatment outcomes, New Smear - Positive cases (2013), SAARC Region**

Country	Population ('000)	Incidence		Notified New and Relapse	Case Detection, All forms (%)	Treatment Success (%)
		Number ('000)	Rate*			
Afghanistan	32000	60	189	31746	53	88
Bangladesh	159000	360	227	191166	53	93
Bhutan <sup>a</sup>	745	1	164	1080	85	91
India	1295000	2200	167	1609547	74	88
Maldives	352	0.15	41	131	89	84
Nepal	28000	44	158	35277	79	91
Pakistan <sup>a</sup>	185000	508	275	308417	62	93
Sri Lanka <sup>a</sup>	20571	13	66	9305	66	85
<b>Total</b>	<b>1720668</b>	<b>3186</b>	<b>185</b>	<b>2186669</b>	<b>69</b>	<b>89</b>

Source: <sup>a</sup> data and report sent by Member States, NTP and Global Tuberculosis Report 2015

\* Rates are per 100 000 population

The estimated population of SAARC region in year 2014 was 1.72 billion which 24% of global populations. In 2014, there were 3.1 million estimated incidence of TB cases, which carries 32% of global burden of TB diseases. However, the estimated prevalence of TB in the SAARC region was 3.9 million, which is 30% of global, also an estimated deaths due to TB in the region was 0.37 million, which is 33% of global deaths due to TB in year 2014.

**Table 03: Global vs. SAARC Region on TB Indicators, 2014**

TB Control Indicators	Global	SAARC	% of Global
Estimated Population	7.2 billion	1.72 billion	24
Estimated Incidence	9.6 million	3.1 million	32
	(133cases/100 000)	(185cases/100 000)	
Estimated Prevalence	13 million	3.9 million	30
	(174 cases/100 000)	(230 cases/100 000)	
Estimated Deaths Due to TB	1.5million	0.37 million	25
	(16 cases/100 000)	(22 cases/100 000)	
New all types TB Cases notified	6.3 million	2.1 million	33
Case Detection Rate all forms of TB	63%	68%	-

Treatment Success Rate (2011 cohort)	86%	89%	-
Case Enrolled on MDR-TB Treatment	0.11 million	--	--
HIV Positive in incident TB cases	1.2 million	44707	4

*Source: Data and report sent by Member States, NTP and Global TB Report WHO, 2015*

## **2. BEST PRACTICES IN TUBERCULOSIS CONTROL PROGRAMME IN THE SAARC REGION**

**AFGHANISTAN**

**MALDIVES**

**BANGLADESH**

**NEPAL**

**BHUTAN**

**PAKISTAN**

**INDIA**

**SRI LANKA**

## AFGHANISTAN

### Overview of Tuberculosis

WHO estimated approximately 60,000 all types of TB cases occurred in year 2014 with incidence of (189/ 100,000) population. The prevalence of TB is around 110,000 cases (340/ 100,000 pop per year) and mortality is 14,000 (44/ 100,000). The incidence of Multi-Drug Resistant (MDR) TB is derived from a sub national drug resistance survey conducted in six provinces of Afghanistan during 2010. As per WHO estimates around 750 new MDR-TB cases among notified pulmonary TB cases are present in the country by end of 2014.

Total 31746 cases were detected in 2014 (highest annual TB case notification so far in last decade). The progress is commendable because in 2001 only 9,581 cases were detected and from that point onwards, the trends shows increasing pattern except in 2008 and 2009 where a slight decline was seen in notified numbers as compared to previous year (2007). From 2010 onward, again the trends are upward. During 2012, 29578 all type of TB cases and 14277 of NNS+ TB cases have been notified. There have been variations in TB distribution by age and gender. There exists high incidence among people aged 15 to 44, with the highest incidence among the most productive age group of 25-34 years old. Among 31746 new and relapse cases 4454 (15%) cases aged less than 15 years. Male Female ratio is 0.7 in 2014.

### Best Practices in Tuberculosis Control Programme:

#### 1. Public-Public and Public-Private Mix (PPM)

PPM a substantial part of TB control strategy has been initiated since 2007 to engage private and non-BPHS & EPHS health facilities in TB care and services. So far NTP has engaged a considerable numbers of private physician and private hospitals and succeeded to involve some public health facilities out of BPHS & EPHS and non MoPH. Basically, there are two models; one is to form PPM-unit which mainly aims to involve private practitioners, private pharmacies, and private laboratories while other aims to involve PPM-DOTS in public.

NTP Involved 11 national hospitals for diagnosis and treatment of TB patients and for each Health Facility, NTP trained more than four people such as Medical Doctor, Nurse, lab

technician and pharmacists and 5 Hospital as referral centres in TB control Program where regular supervision and quarterly review meetings are conducted.

10 private Hospitals involved as diagnostic and treatment centres and trained more than four people such as MD, Nurse, lab technician and pharmacists. 12 Private Hospitals selected as referral centres. Regular supervision and QRM are conducted because these health facilities lie under Urban DOTS. PPM has been expanded to 9 Provinces.

## **2. Afghanistan STOP TB partnership support to strengthening Tuberculosis care and control**

National Stop TB Partnership was established in 2008 with Three sub-national partnerships were developed later with the objectives of the Stop TB Partnership include eliminating TB as a public health problem in Afghanistan. The partnership envisages that every TB patient in Afghanistan should have access to effective diagnosis, treatment, and cure. It supports wider implementation of the National Stop TB Strategy with an emphasis on advocacy communication and resource mobilization. The Stop TB Partnership in Afghanistan is working for the elimination of TB as a public health issue. Its vision is to eventually secure a TB-free Afghanistan.

## **3. WHO Support to Strengthening Tuberculosis Care and Control in Afghanistan**

Stop TB program at WHO Country office in Afghanistan is working with the National TB control Program (NTP) Ministry of Public Health to strengthen and consolidate the provision of comprehensive TB care in the country. The support provided by WHO is in line with the Global Stop TB Plan and the international MDG (6) targets

4. Revision of National Strategic Plan for year s of 2014-2018.
5. Proposal of anti TB drug & diagnostic kits has been approved by Japanese government (starting from 2015 up to 2017).
6. Establishing Culture facilities in National Reference laboratory and 2 Reference laboratories.
7. TB Cross Border Coordination launched between Afghanistan and Pakistan.
8. Conducted operational research on TB Gender, Accuracy of TB data.
9. Shifting of 8 month treatment regimes to 6 months regimes.

## **BANGLADESH**

### **Overview of Tuberculosis**

Bangladesh is among countries with the high burden of TB. The estimated prevalence and incidence rates of all forms of tuberculosis were 404 and 227 respectively per 100 000 population in 2014. Total 187005 notified new and relapse cases were detected, among the notified new and relapse cases 6262 (3%) cases aged less than 15 years. However male female ratio is 1.5 in 2014. The treatment success rate among new and relapse cases (all types) is above 90% since 2007, and it was 93% in 2013 cohort. As per WHO estimates around 2100 new MDR-TB cases among notified pulmonary TB cases are present in the country by end of 2014.

The number of peripheral laboratories performing smear microscopy has increased steadily over recent years, from 1072 in 2012 to 1089 in 2013, corresponding to 0.7 per 100 000 population, to provide greater access to TB diagnostic services. In 2013, as in the previous year, EQA was carried out for all microscopy laboratories, 94% of them showing acceptable performance. Following the WHO recommendation, NTP plans to gradually replace the light microscopes with LED to improve the capacity and quality of sputum microscopy. To support this national initiative, TB CARE II procured and distributed 200 LED microscopes in the country. To use the new microscopes, over 300 staff were trained on LED microscopy. The focus of the training is to update laboratory technicians' skills in sample collection, smearing and staining, microscopic examination by LED, smear evaluation, recording and reporting, supply management, quality assurance, preparation of reagents, preservation of microscopes, and troubleshooting.

In 2014, there were three accredited laboratories performing culture and DST for FLD; for two of them, EQA was carried out showing acceptable performance. One laboratory provides line probe assays (LPA) testing. Despite the number of culture and DST, capacity was tripled, compared to 2011. National coverage of culture and DST is still low, considering the size of the population (<0.1 laboratory per 5 million population).

Xpert MTB/RIF was first introduced in Bangladesh in March 2012 with the support of the TB CARE II project. Till December 2014, a total of 38 Xpert MTB/ RIF machines were functioning at different settings in the country, including six machines in Dhaka city.

The results of the first national DRS completed in 2012 confirmed a low proportion of new TB cases that have MDR-TB (1.4%, confidence intervals 0.7–2.5), but the proportion among retreated cases was revised upwards (29%, confidence intervals 24–34). The total number of estimated MDR-TB cases among notified cases in 2014 was 4800. Coverage of routine surveillance of drug resistance is still low.

Child TB (CTB) activities are progressing steadily in Bangladesh. National guidelines on CTB management have been published in 2012. With the support of TB CARE II project, NTP has involved the Bangladesh Paediatric Association in the TB Control Programme to train the doctors and HCW on CTB diagnosis and management in order to increase the case-detection rate of CTB in Bangladesh. The project started with development of two training modules followed by the facilitators' guide and training of district and sub-district level doctors including HCW. In 2013, TB cases among children of 0–14 years old represented 2.8% of all new TB cases detected, of which 13% were in the age group 0–4 years. Providing IPT to eligible children living in the families of active TB patients is part of NTP policy. About 2996 children were evaluated and 321 children registered for IPT; among the registered children, 78 completed the full course of prophylaxis in 2014.

### **Best Practices in Tuberculosis Control Programme:**

The revised NTP adopted the DOTS strategy during the Fourth Population and Health Plan (1992-98) under the project "Further Development of TB and Leprosy Control Services".

The Government of Bangladesh, together with its many and diverse partners from the public and private sectors, is committed to further intensify the DOTS program in order to sustain the achieved success and to reach the TB control targets linked to the Millennium Development Goals (MDGs).

The best practices are as follows:



- ❖ Revised Strategic Plan for National Tuberculosis Control Programme (2015–2020)
- ❖ National monitoring and evaluation plan for tuberculosis control (2011–2015) and MDR-TB expansion plan (2012–2017) published;
- ❖ Electronic registration of TB data using e-TB Manager software is running in 210 sites;
- ❖ Further expansion of public–private mix for TB control with involvement of Bangladesh knitwear manufacturers and exporters association to provide TB control services programme in knitting industries.
- ❖ Guidelines for community-based MDR-TB which has already been piloted in four sites of four districts with implementation support by the partner (TB CARE II);
- ❖ Two training modules on CTB developed, followed by facilitators’ guide and training of district and sub-district level doctors including HCW;
- ❖ First edition of national guidelines and operational manual on PAL at PHC level and participants’ module on PAL, Bangladesh and guidelines on PAL for nurse/HA/FWA/paramedics in Bangla published.
- ❖ TB infection control operational guidelines published;

## **BHUTAN**

### **Overview of Tuberculosis**

Bhutan had estimated TB prevalence and incidence rate of all forms of TB respectively of 190 and 164 per 100 000 population. Total 1066 notified new and relapse cases were detected, among the notified new and relapse cases 56 (5%) cases aged under 15 years. However male female ratio is 1.0 in 2014. The treatment success for the cohort of new smear-positive cases registered during 2013 was 91%; success rate is steadily equal to or above 90% since 2007. The TB control programme is fully integrated into the general health services with the majority of activities decentralized to the districts.

There are no representative data on levels of DR-TB in the country. Based on modeling, WHO estimated that 2.2% of newly diagnosed TB cases and 35% of retreatment cases have MDR-TB. DRS started in 2010 and is ongoing to better assess levels of DR-TB in the country; preliminary results suggest a higher drug resistance rate than WHO estimates. A total of 122 MDR-TB cases were diagnosed in 2014: of these, 61 had been laboratory confirmed. All 122 MDR-TB cases diagnosed had been enrolled on treatment. GLC approval for the management of MDR-TB cases has been obtained in 2009, guidelines for MDR-TB management have been finalized, medical doctors trained on MDR-TB management and SLD being procured through GDF/GLC. For the MDR-TB cohort of 2012, the treatment success rate was 100%.

In 2014, the LPA was established through GF support to speed up the diagnosis of MDR-TB. PHL has improved in providing results to the districts after the introduction of LPA. Through the support of the NFM grant, there is a plan to introduce Expert MTB/RIF machines in four district hospitals to improve the diagnosis of MDR-TB among various categories of patients.

### **Best Practices in Tuberculosis Control Programme:**

The TB Control Programme is fully integrated into the general health services with the majority of activities decentralized to the districts. The NTP has introduced fixed-dose combination drugs (FDCs), and has procured them through Global Drug Facility (GDF) replacing single drug formulations for first-line treatment for both adult and pediatric cases. Guidelines on

management of TB have been revised and trainings conducted for medical doctors involved in TB control activities. There is no representative data on levels of anti-TB drug resistance in the country. The Drug Resistance Surveillance is ongoing to better assess levels of drug-resistant TB in the country. However, based on modeling, it is estimated that 0.6% of newly diagnosed smear-positive TB cases have MDR-TB. The Public Health Laboratory (PHL) has been linked to the Regional Supranational Reference Laboratory in Bangkok, Thailand, and accredited for culture and first line DST. A comprehensive HRD master plan is in place in the HR Division of the Ministry of Health. The programme coordinates with the Human Resource Division at the central level on HR issues. There is strong collaboration between NTP and partners, including the military hospitals. All military hospitals are involved in delivering TB services. The National TB Control Programme is financially supported through the government and both Rounds 4 (up to end-2010) and 6 of the Global Fund.

The best practices are as follows:

- ❖ A guideline on TB/HIV collaboration was developed.
- ❖ GDF/GLC Mission conducted through support from WHO
- ❖ Established Liquid Culture & DST at the Public Health Laboratory to speed up the diagnosis of MDR-TB.
- ❖ Conducted Laboratory assessment visit by the SNRL
- ❖ Strengthened Laboratory capacity with the introduction of Liquid Culture and DST plus LPA facilities
- ❖ Follow up of patients strengthened using mobile technology
- ❖ Monitoring and supervision visits to the reporting centers
- ❖ Completed study on factors associated with development of MDR-TB in TB patients on DOTS

## INDIA

### Overview of Tuberculosis

Though India is the second-most populous country in the world one fourth of the global incident TB cases occur in India annually. In 2014, out of the estimated global annual incidence of 9.6 million TB cases, 2.2 million were estimated to have occurred in India. Tuberculosis incidence per lakh population has reduced from 216 in year 1990 to 167 in 2014. Tuberculosis prevalence per lakh population has reduced from 465 in year 1990 to 195 in 2014. In absolute numbers, prevalence has reduced from 40 lakhs to 25 lakhs annually. Tuberculosis mortality per lakh population has reduced from 38 in year 1990 to 17 in 2014. In absolute numbers, mortality due to TB has reduced from 3.3 lakhs to 2.2 lakhs annually.

India's TB control programme has achieved TB mortality rate in year 2013 and reducing by 55 % in year 2014 as compared to 1990 level. Similarly there is 58% reduction in TB prevalence rate by 2014 as compared to 1990 level.

India is one of the countries in the world with the highest burden of multidrug-resistant tuberculosis (MDR-TB). As per the WHO Global Report on Tuberculosis 2015, India accounts for 71,000 MDRTB cases. The key focus of RNTCP combating the challenge of drug resistance is to prevent its emergence by providing quality DOTS diagnostic and treatment services, increasing the visibility and reach of the programme services and promoting adherence to International Standards of TB care and Standards of TB Care in India by all healthcare providers.

The treatment outcome report is submitted 31-33 months after patients in the respective cohort are started treatment.

As per the Global Report on Tuberculosis 2013, there were an estimated 5,30,000 TB cases among children (under 15 years of age) and 74000 TB deaths (among HIV-negative children) in 2012 (6% and 8% of the global totals, respectively). It is one of the top 10 causes of childhood mortality. Though MDR-TB and XDRTB is documented among paediatric age group, there are no estimates of overall burden, chiefly because of diagnostic difficulties and exclusion of children in most of the drug resistance surveys.

RNTCP India is reporting the age wise case detection since beginning. The proportion of paediatric TB cases registered under RNTCP has been constant in the past five years and for 2014, 95709 new TB cases were notified accounting for 5% of all cases. This is in the range of the expected incidence by WHO report. However considering difficulties in diagnosis of paediatric TB under field condition, the notification rates can be further strengthened.

### **Best Practices in Tuberculosis Control Programme:**

#### **Standards for TB Care in India**

The gold standards for TB care in India were released on World TB Day 2014. This is India's bold step towards Universal access to quality TB care. On one side these standards propagate best practices in TB control in the private sector at the same time these also challenge the national TB program to raise the bar and provide highest quality TB care under the program. These standards envisages daily treatment regimen in high risk groups, DST-guided treatment regimen to tackle the menace of DR-TB, more patient friendly DOT systems including family DOT and ICT enabled support systems and psychosocial support systems, etc.

#### **DR-TB Counseling Project**

Launched in May 2014 in collaboration with Population Services International under Project Axshaya, this project provides facility and home based counseling to DR-TB patients across 28 locations districts with the help of 30 DR-TB counselors. The compliance and adherence related issues in the treatment of DRTB are being primarily addressed by counseling at every contact, capacity building of care providers and linkages with psychosocial support systems etc.

#### **Drug Sensitivity Testing (DST)-guided Treatment Regimen**

To improve the efficacy of treatment prevent augmentation of drug resistance due to effective monodrug therapies due to unknown resistance and improve treatment outcomes there was a felt need for DST-guided treatment regimen in the country. With support from WHO Country Office in India a workshop to build consensus on DST-guided treatment regimen a Workshop was conducted by Central TB Division. The consensus reached on graded offer of universal DST to

all presumptive MDR-TB cases with scientific regimens to address the issue of mono - and poly drug resistance shall be pilot tested at five locations during 2015-16 for operational feasibility, interim outcomes and scalability across the country.

### **National Anti-TB Drug-resistance Survey (NDRS)**

A national representative anti-TB drug survey was launched by Honorable Health and Family Welfare, Minister on 6th September 2014. This is first NDRS globally to test drug resistance to drugs other than Rifampicin and Isoniazid, being conducted in collaboration with CDC Atlanta, WCO-India and Supra National Reference Laboratory, Belgium. This survey is being conducted across 120 TB Units in the country. Each TB unit shall contribute 27 New Smear Positive and 17 Retreatment TB cases for 13 drugs DST. A total of 5,280 patient's sputum sample shall be tested at a National Reference Laboratory, NTI, Bangalore. This survey shall be completed by June 2015 and results shall be available by December 2015. The results shall guide RNTCP in formulating standardized regimens for a better public health initiative to confront DR-TB.

### **Fixed Dose Combinations and Daily Regimen**

The standards for TB care in India and all the international treatment guidelines envisages daily regimen for all TB cases. The National Expert Committee for Diagnosis and Management of TB has approved 100 district pilot for daily regimen with fixed dose combinations (FDCs) of 4 drug and 3 drug for Intensive phase and continuation phase, respectively. The FDCs shall be given in daily dosages. The pilot shall be conducted to demonstrate operational feasibility and benefits of daily DOT over alternate day. FDCs decrease the pill burden significantly thus improving the patient compliance and treatment outcomes. Both adult and pediatric FDCs shall be made available in single strength, double strength and dispersible formulations.

Some more best practices are as follows:

- ❖ Decentralized diagnosis through a network of more than 13 000 quality assured sputum microscopy laboratories; to ensure quality of sputum microscopy, EQA is being routinely conducted throughout the country as per a standardized protocol based on international guidelines (on site evaluation, panel testing and blinded crosschecking).

- ❖ Treatment services were decentralized through a network of more than 640 000 DOT centres/providers using patient-wise boxes both for adults and paediatric patients.
- ❖ Engagement of the new cadre of community-based accredited social and health activists (ASHA) was increasing.
- ❖ Successful involvement of 330 medical colleges, 2569 NGOs, 13 150 private practitioners and over 150 corporate sector health units was achieved.
- ❖ Revised RNTCP guidelines and schemes for involvement of NGOs and private providers in RNTCP activities was implemented.
- ❖ A national framework for TB-HIV collaborative activities was implemented nation-wide, with “intensified TB/HIV package” implemented in all 35 states.
- ❖ The programme has developed a case-based, web-based notification system (Nikshay).
- ❖ The Programme has developed protocol for diagnosis and treatment of non-MDR drug resistant TB in 2014 and will be implementing DST-guided treatment for such patients in 2015.
- ❖ A NACO-RNTCP-WHO collaborative project for intensified TB case-detection among PLHIV attending antiretroviral treatment (ART) centres was launched in 2014 with completion of training of trainers. Implementation in 30 ART centres in five southern states will start in early 2015. This project will use Xpert MTB/RIF for early TB diagnosis with necessary changes in diagnostic algorithm, use daily FDC anti-TB drugs, pilot isoniazid prophylaxis, implement AIDS information centres in ART centres and institute pharmaco-vigilance in these sites.
- ❖ In a workshop “TB-India Vision 2020”, RNTCP has developed strategies for intensified TB control activities for achieving 2020 TB targets.
- ❖ Mumbai launched a massive awareness campaign: “Mumbai Mission for TB Control Awareness campaign” with famous film star Mr Amitabh Bachchan as campaign ambassador.
- ❖ Universal access to free anti-TB drugs pilot projects launched in three sites, Patna in Bihar, Mehsana in Gujarat and Mumbai in Maharashtra.

- ❖ Under the GF Round 9 project, civil society organizations are undertaking activities in 374 districts across 23 states to enhance the visibility and reach of the programme and engage with communities and community-based care providers to improve TB care and control.
- ❖ During 2014, central internal evaluation of the programme performance and implementation status of RNTCP was conducted every month in two districts in a state on a one-to-one basis along with review of their activity plans to improve programme performance.



## MALDIVES

### Overview of Tuberculosis

Maldives had estimated TB prevalence and incidence rate of all forms of TB respectively of 56 and 41 per 100 000 population. Total 131 notified new and relapse cases were detected, among the notified new and relapse cases 14 (11%) cases aged less than 15 years. However male female ratio is 1.2 in 2014. Treatment success rate among new smear-positive cases was 84% for the cohort of patients registered in 2013. Treatment success rate is below the 85% target since 2007, mainly because of defaulters and non-evaluated cases.

The NTP of the Health Protection Agency (HPA) continues to act as a central body for registration, planning, monitoring and evaluation of the TB control activities since its establishment in 1976. In 2013, the NSP for TB control 2014– 2018 was developed. Continuous support has been received from WHO and from curative services both in the public and private sectors in the country, in TB case finding, treatment, record keeping, follow-up of TB patients and contact-tracing activities. In 2013, only two cases were reported by non-NTP public providers. All anti-TB drugs are available only through the government-run national TB control programme.

The main objectives of NTP are to effectively improve and strengthen TB preventive activities, in addition to diagnosis and treatment of TB cases. In this regard, establishment of critical infrastructure and HRD for intensified casefinding, early case detection and strengthening the microscopy network are critical. In Maldives, there were smear microscopy laboratories; EQA was not conducted for any laboratory. There is one culture facility in the country. DST, if deemed clinically necessary, is undertaken by shipment of samples to NTI, Bangalore, India, which is the designated SNRL for the country. MDR-TB patients are managed clinically at the Indira Gandhi Memorial Hospital in Malé, and treatment is based on individualized regimens. SLD for the management of these cases are procured by the Ministry of Health on a case-by-case basis through GDF. In 2013, six patients were tested for drug resistance but no RR/MDR-TB case was detected. Of the four MDR-TB cases enrolled on treatment in 2011, one completed the treatment, one was “lost to follow-up” and two died.

Available data suggest that TB is relatively uncommon in Maldives; HIV prevalence is estimated to be less than 0.01% in the adult population and TB/HIV is not a major problem yet. HIV testing for all TB patients who are above 15 years was initiated in December 2011.

### **Best Practices in Tuberculosis Control Programme:**

The NTP at the Centre for Community Health and Disease Control, Ministry of Health, Maldives is the central body for registration, planning, monitoring, training and evaluation of TB control activities. TB is a notifiable disease and DOTS remain the core element of the national TB control programme. Close coordination and collaboration with other health care institutions, especially private health care institutions, in diagnosing and accurately reporting identified cases has been established. All anti-TB drugs are available only through the government-run national TB control programme

The main objectives of the NTP are to effectively improve and strengthen TB prevention activities, in addition to diagnosis and treatment of TB cases. In this regard, establishment of critical infrastructure and human resource development for intensified case-finding, early case detection and strengthening the microscopy network are critical; currently there are 40 smear microscopy laboratories and one culture facility. At the same time, social mobilization for increased community involvement and utilization of available services and strengthening NTP management have also been identified as key areas.

The best practices are as follows:

- ❖ A draft national strategic plan for the control of TB in Maldives developed (2015-20)
- ❖ National guideline on “Practical Approach to Lung Health” developed.
- ❖ Direct observation for full course of treatment is in place due to the well functioning DOT centres at all health facilities.
- ❖ Diagnosis and treatment polices are in accordance with WHO guidelines. Quality assured, WHO-recommended FLD and SLD are purchased from GDF through ministry of health funds and provided free of charge to patients.
- ❖ Direct observation of the treatment for full course of treatment is in place due to the well-functioning DOT centres at all health facilities.

- ❖ Screening of all HIV-positive cases for active TB is in place in collaboration with the HIV programme since 2003 and all TB-positive cases for HIV began treatment from 1 December 2011 onwards.

## NEPAL

### Overview of Tuberculosis

World Health Organization estimated TB prevalence and incidence rate of all forms of TB respectively 215 and 158 per 100 000 populations. With the introduction of Directly Observed Treatment Short course (DOTS) number of deaths has dramatically reduced from 9,712 (51/100 000) in 1990 to (17/100 000) in 2014. Total 35277 notified new and relapse cases were detected, among the notified new and relapse cases 345 (<1%) cases aged under 15 years. Male Female ratio is 1.8 in 2014. Treatment success rate among new smear-positive cases was 91% for the cohort of patients registered in 2013, and has been consistently above the target of 85% since 2001. The success rate among new smear-negative/extra pulmonary and retreatment cases is high.

The percentage of TB cases with MDR-TB 2.2% and retreatment cases was 15% in 2014. However, total MDR-TB burden in the country was 1160. National TB Programme has undertaken four national surveys in Nepal as part of the WHO/ IUATLD Global Project on Anti-Tuberculosis Drug Resistance Surveillance. The first survey, in 1996, showed a prevalence of multi drug-resistance (resistance to at least Rifampicin and Isoniazid) around 1.2% among patients never previously treated for tuberculosis. Similarly Drug Resistance prevalence was 3.8% in 1998, 1.3% in 2001 and 2.9% in 2006 and 2.2 in 2010. Nepal was one of the first countries globally to introduce ambulatory MDR-TB case management in 2005 diagnosing and treating Category II failures and other laboratory-confirmed MDR-TB cases under a GLC approved project.

Tuberculosis control is identified as a top priority programme within the Ministry of Health and Population. NTP's plan and budget are aligned with the national health sector development plan and the NSP for 2015–2020 is being developed, incorporating recommendations of the programme review done in 2013. NTP has several fully dedicated staff at central, regional and district levels. In addition, a programme management unit was set up in 2009 at NTC to help with planning, implementation and monitoring of activities supported by GF. Full DOTS institutional coverage was reached in the primary health system, including 100% coverage in PHC centres, health posts, and sub-health posts in the country. Decentralization of services,

outreach projects and strong community involvement are contributing significantly to increase case-detection and access to TB diagnosis and treatment. To better assess impact of community engagement the current R&R system of NTP is being amended in order to capture the contribution of the community; information will be available in the 2015 annual report.

The best practices are as follows:

- ❖ Revision of national DR-TB management manual
- ❖ Revision of NTP general manual (with introduction of CTB management section);
- ❖ Development of infection control policy and strategy;
- ❖ Uninterrupted supply of first and second-line and paediatric QA TB medicines through GDF;
- ❖ Expansion of Xpert technology in several districts and development of national algorithms for their use;
- ❖ collaboration with the National Centre for AIDS & STD Control to implement IPT in ART clinics and conducting evaluation;
- ❖ Kick-started intensified case-finding addressed to various marginalized and vulnerable groups (contacts, HIV-infected, slum dwellers, migrants, prisoners, residents of mountainous districts, etc.);
  
- ❖ Introduction of community DOTS in 11 districts;
- ❖ Establishment of DR-home with enhanced services – DOTS, availability of in-house 24/7 medical services;
- ❖ Enhancing active case detection by door-to-door mobilization of mothers' groups; and Conducted microscopic camps in all the districts.
- ❖ Organized TB orientation programme for parliament members
- ❖ Providing hostels for MDR-TB Patients

## PAKISTAN

### Overview of Tuberculosis

TB is still a major development challenge for Pakistan. It ranks 5<sup>th</sup> amongst the 22 HBCs and 4<sup>th</sup> among 27 MDR high burden countries in the world. According to national prevalence survey results, the incidence of ‘all type’ TB cases in Pakistan is 275/100,000 per year or around 508782 new cases each year. The prevalence of the disease is much higher and is estimated at 342/100,000 population or 632740 cases. Total 308417 notified new and relapse cases were detected, among the notified new and relapse cases 27245 (9%) cases aged under 15 years. Male Female ratio is 1.0 in 2014. Treatment success rate among new smear-positive cases was 93% for the cohort of patients registered in 2013. The mortality rate was 27/100,000 in 2014.

According to WHO estimates, there were around 9900 (6400-13000) MDR-TB cases amongst new pulmonary TB cases and 3100 (2200-4000) amongst retreatment cases, notified in 2014 as per WHO, Global Tuberculosis Report 2015, (4.3% and 19% in New and retreatment cases, respectively).

### Best Practices in Tuberculosis Control Programme:

- **Drug Management Guidelines**

The Drug management unit with the support of MSH has developed 1<sup>st</sup> line and 2<sup>nd</sup> Line Anti TB Drug management guidelines and dispensing Manual for managing TB drugs, their selection, quantification, procurement, storage, distribution and usage across the supply chain.

### Upgradation/Refurbishment of Warehouses

One of the main indicators of Global Fund Round 8 is the upgradation/refurbishment of warehouses at national/ provincial/ regional/ district level for the appropriate drug storage throughout the country. This challenging task was completed and now all the districts TB stores and provincial warehouse has been uniformly upgraded/ refurbished across the country.

- **TB Drug Management & Regulation Committee notification**

A TB Drug Management & Regulation committee has been notified by the then ministry of health to manage and regulate TB Drugs related affairs where participation of all important stakeholders has been ensured. The Drug Management Unit (DMU) organized a meeting of the committee to discuss WHO Prequalification criteria, their BA/BE status and its enrollment. Various institutions for performing BA/BE analysis studies are identified and the program is giving its technical support to accredit these centers and built local capacity in the country.

Following are the best practices:

- ❖ Development of National Media Strategy
- ❖ Development of National M&E Framework
- ❖ Development of Dispensing Guidelines & Manuals for First-line and Second-line anti-TB drugs
- ❖ National Guidelines for Diagnosis and Management of Tuberculosis in Pakistan (January 2015) has been revised
- ❖ Global strategy and targets for tuberculosis prevention, care and control after 2015 has been published.
- ❖ Desk guide for Doctors (Revised: February 2015)
- ❖ Training Module for Doctors (Revised: February 2015)
- ❖ Revised Recording & Reporting Tools of NTP Pakistan
- ❖ Development of National Guidelines for the Control of Tuberculosis in Pakistan.
- ❖ Successful Round 8 Phase 2 Approval-The R8 /DMU achievement are significant and above 90 % in all indicators during grant phase 1 and has achieved A 1 rating in phase 1 accordingly phase 2 was approved.

## **SRI-LANKA**

### **Overview of Tuberculosis**

Sri Lanka is among the low TB prevalence countries in the Region. The estimated prevalence and incidence rates of all forms of tuberculosis were 103 and 66 respectively per 100 000 population, in 2014. The notification rate of all new and relapse TB cases (all types) and new bacteriologically confirmed cases were 44 and 21 respectively per 100 000 population; while the notification of laboratory confirmed cases is fairly stable over time, the notification of clinically diagnosed cases in 2012–2013 was lower than in the period 2006–2011, despite there being no downscaling of NTP activities. An innovative case-finding strategy is being implemented through TB/ diabetes collaborative activities; the pilot phase has been completed, but data are yet to be analysed. It is planned to conduct sensitization programmes for health staff working in diabetes clinics throughout the country. Mass screening in prisons, including the largest prison in Colombo district, has been conducted.

As per Global Report 2015, total 8980 notified new and relapse cases were detected, among the notified new and relapse cases 313 (3%) cases aged under 15 years. However male female ratio is 1:9 in 2014. Sri Lanka reached and has sustained the target of 85% treatment success rate among all new TB cases since 2004; the success rate was 85% for the cohort of patients registered in 2013. In the same cohort, the success rate was 62% for retreatment TB cases.

A national DRS was completed in 2006, and this confirmed the very low levels of drug resistance: resistance to any drug was 1.4% among new patients and 8.8% among previously treated cases in the country; the prevalence of MDR-TB was 0.17% (1 out of 595 isolates). The protocol for a repeated DRS has been developed with the technical assistance of WHO. The planned DRS to be conducted funded through GF NFM interim funding. Culture and DST is to be performed for all patients who fail initial anti-TB treatment regimens, at the time of initiation of treatment for all sputum smear-negative TB patients, patients commencing retreatment regimens, contacts of MDR-TB cases, health-care workers, HIV-infected TB cases, migrants, drug addicts and prisoners.



In 2014, testing for drug resistance was very high among retreatment cases (147%) and increased to 28% among new cases. Only three MDR-TB cases and one RR-TB case were detected in 2013; all of them were started on treatment. The programme initiated MDR-TB case management under r-GLC approval with support through GF in 2010. MDR-TB is diagnosed at the NRL which is supported by the SNRL at NIRT, Chennai, India. Patients are treated initially at the National Hospital of Respiratory Diseases; afterwards they are referred for continuation of treatment at the chest clinics in their respective districts. National guidelines for the management of MDR-TB have been developed. The cohort of MDR-TB patients started on treatment in 2011 includes only six patients: five were cured or completed treatment and one died.

### **Best Practices in Tuberculosis Control Programme:**

Following are the example of best practices in Sri Lanka in TB control programme.

- ❖ The National Strategic Plan for TB Control was revised for the period of 2015-2020 in accordance with the WHO post 2015 strategy.
- ❖ Strengthening active case detection among high-risk categories such as prisoners, drug addicts, estate population.
- ❖ Strengthening collaboration between non-NTP public care providers and private care providers.
- ❖ Completion of upgrading National TB Reference Laboratory to Bio safety level 3.
- ❖ Integration of TB surveillance and control activities into the primary health care settings(Medical Officer of Health System)
- ❖ Further expansion of service coverage by Consultant Respiratory Physicians.
- ❖ Implementing TB infection control activities in chest clinics;
- ❖ Improvement of management of MDR-TB through establishment of site committees for each MDR-TB patients which provided opportunity to address social and economic aspects other than clinical management.
- ❖ A Joint Monitoring Mission was held to review the TB Control activities in Sri Lanka.
- ❖ Reorganization of TB control activities in Colombo District by establishing two sub chest clinics.
- ❖ A survey to determine the prevalence of TB among young people completed.

- ❖ SAARC Workshop on Experiences and Best Practices on Pediatric TB/TB-Diabetes-Colombo, Sri-Lanka was conducted by SAARC TB and HIV/AIDS Centre in year 2014

### 3. HIV/AIDS SITUATION IN THE SAARC REGION

HIV epidemic in SAARC region is also a collection of diverse epidemics in countries, provinces & districts. HIV/AIDS continues to be a major public health problem in the SAARC Region. All eight Member States of the SAARC region are designated as low prevalence countries. On the basis of latest available information this region is home for an estimated number of 2.24 million HIV infected people and 0.15 million AIDS deaths in 2014. Table 04 shows the estimated number of People Living with HIV (PLHIV) in eight Member States of the SAARC Region in the year 2014. Three countries, namely India, Nepal and Pakistan account for majority of the regional burden. The first HIV infected persons were diagnosed in 1986 in India and Pakistan. By 1993, all SAARC Member States had reported the existence of HIV infection in their countries.

**Table 04: Adult HIV Prevalence Rates and Estimated Number of PLHIV in SAARC Region, 2014**

<i>Country</i>	<i>Estimated No. of PLHA</i>	<i>Estimated New HIV infection in 2014(all ages)</i>	<i>HIV Prevalence Rate (%)</i>	<i>Number of AIDS Deaths</i>	<i>First HIV Positive Case Detected (Year)</i>
<b>Afghanistan</b>	<b>6700</b>	<b>&lt; 1000</b>	<b>&lt; 0.1</b>	<b>&lt;500</b>	<b>1989</b>
<b>Bangladesh</b>	<b>8900</b>	<b>1000</b>	<b>&lt; 0.1</b>	<b>&lt; 1000</b>	<b>1989</b>
<b>Bhutan**</b>	<b>1000</b>	<b>&lt;100</b>	<b>0.1</b>	<b>&lt;100</b>	<b>1993</b>
<b>India*</b>	<b>2.09 million</b>	<b>0.12 million</b>	<b>0.27</b>	<b>0.14 million</b>	<b>1986</b>
<b>Maldives**</b>	<b>&lt;100</b>	<b>&lt;100</b>	<b>&lt;0.1</b>	<b>&lt;100</b>	<b>1991</b>
<b>Nepal</b>	<b>39249</b>	<b>1493</b>	<b>0.2</b>	<b>2576</b>	<b>1988</b>
<b>Pakistan</b>	<b>94000</b>	<b>20000</b>	<b>&lt; 0.1</b>	<b>2800</b>	<b>1986</b>
<b>Sri- Lanka</b>	<b>3300</b>	<b>&lt; 500</b>	<b>&lt; 0.1</b>	<b>&lt;200</b>	<b>1987</b>
<b>Regional</b>	<b>2.24 million</b>	<b>0.14 million</b>		<b>0.15 million</b>	

*Source: UNAIDS report "How AIDS Changed everything"-2015\* Annual Report 2014-15, NACO, India (data of 2011)\*\* SAARC Epidemiological Response on HIV/AIDS-2014*

The overall adult HIV prevalence in SAARC region remains below 1%. However, there are important variations existing between countries. Bangladesh, India, Nepal and Pakistan have

reported concentrated epidemics among the key affected populations. Of the estimated number of 2.24 million PLHIV in SAARC region, 2.09 million were living in India in 2014.

**Table 05: Estimated number of adults and children receiving and needing antiretroviral therapy, and coverage, 2014**

Country	Estimated number of People needing ART( WHO 2013 Guidelines)*	Reported number of adults on ART	Estimated adults ART coverage (%)	Number of Children (0-14 years) on ART
<b>Afghanistan</b>	<b>3900</b>	<b>281</b>	<b>4</b>	<b>16</b>
<b>Bangladesh</b>	<b>7100</b>	<b>1287</b>	<b>14</b>	<b>79</b>
<b>Bhutan</b>	<b>&lt;1000</b>	<b>167</b>	<b>21</b>	<b>10</b>
<b>India</b>	<b>1900000</b>	<b>765747</b>	<b>36</b>	<b>45546</b>
<b>Maldives</b>	<b>&lt;100</b>	<b>5</b>	<b>19</b>	<b>NA</b>
<b>Nepal</b>	<b>50000</b>	<b>11089</b>	<b>41</b>	<b>783</b>
<b>Pakistan</b>	<b>85000</b>	<b>5019</b>	<b>5</b>	<b>102</b>
<b>Sri Lanka</b>	<b>2700</b>	<b>605</b>	<b>19</b>	<b>34</b>
<b>Regional</b>	<b>2048700</b>	<b>784200</b>	<b>38</b>	<b>46570</b>

*Source: UNAIDS report “How AIDS Changed everything”-2015, \* UNAIDS Report on the Global AIDS Epidemic -2013*

On the basis of latest available information (UNAIDS report “How AIDS Changed everything”-2015), this region has 2.04 million estimated numbers of adults needing ART while in the region 0.78 million reported number of adults and 46570 numbers of children on ART in 2014. Table 03 shows three countries, namely India, Nepal and Pakistan account for majority of the regional burden.

#### **4. BEST PRACTICES IN HIV/AIDS CONTROL PROGRAMME IN THE SAARC REGION**

**AFGHANISTAN**

**MALDIVES**

**BANGLADESH**

**NEPAL**

**BHUTAN**

**PAKISTAN**

**INDIA**

**SRI LANKA**

## AFGHANISTAN

### **Overview of the HIV/AIDS epidemic**

Based on available data HIV epidemic in Afghanistan seems to be low and step to concentrated, this means that HIV affected mainly PWIDs among key population at higher risk of contracting HIV. The recent Integrated Biological Behavioral Surveillance Survey (IBBS) in 2012 shows an overall 4.4% of HIV prevalence among PWIDs. This prevalence is varied from minimum 0.3% among PWIDs in Mazar city to maximum up to 13.3 percent in Herat city. The study also found 0.3%, 0.4% and 0.7% among Female Sex Worker (FSW), Men who have Sex with Men (MSM) and Prisoner respectively.

A total 6700 estimated Number of People Living with HIV/AIDS (PLHIV) in the country. However a cumulative number of 1694 HIV infections were reported to the National AIDS Control Program at the end of year 2014

### **Best practices on HIV/AIDS Control Programme**

The National AIDS Control Program (NACP) established in 2003 which, under the leadership of the Ministry of Public Health (MoPH), plays a coordination and management role. Since then, the national response has focused on provision of targeted services for Key Affected Populations, vulnerable populations, and general population. With the support of key international donors and development agencies, the country has taken a multisectoral approach to the HIV response in order to arrest HIV transmission from further spread in the community. The HIV epidemic has evolved in the past decade to a concentrated stage among Key Affected Populations in Afghanistan. Throughout this period, the following best practices are to be noted:

Harm reduction package to PWID include the distribution of safe injecting kits, collection of used needles and syringes, syndromic management of STIs, counseling for Blood Borne Diseases (BBDs) including VCT for HIV, HCV and HBV testing, condom promotion, primary health care and abscess management, overdose management, referral for TB services, referral to ART, as well as social services like hygiene kits and nutrition in the community as well as in the

prisons including male and female in the nine provinces (Kabul, Hirat, Balkh, Nangarhar, Badakhshan, Kunduz, Kandahar, Ghazni and Parwan).

Advocacy project on integration of HIV and reproductive health services through BPHS setting and approach funded by European Commission implemented during the reported period Jan, 2011 to end of 2013. The project is also addresses the unmet need and rights of women and men living with HIV/AIDS to reproductive health services which improved access to RH and HIV services especially for women, young people, people living with HIV and marginalized groups.

Integrated Biological Behavioral Survey (IBBS) second round has been conducted in the five cities among the following key populations:

- PWID in Kabul, Hirat, Mazar, Jalalabad and Charikar.
- FSW in Kabul, Hirat and Mazar.
- MSM in Kabul
- Prisoners in Kabul and Hirat prison
- RTW in Torkham border site

Second round of knowledge attitude and believe (KAB) regarding HIV and AIDS among policy makers in Kabul, Rapid assessment of PWID in Western provinces (Hirat, Farah and Nimroz) and OST evaluation are the other studies conducted during the reporting period.

## **BANGLADESH**

### **Overview of the HIV/AIDS epidemic**

Prevention efforts in Bangladesh had been initiated much before the first HIV case was detected in 1989, till date data has indicated that Bangladesh is containing the HIV epidemic. Due to reportedly low prevalence there is no comprehensive national study to measure the prevalence of HIV among the general population, however, it is considered to be less than 0.1 percent. In all of the nine HIV Serological Surveillance rounds conducted till date (Round 9, 2011) in Bangladesh, the HIV prevalence among the most affected key populations as a whole remained below 1 percent.

On December 1, 2013, on the occasion of World AIDS Day, the National AIDS/STD Program (NASP) had confirmed a total of 3,241 HIV cases reported in Bangladesh, of which 370 cases identified were new. In 2013, 95 persons had developed AIDS and a total of 82 deaths were reported. Cumulatively 1,299 people had developed AIDS in the country till date and 472 had died.

### **Best practices on HIV/AIDS Control Programme**

#### **Expanding Opioid Substitution Therapy with Methadone in Dhaka, Bangladesh**

United Nations Office on Drugs and Crime (UNODC) and International Centre for Diarrhoeal Disease, Bangladesh (ICDDR,B) are working jointly with the Government of Bangladesh to introduce opioid substitution therapy (OST) among PWID. Advocacy on OST started in Bangladesh more than 10 years ago and in 2008 the National Narcotics Control Board (NNCB) of Bangladesh approved the pilot study on OST using methadone under the project “Prevention of Transmission of HIV among drug users in SAARC Countries” of UNODC Regional Office for South Asia (UNODC-ROSA) supported by AusAID. The pilot program started in June 2010 with the opening of the Methadone Maintenance Therapy (MMT) clinic at the Central Drug Addiction Treatment Centre (CTC) of the Department of Narcotics Control (DNC) ) with support initially from UNODC ROSA and later also from Family Health International.

The MMT clinic at CTC has been providing different types of services to its clients along with regular dispensing of methadone (365 days in a year). These services include: outpatient services



with general medicine; counseling, motivational enhancement and psychiatric services; laboratory investigations if required; community sensitization and methadone anonymous meeting; providing free of charge HIV testing services; and referring patients if required to nearest hospital for TB screening and treatment and PLHIV self help group for ARV medication only for HIV positive patient.

Based on the pilot OST is now expanded to two more DIC to cover and additional 300 PWID. In the three OST centers currently 411 persons are enrolled and 299 persons are regularly taking methadone.

### **Addressing HIV vulnerability among Cross Border Mobile Population**

Cross-border movement into India has become a necessity for economic survival of people living in bordering areas of Bangladesh. EMPHASIS (Enhancing Mobile Population's Access to HIV & AIDS services, Information and Support) is the very first ground breaking 5 years (Aug 2009-Aug 2014) sub-regional initiative by CARE India, Bangladesh and Nepal funded by BIG Lottery Group of United Kingdom. The project works with highly vulnerable groups who are largely poor, with low literacy rate coming from rural Bangladesh and end up migrating to cities (specially at Mumbai and Delhi) in India with dreams and hopes of better jobs to support their family back home.

The baseline study identified the major **push factors** of cross border mobility are lack of employment and poverty at source; **pull factors** are more employment opportunity, higher wages, recreation opportunities, and peer pressure etc at destination. Unknowingly the mobile people fall into HIV & STI risk: men meet their sexual need unsafely at destination, women become involved in sex trade for endurance at destination or in the course of mobility they are abused / harassed by powerful people at source and destination. This continues as frequent phenomena for years and it acts as driving force of stigma towards them (Ref: Baseline study of EMPHASIS Project).

### Obtaining Broker's assistance to reach cross border mobile population

The approach to reach impact population (IP) at transit areas is to reach them through brokers at the place they are stopping over during their travel, a place where no one is going to find them. After one year implementation at selected border areas, outreach was built on trusting relationships with the brokers and reaching impact populations (IPs) with necessary HIV & service access information at locations selected by brokers. The outreach activity at transit has been established from field learning that People from different districts choose this transit for safe undocumented trespass and sometimes takes a stopover close to the land port to secure a safe time for the trespass. Migrants sometimes bring their family to villages near the porous border area. The outreach activity through contact with the broker is thus successful as it doesn't have any implication of facing law enforcement agency harassment.

### Self Help Group of Wives of Migrant's left at home to reduce stigma and discrimination related to HIV and Cross Border Mobility

A group of women left at home (Self Help Group) were brought together to try to address financial constrains in the absence of their husbands and they initiated the community action (i.e. participated in family counseling and community sensitization) to reduce family violence and social stigma on them and the returnee females with the help of Enhancing Mobile Population's Access to HIV & AIDS services, Information and Support (EMPHASIS). Community referral to services for the returnees and migrant's family was another action point. It resulted to reduce violence and stigma against women left at home & returnee females of 22 families and they started to be reintegrated into family and community.

### Capacity building of the health service providers to increase service access for the cross border mobile population

Ninety Three Health service providers ( Government and nongovernment) at Jessore and Satkhira (two border-lying districts) were trained on Syndromic Management of STI, HIV/AIDS and Migration, Voluntary Counseling and Testing (VCT), Advocacy and Communication and HIV/AIDS care and rational use of ART. This capacity building initiative resulted in increased service access of the bordering people. Formal MoU could not help activating effective referral

but increased knowledge after training of the service providers facilitated them to render services to the clients. It was evident that the female clients were frequently referred to the gynecologist for any kind of STI and RTI related sign/symptoms; but after having the STI management training many of the male doctors and medical assistants also felt confident to treat clients

### **Addressing Vertical Transmission and Expanding PMTCT in a Low Prevalence Setting**

The Government of Bangladesh with support from UNICEF has established a revised National Guidelines for the Prevention of Vertical Transmission of HIV and Congenital Syphilis in 2013. The revised guidelines is aligned with the global commitment for the elimination of mother to child transmission of HIV and incorporate innovative context-specific dual service delivery model to increase effective coverage of PMTCT services in Bangladesh. The objectives of the guidelines are to:

- Establish approaches for the detection of HIV and Syphilis in pregnant women and ensure their access to treatment
- Set national level standard for the use of anti-retroviral drugs in pregnant women for their own health and for preventing HIV infection in infants and young children.
- Align national program approaches with global plan, strategies and experiences for prevention and elimination of vertical transmission.
- Update safe feeding options for HIV-exposed infants.
- Develop monitoring framework for measuring achievements towards national targets.

To support the strategic approach, “Targeted Services for Women in Special Population Group” the following is being implemented in partnership with civil society organizations:

- Active HIV counseling and testing targeted at women in key population groups at community levels and linked to existing HIV/AIDS programme sites
- Sexual and reproductive health and HIV/AIDS linkages with focus on treatment and control of sexually transmitted infections
- Couple counseling, access to appropriate contraceptive commodities and support to initiate pregnancy at choice for HIV positive woman and spouse
- Syphilis screening and treatment

- Referral to designated health facilities for PMTCT and maternal, neonatal and child health care services for HIV positive pregnant women / most at risk adolescent girls including follow up care services
- Promotion of community based stigma reduction and social integration programme for the mother / baby pair

Considering the strategic approach, “Universal PMTCT Services for Pregnant Women” Government of Bangladesh and UNICEF collaborated to designate three public health facilities for PMTCT care in Bangladesh namely Bangabandhu Sheikh Mujib Medical University, Dhaka; Chittagong Medical College Hospital, Chittagong and Sylhet Osmani Medical College Hospital Sylhet. The key interventions offered by these centers include:

- Provider initiated testing and counseling including syphilis testing and treatment for all pregnant women in the facilities
- Anti-retroviral (ARV) treatment for the prevention of mother to child transmission of HIV including linkage / referral to treatment programmes
- Safe delivery and care of the exposed infants of HIV positive mothers
- Infant feeding counseling in the context of HIV and support for adherence to ARV prophylaxis during the breastfeeding period
- Follow up care for mother and infant, including early infant diagnosis of HIV and treatment of infected children
- Integration of family planning services into maternal health care for HIV positive women
- Communication strategy targeted at both service providers and HIV positive women / girls and their families

The implementation of strategic approaches is supported by UNICEF Bangladesh to inform national practice towards reducing paediatric HIV infection. As at the end of 2013, the support to the three designated facility have led to an increase from 4% (in 2012) to 8.5% in the proportion of HIV positive pregnant women receiving ARV for PMTCT in Bangladesh.

To assure quality of service delivery, UNICEF and her partners are developing clinical protocols and community based guidance as well as rolling out national training programmes on PMTCT and Paediatric AIDS care in Bangladesh.

### **Initiating MIS for interventions with Key Populations**

Various stakeholders implementing all key population interventions collectively provided feedback through a three-day workshop on indicators and monitoring, recording and reporting tools at various levels to provide standard data for national level reporting on interventions with key populations which would fulfill requirements of both government and global requirements and maybe enhanced to aid in local level monitoring.

Outputs of the workshop included revised M&E tools incorporating minimum standard requirements for reporting, agreed on formats which would feed into the national data base, standard definitions for uniform reporting and feedback on the existing indicators within the national M&E framework. The workshop was jointly organized by NASP, UNAIDS and NASP.

Currently reporting on Key Population (KP) intervention indicators are ongoing, however, more focus must now be made on effective report generation, decentralizing data entry mechanisms and enhancing public access to the data.

### **Recognition of transgender / hijra as the third gender in Bangladesh**

Hijras are now considered as a separate gender in Bangladesh and will get priority for education and other rights. The decision was made at the cabinet meeting on November 11, 2013, which was chaired by Prime Minister. Currently steps are being taken to fully legalize this recognition. Hijras are already enlisted as voters in Bangladesh.

### **Mid-term reviews of Global Fund supported interventions**

The survey “Mid-Term Survey on Expanding HIV/AIDS Prevention in Bangladesh RCC Program funded by the Global Fund” intended to assess the progress made by the RCC phase-I implemented by Save the Children International in Bangladesh. The study used robust multifarious analytical tools those consist of both advanced quantitative and qualitative

techniques. The study was conducted in all 6 divisions of Bangladesh during the month of Oct-Nov, 2012 where the Rolling Continuation Channel (RCC) phase-I have been implemented by SCI, SRs and SSRs. This study focused on the population groups who have received the services by SCI, SRs or SSR of the RCC phase-I. The respondents for this study were IDUs and their partners, FSW and their partners, YP aged 15 to 24, PLHIV, Key personnel related to power structure of IDUs and FSWs, and Key program personnel. Though the study did not follow standard BSS methodology and did not have a serological component, it provides valuable information on progress made among intervened groups and through adjustment and calibration using information from the 2006-07 BSS a generalized understanding at national level maybe obtained.

ICDDR,B conducted the Mid-line assessment among MSM, MSW and TG in Dhaka, Chittagong, Sylhet and Hilli and used standard BSS methodology and also had a serological component. Thus the study is providing required information on improvements in behavior among these KPs considering ongoing interventions.

Given the delay in the BSS, the two assessments were vital to provide some updated information on behaviors of KP to further help us understand the impact of interventions.

### **Assessment of Impact of Harm Reduction Interventions among People Who Inject Drugs in Dhaka City**

While several assessments of drug use have been carried out in the past in Bangladesh, a more comprehensive study was required to understand the effects of the dynamics of risk behaviour and to provide a description of the current situation of the HIV epidemic and its future projections for planning HIV/AIDS prevention programs in the country. This study supported by NASP, IEDCR, Save the Children, icddr,b, UNAIDS Bangladesh and CDC Atlanta has applied the AIDS Epidemic Model (AEM) to assess the likely pattern of HIV spread in the country based on current risk indicators and HIV prevalence.

The aim of this assessment is to understand the HIV transmission dynamics in Dhaka city and to estimate the extent to which harm reduction interventions among PWIDs have contributed towards epidemiological trends and reduced HIV transmission in the city. It also aims to

examine observed epidemiological trends among PWIDs in Dhaka city and other surveillance populations, with changes in HIV transmission modes and AIDS cases. Cost efficiency of the existing harm reduction interventions has also been examined that might have led to continued low HIV prevalence among PWIDs or in general among key populations.

Findings from the AEM also reveal that the prevalence of HIV among PWIDs in Dhaka city in 2012 was projected to be 17.5 percent if there was no harm reduction intervention. In contrast, the prevalence among the same group was projected to be 5.8 percent if existing intervention scenarios are considered, this coincides with findings from serological surveillances (5.3% HIV prevalence among PWID in Dhaka). Similarly, the HIV prevalence in the absence of any intervention among female PWIDs in Dhaka city was projected to be nearly 3.1 percent in 2012 as compared to 1.1 percent, with existing interventions.

Information from the modeling implies that harm reduction interventions in Dhaka have been effective and need to be continued.

### **Community Access to HIV Treatment Care and Support Services Study: Bangladesh Report**

The study on ‘Community Access to HIV Treatment Care and Support Services (CAT-S) in Seven Asian Countries’ namely Bangladesh, Indonesia, Laos, Nepal, Pakistan, Philippines and Vietnam has been conducted by Asia Pacific Network of People Living with HIV/AIDS (APN+) under the support of the Global Fund Round-10. In Bangladesh, Ashar Alo Society (AAS), as a partner of APN+, has conducted this study. It is hoped that this study will contribute towards effective mainstreaming and scale-up of HIV programs in Bangladesh.

This cross-sectional study, conducted during November 2012 to April 2013, is expected to serve as a baseline study to measure longitudinal changes in access to HIV treatment-related issues in Bangladesh as planned in second phase. HIV treatment-related issues such as access to pre-ART care, ART, ART adherence, treatment literacy, high risk behaviors, health seeking behaviors, etc. were the core issues of this study. A total of 600 PLHIVs (randomly selected) participated in this study. The participants were identified from different population groups through 7 service centers of 4 divisions. The data collectors were recruited from the respective community groups.

## **BHUTAN**

### **Overview of the HIV/AIDS epidemic**

The first case of HIV was detected in 1993, and the number of cases increased from the year 2000 onwards, with more than 80% of the total cases reported within the last 10 years. This noticeable increase is attributed to the scale up of HIV testing and counseling services in the country. The majority of the cases are found within the younger populations, with over 53% of cases detected in the population group below the age of 30.

Bhutan bears a low burden of HIV; the estimated adult HIV prevalence was 0.1% (range 0.1%-0.4%) in 2013, or less than 1,000 people living with HIV. However, due to data limitations, particularly related to the HIV prevalence and size of the traditionally vulnerable populations, it remains difficult to fully understand and explain the dynamics of the overall HIV epidemic in the country.

### **Best Practices on HIV/AIDS Control Programme**

#### **The Core Pillar of our response –Benevolent leadership**

Unlike many countries in the world, where political support and leadership still remain ambiguous, Bhutan has demonstrated a strong political commitment to preventing and controlling the spread of HIV in the country. The response to HIV in Bhutan is guided by the principle of Gross National Happiness (GNH), enshrine in it is the principal of equality and human rights for a meaningful human development approach. In light of this fundamental framework of GNH, the country's achievement toward the response to HIV has been possible primarily because of the high level commitment, leadership and coordinated multi-sectorial response in combating the HIV epidemic in the country. In addition to the government 's efforts, it is the explicit top-level initiative from the royal family that stands as a testament to Bhutan's commitment to an effective HIV response.

On May 24, 2004, the Fourth King, His Majesty Jigme Singye Wangchuck, issued a royal decree to encourage HIV prevention and to respect the rights of PLHIV. During that same year, through



royal edict, broadened the scope of organizational and individual-level participation in HIV prevention to address stigma and discrimination. The following year, in 2005, with the growing rate of infection among the younger generation, the Fifth King, His Majesty the Jigme Khesar Namgyel Wangchuck, proclaimed to the nation, “HIV is no exception. The youth will use their strength of character to reject undesirable activities; their compassion to aid those afflicted and their will to prevent its spread”, giving the much needed support to the organization exclusively working with the Youth in the country. The two decrees today serves as a core pillar of the country’s HIV responses and provides the much needed political support. Furthermore the work of Her Majesty, the Queen Mother Ashi Sangay Choden Wangchuck continues to be a source of great inspiration for the grass-root communities to work towards HIV prevention, substance abuse and reproductive health issues. Her Majesty has selflessly engaged in many high level dialogues and in strengthening, supporting and guiding the only positive network CSO – Lhaksam, in the country. Today, the Royal Decrees and the continuous support from Her Majesty the Queen Mother, not just provides great inspiration, leadership and moral authority, but serves as a visionary institutional rectitude and the capacity to mobilize resources and collective strength toward the HIV response in the country.

### **Meaningful partnership**

“In 2009 we got an opportunity to attend a meeting of the PLHIV. The meeting was organized by the Ministry of Health. We got a chance to meet others like us. It was such an overwhelming moment for us to see that we were not the only HIV positive people but there were many others and they were living normal lives. We felt inspired and alive again,” Jigme (quote from the “Be Positive”).

HIV treatment and counseling are available exclusively under the Bhutanese universal health care system. In addition to the free treatment, the care and support for those living with HIV has received considerable attention in Bhutan. The Ninth Five Year Plan provided a multi-sectoral strategy to prevent and control HIV and also identified this as one of the country’s most important programme in promoting healthy outcomes. Recognizing the need for a social support system for PLHIV in the country, Ministry of Health initiated a self-help group in 2009 at the HISC to facilitate psychosocial support amongst the PLHIV. A year later with the support and

commitment from the Ministry of Health the network got registered as the first and the only CSO working primarily for people affected and effected by HIV in the country.

Unique to Bhutan is the backbone support rendered by the National Government to a CSO (Lhaksam) that was not socially accepted to carry the organization's mandates. Today staffed by a dedicated team of mostly positive members, Lhaksam has been able to bring some of the important issues and challenges right at the core of public discourse and policy making in the country. In a traditionalist society, few founding members of the Lhaksam openly declared their HIV positive status and discussed the issues at great length on national television, radio and print media. This event has a huge impact to dispel some of the conventional myths associated with HIV and AIDS and gave the confidence to thousands across the country to come out and test their status. Lhaksam, today is the only NGO to provide care and support directly to the affected population in addition to emotional and basic financial support to live a meaning and productive life. With the collective and collaborating working relation with the National Programme as a foundation, Lhaksam today is a key collaborating organization working and complementing the efforts of Ministry of Health in delivery the much needed services to PLHIV and their family.

## INDIA

### Overview of the HIV/AIDS epidemic

The National AIDS Control Programme (NACP) has been implemented by Government of India as 100% central sector scheme through State AIDS Control Societies in the states to prevention and control of HIV/AIDS in the country. The first National AIDS Control Programme was launched in 1992, followed by NACP-II in 1999. Phase III of NACP, launched in July 2007, had the goal to halt and reverse the epidemic in the country over the five-year period (2007-2012) by scaling up prevention efforts among High Risk Groups (HRG) and general population, and integrating them with Care, Support & Treatment services.

Currently NACP IV (2012-2017), is in last year of its implementation. It focuses on accelerating the process of reversal of the HIV epidemic. The key strategies under NACP-IV includes intensifying and consolidating prevention services with a focus on HRG and vulnerable population, increasing access and promoting comprehensive care, support and treatment, expanding IEC services for general population and high risk groups with a focus on behaviour change and demand generation, building capacities at national, state and district levels and strengthening the Strategic Information Management System. Prevention and Care, Support & Treatment (CST) form the two key pillars of all HIV/AIDS control efforts in India.

As per India HIV Estimation 2015 report, National adult (15–49 years) HIV prevalence in India is estimated at 0.26% (0.22% – 0.32%) in 2015. The adult HIV prevalence is estimated at 0.30% among males and at 0.22% among Females. The total number of people living with HIV (PLHIV) in India is estimated at 21.17 lakhs (17.11 lakhs–26.49 lakhs) in 2015 with Children (< 15 years) accounts for around 7%, while 41% of total HIV infections are among females.

According to HSS 2014-15, the overall HIV prevalence among ANC clinic attendees, considered a proxy for prevalence among the general population, continues to be low at 0.29% (90% CI:0.28-0.31) in the country, with an overall declining trend at the national level.

India continues to portray a concentrated epidemic. As per National Integrated Behavioural and Biological Surveillance (IBBS) has estimated HIV prevalence among FSWs, nationally, level at 2.2% (95% CI: 1.8 - 2.6). HIV Prevalence among MSM recorded at the national level was 4.3%

(95%CI: 3.7 – 5.1) while among IDU, the prevalence of HIV recorded among IDU at the national level was 9.9% (95% CI: 9.0-10.9).

### **Best practices in India:**

#### **1. Opioid Substitution Therapy (OST) under the National AIDS Control Program in India**

##### **Background:**

In 2008, Opioid Substitution Therapy (OST) was included as one of the service components under the Harm Reduction which is the prevention strategy for the Injecting Drug Users (IDUs). OST is an evidence-based treatment for opioid dependence that is known to reduce drug related harm among IDUs, in particular prevention of transmission of HIV and other blood borne viruses. It is a medical treatment for opioid dependent IDUs, delivered in clinic settings along with psychosocial interventions. OST involves long-term maintenance of people who are injecting opioid drugs on medications that effectively relieve the craving and withdrawals associated with abstinence from injecting drugs. Thus, the treatment eliminates the need for continued injecting of illicit drugs and enables IDUs to either stop or reduce injecting.

Buprenorphine and methadone are the two major medications used in substitution treatment programmes across the globe and both are currently available in India for use in maintenance treatment of opioid dependence. Under NACP III, buprenorphine based OST centres were established in both NGO and Government healthcare settings, while the methadone based OST programme was to be implemented only through licensed government health care facilities as per the provisions of the Narcotic Drugs and Psychotropic Substances (NDPS) Act of 1985. NACO has initiated OST with methadone in RIMS, Imphal in the current phase of NACP (NACP IV).

##### **Process followed to ensure quality service at the center:**

With the scale-up of the OST program, quality service delivery is also to be ensured. Therefore, Standard Operating Procedure (SOP), scheme document, clinical guidelines, training manuals, etc. are developed and published. Based on these guidelines, all cadre of staff are trained. Some salient features of these guidelines are being outlined below:

1. All clinical staffs are given induction training before the OST program is rolled out, followed by refresher training.
2. The treatment of directly observed under the supervision of a physician or a nurse
3. The medication is administered sub-lingual, after being crushed.
4. Once administered to the client, the client is made to wait at the center for at least 10-15 minutes
5. Take home medication is not given as part of the programme (unless in exceptional cases, emergency situations).
6. To ensure quality of services, the technical support unit at the State level are conducting a quality assurance protocol visit on a quarterly basis.
7. All the OST centres are accredited by an external agency i.e. National Accreditation Board for Health Care providers.

OST medication is stored in secure locations. Clients are enrolled on OST after thorough examination and case history taking by the physician in charge. The supply chain is being managed effectively due to which not a single stock out of OST medicine has ever been reported since the initiation of the program.

**Conclusion:**

National Programme data shows that opiate substitution treatment is effective across a range of outcomes, including reducing all-cause mortality, improving physical and mental health, and decreasing illicit drug use, criminal activity, and risk of HIV infection and adherence to ART. The benefits of OST are not only limited to HIV prevention, it extends to the reduction of other harms associated with drug use, especially when combined with psychosocial interventions. OST stabilizes clients physically and psychologically which improves their ability to think coherently and makes them amenable to other lifestyle modifications necessary to achieve complete recovery and reintegration into society. Clients taking OST are often gainfully employed and able to take care of their families. Scientific studies from various countries have clearly established the role of OST in reducing crime rates among drug users, improving quality of life,

and reducing socio-economic consequences of drug use for families and communities. The stabilization of the client's lifestyle also improves adherence of HIV positive IDUs to ART, thus benefitting both the individual and the society as a whole.

## **2. Innovative Intensified Tuberculosis case finding and appropriate treatment at high burden ART centres in India**

### **Background:**

The Tuberculosis and HIV duo forms the deadly synergy and the co-infected patients with these diseases more often have unfavourable treatment outcomes. TB is the most common opportunistic infection and leading cause of mortality among People Living with HIV AIDS (PLHA). The recent WHO Global TB Report shows that an estimated 120000 HIV-associated TB patients emerge annually in India. This accounts for second highest global burden of HIV-associated TB. Early diagnosis of Tuberculosis and Drug resistant Tuberculosis among PLHA, prompt initiation of treatment, Adherence to treatment (Anti TB treatment and Anti-Retroviral Therapy) is critical to reduce the mortality among PLHA.

Considering the challenges there was a felt need to implement the comprehensive strategy to reduce the burden of TB among PLHA and vice-a-versa. Government of India 's National AIDS Control organisation& Central TB Division,with support from WHO-India, initiated an 'Innovative, Intensified TB case finding and appropriate treatment at selected 30 high burden ART centres in India' aimed at reducing the burden of TB among people living with HIV.

'Innovative Intensified TB case finding and appropriate treatment at high burden ART centres in India' project to support the three I's for HIV/TB (Intensified case finding, Isoniazid preventive therapy (IPT), and Infection control) to reduce the burden of TB among people living with HIV was launched by Hon'ble Union Health Minister,Ministry of Health and Family Welfare, Government of India and Hon'ble Secretary Health,Ministry of Health and Family Welfare, Government of India on World TB day 2015 .

This collaborative project among National AIDS Control Organisation, Central TB Division&WHO India is using Cartridge Based Nucleic Acid Amplification Test (CBNAAT),which will diagnose TB and Rifampicin resistance in 90 minutes time.CBNAAT is

used as primary diagnostic tool established in Designated Microscopic Centres located near to selected 30 ART centres in five states (Andhra Pradesh, Telangana, Karnataka, Maharashtra & Tamil Nadu). This will help in early rapid diagnosis of TB and Rif Resistance among People living with HIV. Patient diagnosed with Tuberculosis are linked to first line anti TB drugs daily regimen for TB patients diagnosed in these centers. Project components also include Airborne infection control at HIV care settings and Isoniazid Preventive Therapy.

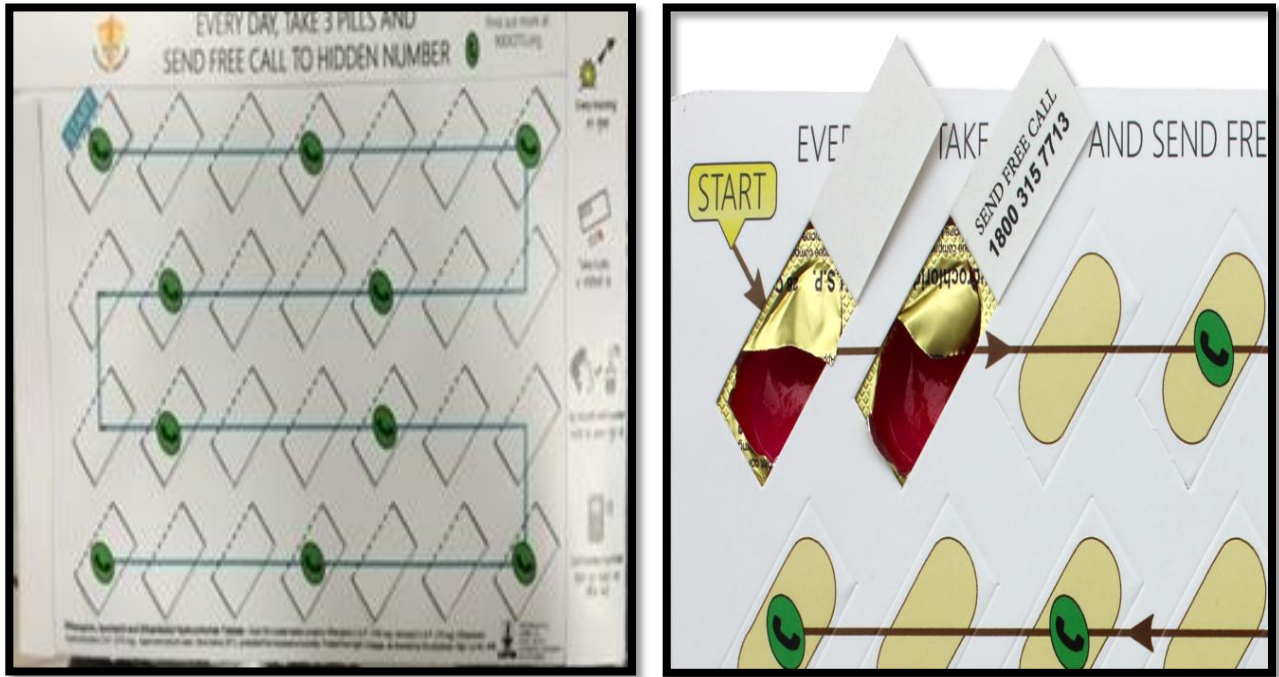
To successfully implement the project following steps were taken:

- A training curriculum was developed for the State level and facility level stake holders.
- Training was conducted at all levels including use of video training materials developed for training.
- CBNAAT equipment was installed in all the 30 sites in very short time.
- Fixed Drug combinations of Anti TB with a missed call adherence tracking mechanism was provided to all the ART centres.
- Supervisory visits and Airborne Infection control assessment were conducted in the pilot sites.

**Salient features:**

- Single window service delivery for TB & HIV
- Intensified case finding using CBNAAT
- TB & HIV patients receive daily anti-TB therapy drugs in Fixed Dose Combination
- Innovative drug intake tracking mechanism using missed call at a toll free number on the strip is used under this project.
- Better management of side effects-Pharmacovigilance
- Isoniazid Preventive Therapy

➤ Air Borne Infection control at HIV care settings



*Fig1: Innovative drug intake tracking mechanism (99DOTS) using missed call at a toll free number on the strip is used under this project.*

**Lessons learned:**

- Use of technology and rapid diagnostics yields better results and reduces the delays in diagnosis
- Use of mobile-based technology for tracking adherence is feasible, simple, reduces the human resource cost, and ensures adherence.
- Quality training of Staff using the latest technology is most important to ensure good results.
- Patient centered care and support builds up trust in the public health system and reduces out of pocket expenses for patients.



## **MALDIVES**

### **Overview of the HIV/AIDS epidemic**

Maldives has a low prevalence of HIV, with high risk for potential concentrated epidemic. Through 2013, 19 HIV positive cases had been reported among Maldivians (16 male, 3 female) and around 300 or more cases among expatriates. 18 out of 19 cases have been identified through case reporting, one case was identified through 1<sup>st</sup> BBS, and majority of infections were reportedly acquired through Heterosexual transmission. 12 of 18 HIV positive Maldivians died of AIDS. Until recently, Maldives, HIV infections were imported, however most recent infections were local. HIV among Key Populations was reported in 2011 and 2012; they are from MSM and IDU communities. However, as per HIV and AIDS data hub for Asia Pacific-2015, 21 cumulative reported an HIV infection was recorded in 2014.

### **Best practices on HIV/AIDS Control Programme**

Recently, Maldives is going through lot of changes, politically and socially. However much is sensitive, the issues around HIV. The Government has put effort to bring about possible Policy and legislation change which is necessary. A new drug law has been enacted in 2011 which provides provisions for drug treatment, where people who use drugs are sentenced to treatment, not incarceration. Hence the drug law which was recently enacted is in a position to command the type of treatment that is indicative for each drug user. OST will now be a legally prescribed treatment which will benefit key populations immensely.

The MMT program which began as a pilot program has now terminated its pilot status and has been streamlined into mainstream programs for drug users. This was done, mainly keeping in mind the harm reduction philosophy.

Considering human rights as key principles of service delivery; access and universal coverage is vital. A scale-up measure for reaching universal access to treatment, the government of Maldives has made an important policy decision that all expatriate migrant workers who gets HIV positive while working in Maldives are provided access to free HIV treatment and care.

Also, access to health care is ensured through a universal health insurance scheme, where every Maldivian is automatically joined, with a common premium, which is paid by the Government. Therefore, PLHIV will be able to access medical services as any other individual. Efforts on sensitization of law enforcement officers has proven to be effective; currently syringes or condoms are not used as evidence of crime, and there are no reports of people who carry a condom or a syringe are subjected to harassment and intimidation. National Strategic Plan for the Prevention and Control of HIV/AIDS (2014-2018) has been developed by Maldives.

Key Affected Populations are recognized as an important stakeholder. Representatives from the informal networks and groups of KAPS have actively engaged in the development of national policies and plans to ensure that their voice and opinions are reflected, captured in the development and planning process.

Some of the best practices were highlighted:

- National strategic plan express the best HIV response scenario for the Republic of the Maldives is to invest in an effective early warning system through more effective HIV surveillance, in particular behavioral surveillance. It also prioritizes to build prevention preparedness, with a focus on effective targeting of prevention efforts for those key-affected population.
- Initiated HIV testing on all TB Patient (as part of the national TB treatment protocols)
- Initiated the provision of ART for the expatriates who get HIV positive while working in the Maldives, and patients were enrolled.
- The readiness and feasibility of adoption of HIV ‘Treatment as prevention’ in Maldives was done by UNICEF by adopting the ‘new’ (July 2013) WHO Treatment and Prevention Guidelines which include a recommendation to provide treatment to all HIV infected people, irrespective of CD4 cell count, who are in a sexual relationship with a sero-discordant partner, partly for the purpose of ‘treatment as prevention.’

## **NEPAL**

### **Overview of the HIV/AIDS epidemic**

Nepal's HIV prevalence has not changed much over the last five years, it has remained within 0.3 - 0.2 percent. It is estimated that currently there are around 39,249 people living with HIV in 2014, decreasing from 40,723 in 2013. An estimated number of 2,576 deaths were due to AIDS in 2014 declining from 3,362 deaths in 2013. The number of estimated deaths is projected to decline to 1,266 in 2020, due to an expected increase in the numbers of people on Antiretroviral Therapy (ART). The estimated number of new cases in 2014 is 1,493 as compared to 1,408 in 2013. Overall, the epidemic is largely driven by sexual transmission that accounts for more than 85% of the total new HIV infections. The HIV epidemic in Nepal remains concentrated among the key affected populations notably; people who inject drugs (PWID), men who have sex with men (MSM), transgender people (TG), male sex workers (MSW), female sex workers (FSW) and male labor migrants (MLM) as well as their spouses.

### **Best practices on HIV/AIDS Control Programme**

#### **1. Scaling up Monitoring of HIV DR related Early Warning Indicators**

National Centre for AIDS & STD Control, Ministry of Health & Population reported that 9,880 PLHIVs were receiving Anti-Retroviral Therapy (ART) from 52 ART clinics by July 2014. Emergence and transmission of HIV drug resistance (HIVDR) is an unavoidable consequence of ART, even when appropriate drugs are prescribed and adherence is maximally supported. It was of paramount importance that National programme embarked on monitoring of HIV Drug Resistance. With the technical assistance from WHO, Nepal has developed its “National Strategy on HIV Drug Resistance monitoring & surveillance – 2014-2020” and a pilot survey of monitoring of Early Warning Indicators (EWIs) was conducted in 3 ART clinics during November – December 2013. During 2014 it was scaled up to 24 ART clinics by training 2 data abstractors from each clinic on EWI monitoring. During this training data abstractors were trained to calculate sample sizes for each indicator, entering data in EWI monitoring software package developed by WHO and preliminary analysis of the data for each ART clinic. By training data abstractors and conducting EWI monitoring in these 24 clinics, EWI monitoring was completed for all the ART clinics in Nepal which initiated ART for PLHIVs during the

period 2011-2012. Out of 5 EWIs complete data was available for only 4 indicators, they are – EWI 1 – On time pill pick up (adults & pediatric), EWI 2 – retention in care, EWI 3 - Pharmacy stock-out and EWI 4 – Dispensing practices.

## **2. Saath-Saath Project Festival Campaign 2014 - Urging the Migrant Workers and their Spouses to get tested for HIV and STI**

National HIV/AIDS Strategy 2011-2016 and Nepal HIV Investment Plan (NHIP) 2014-2016 identify migrant workers as one of the Key Affected Populations (KAPs). Migrant workers particularly those traveling to high HIV prevalence areas in India, where they often visit female sex worker (FSWs); are acting as bridging populations to transmit HIV infections to their spouses. The low level of comprehensive knowledge on HIV and AIDS and exposure to HIV programme put them at higher risk. Due to wide dispersion as well as high mobility of the migrant workers, the HIV programme often face challenges to reach migrant workers, thus there is a need for innovative approaches and activities to reach the migrants.

The USAID-funded Saath-Saath Project (SSP), to cater to the pressing need to reach the migrants workers , planned and successfully implemented the SSP Festival Campaign 2014 from September 22 to October 31, 2014 in the four SSP’s migrant focused project districts– Bara, Nawalparasi, Kapilbastu and Palpa. SSP seized the opportunity of the festival seasons Dashain, Tihar, Chhat, and Bakra-Eid to raise awareness among the migrant workers and their spouses on prevention of HIV and STI. As numerous migrant workers had returned home to celebrate festivals with their families, the campaign provided an excellent opportunity to reach out to approximately over 15,000 people including migrant workers, their spouses and general public in the four districts. The campaign urged them to get themselves and their families tested for HIV and STI thus was conducted under the tagline: “Get yourself and your family tested for HIV and STI. Enjoy the festival season”.

The series of events that were strategically planned and conducted during the SSP Festival Campaign 2014 in the four districts include display of hoarding board with HIV prevention messages and services sites in strategic locations, outreach sessions with greeting cards, street drama followed by group educational contacts in strategic locations, information, education and

communication/behaviour change communication (IEC/BCC) materials stall exhibition, IEC/BCC materials and condom distribution and Public Service Announcement (PSA) airing through different local FM radios.

During the campaign, new collaborations were formed with the Himalayan Bank Limited in Kathmandu as part of SSP's Public-Private-Partnership (PPP) initiative and with International Organization of Migration (IOM)'s Migrant Resource Center (MRC) in Kapilbastu district in an attempt to identify innovative ways to reach out to wider audiences with messages related to prevention of HIV and STIs.

### **3. Using Geographical Information System (GIS) in HIV Programme in Nepal: A Saath-Saath Project Experience**

As epidemiology links directly with people and places, using GIS for public health programmes contributes greatly to generate valuable information for improved decision making and rational allocation of resources. GIS products are being used progressively under United States Agency for International Development (USAID)-funded Saath-Saath Project (SSP) and its predecessor. SSP currently uses this mapping technology for decision making and to monitor and present HIV programme results and service coverage. The project has been using geo-enabled reporting of HIV Prevention, STI, VCT and family planning (FP) services. As a result, two satellite sites were expanded in the strategic locations of the valley providing technical support to strengthening the capacity of government and NGOs working in HIV in Nepal.

SSP has been collecting geo-reference data from its expanded integrated health services (EIHS) sites in all working districts. Location information of all SSP- managed EIHS sites are collected either through GPS device or by taking references from Google Earth software. Additional information such as village development committee (VDC) and municipality level outreach coverage details, estimated size of key affected population, location of health facilities, hotspots and geographical boundaries are also compiled.

Following the information collected, a GIS-database is created using information relevant to the project. Data collected through routine reporting is compiled and fed into the database to

generate maps and analyzed extensively before making any decision i.e., to establish additional site, expanding outreach locations, reviewing coverage, presenting to the stakeholders and so on.

The project has been able to develop a variety of maps that helped perform geo-enabled data analysis and regular reporting. These maps also assist to monitor project progress, identify gaps, and improve overall project performance. A few examples of use of GIS under SSP are mapping distribution of PLHIV and ART sites; coverage of key affected populations and hot-spots by districts, mobility patterns of outreach workers, distance between service sites and beneficiaries, and assessment of service availability. Recently SSP in collaboration with National Centre for AIDS and STD Control (NCASC) developed web-map of national HIV service sites in Nepal which is available in NCASC website for public access. Mapping also provided opportunity to conduct proximity analysis that helped develop strategies to increase service utilization, expand outreach and monitoring progress. In addition, using the institutional experiences, the project explored opportunities to expand the skills of GIS use in HIV programmes at national level for NCASC as well as SSP partner NGOs through two rounds of trainings on Arc-GIS and Quantum GIS software and regular onsite technical support and mentoring.

GIS maps are strong tool used for planning and monitoring of HIV-interventions. Use of geo-spatial information contributes significantly for improved decision-making capacities. It is realized that the interest in the use of GIS increases when it is used for programme designing, planning and monitoring by the programme managers. However, there is need for strengthening skills and advocacy at various levels to realize the importance of incorporating GIS in projects as well as national M&E systems.

#### **4. Clinical Placement for Mid-level Healthcare staff of Antiretroviral Therapy (ART) centers for better clinical management of HIV**

In 2014, there were 53 ART centers providing services to over 1,040 People Living with HIV (PLHIV) in the country. Well managed ART centers lead to better outcomes in ART therapy. The majority of ART centers are managed by mid-level health staff, namely Health Assistants, Staff Nurses and Senior Auxiliary Health Workers (AHWs). This healthcare staffs are responsible for most of the activities of clinical management of HIV including ART. The

challenges they face for better clinical management of HIV include human resource and infrastructural challenges including having trained human resource in place. Many of the providers are newly trained and due to high turnover of service providers, they have not had adequate exposure to treating PLHIV. Therefore, in collaboration with NCASC, the USAID-funded Saath-Saath Project (SSP) is providing support to further build capacity of the healthcare service providers, including national level clinical management training, on-site mentoring and coaching, warm-line support, clinical placement and support to the sites by community and home based care (CHBC) teams.

The Saath-Saath Project in coordination with NCASC, developed a package targeting the mid-level health care personnel working in peripheral ART centers, to provide them with a two-week-long clinical placement at tertiary level referral facilities, to enhance their knowledge and skills for clinical management of HIV. A Memorandum of Understanding (MoU) between SSP and Shukraraj Tropical and Infectious Disease Hospital (Teku Hospital) in Kathmandu was signed to provide clinical placement to the staff selected and nominated by NCASC from the peripheral ART centers. The number of participants is three at a time so that each participant gets adequate time for observation, practice and discussion. Teku Hospital being one of the largest ART site in Nepal, the participants benefit from getting exposure in dealing with more clients and learning how to diagnose and treat different Opportunistic Infections among PLHIV.

## **5. Online Programme Management Information System (OPMIS) for the Global Fund HIV Programme of Save the Children**

Save the Children has established Online programme management information System (OPMIS) across all programmes including Global Fund HIV & AIDS programme effective from 16th July 2013 (i.e. SSF Year III of phase-I) to all the 70 SR Users managing comprehensive programme for migrants/spouse of migrants, FSWs, PWIDs, CCCs and MSM/TG/MSWs.

The main features of OPMIS is the web based case basis recording and reporting where each SR enters the data in OPMIS using individual username and password.

There are two distinctive criteria for recording the intervention. Case recording: The SRs managing programme for PWIDs, FSWs, MSM/TG/MSW, CCC, CHBC, VCT and STI, records

the data for each case with unique client code generation. Cumulative recording: The SRs managing programme for migrants and spouse of migrants, the SRs record the monthly total reached by OWs, CMs and PEs.

In case of meeting, training, workshop and orientation, the SRs records the name of the participants with specific date/time and venue of such events.

The SRs submits the OPMIS monthly report online to the respective focal person in the region and after the verification, the focal person submits that to Deputy COP. Once it is submitted the data is automatically locked but the Save the Children staffs, auditors and LFA can access the report of all the SRs for any period and component.

This has resulted in an efficient data reporting and feedback system, verification process, resulting in lesser errors and level of effort, quicker data management and analysis.

## **6. Cash transfer support for children living with HIV**

Social protection is recognized for its capability to address HIV related vulnerabilities, especially among children. From April 2014, Save the Children with the support of GFATM started cash transfer programme in 45 districts based on the endorsed CABA Operating Guideline 2070. As of 15 December, 2014, 1,090 children living with HIV (CLHIV) have been receiving monthly NRs. 1,000/= cash. A majority of HIV positive children (64%) enrolled in cash transfer were orphaned by HIV & AIDS, of which nearly 20 percent had both their parents deceased. Around half of all children enrolled in cash are aged between 6 to 12 years.

The main objective of the cash transfer programme is to increase the quality of life of children living with HIV and to reduce HIV related morbidity and mortality in Nepal. This programme is linked with other care and support services in the district to maximize its effectiveness. In absence of any national social protection programme for people living with HIV, this is a timely intervention which has had some visible outcomes. In specific, the scheme has played an important role in improving treatment outcomes and adherence among children and in addressing the priority needs of children, especially nutrition, health and education of children.



## **7. Community-based Prevention of Mother to Child transmission of HIV services in Nepal**

Since 2009, UNICEF Nepal, FHI360 and other partners have supported the MoHP to provide and expand community-based PMTCT services. As per Nepal HIV Investment Plan (NHIP), it is envisaged that the vertical transmission of HIV will be eliminated and that mothers will be kept alive and well: Elimination of Vertical Transmission (eVT). In the mountainous district of Achham, access to eVT services have been improved by offering HIV testing in ANC at lower level health posts, through the support of Female Community Health Volunteers (FCHVs) and Community Home Based Care (CHBC) teams. As a result, women living with HIV receive counseling, adherence support, commodities such as condoms, iron pills and tetanus vaccines, and more children are born HIV free. Since 1988, Female Community Health Volunteers (FCHVs) have been instrumental to Nepal's community-based primary health care system and bridging the gap between health services and the needs of community members. Decentralizing services such as PMTCT services to such community-based support has been effective and even necessary in the context of Nepal. Some other innovative approaches were launched in 2014 aiming at expanding the services of HTC, such as community-based campaigns for "HIV testing at Street" and "HIV testing at festivals" in Kathmandu.

## **PAKISTAN**

### **Overview of the HIV/AIDS epidemic**

Pakistan's Federal Ministry of Health initiated a National AIDS Prevention and Control Program (NACP) in 1987. Pakistan had an estimated 94,000 people living with HIV by the end of 2014, with 20,000 estimated new HIV infection and 2800 deaths due to AIDS. The trend of a concentrated HIV epidemic among Key Affected Populations in Pakistan continues to be driven by PWID exhibiting the highest HIV prevalence at 27.2% in 2011. This is followed by 'Hijra' (HSWs) or transgender and male sex workers (MSWs) at 5.2% and 1.6%, respectively. Among the Key Affected Populations identified in the country, female sex workers (FSWs) exhibit the lowest prevalence of 0.6%. Other than the Key Affected Populations, evidence also exists of either HIV-related risk factors or infection among certain vulnerable populations, such as the spouses of key affected populations, imprisoned populations, at-risk adolescents and in certain occupational settings, including in some cases through nosocomial infection.

### **Best practices on HIV/AIDS Control Programme**

1. Expansion of CD4 and Viral load facilities in Punjab: Punjab is the biggest province of Pakistan harboring more than 60% of the population of the country. With highest HIV burden and long distances between cities all HIV positives had to travel from every nook and corner of the province to the capital city of Lahore to get CD4 and viral load testing which is crucial for HIV treatment monitoring. This had huge human and financial cost implications. There was just one CD4 machine available in Lahore when this was bought in 2005. To overcome this problem Punjab AIDS Control Program developed a plan with WHO Pakistan of introducing Point of Care CD4 machine in the province that would travel from center to center on specific dates to conduct all tests in that city. With two machines donated by WHO the program now has a laboratory based CD4 machine in Lahore and two Point of Care machines moving around the centers.

2. Similarly there was just one viral load machine in Lahore where all patients had to come at least twice in a year for testing. WHO Pakistan after conducting a pilot in NACP reference laboratory Islamabad introduced optimization of already available PCR machines in the country.

Since these machines were already widely available in the country at various levels the HIV viral load testing facility was also made available to nearly all HIV treatment centers in the country.

3. The APLHIV is a Nationwide Network of People living with and affected by HIV and associated key population. The APLHIV was registered in 2008, with its Federal Secretariat located at Islamabad. It was established to address the rights and issues of marginalized people, to provide a quality life and to ensure dignity of the lives of people living with and affected by HIV. During 2014 APLHIV provide independent monitoring of equity principles to ensure that services are provided in a dignified manner, ensuring protection of rights of the clients and to ensure that interventions are provided in a nondiscriminatory manner. The concept of community based monitoring proved to be a best practice as it is essentially helpful to identify the gaps in services being provided and to suggest remedial measures. This community based monitoring also gave a sense of empowerment to the community as their view points are being considered at policy and decision making levels. The community based monitoring is being provided through:

a. The provincial Coordinators, who visit all the treatment centers and the CHBC sites in their respective provinces in every quarter (each site is visited every months).

b. Assessment tools are used to perform the monitoring by the Provincial Coordinators.

c. Feedback from both the services providers and the clients is received which helps to identify the gaps and suggest measures to address these gaps.

d. In each province one FGD with clients is held in every quarter on various service delivery points on rotational bases.

e. Provincial Coordinators are also tasked to make contacts and establish links between the private sector and public sectors; visits of influential are also part of this aspect which is mainly conducted by the Federal Secretariat.

f. In addition the APLHIV is acting as a holding point for complaints, suggestions and feedbacks.

g. The APLHIV is also committed to provide leadership in engaging community participation at National level.

Basic information The APLHIV is also providing the services of Toll Free Helpline at National level. This is the only helpline at National level providing the services in Pakistan. Helpline is instrumental in provision of monitoring services across the country and round the clock. The helpline is responsible for provision of:

- a. About HIV, HCV and HIV/HCV Co-Infection.
- b. Telephonic Counseling
- c. Referral Services
- d. Receiving and processing of complaints, suggestions and feedback on the quality, quantity and equity of services being provided to the clients/community.

The helpline provided help in following areas in 2014:

- a. Total SMS sent for provision of information= 1063872
- b. Total calls received from across the country=10123
- c. Basic information provided= 8800
- d. Counseling provided= 540
- e. Referral services provided= 608
- f. Complaints received= 175
- g. Complaints processed=175
- h. Appropriate action taken on complaints=175
- i. Calls received from Punjab=3018
- j. Calls received from Sindh =1995

k. Calls received from KP= 1650

l. Calls received from Balochistan=1576

m. Calls received from ICT, FATA, GB and AJK=800

n. Calls received from unknown locations= 1084

Other than above mentioned initiatives the APLHIV had helped the national and provincial AIDS Control Programme in following areas:-

a. Helped the program in reducing ARV stock outs in treatment centers. No stock out of ARVs has been reported last year.

b. Due to intensive follow up of complaints CD-4 machines donated by WHO were provided at Larkana, Quetta and Turbat

c. Three PLHIVs were facilitated to be re-employed on their jobs.

d. A national level study was conducted on Access of community to treatment care and support and its report was shared in a national consultation workshop.

e. Conducted a national study to find HIV/HCV coinfection prevalence in HIV positives in the country. The results of this study would be shared in a national consultation workshop.

4. Under new WHO recommendation of Treatment as Prevention (TasP) new consolidated guidelines recommend use of ART to prevent transmission of HIV in sero discordant couples. In Pakistan most of those on HIV treatment are migrants working in Gulf countries who have returned with this infection. Largest number of this population is in Khyber Pakhtunkhwa province of Pakistan. HIV transmission was reported in quite a number of instances in the families from husband to their spouses. In order to test initiative of TasP in migrant workers where one partner was infected UNICEF started a pilot project. Till December 2014, 40 such partners were receiving ART as TasP and their spouses were negative.

## **SRI-LANKA**

### **Overview of the HIV/AIDS epidemic**

Sri Lanka has been categorized as a country with a low level HIV epidemic. The term ‘low-level epidemic’ is used for epidemics where HIV prevalence remains less than 1% in the general population and below 5% in any key population. In such a scenario, HIV case reporting and monitoring of HIV programmatic data plays a vital role in understanding the HIV epidemic in the country. The estimated number of PLHIV in Sri-Lanka maintains a steady increasing trend from 1900 in 2001 to 3300 in 2014.

### **Best practices on HIV/AIDS Control Programme**

#### **i. Tracking the epidemic**

Unlinked sentinel surveillance was first introduced in 1993 to track the level of HIV infection in different sub populations and provide information for policy and programmes development. Several stakeholders from the health and CSO assist the NSACP to conduct this annual event. The data collected from sentinel surveillance was used to track the epidemic, make estimates of MARP in the country.

The Strategic Management Unit (SIM) was established in 2009 and is expected to improve collection of strategic information, analysis and generation of evidence based information for dissemination to programme planners for the development of district level plans in accordance with national policies and strategies.

National STD/AIDS Control programme launched its official website in 2011. This enabled information dissemination to all stakeholders.

Another significant achievement is the implementation of the online Patient Information Management System (PIMS). All STD clinics can log into the PIMS and enter STI patient related data using this system. Since January 2011, 5 STI clinics started using this new online system.

## **ii. Supply of HIV free safe blood**

Sri Lanka is one country in the South Asia region which has been able to keep the spread of HIV by transfusion of contaminated blood at an extremely low level. The success is due to the blood safety policy adopted in 1988. A policy decision was made by the Government of Sri Lanka to screen all donated blood collected in the government blood banks for HIV and other transfusion related infections. The National Blood Policy of Sri Lanka was presented to the Parliament and the Transfusion act has been enacted. A private Medical Institutions Bill that incorporates legislative powers to the Ministry of Health in respect of private health care facilities to regulate private sector blood banks has also been approved by Parliament.

## **iii. Provision of STI services**

The STI services in Sri Lanka was established in 1952 and since then control and prevention interventions have been taking place in a systematic manner. The NSACP consists of an administrative wing and treatment and care service which is supported by the National Reference Laboratory and it networks with 30 island wide STD clinics. All STD clinics are manned by a trained medical officer. The other medical staff is also trained in various aspects including delivery of clinical care without stigma and discrimination, counseling, laboratory services. Primary prevention activities are carried out by a public health care team and are assisted by primary health care staff in the respective areas, CSOs and PLHIV. The roles and responsibilities of the primary health care providers such as MOH, PHMW, PHNS, PHI were revisited and confirmed by the Deputy Director General of Public Health Services in 2009. The public health team carries out awareness, behavior change communication programmes for MARP and the general public. Comprehensive management of STI is done on an etiological or syndromic basis depending on the availability of laboratory facilities. Treatment protocols for etiological and syndromic management of STD in Sri Lanka are available in all centers. Drugs for STI treatment including ceftriaxone, cefuroxime, doxycycline, metronidazole, acyclovir are available in all STD clinics. STD services are available to all and are free of charge in the government sector. Counseling, partner notification, condom promotion and provision are included in the package of services. All STD attendees are offered HIV testing and counseled before testing. Confidentiality is maintained during pre and post test counseling and examination for STI. STD clinics serve as

VCT centers. The STD services play an integral part in screening antenatal mothers for syphilis. All mothers diagnosed with syphilis are treated and followed up at STD clinics and the management of infants is carried out in coordination with the pediatrician. The antenatal screening programme is monitored at the monthly MOH conference. With the launch of the ECS programme the RDHS is responsible in the smooth delivery of this service at district level.

Data from STD Clinic are collected using standard formats and is entered into various registers by trained staff. Quarterly returns are submitted to the center where data are analyzed and used for policy and programme planning. The STI data over the years shows a declining trend of bacterial infections with an increase in viral STI.

#### **iv. Mapping and size estimation of key populations at risk (FSW and MSM) in Sri Lanka**

As yet, evidence suggests that the HIV epidemic in Sri Lanka remains at a relatively low level. However, experience from other countries in South Asia have shown that concentrated HIV epidemics involving vulnerable key populations can expand quickly within those sub-populations and affect the wider population through “bridge populations” (usually men who have sexual partnerships with both members of higher risk key populations and lower risk partners).

Therefore, to prevent the establishment and potential expansion of an HIV epidemic in Sri Lanka a key strategy will be to reduce the potential for transmission in important networks of vulnerable key populations, particularly where such networks are large and dense and therefore prone to rapid HIV transmission within and from these networks. The first key step in developing targeted interventions for vulnerable key populations is assessing their location, size and basic operational characteristics. Experience in diverse settings of South Asia has shown that structured mapping can provide accurate estimates of the size and location of key populations and thereby provide guidance for the scoping and targeting of HIV prevention programs and services.

The National STD/ AIDS Control Programme established a steering group to guide this initiative with membership drawn from the NSACP, senior ranking law enforcement agents, the two implementing community based organizations (Companions on a Journey and Community



Strength Development Foundation) and the UN system. Technical assistance was provided by the World Bank through the University of Manitoba, who provided experienced staff from both India and Pakistan. The two key community based organizations received a comprehensive training, where a pilot methodology was field tested.

Hot spots for Men who have sex with men and female sex workers have now been mapped in 4 of the 25 districts across the island. Initial results from the mapping exercise will provide clearer estimates of numbers and locations making at-risk populations easier to reach with prevention services. The methodology has been adopted by the NSACP for scale-up to further 10-13 districts under the Global Fund round 9 interventions with implementation starting in late 2010.

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