



## World TB Day and SAARC TB Day 2021 Bulletin

### TB Epidemiology

#### Burden of TB (Global vis-à-vis SAARC)

Globally, there are 30 high burden countries which account for 87% of Global TB Burden. There are 3 countries in the SAARC region, namely India, Pakistan and Bangladesh which feature amongst these thirty countries and account for 35.7% of the Global TB Burden.

Globally, an estimated 10.0 million people fell ill with TB (130 cases per 100 000 Population) in 2019, a number that has been declining very slowly in recent years. 7.5 million cases were notified in 2019 across the globe which means there was a gap of 2.5 million (25%) between incident and notified cases. For the cases notified in 2018, the treatment success rate was 85 % which is considered as a good achievement.

There were an estimated 1.2 million (range, 1.1–1.3 million) deaths from TB among HIV-negative people in 2019 and an additional 208 000 (range, 177 000–242

000) deaths from TB among HIV positive people. TB is the 10th leading cause of death worldwide and, since 2007, it has been the leading cause of death from a single infectious agent, ranking above HIV/AIDS.

Overall globally, there were an estimated 465 000 (range, 400 000–535 000) incident cases (number of cases that occurred in a year) of MDR/RR-TB in 2019. Globally, 456 426 cases of TB among people living with HIV were notified in 2019, equivalent to 9.5% of the 4.8 million TB patients with an HIV test result. 88% of these patients were started on Anti Retroviral Treatment.

In the SAARC region, an estimated 3.7 million people fell ill with TB (203 cases per 100 000 Population). In 2019, 3.1 million TB cases were notified in the SAARC region, which means there was a gap of 0.6 million (16%) between incident and notified cases. For the cases notified in 2018 in the SAARC region, the treatment success rate was 85 %.

In the SAARC region, there were an estimated 150000 (range, 400 000–535 000) incident cases of MDR/RR-TB in 2019. In the SAARC region, 47664 cases of TB among people living with HIV were notified in 2019. 95% of these patients were started on ART. The table on the problem explained, is given below (Table 1):

**Table 1. Global vs. SAARC TB Indicators 2019**

TB Control Indicators	Global	SAARC	% of Global
Estimated Population	7.69 billion	1.83 billion	24
Estimated Incidence	10 million	3.7 million	37
	(130 cases/100 000)	(203 cases/100 000)	
Estimated Deaths Due to TB	1.4 million	0.5 million	45
Total cases notified	7.5 million	3.1 million	41
New and relapse notified cases	7.1 million	2.8 million	39
Treatment Success Rate (2018 cohort)	85%	85%	-
Estimated MDR/RR- TB incidence	0.46 million	0.15 million	32
Patients with Known HIV Status who are HIV Positive	0.45 Million (9.5% of tested)	0.047 Million	10
Patients with Known HIV Status who are HIV Positive on ART	0.39 Million (88%)	0.045 Million (95%)	12

Source: [www.who.int/tb/data/TB country, regional and global profiles](http://www.who.int/tb/data/TB_country,_regional_and_global_profiles)



SECRETARY GENERAL

SOUTH ASIAN ASSOCIATION  
FOR REGIONAL COOPERATION  
SECRETARIAT



MESSAGE  
WORLD TUBERCULOSIS DAY  
24 MARCH 2021

The World Tuberculosis Day is observed every year on 24<sup>th</sup> March to mark the discovery of the bacterium causing Tuberculosis (TB) by Dr. Robert Koch in 1882. The Day is an opportunity to spread public awareness about the devastating health, social and economic consequences of TB as well as to make pledges for persistent efforts to end this global menace. The Day is also commemorated as the SAARC TB Day across the South Asian region.

In spite of the ongoing global efforts to control the spread of TB, it still remains one of the deadliest infectious diseases. Every year, millions of people fall sick with TB and hundreds of thousands succumb to this preventable and curable disease. The theme of the World TB Day for 2021 - 'The Clock is Ticking' - aptly reflects the fact that there has not been satisfactory progress towards achieving global targets and that we are running out of time in implementing the commitments to end TB, outlined in the UN Political Declaration on Tuberculosis adopted during the first-ever UN High-Level Meeting on Tuberculosis held in 2018. Even though the number of people treated for TB has increased after the UN High-level Meeting in 2018, much remains to be done to reach the global targets. We can achieve these only when we are able to provide equitable access to quality and timely diagnosis, prevention, treatment and care for the disease. Although the past year was devoted to responding to the COVID-19 pandemic, it is heartening that the number of new infections of TB is on the decline, calling for innovative ways to retain the success achieved in its prevention and control in the previous years.

The SAARC region, with an estimated incidence of 3.7 million TB cases, accounts for 37% of the global burden of TB. In this backdrop, the efforts made by the Member States of SAARC for the control of TB in the region, especially since the establishment of the SAARC Tuberculosis and HIV/AIDS Centre (STAC) in 1992, are indeed very encouraging. However, there are many challenges, such as multi-drug resistant TB, extensively drug resistant TB, TB in children, Latent TB and TB/HIV co-infection. Moreover, many people in our region continue to suffer from this disease because of poverty, gender inequality, vulnerability, marginalization as well as inadequate access to quality care, including affordable diagnostics and treatment facility.

On this Day, I wish to sincerely request the Member States of SAARC to work collectively with a resolve to achieve the target of eliminating TB in the SAARC region by 2027, three years ahead of the global target. I also take this opportunity to congratulate STAC for consistently supporting the Member States in this endeavour.

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- ❖ For MDR-TB diagnosis and treatment, 59% needs to be achieved in the SAARC Region by 2022
- ❖ The achievement of this target by the SAARC Member States ranges between 31-67%.
- ❖ There were 3.1 Million total case notified and 2.8 Million new and relapse notified TB cases (gap of 16%)
- ❖ 42% Childhood TB diagnosis and treatment target needs to be achieved in the SAARC Region by 2022
- ❖ The SAARC Member States achievement on this target ranges between 42-76%.



SAARC TB and HIV AIDS Centre, with the support and inputs of SAARC Member States, has published and disseminated SAARC Regional Strategy for Elimination of Tuberculosis (2018-2023) to support the Member States to End TB in the region:

### TB Incidence in SAARC Member States:

SAARC region, with 24 % of the Global population, accounts for 37% of the Global burden of TB in terms of incident cases. The 3 countries in the SAARC region, namely India, Pakistan and Bangladesh, are part of these thirty countries and account for 35.7 % of the Global TB Burden and 96% burden of the SAARC region. India, the most populous country (1366 million), accounts for 71% of the total burden, Pakistan 15% and Bangladesh 9.7 % of the total burden in SAARC region. However, the rate of incident (number of cases that occurred in a year) TB cases is highest in Pakistan, i.e. 238 incident cases per

100,000 population, second highest in Nepal i.e. 238/100,000, third highest in Bangladesh i.e.221/100,00 and fourth highest in India, i.e. 193/100,000 population. The table on the problem explained, is given below (Table 2 and Figure 01):

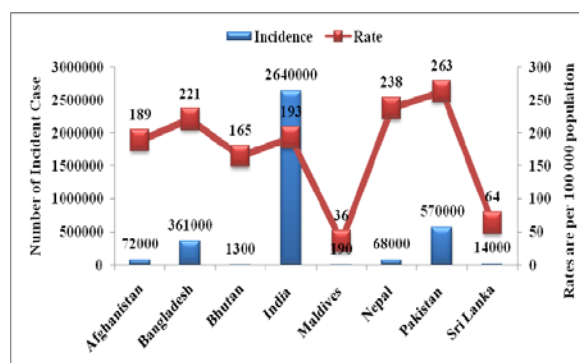
**Table 2: Estimates of TB Incidence in the SAARC Region 2019**

Country	Population ('000)	Number		Rate*	
		Best Estimate	Uncertainty Interval	Best Estimate	Uncertainty Interval
Afghanistan	38000	72000	46000-103000	189	122-270
Bangladesh	163000	361000	262000-474000	221	161-291
Bhutan	760	1300	960-1600	165	126-208
India	1366000	2640000	1800000-3630000	193	132-266
Maldives	530	190	150-240	36	28-46
Nepal	29000	68000	40000-103000	238	141-359
Pakistan	217000	570000	404000-764000	263	187-353
Sri Lanka	21000	14000	10000-18000	64	47-83
<b>Total</b>	<b>1835290</b>	<b>3726490</b>	-	<b>203</b>	-

Source: WHO Global Tuberculosis Report 2020, \* Rates are per 100 000 population

**Figure 01: Estimates of TB incidence in the SAARC Member States- 2019**

- ❖ Three of eight Member States in the SAARC Region, namely India, Pakistan and Bangladesh, lie among 30 high TB and MDR-TB burden countries in the world.
- ❖ An estimated 3.7 Million people fell ill with TB (203 cases per 100 000 Population)
- ❖ There were an estimated 0.5 Million deaths from TB
- ❖ There were 3.1 Million total case notified and 2.8 Million new and relapse notified TB cases (gap of 16%)
- ❖ Estimated MDR/RR TB incidence was 157119
- ❖ Out of 47664 TB patients who were HIV positive, 45298 (95%) were put on Antiretroviral Treatment



Source: WHO Global Tuberculosis Report 2020

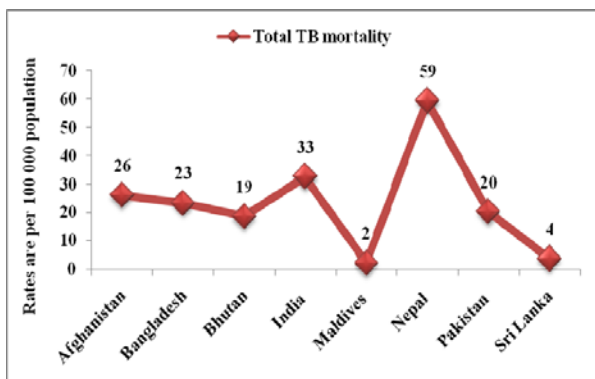
**TB Mortality in SAARC Member States:**

SAARC region with 24 % of the Global population accounts for 40% of the Global mortality due to TB. The rate of mortality due to TB per 100,000 population is highest in Nepal, i.e. 59 per 100,000 population, followed by India i.e. 33/100,000 population, third being Afghanistan i.e.26/100,00 population and fourth highest in Bangladesh, i.e. 23/100,000 population followed by Pakistan (20/100,000) and Bhutan (19/100,00). Sri Lanka (4/100,000) and Maldives (2/100,00) have the lowest mortality due to TB in the SAARC region. The table on the problem explained, is given below (Table 3 and Figure 02):

**Table 3: Estimates of the TB Mortality in the SAARC Region 2019**

Country	Population ('000)	HIV -Negative TB Mortality		HIV-Positive TB Mortality		Total TB Mortality	
		Number	Rate *	Number	Rate *	Number	Rate *
Afghanistan	38000	9800	26	120	0.32	9920	26
Bangladesh	163000	38000	24	150	0.09	38150	23
Bhutan	760	140	18	1	0.10	141	19
India	1366000	436000	32	9500	0.69	445500	33
Maldives	530	11	2	0	0.00	11	2
Nepal	29000	17000	58	220	0.77	17220	59
Pakistan	217000	42000	19	1900	0.90	43900	20
Sri Lanka	21000	770	3.6	4	0.02	774	4
<b>Total</b>	<b>1835290</b>	<b>543721</b>	<b>30</b>	<b>11895</b>	<b>0.65</b>	<b>555616</b>	<b>30</b>

Source: WHO Global Tuberculosis Report 2020, \* Rates are per 100 000 population



**Figure 02: Estimates of the TB mortality in the SAARC Member States- 2019**

### Estimates of TB burden in Children in SAARC Region:

The estimated incidence of TB in children in the SAARC Region is 12.5% of the total estimated incident cases with variations amongst the SAARC Member States as shown in the Table below. All Member States are providing preventive treatment to the children of household contacts of confirmed TB cases. The proportion of children provided preventive treatment is variable with a need to improve

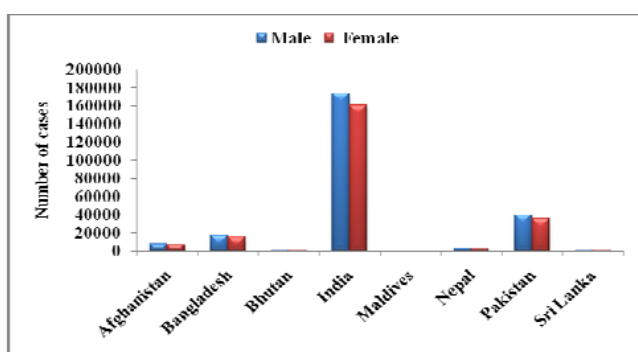
for most of the countries. As diagnosis is more complicated and monitoring of treatment is more difficult in children, there is a need to improve management of TB for children. The table on the problem explained, is given below (Table 4 and Figure 03):

**Table 4: Estimates of TB Burden in children (0-14) by age and sex in the SAARC Region, 2019**

Country	Male	Female	Total (% of Total Cases)	Total Cases (including children)	Children (age <5) household contacts of bacteriologically -confirmed TB cases on preventative treatment (%)
Afghanistan	7800	7300	15100 (21%)	72000	93
Bangladesh	17000	16000	33000 (9.1 %)	361000	51
Bhutan	32	30	62 (4.8 %)	1300	28
India	174000	160000	334000 (12.7%)	2640000	33
Maldives	1	2	3 (1.6%)	190	70
Nepal	2700	2400	5100 (7.5%)	68000	37
Pakistan	40000	36000	76000 (13.3%)	570000	5.6
Sri Lanka	410	370	780 (5.6%)	14000	51
<b>Regional</b>	<b>241943</b>	<b>222102</b>	<b>464045 (12.5%)</b>	<b>3726490</b>	

Source: <https://www.who.int/teams/global-tuberculosis-programme/data>

**Figure 03: Estimates of TB Burden by Gender in the SAARC Region, 2019**



Source: <https://www.who.int/teams/global-tuberculosis-programme/data>

### Case Notification in SAARC Region:

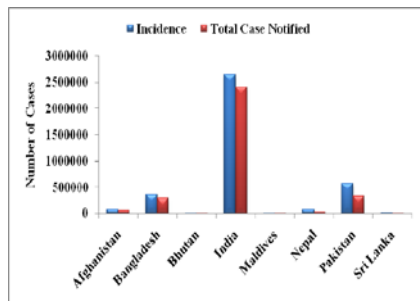
The sustained efforts by the National programs have resulted in improvement of TB notifications. Out of an estimated 3.7 million cases in 2019, 2.87million cases (77.5 %) were reported by the SAARC region. The table on the problem explained, is given below (Table 5 and Figure 04):

**Table 5: TB Case Notification in the SAARC Region -2019**

Country	Population ('000)	Total Case Notified	Total (New and Relapse Cases)
Afghanistan	38000	52770	52438
Bangladesh	163000	292942	291595
Bhutan	741	1016	1005
India	1366000	2404815	2162323
Maldives	530	154	154
Nepal	29000	32043	31495
Pakistan	217000	334754	328312
Sri Lanka	21000	8434	8204
<b>Total</b>	<b>1835271</b>	<b>3126928</b>	<b>2875526</b>

Source: WHO Global Tuberculosis Report 2020

**Figure 04: TB Case Incidence and Notifications in the SAARC Member States-2019**



Source: WHO Global Tuberculosis Report 2020

**Treatment Success Rate in the SAARC Region:**

The treatment success rate of the New and Relapse cases has been good over the successive years and it was 85 % for the SAARC region in 2019. The table on the problem explained, is given below (Table 6):

**Table 6: TB Case Notification (2018) and Treatment Success Rate (2018 Cohort)**

Country	Total New and Relapse*	Treatment Success (%)**
Afghanistan	48420	91
Bangladesh	267143	94
Bhutan	898	95
India	1994000	82
Maldives	138	64
Nepal	31855	91
Pakistan	360472	93
Sri Lanka	8620	85
<b>Regional</b>	<b>2711546</b>	<b>85</b>

Source: \*SAARC Epidemiological response on Tuberculosis-2019, \*\*WHO Global Tuberculosis Report-2020

**Management of Drug Resistant TB in the SAARC Region:**

With the improvement in laboratory infrastructure, there have been considerable improvements in diagnosis and treatment of drug resistant TB Cases. However, a lot is still required to be done. Out of an estimated, 157119 estimated Multi Drug Resistant (MDR)/ Rifampicin Resistant cases (RR) TB cases in the SAARC region in 2019, 72677 (46.25%) cases were diagnosed and 61682 (84.8%) were put on treatment. Out of 2625 cases of Extensively Drug Resistant TB Cases diagnosed in 2019, 1979 were put on treatment. There are significant gaps which need to be bridged on MDR-TB. The estimated MDR/RR-TB cases in 2019 are the maximum for India, i.e. 124,000 cases followed by Pakistan (25,000), Bangladesh (3300), Afghanistan (2400) and Nepal (2200). The table on the problem explained, is given below (Table 7 and Figure 05):

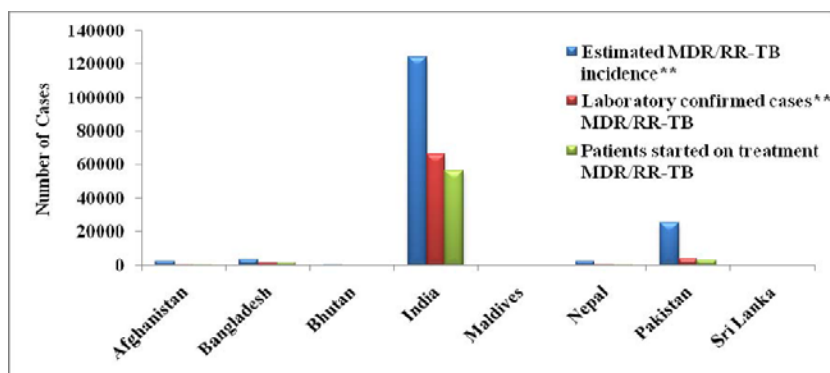
**Table 7: Drug-resistant TB care in the SAARC Region, 2019**

Country	Estimated MDR/RR-TB Incidence**	Laboratory Confirmed Cases**		Patients Started On Treatment		MDR/RR-TB Cases Tested For Resistance To Any Fluoroquinolone
		MDR/RR-TB	XDR-TB	MDR/RR-TB	XDR-TB	
Afghanistan	2400	486	5	396	6	43
Bangladesh	3300	1373	7	1243	7	1248
Bhutan	190	87	1	70	0	65
India	124000	66255	2523	56569	1918	36748
Maldives	2	1	0	1	0	1
Nepal	2200	635	29	378	14	417
Pakistan	25000	3820	60	3004	34	2512
Sri Lanka	27	20	0	21	0	-
<b>Regional</b>	<b>157119</b>	<b>72677</b>	<b>2625</b>	<b>61682</b>	<b>1979</b>	<b>41034</b>

\*\* Includes cases with unknown previous TB Treatment history

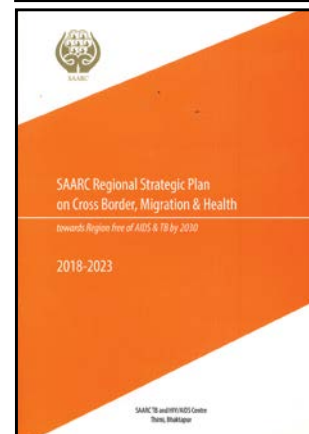
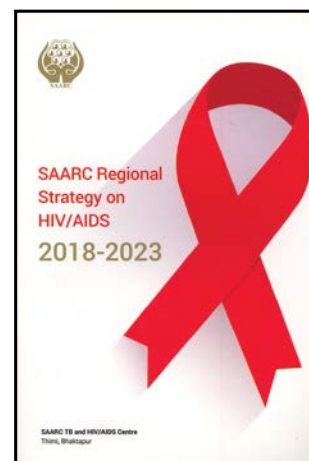
Source: WHO Global Tuberculosis Report 2020, \*<https://www.who.int/tb/country/data/download/en/>

**Figure 05: Drug-resistant TB care in the SAARC Member States 2019**



\*\* Includes cases with unknown previous TB Treatment history

Source: WHO Global Tuberculosis Report 2020



## TB/ HIV Care in New and Relapse TB patients:

A small proportion out of the TB patients tested were HIV positive. Most of the countries have put a significant proportion of HIV positive TB patients on Anti Retroviral Treatment. The table on the problem explained, is given below (Table 8):

**Table 8: TB/HIV care in new and relapse TB patients, 2019**

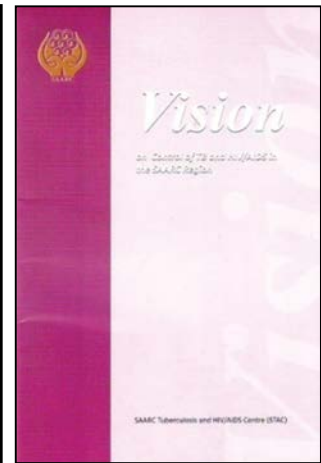
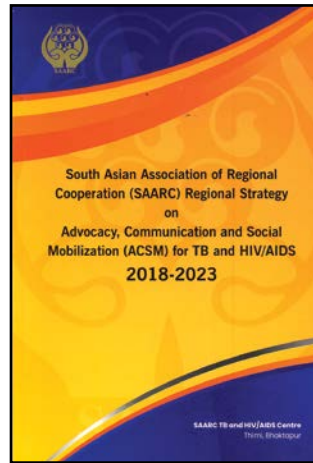
Country	Patients with known HIV status who are HIV positive		Patients on Antiretroviral Therapy (ART)	
	Number	%	Number	%
Afghanistan	11	0.036	7	64
Bangladesh	120	1.2	116	97
Bhutan	3	0.31	3	100
India	46741	2.7	44517	95
Maldives	0	0	0	-
Nepal	159	0.72	155	97
Pakistan	624	0.48	494	79
Sri Lanka	6	0.078	6	100
<b>Regional</b>	<b>47664</b>		<b>45298</b>	<b>95</b>

Source: WHO Global Tuberculosis Report 2020

**Table 9: Estimated proportion of TB cases with MDR/RR- TB, 2019**

Country	New Cases (%)	Previously Treated Cases (%)
Afghanistan	2.6	24
Bangladesh	0.7	11
Bhutan	15	9.6
India	2.8	14
Maldives	0.93	11
Nepal	2.2	15
Pakistan	4.2	7.3
Sri Lanka	0.1	3.3

Source: WHO Global Tuberculosis Report-2020



## Surveillance of Drug Resistant TB:

Estimated proportion of TB Cases with MDR/RR-TB: This indicator depicts the gravity of Drug Resistant TB problem. MDR-RR- TB amongst new cases is not alarming with highest being in Pakistan (4.2 %) and lowest being in Sri Lanka (0.1 %). Amongst the Previously Treated TB Cases, it was also not significantly high except for Afghanistan (24%), Nepal (15%), India (14%) and Bangladesh (11%) and Maldives (11%). The table on the problem explained, is given below (Table 9):



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