Achieving the Sustainable Development Goal on Health (SDG 3)

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Target 3.c Substantially increase health financing and the recruitment, development, training and retention of the health workforce in developing countries, especially in least developed countries and small island developing States.

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1. Executive Summary

The Sustainable Development Goals (SDG) carry forward and expand upon the vision and objectives of the Millennium Development Goals (MDG) which witnessed its fair share of achievements over one and a half decades of its being. Comprising of 17 goals, targets and 230 indicators to be achieved by 2030, it envisages wider inter-sectoral and holistic frameworks for sustainable development.

Of these, Goal No. 3 (SDG 3) deals with sustainable health by ensuring healthy lives and well-being. It takes into cognizance emerging new challenges in relation to health across the global landscape and cross-sectoral coordination for exponentiation and broadening of health outcomes.

Member nations have initiated efforts towards the same in right earnest and the process of reporting these efforts is expanding. Due to the wider ambit of the targets envisaged within these goals, and in particular, SDG 3, there are challenges and hurdles in coordinating activities and programs as well as identifying, collecting and collating data within nations. Though a few nations have identified relevant indicators internally for contributing to meaningful reporting, this can impact streamlining of data received inter-nationally as well as global assessment of progress.

The current study has focused on understanding the measures and processes that countries have adopted towards the achievement of targets under SDG 3, as reported by them through their Voluntary National Reviews as well as from other published sources and highlights the challenges that have been often confronted while reporting on the same. The report looks at suggestions that are available to overcome such challenges and contributes relevant additional ones.

Global achievement of maternal mortality targets which remained unaccomplished by the end of MDG’s is besieged with similar impediments currently as regions such as Sub-Saharan Africa and Asia continue to struggle with deficits in skilled manpower for safe delivery and incomplete coverage of family planning methods. Inaccurate classification
of maternal deaths also poses threats to reliability of reports. A similar scenario is observed in relation to neonatal and infant deaths.

While there is a sense of achievement in diminishing the progress of HIV/AIDS, the incident rates in some of the most endemic regions of the world hold cause for concern. Tuberculosis and its advanced variant of Multi-Drug Resistant Tuberculosis (MDR-TB) as well as Malaria burden hold out a grim reminder of the looming threat of infectious mortality that demands urgent interventions. The rise of Non-Communicable Diseases and its morbidity bearings on national populations calls out for stronger policy and Information, Education and Communication (IEC) measures.

Nations have strengthened surveillance and legal recourses to tackle the epidemic of substance abuse. However available statistics of current users of tobacco and alcohol point out that there may be estimation errors and demands deploy of standardized survey tools across the globe. The potentially larger prevalence spells out that much more needs to be done. The positioning of road traffic accidents as the leading cause of death for males between 15 and 29 years of age, despite data being made available from unlinked multiple sources, is also a hitherto unaccounted serious concern from a health systems perspective.

Considerable progress has been achieved in meeting the family planning needs of women in reproductive age who are married or are in union. What requires a vigorous focus now is to bring down the adolescent birth-rate in two-thirds of the world.

Public Health spending remains the bedrock for strategies to achieve Universal Health Coverage in low and middle-income countries where social inequities exist. This has been demonstrated by the surge in access to health services in nations where the State has extended forms of financial protection. It is also important to engage with indigenous systems of medicine and their practitioners in the pursuit of widening affordable and acceptable low-cost health care for populations.
Reliable and comprehensive data sources covering all population sub-groups within countries, on mortalities associated with environmental pollution, are imperative for comparability across nations.

The provision of cheaper, good quality generic drugs by a few nations is a major positive step ahead in improving access to essential drugs. More countries are expected to follow suit. Effective monitoring of immunization coverage requires triangulation of data sources from within nations. Developmental aid for target conditions such as HIV/AIDS, TB and Malaria have phenomenally increased and States should enable transparent reporting of all developmental aid sources for health research.

Realistic priority setting and relevant apportioning of health finances for varied health challenges is missing. Nations have however attempted to innovate to raise resources for health. Estimations of health workers on the ground often does not account for personnel engaged in the practice and service delivery of indigenous and traditional systems of medicine. This needs to be incorporated into national censuses. There is a lack of consistency and accuracy in the assessment of emergency preparedness and risk reduction of countries globally.

Strengthening of health systems remains the most important intervention and thrust of focus for the achievement of the 2030 Sustainable Development Agenda. All efforts towards the achievement of the health-related SDGs should be aligned for robust monitoring, health systems strengthening for Universal Health Coverage, health equity, sustainable health financing, innovation and research and development.

2. Introduction

In September 2015, Heads of State and Government agreed to commit themselves to achieve sustainable development by adopting the 2030 Agenda for Sustainable Development that includes 17 Sustainable Development Goals (SDGs), which set out quantitative objectives across the social, economic, and environmental dimensions of sustainable development.
The goals provide a framework for shared action “for people, planet and prosperity,” to be implemented by “all countries and all stakeholders, acting in collaborative partnership.”

As articulated in the 2030 Agenda for Sustainable Development, “never before have world leaders pledged common action and endeavour across such a broad and universal policy agenda.” 169 targets accompany the 17 goals and set out quantitative and qualitative objectives for the next 15 years. These targets are “global in nature and universally applicable, taking into account different national realities, capacities and levels of development and respecting national policies and priorities.” A set of 230 indicators and a monitoring framework will also accompany the goals.


The HLPF is the main United Nations platform on sustainable development and it has a central role in the follow-up and review of the 2030 Agenda for Sustainable Development at the global level. General Assembly resolution 70/299 provides further guidance on the follow-up and review of the 2030 Agenda and the SDGs. The Forum adopts inter-governmentally negotiated political declarations.

As with many commitments made at global level using multilateral platforms, commitments made to achieve the 2030 Agenda for Sustainable Development and related SDGs need to be translated to national and local actions.

With progress that is being made, at national and global levels, in ensuring health for all, the SDG 3 focuses on ensuring healthy lives and promoting the well-being for all at all ages. According to the United Nations, significant strides have been made in increasing life expectancy and reducing some of the common killers associated with

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1 https://sdg.guide/chapter-1-getting-to-know-the-sustainable-development-goals-e05b9d17801
2 https://sustainabledevelopment.un.org/futurewewant.html
3 https://undocs.org/en/A/RES/70/299
child and maternal mortality. Major progress has been made on increasing access to clean water and sanitation, reducing malaria, tuberculosis, polio and the spread of HIV/AIDS. However, many more efforts are needed to fully eradicate a wide range of diseases and address many different persistent and emerging health issues\textsuperscript{4, 5}.

During the HLPF 2017 meeting, about 42 countries presented their Voluntary National Reviews (VNRs) outlining a range of activities to achieve the SDGs in general and SDG 3 in particular. The synthesis report of VNRs indicated that though progress made by countries is becoming impactful, challenges remain in terms of using indicators to deal with reviewing national actions.

This paper focuses on the Goal related to health (SDG 3) in the context of reviewing currently available indictors against the set SDG targets and provides suggestions for national actions related to generating information and data on indicators besides suggesting adjustments to such indicator usage at national level. The paper also provides a set of recommendations for national actions related to realizing SDG 3.

\textbf{2.1 Methodology}

This report has been created by the extensive scoping of secondary data made available through the Voluntary National Reviews (VNRs) of nations to the High Level Political Forum (HLPF), status reports on the Millennium Development Goals, WHO Policy Strategies on Traditional Medicine, UNICEF reports on maternal and child health indicators, academic manuscripts on SDG 3 indicators, WHO reports on communicable and non-communicable diseases, UN reports on reproductive health, global reports on road accidents, statistical, global and national monitoring reports on SDG 3 progress and SDG websites.

Relevant data obtained has been represented in the following manner in the report:

a) Region-wise statistics with respect to specific SDG 3 targets and indicators

b) Descriptive global situational analysis in relation to SDG 3 targets and indicators

\textsuperscript{4}Sustainable Development Goals :http://www.un.org/sustainabledevelopment/health/
c) National responses on progress made with respect to individual SDG 3 targets and indicators

d) National indicators developed by India for respective SDG 3 targets.

2.2 Objectives

The objectives of the current report are:

a) To update on the global progress and challenges with respect to individual SDG 3 targets and indicators

b) To highlight suggestions for addressing the challenges in relation to the achievement and reporting of these targets.

2.3 Target Audience

The report is aimed primarily at the following audience:

a) Policy makers and experts working towards achieving SDG 3 at different levels,

b) National Ministries of Health and Health Policy makers,

c) Health, Social and Development researchers with a keen interest in Sustainable Development, and

d) Public Health professionals and managers engaged in projects on community health in relation to National Health goals and priorities

3. A Quick Review of Achievements through the Millennium Development Goals (MDGs)


Focused intra-national, international and global efforts facilitated the effective advancement of several goals, in particular the two health related goals within the deadline of 2015, See Table 1 below.
Table 1: Health Related Goals and Targets under the MDGs

<table>
<thead>
<tr>
<th>Goal No.</th>
<th>Goal</th>
<th>Targets</th>
</tr>
</thead>
</table>
| 5.       | Improve Maternal Health | 5.A Reduce by three quarters, between 1990 and 2015, the maternal mortality ratio  
5.B Achieve, by 2015, universal access to reproductive health |
| 6.       | Combat HIV/AIDS, Malaria and other diseases | 6.A Have halted by 2015 and begun to reverse the spread of HIV/AIDS  
6.B Achieve, by 2010, universal access to treatment for HIV/AIDS for all those who need it  
6.C Have halted by 2015 and begun to reverse the incidence of malaria and other major diseases |

Actions using the MDG framework resulted in global reduction of maternal mortality ratio (MMR) by 45% with regions contributing to the maximum burden on account of the same witnessing significant reductions, such as South Asia (64%) and Sub Saharan Africa (49%).

This period also witnessed an increase by 12% points of skilled health worker assisted births, positioning it as 71% of all births globally. Similarly, concerted strategies and interventions saw the antenatal coverage of pregnant women leap to 89% from a mere 59% in 1990 in one of the most underserved regions of the world - Northern Africa. Efforts towards reduction of unwanted pregnancies also bore fruit with an increase in global contraceptive use by women between the ages of 15-49 from 55% to 64%.

The fight against infectious diseases also saw commendable progress. The global incidence rate of HIV decreased by over 40 per cent accompanied by the massive expansion of antiretroviral therapy (ART) coverage for people living with HIV from 800,000 in 2003 to 13.6 million in 2014. Anti-malarial prophylactic measures gained a boost in Sub-Saharan Africa with above 900 million insecticide treated nets being provisioned to endemic areas in the decade leading up to 2014. Over 37 million lives were saved on account of global coordinated efforts towards the prevention, diagnosis and treatment of Tuberculosis.

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7 Ibid.
Global action on the broader determinants of health also translated to a few noteworthy achievements. Over 58% of the world’s population and over 2.1 billion people had access to improved drinking water and improved sanitation respectively by 2015.

However, there remained no lesser challenges to conquer. The earning power of women was 24 per cent less than that of men, the risk of stunting and risk of under-five death (of which neonatal deaths comprise the majority) for children from the poorest households was twice than those from the richest, Southern Asia and Sub-Saharan Africa continued to contribute to nearly two-thirds of the total underweight children, nearly 60 million people across the world were displaced from their original habitations on account of conflicts, diminishing of employment opportunities in the developed and developing regions of the world had set in motion a labour crisis and of the employed population, 45 per cent (1.45 billion) continued to work in extremely vulnerable conditions and 800 million people continued to live in extreme poverty and suffer from hunger.

4. Moving from MDGs to SDGs

Goal 3 of the Sustainable Development Goals focuses on ensuring healthy lives and promoting well-being for all for all ages. It moves wider beyond the scope of what was articulated in the MDGs in that it has 13 targets and 27 indicators which are centred on maternal health, child health, communicable, non-communicable and tropical diseases, substance abuse, road traffic accidents, environmental pollution, Universal Health Coverage (UHC), health financing, health workforce recruitment, health information systems and research and development. The detailed enlisting of the SDG 3 targets and their respective global and national indicators is provided in Table 9.

The enhanced targets under SDG 3 cover a lot of ground from the purview of them being in sync with a majority of health concerns of nations around the globe. They also correspond to a lot of international efforts and programs that are being carried out across the globe for targeted health outcomes and find links to the World Health

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82015_MDG_Report, supra note 6
9Sustainable Development Goals, supra note 4
Assembly adopted strategies and universal action plans. They acknowledge the growing health challenges for nations and measures required to align, monitor and sustain efforts undertaken for health and development to symbiotically contribute to each other.

5. Review of SDG 3 in 2017

Despite achievements that have been made during the past two decades, the objectives of reducing maternal, new-born and child mortality, enhancing nutritional status, providing universal access to sexual and reproductive health and rights, and effectively carrying forward the battle against communicable diseases such as HIV/AIDS and other sexually transmitted infections, tuberculosis, malaria, neglected tropical diseases and hepatitis are besieged with multiple challenges.

The inherent weaknesses of health systems within nations contribute to deficiencies in coverage and utilization of some of the most basic health services and deficient preparedness for health emergencies. Gender inequity places young girls and women at a disadvantageous position in relation to health. The most vulnerable populations seeking quality health care, in particular women and children, have inequitable access to the same. The same applies to migrant and refugee populations who too lie acutely exposed to varied health risks. Disparities that exist within nations by virtue of income, group characteristics, residence, experience of conflict or humanitarian disasters, by age and by sex contribute to inequities in the access of quality health services.

The progress reported by nations in respect to the SDG targets by virtue of their Voluntary National Reviews (VNRs) is provided in Table 8.

It is projected that an annual reduction rate of over 7.5 per cent is required globally to achieve the Maternal Mortality Rate (MMR) target of <70 maternal deaths per 100,000 live births by 2030. A major contributory factor towards the same, the deprivation of skilled care during delivery continues to persist as a serious challenge in Sub-Saharan Africa.

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Africa. This region also singularly contributes majorly to the burden of under-five deaths, despite global efforts resulting in a 44 per cent reduction in under-five mortality worldwide since 2000. Central and Southern Asia and Sub-Saharan Africa had high reported rates of neonatal mortality (30/1000 live births). Access to and adoption of family planning methods was achieved by 78% of the world’s women aged 15-49 years. Ironically, we continue to have high adolescent birth rates in two-thirds of all nations (>20 births/1000 adolescent girls)\(^\text{12}\).

Notwithstanding the laying out of defined targets in SDG 3, nations grapple with challenges on the path to achievement of the same. Collection of reliable and meaningful data for tracking the progress is a key issue. As nations pursue their own programs and schemes in relation to their national health priorities, the global indicators for SDG3 which have been outlined, may not find relevance in several countries. Hence, it is important for nations to identify what indicators may be employed to capture relevant data in relation to the SDG3 targets.

Accordingly, many nations have reported their own set of indicators evolved through the VNRs on the progress of the SDGs. India has developed 41 indicators spearheaded by the NITI (National Institution for the Transformation of India) Aayog towards the same. The massive effort towards reconciling and aligning the targets within SDG3 to the national programs and policies also exists in quite a few nations. Leadership and vision by the heads and major agencies of the State is very critical for the successful implementation of the SDGs.

6. Understanding SDG 3 using targets and indicators to move global health agenda

This section focuses on current actions (based on the VNRs and related reports at national and regional levels), to achieving the SDG 3 targets using the agreed indicators. It also discussed the gaps in the indicators in use (agreed at global level), suggests options to fill the gaps and provides some recommendations for countries to consider.

\(^\text{12}\)SUSTAINABLE DEVELOPMENT GOAL 3; https://sustainabledevelopment.un.org/sdg3
**Target 3.1 - Reduce the global maternal mortality ratio to less than 70 per 100 000 live births**

The regions which are far behind with respect to this target are Sub-Saharan Africa (>500/100,000 live births) and South Asia (>200/100,000 live births). Skilled staffs are reported to be involved in only half of births in these regions. In 2015, the global maternal mortality ratio stood at 216 maternal deaths per 100,000 live births. Nearly 1.6% (4700) of all global maternal deaths was attributed to HIV/AIDS. Five countries globally reported more than 10% of their maternal deaths as attributable to HIV/AIDS in 2015. They are South Africa (32%), Swaziland (19%), Botswana (18%), Lesotho (13%) and Mozambique (11%)\(^{13}\). Table 2 showcases the region wise lifetime risk of maternal death and percentage change of MMR.

**Table 2: Lifetime Risk of Maternal Death and Percentage change in MMR between 1990 and 2015\(^{14,15}\)**

<table>
<thead>
<tr>
<th>Region</th>
<th>Lifetime risk of Maternal Death (1 in)</th>
<th>Percentage change in MMR between 1990 and 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sub-Saharan Africa</td>
<td>36</td>
<td>45</td>
</tr>
<tr>
<td>South Asia</td>
<td>200</td>
<td>67</td>
</tr>
<tr>
<td>Middle East and North Africa</td>
<td>280</td>
<td>50</td>
</tr>
<tr>
<td>Latin American and Caribbean</td>
<td>670</td>
<td>49</td>
</tr>
<tr>
<td>East Asia and Pacific</td>
<td>880</td>
<td>62</td>
</tr>
<tr>
<td>CEE/CIS</td>
<td>2000</td>
<td>64</td>
</tr>
<tr>
<td>Least developed countries</td>
<td>52</td>
<td>52</td>
</tr>
</tbody>
</table>

**Indicator Challenges, suggestions and recommendations to deal with the challenges**

The major challenges encountered with the indicators for SDG 3.1 are\(^{16}\):

1. Inadequate or improper reporting of deaths in relation to pregnancies captured through surveys.
2. Data from Central Registry and Vital Statistics (CRVS) systems often under-report maternal deaths.
3. The working definition of skilled cadres needs to be consistent across nations and their multiple data sources.

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\(^{15}\)Trends in maternal mortality, supra note 13

An important suggestion made available is that Confidential Enquiry into Maternal Deaths (CEMD), involving multiple experts reviewing all maternal mortality cases in detail, needs to be integrated within national-level Civil Registration and Vital Statistics (CRVS) systems. It would greatly help in the correction of under reporting of maternal deaths owing to mis-classification.

Health care in most of the low and middle-income countries is characterized by the presence of pluralistic health systems. The nature of these systems varies from being codified and having institution-based delivery (Ayurveda, Traditional Chinese Medicine, Unani, etc.) to un-codified practices of indigenous knowledge both at the gross community level and the micro individual level. All of these are currently subsumed under the broader heading of Traditional Medicine (TM). TM is reportedly widely used across the world for meeting healthcare needs - by up to 80% of the population in Laos, 76% and 86% of the populations in Singapore and the Republic of Korea and 49% in Switzerland. Its popular demand is accrued to its accessibility and affordability, and quite often turns to be the only affordable source of health care especially for the poorest of communities and individuals. It has also been documented that for millions of people, TM and TM practitioners remain the main source of health care and sometimes the only source of care.

Considering the role of Traditional Medicine (TM), an additional recommendation for indicators can be proposed. While accounting for skilled cadres, nations almost certainly do not account for practitioners of Traditional Medicine (TM) from the informal/unorganized sector. This is despite them being officially recognized as TM practitioners by the World Health Organization (WHO).

Nations across the globe have communities of these unorganized practitioners in diverse numbers. In India alone, there is an estimated over one million informal community-based TM practitioners who continue to provide primary health care services on a regular basis.

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17 Trends in maternal mortality, supra note 13
**Target 3.2- Reduce neonatal mortality to at least as low as 12 per 1000 live births and under-5 mortality to at least as low as 25 per 1000 live births**

High neonatal deaths continue to be prevalent in Sub-Saharan Africa and South Asia (30/1000 births)\(^{20}\). Mortality among children under 5 years of age remains high in sub-Saharan Africa, with a rate of 84 deaths per 1,000 live births in 2015\(^{21}\). What will add an interesting dimension to this overall scenario is that not long ago, the infant mortality rate in the United States of America was classified as high (6.1/1,000 live births) falling way behind nations such as New Zealand (5.5), Greece (3.8), South Korea (3.2) Portugal (2.5) and Japan (2.3)\(^{22}\). Table 3 points out region wise inequitable risks of under-5 child death and percentage decline in neonatal mortality and under-5 mortality.

**Table 3: Child mortality and risks region wise\(^{23-24}\)**

<table>
<thead>
<tr>
<th>Region</th>
<th>Inequitable risks of child death under-5 years of age</th>
<th>Percentage decline in neonatal mortality</th>
<th>Percentage decline in under-5 mortality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Africa</td>
<td>1:11</td>
<td>40 (SSA)</td>
<td>63 (SSA)</td>
</tr>
<tr>
<td>South East Asia</td>
<td>1:21</td>
<td>52 (SA)</td>
<td>73 (SA)</td>
</tr>
<tr>
<td>Eastern Mediterranean</td>
<td>1:180</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Latin American and Caribbean</td>
<td>1:56</td>
<td>59</td>
<td>75</td>
</tr>
<tr>
<td>Western Pacific</td>
<td>1:67</td>
<td>70 (EAP)</td>
<td>73 (EAP)</td>
</tr>
<tr>
<td>Europe</td>
<td>1:83</td>
<td>64 (ECA)</td>
<td>73 (ECA)</td>
</tr>
<tr>
<td>North America</td>
<td>1:143</td>
<td>35</td>
<td>48</td>
</tr>
</tbody>
</table>

*SSA - Sub-Saharan Africa, SA - South Asia, EAP - East Asia and Pacific, ECA - Europe and Central Asia*

**Indicator Challenges, suggestions and recommendations to deal with the challenges**

The major challenges in relation to the indicators of SDG 3.2 are\(^{25}\):

1. Neonatal deaths are under-reported in several nations
2. Mortality data sets may not represent or mis-represent factual age
3. Neonatal deaths are often misclassified with stillbirths

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\(^{24}\)Six Lines of Action to Promote Health, supra note 16
The available suggestion in relation to the above is that follow-up Verbal/Social Autopsy Surveys are an additional tool to check for the reliability of neonatal deaths whose data may have been collected through various sources such as Full Birth History (FBH) surveys or institution-based data. Small nations have reported nearer to a quarter percentile difference between the initial reported stillbirths and the numbers that were reaffirmed post the Verbal Autopsy measures\(^26\). Employment of the ICD-PM application which sets forth the classification of ICD codes utilized in classifying perinatal and maternal causes of death is expected to help facilitate the capture of consistent and reliable data with regard to neonatal deaths\(^27\).

**Target 3.3 End the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases.**

There were 0.3 new HIV (human immunodeficiency virus) infections per 1,000 uninfected adults and 0.08 new HIV infections among children under 15 years of age which were reported globally in 2015\(^28\). The rate of new HIV cases in Sub-Saharan Africa has declined dramatically over the past two decades and the current incidence rate is near to 0.25% of the population. This still translates to nearly above 3 of every 1,000 uninfected people ages 15–49 contracted HIV/AIDS in 2015\(^29\).

There was an average rate of decline by 1.4% in the global incidence rate of TB cases between 2000-2016. Of the cases in 2016 alone, 10% of them constituted of people living with HIV. During the same period, an estimated 44 million TB deaths in non-HIV infected people was averted on account of TB treatment being made available to them\(^30\). In Sub-Saharan Africa, there were a reported 276 new Tuberculosis cases per 100,000 people in 2015 which is almost double the global rate of new tuberculosis cases as compared to 220 new cases per 100,000 in South Asia\(^31\). An estimated of 4.1% of new


\(^{27}\)Making Every Baby Count: audit and review of stillbirths and neonatal deaths; http://apps.who.int/iris/bitstream/10665/249923/1/9789241511223-eng.pdf

\(^{28}\)SUSTAINABLE DEVELOPMENT GOAL 3, supra note 12


\(^{30}\)Global Tuberculosis Report 2017 http://apps.who.int/iris/bitstream/10665/259366/1/9789241565516-eng.pdf?ua=1

\(^{31}\)World Bank SDG Atlas 2017, supra note 20
cases and 19% of previously treated cases were found to be cases of Multi-Drug Resistant TB (MDR-TB) globally.

India currently accounts for nearly 1/4th of the global burden for TB and reportedly has the highest burden of both TB and MDR-TB cases globally, with an incidence of an estimated 1.3 lakh cases of MDR-TB annually. There were an estimated 1.1 lakh cases of HIV-associated TB reported in 2015, of which nearly 1/4th of them succumbed to the disease. It was accounted that of an estimated 10.4 million new cases globally only 6.3 million were officially notified post-detection, leaving a gap of 4.1 million. Nearly half the burden of this gap was borne primarily by three nations - India, Indonesia and Nigeria. Despite standardized treatment in India being delivered by the Public sector, poor diagnostic practices leading to delayed diagnosis in the unregulated and vast private sector adversely impacts early diagnosis and treatment.

Germany’s international collaborative hub to foster the research and development (R&D) of new tools to combat antimicrobial resistance (AMR) and tuberculosis (TB) will focus on coordinating research efforts, maximizing the impact of new and existing basic and clinical research initiatives, and foster product development.

It is estimated that an average of 1.46 million people, equivalent to nearly 0.12% of the nation’s population are on TB treatment in India, on any given day. Probably as an acknowledgement of the gravity of the scenario, the Public financial support for combating TB was nearly doubled to USD 525 million in 2017.

Globally, an estimated 216 million cases of malaria occurred worldwide. Sub-Saharan Africa is reported to be bearing the highest burden of malaria, with an incidence of 234

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33Global Tuberculosis Report 2017, supra note 30
34The number of privately treated tuberculosis cases in India: estimation from drug sales data. Lancet Infect Dis . 2016;16(11):1255-60 ; http://dx.doi.org/10.1016/S1473-3099(16)30259-6
35Global Tuberculosis Report 2017, supra note 30
36World Malaria Report 2017 http://apps.who.int/iris/bitstream/10665/259492/1/9789241565523-eng.pdf?ua=1
per 1,000 persons at risk\textsuperscript{37}. Fifteen countries of Sub-Saharan Africa carried 80\% of the global malaria burden in 2016\textsuperscript{38}. Data from surveys conducted in 22 African countries pointed out that household ownership of at least one insecticide-treated mosquito net was associated with a 13-31\% reduction in the mortality of children under five years of age\textsuperscript{39}. The mortality figures attributed to malaria globally in 2016 was 445,000\textsuperscript{40}.

In 2015, 1.6 billion people required mass or individual treatment and care for neglected tropical diseases, a 21 per cent decline from 2010\textsuperscript{41}.

Global coverage of vaccinations for Hepatitis B among children 1 year of age increased from 29 per cent in 2000 to 84 per cent in 2015\textsuperscript{42}.

**Table 4: Incidence of TB, Prevalence of HIV and Estimated Malaria Cases\textsuperscript{43-45}**

<table>
<thead>
<tr>
<th>Region</th>
<th>Estimated incidence of TB in 2016 (per 100,000 population)</th>
<th>People living with HIV in 2016 (In millions)</th>
<th>Estimated Malaria cases in 2016 (In millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Africa</td>
<td>254</td>
<td>6.5 (WCA)</td>
<td>194</td>
</tr>
<tr>
<td>South East Asia</td>
<td>240</td>
<td>5.1 (A&amp;P)</td>
<td>14.6</td>
</tr>
<tr>
<td>Eastern Mediterranean</td>
<td>114</td>
<td>-</td>
<td>4.3</td>
</tr>
<tr>
<td>Latin American and Caribbean</td>
<td>-</td>
<td>2.0</td>
<td>75</td>
</tr>
<tr>
<td>Western Pacific</td>
<td>95</td>
<td>-</td>
<td>1.6</td>
</tr>
<tr>
<td>Europe</td>
<td>32</td>
<td>1.5 (EECA)</td>
<td>0</td>
</tr>
<tr>
<td>The Americas</td>
<td>27</td>
<td>2.4 (WCENA)</td>
<td>0.9</td>
</tr>
</tbody>
</table>

*WCA - Western and Central Africa, EECA - Eastern Europe and Central Asia, A&P - Asia and Pacific, WCENA - Western and Central Europe and North America

**Indicator Challenges, suggestions and recommendations to deal with the challenges**

The major challenges in relation to the indicators of SDG 3.3 are\textsuperscript{46}:

1. From observed prevalence and antiretroviral therapy (ART) coverage, need of models to infer incidence

\textsuperscript{37} Good Health and Well Being, supra note 29
\textsuperscript{38} World Malaria Report 2017, supra note 36
\textsuperscript{40} World Malaria Report 2017, supra note 36
\textsuperscript{41} SUSTAINABLE DEVELOPMENT GOAL 3, supra note 12
\textsuperscript{42} Ibid.
\textsuperscript{43} Global Tuberculosis Report 2017, supra note 30
\textsuperscript{45} World Malaria Report 2017, supra note 36
\textsuperscript{46} Six Lines of Action to Promote Health, supra note 16
2. HIV prevalence and people receiving ART data being reported by different data sources
3. Capturing the rate of under-reported TB cases by data made available from facility and/or routine surveillance systems
4. Incomplete notifications of Malaria cases in high-burden areas; reliance on parasite-prevalence surveys for prediction of incidence
5. Clearly defining which population lies at-risk for Malaria
6. On scaling up of immunization, the imperativeness of surveying large number of five-year-old
7. Commonly observed trend of under-reporting of cases; issues in aggregating data across diseases.

**Target 3.4 Reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being.**

80% of the global deaths, between the age group of 30-69 years, on account of non-communicable diseases (NCD) occur in low and middle-income countries. The highest mortality among this group is attributed to Cardiovascular diseases (17.7 million) followed by Cancer (8.8 million), respiratory diseases (3.9 million) and Diabetes (1.6 million)\(^\text{47}\).

Nine of the 12 highest national mortality rates from non-communicable diseases in 2015 were in East Asia and Pacific or Europe and Central Asia, with Papua New Guinea the highest, where the probability of 30-year-old people dying from these non-communicable diseases before their 70th birthday is 36 percent. Suicide rates for all ages tend to be higher in Europe and Central Asia and in high-income countries\(^\text{48}\). Nearly 800,000 suicides occurred worldwide in 2015, with men about twice as likely to commit suicide as women\(^\text{49}\).

**Indicator Challenges, suggestions and recommendations to deal with the challenges**

Some of the major challenges in relation to the indicators of SDG 3.4 are\(^\text{50}\):

1. Assignment of cause-of-death and its quality

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\(^{48}\)Good Health and Well Being, supra note 29

\(^{49}\)SUSTAINABLE DEVELOPMENT GOAL 3, supra note 12

\(^{50}\)Six Lines of Action to Promote Health, supra note 16
2. Under-reporting of suicides and determination of their intent
3. Data made available with respect to treatment of CVDs is not essentially specific to health system response
4. Fails to capture the existence of effective treatment for Cervical Cancer

A recommendation that the authors herewith put forward is that though national level Information Education and Communication (IEC) programs continue to target behavioural changes with respect to diet and consumption patterns, it is certainly not adequate enough in terms of desired outcomes at the community level. These initiatives should be supported by a strong policy commitment from the State to regulate the promotion of unhealthy diet through media by a series of measures such as levy high time rates and taxes for each slot of a commercial played out or displayed through the print media, ensure that commercial stakeholders of processed foods comply with mandatory disclosure of health hazardous ingredients and the potential adverse health events accrued to such foods, ensure the non-availability of such foods within defined geographic contours of educational establishments and so on.

Target 3.5 Strengthen the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol.

In 2016, alcohol consumption was reported highest in Europe and Central Asia (10.2 litres of pure alcohol per person a year) and lowest in the Middle East and North Africa (0.8 litres). More than 1.1 billion people smoked tobacco in 2015, with the number of males higher than those of females. More than 80% of member nations who are party to the WHO Framework Convention on Tobacco Control have either strengthened their existing laws and regulations in regard to Tobacco control or have adopted new ones51.

Indicator Challenges, suggestions and recommendations to deal with the challenges
Some of the major challenges in relation to the indicators of SDG 3.5 are52:
1. The absence of an acceptable indicator definition
2. Estimations of consumption by tourists and domestic production

51 World Health Statistics 2017 - Monitoring Health for the SDGs; http://apps.who.int/iris/bitstream/10665/255336/1/9789241565486-eng.pdf?ua=1
52 Six Lines of Action to Promote Health, supra note 16
Suggestions available from across the globe point out that as data for substance abuse is primarily obtained through facility-based records, the quality and reliability of such data sources varies between nations. Hence it becomes imperative that national health systems identify reliable data sources (community-based or facility based) for indicators defined by them.

In addition to the above, the authors would like to point out that food and drinks form an important category of tourism expenditure, generated either through domestic, inbound or outbound tourism, whose statistics nations are supposed to integrate into their national accounts while assessing ‘final consumption’\(^5\). Data from several nations under this category is not made available to the Global Health Observatory of the WHO. This estimation could give a truer picture of the nation’s actual substance abuse burden as compared to commercial sales that is intimately linked to the tourism sector.

**Target 3.6: By 2020, halve the number of global deaths and injuries from road traffic accidents.**

In 2013, about 1.25 million people died from road traffic injuries, the leading cause of death among males between 15 and 29 years of age\(^5\). Road traffic accidents are considered to be the main cause of death for people between the age group of 15-29 years and bears repercussions for vulnerable road users such as pedestrians, cyclists and motorcyclists\(^5\). In lower and middle-income countries this results to an estimated loss of 5% of the GDP. The African Region has the highest road traffic death rates, while the European Region has the lowest rates particularly among its high-income countries, on account of them achieving and sustaining reductions in death rates despite a persistent increase in motorization\(^5\). Table 5 points out region wise road traffic fatality rates.

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\(^5\)SUSTAINABLE DEVELOPMENT GOAL 3, supra note 12

\(^5\)World Health Statistics 2017, supra note 51

**Indicator Challenges, suggestions and recommendations to deal with the challenges**

A major challenge in relation to the indicator of SDG 3.6 is the existence of differences in relation to definitions across death multiple sources of registration data, surveillance systems and police data\(^{58}\).

Available suggestions point out to the need of linking multiple data sources (vital registration data, police data and hospital data) employed in nations for improving the estimates of road fatality victims\(^{59}\).

**Target 3.7 By 2030, ensure universal access to sexual and reproductive health-care services, including for family planning, information and education, and the integration of reproductive health into national strategies and programs.**

In 2017, 78 per cent of women of reproductive age (15 to 49 years of age) worldwide who were married or in union had their need for family planning satisfied with modern methods as compared to 75 per cent in 2000. The adolescent birth rate remains high in two thirds of all countries, with more than 20 births per 1,000 adolescent girls in 2015\(^{60}\).
Twelve percent of women of reproductive age who were either married or in a consensual union had an unmet need for contraception in 2015. Table 6 points out region wise contraception prevalence rate, demand for family planning, unmet need for contraception and adolescent birth rates.

Table 6: Contraception Prevalence Rate, Demand for Family Planning, Unmet need for Contraception and Adolescent birth rates by regions

<table>
<thead>
<tr>
<th>Region</th>
<th>Contraception Prevalence Rate (CPR) among women aged 15-49, either married or in a union (In %)</th>
<th>Demand for Family Planning (TD) among women aged 15-49, either married or in a union (In %)</th>
<th>Unmet need for contraception (UNR) among women aged 15-49, either married or in a union (In %)</th>
<th>Adolescent birth rates (No. of live births per 1,000 adolescents aged 15-19)</th>
</tr>
</thead>
<tbody>
<tr>
<td>East and Southern Africa</td>
<td>38.6</td>
<td>62</td>
<td>23.6</td>
<td>113</td>
</tr>
<tr>
<td>West and Central Africa</td>
<td>17.6</td>
<td>42</td>
<td>24.2</td>
<td>129</td>
</tr>
<tr>
<td>Asia and the Pacific</td>
<td>68.5</td>
<td>78</td>
<td>9.9</td>
<td>35</td>
</tr>
<tr>
<td>Eastern Europe and Central Asia</td>
<td>65.0</td>
<td>76</td>
<td>10.7</td>
<td>30</td>
</tr>
<tr>
<td>Latin American and Caribbean</td>
<td>72.7</td>
<td>83</td>
<td>10.7</td>
<td>76</td>
</tr>
<tr>
<td>Arab States</td>
<td>51.5</td>
<td>68</td>
<td>16.6</td>
<td>58</td>
</tr>
</tbody>
</table>

The Ministry of Health and Family Welfare, India has launched a national program - *Rashtriya Bal SwasthyaKaryakram* (RBSK) for child health screening and early intervention. Screening is done for over 30 different health conditions which are prevalent in children and are broadly classified under Defects at birth, Diseases in children, Deficiency conditions and Developmental delays including Disabilities (4 Ds). Intervention Services are executed through appropriate linkages to care, support and treatment.


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**Indicator Challenges, suggestions and recommendations to deal with the challenges**

Major challenges in relation to the indicators of SDG 3.7 are:

1. Non-inclusion of unmarried women during data collection
2. Misstatements on age while estimating Adolescent Birth Rate

A few of the available suggestions are on the following lines:

1. Data for the above target is generally collected through Demographic and Health Surveys, Reproductive Health Surveys and quite often, in most of the nations unmarried women of the reproductive age group, particularly adolescent group (15-19 years) are not included in these surveys. It is mandatory that a representative sample of unmarried women should form an imperative source of information in these surveys. This would strengthen policy and program efforts in respect of Reproductive and Sexual Health education, moving beyond the over-emphasized approach of facility-based counselling and clinical services.

2. Data capturing and reporting from women and girls who remain outside the standard 15-49-year age interval has been initiated in many regions such as Latin America and the Caribbean, and in South-East Asia, throwing light on maternal deaths occurring among girls even younger than 15\(^64\).

**Target 3.8 Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all.**

High out-of-pocket (OOP) expenditures continue to dominate health care financing in many low- and middle-income countries\(^65\). Review of evidence from 6 countries found that conditional cash transfers, in which cash payments are made in return for using health services, resulted in an 11-20% increase in children being taken to health centres and 23-33% more children making visits for preventive healthcare\(^66\). A reported 808 million people incurred OOP expenditure exceeding 10% of their total household income and of which, for 179 million people, it exceeded the 25% threshold level, in 2010\(^67\).

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\(^{63}\)Six Lines of Action to Promote Health, supra note 16

\(^{64}\)Trends in maternal mortality, supra note 13

\(^{65}\)Good Health and Well Being, supra note 29

\(^{66}\)World Health Report; http://www.who.int/whr/2013/main_messages/en/

Strategies to attain Universal Health Coverage (UHC) continue to challenge nations, particularly those from the low and middle-income regions. Public Health spending remains the primary source for the same globally. Variance in and sub-optimal allocation of such dedicated spending across national budgets accentuates the crisis. Table 7 points out region wise UHC service coverage index.

Table 7: UHC Service Coverage Index*68

<table>
<thead>
<tr>
<th>Region</th>
<th>Regional (population-weighted) mean for the UHC Service Coverage Index (Scores between 0-100)</th>
<th>Population who have spent beyond 25% level of catastrophic health expenditure, 2010 (In millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Africa</td>
<td>64</td>
<td>25.6</td>
</tr>
<tr>
<td>Asia</td>
<td>64</td>
<td>128.7透</td>
</tr>
<tr>
<td>Latin American and Caribbean</td>
<td>77</td>
<td>14.9</td>
</tr>
<tr>
<td>Europe and Northern America</td>
<td>75</td>
<td>9.8</td>
</tr>
<tr>
<td>Oceania</td>
<td>74</td>
<td>0.2</td>
</tr>
</tbody>
</table>

*The UHC service coverage index is a single indicator that is computed based on tracer indicators (some of which are proxies of service coverage) to monitor coverage of essential health services.

Children aged 0-4 years of age in Chile benefit from a social protection policy which incorporates a system of benefits, interventions and social services. The key features of this policy are home visits, nurturing parenting skills and child development by the deployment of education groups, child care, health care, counselling and referral services.

In Zimbabwe, the Government has recently introduced a 5-cent health fund levy for every dollar of airtime and mobile data under the theme “Talk-Surf and Save a Life”, towards mobilizing funds for the purchase of drugs and equipment for public hospitals and clinics³.

A cash transfer scheme commenced by the Ministry of Community Development in Zambia has benefited the most vulnerable (70% impacted by HIV/AIDS; 30% children orphaned; 55% of house-holds heads were aged 65 or over). It was observed that 3 years into the program, the beneficiaries enrolled had increased their food consumption and reported reduced episodes of illness.
**Indicator Challenges, suggestions and recommendations to deal with the challenges**

Major challenges with the indicators of SDG 3.8 are as follows:

1. Tracer indicators may yield asynchronous data; some tracer indicators with respect to UHC lack disaggregation variables.
3. Depending on the health system structure of nations, optimal level for hospital access may vary.

Primary Health Care is the core of the philosophy of UHC. To ensure this at a sustainable and equitable level, it is imperative that national governments devise policies and strategies to integrate and utilize completely and effectively all available local, national and other resources in relation to health. This guiding principle has echoed in most of the international health declarations and roadmaps, right from Alma Ata.

Globally across member states of WHO, non-codified application of Traditional Medicine (TM) comprises of the collective knowledge, practices and beliefs of communities in relation to health that are culture and region specific and has been sustained through oral transmission across generations. This is referred to as Local Health Traditions (LHT). This knowledge base is also synonymously referred to as ‘folk knowledge’, ‘indigenous knowledge’, ‘people’s knowledge’ and ‘traditional wisdom’. As it has been estimated that over 80% of the world’s population depends on traditional healing systems as their primary source of care, support for local ecosystem-based LHTs at the highest level shall play a critical role in the progress towards UHC by empowering communities for sustainable and affordable primary healthcare, significantly reducing out-of-pocket expenditure, nurturing and protecting ecosystems, promoting sustainable livelihood and prevent erosion of valuable community-based health wisdom.

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69 Six Lines of Action to Promote Health, supra note 16
Target 3.9 By 2030; substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination.

Worldwide in 2015, an estimated 108,000 people died as a result of unintentional poisoning, a 33 per cent decrease since 2000\(^{70}\).

**Indicator Challenges, suggestions and recommendations to deal with the challenges**

Major challenges in relation to the indicators of SDG 3.9 are\(^{71}\):

1. The lack of clarity around assumptions employed to attribute mortality on account of poor air quality
2. The lack of clarity around assumptions employed to attribute mortality on account of unsafe WASH practices
3. Quite often, deaths occurring due to alcohol and illicit drug use are wrongly assigned to unintentional poisoning with an unspecified substance

Available suggestions, as a prelude, dwell upon the fact that data available globally on mortality in relation to WASH is of uncertain reliability, coverage and comparability across countries. Many regions of the world such as Sub-Saharan Africa have not carried out household surveys for several years at a stretch. Hence data available could be considerably out of date. Highly vulnerable populations such as those living in slums and in conflict zones may have been well omitted from such surveys. The sources of such data are also extremely heterogeneous, ranging from censuses, national registers and household surveys, creating challenges for interpretation of statistical results\(^{72}\).

The authors recommend two important measures to be adopted to ensure reliability of data-triangulation of multiple data sources starting from the District level and Third-Party Audits of annual reports from the official Healthcare delivery system.

\(^{70}\)SUSTAINABLE DEVELOPMENT GOAL 3, supra note 12

\(^{71}\)Six Lines of Action to Promote Health, supra note 16

Target 3.a Strengthen the implementation of the World Health Organization Framework Convention on Tobacco Control in all countries, as appropriate

In India, the Tobacco Control Act Section 5 restricts all forms of advertisement (direct, indirect/surrogate), promotion and sponsorship of tobacco products. Section 6 of the Act prohibits sale of tobacco products to those below 18 years of age. A few states in India have implemented the directives in this act with true earnestness. Kerala is the first state to have enforced a complete ban on the advertisement of tobacco products. Environmental hazards caused due to the non-biodegradable remnants of tobacco products such as cigarette butts is also a concern which is yet to receive major policy attention in several developing nations, including India.

Indicator Challenges, suggestions and recommendations to deal with the challenges

Tobacco use as measured across surveys lacks a consistent indicator definition\(^73\). The Global Adult Tobacco Survey (GATS) has been developed as a tool for administration towards generating comparable intra-national and inter-national data in respect to monitoring tobacco use. When nations are unable to implement the complete comprehensive GATS tool, a subset of questions from the above tool are suggested to be administered through the Tobacco Questions for Survey guide. It has been suggested that these available tools should be adopted as a standard instrument by all nations towards obtaining factual data and monitoring progress in relation to SDG 3. a\(^74\).

Target 3.b Support the research and development of vaccines and medicines for the communicable and non-communicable diseases that primarily affect developing countries, provide access to affordable essential medicines and vaccines, and, in particular, provide access to medicines for all.

Development funding for health has evolved over the past twenty years, where a three-fold increase has been witnessed and where close to $38 billion a year is now spent. HIV/AIDS, TB and Malaria have experienced an eight-fold increase in funding\(^75\).

\(^73\)Six Lines of Action to Promote Health, supra note 16
Indicator Challenges, suggestions and recommendations to deal with the challenges

Major challenges in relation to the indicators of SDG 3.b are76:

1. Hurdles to reconciliation of data on immunization coverage obtained through varied household survey and administrative sources
2. Developmental aid provided for health research being incompletely reported
3. Creation of sampling frame to map public and private facilities; affirming the quality of medicines in stock

The available suggestions in relation to the above are on the following lines:

1. Vulnerable populations such as displaced persons, people leaving in the periphery of urban towns such as slums and others are not essentially prioritized target groups in any State-driven campaign for universal immunization coverage. Hence, essentially data made available through regular data sources may not represent a true picture of the factual nation-specific situation. Any such campaign should be preceded by a meaningful exercise to identify all stakeholders.
2. Developmental aid that arrives from major funding agencies is more often than not linked with stringent conditions and expectations. Based on past experiences that nations may have had, donors may not be viewed favourably. Private players/entities who come forward to fund health research may also promote significant ‘special’ interests with respect to research outcomes. Many of these factors may weigh in mind subsequently leading to incomplete reporting of developmental aid in health research. It is important to promote stakeholders engaged in health research towards aligning their efforts in relation to National health priorities. Here the State could play the role of a facilitator for such funds from external agencies while intervening to negate misplaced priorities, interests or conditionality.
3. Based on limited data available with respect to access to essential medicines during the period 2007-2014 it is estimated that the median availability of selected essential medicines was only 60% and 56% in the public sector of low-income and lower-middle-income countries77. This forces vulnerable healthcare seekers to incur

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76 Six Lines of Action to Promote Health, supra note 16
77Six Lines of Action to Promote Health, supra note 16
high OOP expenditure on procurement of the same from the private sector. The prices people pay for lowest-priced generic medicines vary from 2.5 times to 6.5 times international reference prices (IRPs) in the public and private sectors, respectively. National per capita spending on medicines in the public-sector ranges from $26.67 to $505.46 across developed countries and from $0.04 to $16.30 across least developed countries. Adequate, sustainable and equitable financing of medicines and increasing the use of quality-assured generic medicine are key strategies for improving affordable access to essential drugs.78.

The Government of India has implemented a campaign for the opening of medical stores, known as Jan Aushadhi Kendras where, unbranded quality generic medicines would be sold which are available at lower prices and equivalent in potency to branded expensive drugs.8

Target 3.c Substantially increase health financing and the recruitment, development, training and retention of the health workforce in developing countries, especially in least developed countries and small island developing States.

In 2015, total official flows for medical research and basic health from all donor countries and multilateral organizations amounted to $9.7 billion, an increase in real terms of 30 per cent since 201079. Despite increased financial aid to nations to combat health challenges, close to only 3% of the global aid is apportioned for the prevention and control of non-communicable diseases. This is despite 2/3rd of global mortality being accounted towards NCDs80. Conditions like Chronic Kidney Disease whose prevalence has been substantially increasing over the past couple of years globally, hardly find a focus in the health priorities of States81. The shift in funding priorities as well as healthcare focus towards these conditions is urgent and compelling.

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79 SUSTAINABLE DEVELOPMENT GOAL 3, supra note 12
Over 40 per cent of all countries have less than one physician per 1,000 people, and around half have fewer than three nurses or midwives per 1,000 people\textsuperscript{82}.

Information technology is being leveraged by many nations for improving access to healthcare services (mobile clinics in Belize, Kenya and Zimbabwe, Nigeria), enhancing awareness (India’s mDiabetes), and remittances for health workers (India’s ASHA Soft, Kenya’s Mtiba) and management of data records (Jordan’s EHR, India’s Auxiliary Nurse Midwives Online)\textsuperscript{83}.

**Indicator Challenges, suggestions and recommendations to deal with the challenges**

A major challenge with the indicator of SDG 3.c is that health workers are inconsistently defined across sources\textsuperscript{84}.

The World Health Assembly had called upon its member states to embrace traditional indigenous health systems by including indigenous peoples at all stages of health care development and implementation, seeking a broader, more inclusive approach to health care. The WHO Traditional Medicine Strategy (2014-2023) document also exhorts member states to establish provisions for the education, qualification, and accreditation or licensing of Traditional and Complementary Medicine practices and practitioners based on needs and risk assessment\textsuperscript{85}.

The National Health Policy of India (NHP 2017) encompasses the spirit of these guidelines and recommends formal recognition of both the practices and practitioners from the informal stream of practices of Traditional Medicine through a certification

\textsuperscript{82}SUSTAINABLE DEVELOPMENT GOAL 3, supra note 12
\textsuperscript{84}Six Lines of Action to Promote Health, supra note 16
\textsuperscript{85}WHO Traditional Medicine Strategy 2014-2023, supra note 18
process of their knowledge to deal with primary health care\textsuperscript{86}. India alone is said to have more than one million informal community-based healthcare providers. This is a huge health human resource available that has been unutilized by the State. The authors recommend that nations should quantitatively estimate the numbers of such health human resources available and their specific streams of practice/health care services through detailed surveys and group them under the bracket of informal health workers.

\textit{Target 3.d Strengthen the capacity of all countries, in particular developing countries, for early warning, risk reduction and management of national and global health risks.}

One of the major challenges in respect to this target is the lack of global consistency and accuracy of assessments of IHR capacity and emergency preparedness reported form the major challenges of the indicators of SDG 3. d\textsuperscript{87}.

7. Sustainable Health Agenda

The Sustainable Development Agenda for 2030 focuses on the vision of sustainable health derived from the management of available resources by all towards the support of health and well-being of the current and the forward generations to come. A major thrust in this agenda is the strengthening of health systems to enable UHC. Towards the fulfilment of these objectives, the WHO has set forth six-lines of action for the realignment of all efforts that are currently underway in nations towards the accomplishment of the SDGs and for the exploration of novel mechanisms to accentuate progress and achievements accrued so far\textsuperscript{88}. The lines of action include, monitoring health related SDGs, health system strengthening for Universal Health Coverage, health equity, sustainable health financing, innovation and research and development.

It is important for countries to consider the above lines of action while developing national strategies and action plans related to SDG 3.

\textsuperscript{87}Six Lines of Action to Promote Health, supra note 16
\textsuperscript{88}Six Lines of Action to Promote Health, supra note 16
7.1 Scenario at National Level
Review of the VNRs presented during 2016 and 2017 at the HLPF indicate that countries are still optimizing programs and actions to realize the SDG on health. While several countries, including India, for example, have developed relevant national indicators in addition to or in lieu of global indicators.

This will provide an opportunity for countries to better align ongoing actions as well as deal with effective national and local priorities that are specific, based on available capacities and resources with them. While this is a good start, it is important for countries to consider additional measures and focus that can find a place in future VNRs for those countries that have already submitted their VNRs.

The following table (Table 8) illustrates actions that were reported through the VNRs and a set of suggestions for consideration by these countries in implementing national actions and preparing the VNRs. It should be noted that several of the suggestions are also relevant for those countries that are either developing their VNRs currently or those considering developing the VNRs in the future.

Table 8 SDG Goal 3 targets, indicators and national responses

<table>
<thead>
<tr>
<th>Target No.</th>
<th>SDG 3 Target</th>
<th>Global Target Indicators</th>
<th>Country</th>
<th>as reported through VNRs on 2017</th>
<th>Standard suggestions for incorporation into future VNRs</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1</td>
<td>Reduce the global maternal mortality ratio to less than 70 per 100,000 live births</td>
<td>Maternal Mortality Ratio</td>
<td>India</td>
<td>Increase in institutional delivery to 78.9%</td>
<td>Ensure reliable coverage of maternal deaths by additionally considering data obtained through mechanisms for re-assessment and confirmation of captured maternal mortalities through the central registration and vital statistics systems (CRVS).</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Proportion of births attended by</td>
</tr>
</tbody>
</table>

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89Voluntary National Reviews 2017, supra note 83
| 3.2 | Reduce neonatal mortality to at least as low as \(12/1000\) live births and under-5 mortality to at least as low as \(25/1000\) live births | Under-5 mortality rate | Uganda | Reduction of infant and under-5 mortality to 53 & 80 respectively | Incorporation of Verbal/Social Autopsy Surveys and the ICD-PM application for generating consistently reliable data on neonatal mortalities. |
| 3.3 | End the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases. | Number of new HIV infections per 1,000 uninfected population, sex, age & key populations | Belize, Guatemala and Mexico | Active surveillance, community-based interventions, intersectoral cooperation and cross-border collaboration for progress towards malaria elimination. |
| | | Tuberculosis incidence per 100,000 population | Kenya | Establishment of HIV/AIDS Tribunal to reduce stigma and discrimination |
| | | Malaria incidence per 1,000 population | Netherlands and Sweden | Focus on the surveillance of the growing threat of antibiotic resistance and cross-sectoral efforts for combating the challenge |
| | | Hepatitis B incidence per 100,000 population | India | Launch of new drug for combating drug-resistant TB |
### Achieving the Sustainable Development Goal on Health (SDG 3)

<table>
<thead>
<tr>
<th>3.4</th>
<th>Reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being.</th>
<th>Mortality rate attributed to cardiovascular disease, cancer, diabetes or chronic respiratory disease</th>
<th>Portugal</th>
<th>Special tax on sugar-sweetened beverages which have little nutritional value</th>
<th>Report on legal and policy measures that empower IEC campaigns towards the prevention of NCDs and promotion of healthy lifestyles</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coverage of treatment interventions (pharmacological, psychosocial and rehabilitative and aftercare services) for substance use disorders</td>
<td>Suicide mortality rate</td>
<td>India</td>
<td>Initiation of <em>Rashtriya Bal Swasthya Karyakram</em> (RBSK) for child health screening and early intervention services</td>
<td>Establishment of National Non-Communicable Diseases Cell</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Venezuel a</td>
<td>Maintenance and pursuance of social investment policies for ensuring comprehensive well-being.</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>3.5</th>
<th>Strengthen the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol.</th>
<th>Ensure collection of statistics on substance abuse from reliable data sources.</th>
<th>Estimates of revenue accrued through diet and beverages in the tourism sector to be integrated into National Accounts estimates.</th>
<th></th>
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</tr>
</thead>
</table>
### 3.6 By 2020, halve the number of global deaths and injuries from road traffic accidents.

<table>
<thead>
<tr>
<th>Harmful use of alcohol, defined according to the national context as alcohol per capita consumption (aged 15 years and older) within a calendar year in litres of pure alcohol</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Death rate due to road traffic injuries</strong></td>
</tr>
<tr>
<td><strong>Azerbaijan, Bangladesh, Belgium, Belize, Chile, Costa Rica, Cyprus, Ethiopia, Portugal and Thailand</strong></td>
</tr>
<tr>
<td><strong>Measures adopted to reduce the number of deaths and injuries from road traffic accidents; awareness campaigns for behavioural changes associated with risk factors for driving</strong></td>
</tr>
<tr>
<td>Clearer estimates of road traffic fatalities to be enabled through effective linking between multiple sources of data</td>
</tr>
</tbody>
</table>

### 3.7 By 2030, ensure universal access to sexual and reproductive health-care services, including for family planning, information and education, and the integration of reproductive health into national strategies and programs.

<table>
<thead>
<tr>
<th>Proportion of women of reproductive age (aged 15-49 years) who have their need for family planning satisfied with modern methods</th>
</tr>
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<tbody>
<tr>
<td><strong>Indonesia</strong></td>
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<tr>
<td><strong>Efforts to reduce early child marriage</strong></td>
</tr>
<tr>
<td>Include unmarried women as a representative sample in demographic health and reproductive surveys</td>
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<th>Adolescent birth rate (aged 10-14 years; aged 15-19 years) per 1,000 women in that age group</th>
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<td><strong>Tajikistan</strong></td>
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<tr>
<td><strong>Focus on gender-based norms and values which have direct linkages to reproductive health and health of mothers and children</strong></td>
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<tr>
<td>Country/Region</td>
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<tr>
<td>--------------------------------</td>
</tr>
<tr>
<td>Republic of Korea</td>
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<tr>
<td>Belarus, Belgium, Czech Republic, Denmark, Japan, Portugal, Sweden, Slovenia, Thailand</td>
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<tr>
<td>India</td>
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<tr>
<td>Guatemala, Maldives</td>
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<tr>
<td>Belize, Kenya and Nigeria</td>
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<tr>
<td>France</td>
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<td>Island developing States.</td>
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<tr>
<td><strong>Republic of Korea</strong></td>
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<tr>
<td><strong>Zimbabwe</strong></td>
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<td><strong>France</strong></td>
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<tr>
<td><strong>Togo</strong></td>
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</table>
### Achieving the Sustainable Development Goal on Health (SDG 3)

<table>
<thead>
<tr>
<th>Azerbaijan, Chile, Indonesia, Kenya, Maldives, Nigeria and Qatar</th>
<th>Measures towards recruitment, training and retention of health workforces</th>
</tr>
</thead>
<tbody>
<tr>
<td>India, Kenya</td>
<td>Improved payment of health workers</td>
</tr>
<tr>
<td><strong>3.d</strong> Strengthen the capacity of all countries, in particular developing countries, for early warning, risk reduction and management of national and global health risks.</td>
<td>International Health Regulations (IHR) capacity and health emergency preparedness</td>
</tr>
<tr>
<td>India</td>
<td>Launch of tablet-based application for data capturing and updation by Auxiliary Nurse Midwives regarding beneficiaries</td>
</tr>
<tr>
<td>Finland</td>
<td>Near to 40 per cent of the national indicators are readily measurable and an equal percentage is measurable with additional resources</td>
</tr>
</tbody>
</table>

### 8. Conclusions

This report provides an overview of current targets, indicators and actions related to achieving the sustainable health goal and how countries are responding to using them. While specific recommendations are made to re-align and/or develop new indicators against specific targets under SDG 3, it is important for countries to urgently undertake an assessment of nature and kind of data and information available to deal with using the indicators. Considering the ongoing challenges for the UN Statistical Commission in refining the currently available indicators at global level, it is important for countries to scale up actions and experiences in manner additional and re-aligned indicators will help assess the progress of implementation under SDG 3 at national level.

Following four action points are suggested for consideration by countries, based on the above.

First, establish nationally relevant, data sets and information availability to realistically and credibly report on actions and impacts. Such data and information should be the basis for all relevant actions related to health agenda at local and national levels.
Second, countries should use the available indicators more robustly to review actions and prepare the VNRs. Using a broad-brush approach to reviewing actions and reporting will mask the nature and depth of actions in achieving the SDGs that will skew the national and global review mechanism(s).

Third, while specific and locally-relevant indicators, at national level, are pertinent to be developed and used, it is important for countries to link them with global indicators to facilitate appropriate assessment of actions to review global impacts. Currently, this action is relatively weak with countries using their national indicators, where available and not expressly linking them with global indicators.

Fourth, while traditional means of action to achieving the SDG on health are in place and being pursued, countries need to come up with innovative programs to mainstream SDG 3 across other SDGs - such as those on SDG 4, SDG 13, SDG 15 and others to be more impactful and relevant.

The Six-line Frame of Action discussed earlier provides nations a trajectory for positioning their policies, synergizing their efforts and augmenting their capacities towards the meaningful accomplishment of the SDGs. It would be appropriate for countries to articulate this as the guiding framework for all future endeavours and explore innovations within.
FLEDGE (Forum for Law, Environment, Development and Governance) is a non-profit trust established in 2014 to support human resource development and capacity building on issues of law, environment and development.

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