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CONTENTS

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Editorial

India's rural health sector, usually known for inadequate infrastructure and inefficient service delivery, had some cheering news in recent times. WHO and UNICEF officially acknowledged India for **Maternal and Neonatal Tetanus Elimination (MNTE)** and for being **Yaws-free**. This is significant because India is the first country in the world to be declared Yaws-free in 2016 much before the WHO global target year of 2020. Similarly, India was validated for MNTE in April 2015, quite ahead of the global target date of December 2015.

These milestones in public health were achieved through measures such as improved institutional deliveries, a well coordinated immunization strategy and effective monitoring at top level. Moving ahead in this direction, basket of vaccines in **Universal Immunization Programme (UIP)** has been increased from 6 to 12 to free India from preventable deaths. Further, the Government has prepared an action plan to eliminate Kala-Azar and Filariasis by 2017; Leprosy by 2018, Measles by 2020 and to eliminate Tuberculosis by 2025.

Seriousness to achieve these targets is evident from the fact that this year's budget estimates for health show an appreciable increase of more than 27 per cent. And announcement has been made to create 5000 Post Graduate seats per annum to ensure adequate availability of specialist doctors to strengthen secondary and tertiary levels of healthcare. In another significant move, a **National Health Policy- 2017** has been announced after a gap of 15 years. In the words of our Prime Minister, "It marks a historic moment in our endeavour to create a healthy India where everyone has access to quality healthcare."

National Health Policy- 2017 sets the ambitious target of gradually increasing public health expenditure to 2.5 per cent of GDP and policy shift in Primary Health Care from selective care to assured comprehensive care. It envisages to establish Health and Wellness Centers and engagement with private sector for critical gap filling. The overall tone of the policy is for an assurance based approach, increasing access, affordability and quality.

In addition to physical health, mental health is another area that has been crying for attention in India for long. **Prime Minister Shri Narendra Modi in his *Mann Ki Baat*** address talked about mental health and depression. He had said, "Depression is not incurable. There is a need to create a psychologically conducive environment to begin with. The first mantra is the expression of depression instead of its suppression." Further giving this vision a concrete shape a **Mental Health Policy- 2017** has also been announced. It strives to create a rights based statutory framework for mental health and improving access to quality and appropriate mental healthcare services.

Further, Government approach is moving away from mere 'fitness' or being 'healthy' towards 'wellness', which is a more wholesome concept. In this endeavour, focus on cleanliness is rightly stressed. Prime Minister Shri Narendra Modi said "Cleanliness or *swachhta* is one of the most important aspects of preventive healthcare." With increased Government focus on cleanliness, rural Uttarakhand and rural Haryana have declared themselves as the 4th and 5th **Open Defecation Free (ODF) States of India under the Swachh Bharat Mission Gramin (SBM-G)**. This progress is appreciable.

In this shift from 'fitness' to 'wellness', traditional Indian medicine systems are also going to play an important role. **National AYUSH Mission** focuses on providing cost effective AYUSH services, with a universal access. Under this Mission, stand-alone AYUSH Hospitals and Dispensaries will be upgraded, AYUSH education will be improved as also the availability of quality ASU&H drugs. With Yoga already becoming an international rage with the celebration of **International Day of Yoga**, future for AYUSH system looks bright.

After all this analysis, in the end, we should not forget the importance of the 'art' of communication for achieving public health targets. The slogans like ***'Do Boond Jindagi Ki'*** effectively communicated the message to masses in simple and direct language and achieved what once seemed impossible – victory over the polio.

TOWARDS A HEALTHIER INDIA: IMMUNISING EVERY CHILD

J. P. Nadda

The polio-free and MNTE-free India that we celebrate today has only been possible due to vaccines and more so because of how we made sure that the vaccines were administered to the children and are now covering even the adults who need them. The success is due to our Universal Immunization Program (UIP) - a major public health intervention in the country. I am proud to say that it is one of the largest immunization programs in the world.

Immunization is one of the most cost effective public health interventions and largely responsible for reduction of mortality and morbidity rates caused by vaccine preventable diseases. The eradication of smallpox globally and the elimination of polio, yaws and maternal & neo-natal tetanus from our country are clear reminders of the power of vaccination in dealing with the scourge of communicable diseases. Vaccines are critical for India as we are rapidly developing and urbanizing. Rapid growth is also associated with the movement of migrant workers within regions resulting in movement of pathogens (including resistant strains) between regions of high and low endemicity, leading to a higher risk of communicable diseases. While urbanization is one aspect, some states are pre-disposed towards higher prevalence of a certain communicable disease viz. Japanese Encephalitis. Focus on immunization is also part of our endeavour to ensure that we keep polio at bay and keep on pushing towards reaching out with immunization to every single child in every far flung corner of the country.

→ Mission Indradhanush

- Launched to protect every child from vaccine preventable diseases
- More than 2.6 Crore children already immunized
- Annual growth for full immunization coverage has increased from 1% to of 5-7%
- 55.9 Lakhs pregnant women vaccinated with tetanus toxoid
- 505 districts covered in different phases

The polio-free and MNTE-free India that we celebrate today has only been possible due to vaccines and more so because of how we made sure that the vaccines were administered to the children and are now covering even the adults who need them. The success is due to our Universal Immunization Program (UIP) - a major public health intervention in the country. I am proud to say that it is one of the largest immunization programs in the world. UIP become a part of Child Survival and Safe Motherhood Programme in 1992. Since 1997, immunization activities have been an important component of the National Reproductive and Child Health Programme and are currently one of the key areas under the National Health Mission (NHM) since 2005. Under the UIP, Government of India is providing vaccination to prevent 11 vaccine preventable diseases namely Diphtheria, Pertussis, Tetanus, Meningitis & Pneumonia caused by Haemophilus influenza type B, severe form of Childhood Tuberculosis, Polio,

Maternal and Neonatal Tetanus Elimination (MNTE)

- India has achieved the Maternal and Neonatal Tetanus Elimination in May 2015, ahead of the target date of December 2015.
- Catalyst behind the success: Improved institutional Deliveries, strengthened routine immunization.

Hepatitis B and Measles across the country, and against Rubella & Rotavirus Diarrhea in selected states and Japanese Encephalitis in endemic districts. The programme reaches to vaccinate 2.67crore new born and 3 crore pregnant mothers annually. More than 90 lakh Immunization sessions are conducted annually with nearly 27,000 cold chain points across the country. Let me briefly describe the vaccines that UIP delivers across the country as vast and diverse as India. Polio vaccine - India reported its last case of polio on 13th January 2011. South East Asia Region (SEAR) of WHO has been certified Polio free on 27th March, 2014. As a part of Polio end game strategy, Inactivated Polio Vaccine (IPV) has been introduced across all the states of the country. Measles vaccine - Nationwide coverage of first dose of Measles was started in 1985 as part of Routine immunization (RI). 2nd dose of Measles was introduced in 2010 in 22 states immediately as part of RI and in remaining 14 states in RI after a campaign (Measles Supplementary Immunization Activity) covering nearly 12 crore children. As on date, the entire country is providing two doses measles vaccine schedule under RI. Hepatitis B vaccine - was piloted in 2002-03 and then scaled up across the country in 2010 to protect children from liver diseases such as Jaundice and Cancer. Now it is provided as part of pentavalent vaccine. Pentavalent Vaccine–contains antigens against five diseases i.e. Hepatitis B, Diphtheria+Pertussis+Tetanus (DPT–current trivalent vaccine) and Haemophilus influenza b (Hib). We introduced Pentavalent vaccine initially in two states viz. Kerala and Tamil Nadu in December 2011. At present, this vaccine has been expanded to all 36 States/UTs. Rotavirus Vaccine is given under UIP to prevent Diarrhoea due to rotavirus. The vaccine is provided as three doses and is currently provided in 9 states of the country. The vaccine was launched on 26th March 2016 in four states, expanded to five more States on 18th February 2017 and is planned in Uttar Pradesh sometime this year. Japanese Encephalitis vaccination program started in 2006 in JE endemic districts with a strategy to cover all children of 1-15 years of age in mass vaccination drive (campaign mode) and subsequent integration into RI. Campaign activity as well as introduction of JE as part of a RI, have been completed in 216 districts from the identified 231 JE endemic districts. Adult JE vaccination campaign (15-65 yrs) has been carried out as a one-time activity in 31 high burden districts of Assam, Uttar Pradesh and West Bengal. The latest intervention in UIP has been the introduction of Rubella vaccine as combined Measles Rubella (MR) vaccine. MR vaccine was launched on 5th February 2017 in five states/UTs (Karnataka, Tamil Nadu, Goa, Lakshadweep & Puducherry) as MR vaccination campaign covering children aged 9 months to 15 years. During the MR campaign, around 3.32 crore children were covered with an achievement of 97 per cent coverage. Subsequent to completion of the campaign, MR vaccine has replaced Measles vaccine in these states/UTs. The introduction of MR vaccine in other states of the country is also planned in a phased manner.

Besides the above vaccines as part of the Routine Immunization schedule, we are in the process of launching the Pneumococcal Conjugate Vaccine (PCV)in the states of Himachal Pradesh & parts of Uttar Pradesh & Bihar this year. Also as part of the Polio Endgame Strategy, India has switched from trivalent Oral Polio Vaccine (tOPV) to Bivalent Oral Polio Vaccine (bOPV) on 25th April, 2016, both in polio campaigns and routine immunization. The

Budget Allocation

- Unprecedented Increase of 27.77 per cent in outlay of health in 2017-18 over 2016-17
- Increase in allocation in 2017-18 over 2016-17
- Human Resource and Medical Education: Rs 3425crore
- NHM : Rs 2903.70 crore
- NACO: Rs 300 crore
- PMSSY: Rs 1525 crore
- AIIMS : Rs 357 crore

country has been validated free of tOPV after the switch.

To supplement our efforts towards reaching every child with immunization services, we conceived a special targeted intervention to reach out to all those children who have been left out of the RI drives or are partially-immunized. This is called 'Mission Indradhanush'. It is a sub part of the overall UIP of the country, designed and implemented to increase the coverage of UIP itself. It was launched on 25th December, 2014, to drive towards 90 per cent full immunization coverage of India and sustain the same by year 2020. The first phase was implemented from 7th April 2015 – World Health Day. During each phase of Mission Indradhanush, four intensified drives of 7 days each have been held every month to cover left-out and missed-out children in the high focus districts. During the three phases of Mission Indradhanush, 497 districts across 35 states/UTs were covered. During these phases, more than 2.1 crore children were reached of which 55 lakh children were fully immunized. In addition, 55.9 lakh pregnant women were also vaccinated with Tetanus toxoid. The platform of Mission Indradhanush was also utilized for distributing 52.2 lakh ORS packets and 183.1 lakh Zinc tablets to children. The 4th phase of Mission Indradhanush commenced on 7th February 2017 in 8 North Eastern states and in 180 districts across 18 states from 7th April in rest of the country. As on date, nearly 2.2 crore children and about 58 lakh pregnant women have been immunized. The annual rate of immunization which was earlier 1% has grown by 6.7 per cent.

New Vaccines

- Basket of vaccines in UIP increased from 6 to 12.
- **Inactivated Polio Vaccine launched in November 2015:** around 1.47 crores doses administered till February 2017.
- **Rotavirus Vaccine introduced in March 2016:** More than 42.5 lakh doses administered.
- **Rubella vaccine as Measles Rubella (MR) Vaccine:** Launched on 5th February 2017, provided to more than 3.3crore children till 31st MARCH.
- **Adult Japanese Encephalitis vaccine:** Campaign completed in 27 districts, 31.15 crore adults vaccinated.
- **tOPV to bOPV switch :** On 25th April 2016: Complete replacement in both Polio Campiagn and Routine immunization.
- **Pnuemococcal Conjugate Vaccine:** Rolled to approx 21 lakh children in Himanchal Pradesh and parts of Bihar and UP in first phase.

Our efforts towards total immunization are guided by the universally accepted fact that health and development are intertwined – healthy people generally have longer lives, and are more productive, enabling them to earn and save more, therefore contributing to the nation's prosperity. The visionary leadership and support of our Prime Minister Shri Narendra Modi ji is thereby continuously encouraging my ministry through resource availability and focus, which infuses us with renewed and enthusiastic vigour towards addressing inequities, through a special focus on inaccessible and difficult areas and poor performing districts. We are trying to serve each one to achieve our goal of a healthier, more prosperous India.

I would like to conclude that the Ministry of Health and Family Welfare has been working tirelessly to improve the health care systems and services towards providing a better quality of care to people in line with Government's well-enunciated priority for 'Antyodaya'- reaching out to the those who need it the most towards shaping a holistically productive and developed nation, right from its foundation i.e. healthy children.

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HEALTH CARE FOR ALL: THE NATIONAL HEALTH POLICY 2017

V. Srinivas

The National Health Mission (NHM) sought to revitalize rural and urban health sectors by providing flexible finances to State Governments. The National Health Mission comprises of 4 components namely the National Rural Health Mission, the National Urban Health Mission, Tertiary Care Programs and Human Resources for Health and Medical Education. The National Health Mission represents India's endeavor to expand the focus of health services beyond Reproductive and Child Health, so as to address the double burden of Communicable and Non-Communicable diseases as also improve the infrastructure facilities at District and Sub-District Levels.

Article 47 of Indian Constitution, the Directive Principles of State Policy says that it shall be the duty of the State to raise the level of nutrition and the standard of living and to improve public health. Health sector policy making in India is extremely challenging and complex. The backdrop for policy formulation is low public spending and high out of pocket expenditures. Despite India providing free care in public hospitals for maternity, new born and infant care, the burden of out of pocket expenditures remains quite high.

In 1943, the Joseph Bhor Committee Report envisaged one bed for every 550 people and one doctor for every 4600 people in every district. In 1946, Government resolved to make plans for establishing a Primary Health Centre for every 40,000 people, a Community Health Centre of 30 beds for every 5 Primary Health Centers and a 200 bedded District Hospital in every District. On the eve of Independence, India inherited a substantial disease burden, with infant and maternal mortality, low life expectancy, inadequate number of doctors, nurses and midwives, poor health infrastructure and low budgetary allocations. During the first 3 decades since Independence, India's health policy focus entailed controlling infectious diseases, family planning, creation of teaching hospitals like AIIMS to produce high quality human resources and promote infrastructure.

In 1978, India adopted the Alma-Ata Declaration for providing comprehensive primary health care to all its people. In 1983, India's first National Health Policy (NHP) was formulated with emphasis on primary health care and an integrated, vertical approach for disease control programs. The allocations for health sector became tighter during the difficult years of 1990s. The National Health Policy (NHP) 2002 broadly reiterated the earlier Policy's recommendations while advocating that the public investment be increased to 2 per cent of GDP. The NHP 2002 was followed by the launch of the National Rural Health Mission (NRHM) in 2005 designed on the principles of decentralisation and community engagement with focus on revitalizing primary care.

National Health Mission:

India's flagship health sector program, the National Health Mission (NHM) sought to revitalize rural and urban health sectors by providing flexible finances to State Governments. The National Health Mission comprises of 4 components namely the National Rural Health Mission, the National Urban Health Mission, Tertiary Care Programs and Human Resources for Health and Medical Education. The National Health Mission represents India's endeavor to expand the focus of health services beyond Reproductive and Child Health, so

as to address the double burden of Communicable and Non-Communicable diseases as also improve the infrastructure facilities at District and Sub-District Levels.

The National Health Mission (NHM) brought together at National level the two Departments of Health and Family Welfare. The integration resulted in significant synergy in program implementation and enhancement in Health Sector allocations for revitalizing India's rural health systems. A similar integration was witnessed at State levels too. A post of Mission Director NRHM manned by a senior IAS Officer was created to administer the State Health Society. The NHM brought in considerable innovations into the implementation of Health Sector Programs in India. These included flexible financing, monitoring of Institutions against IPHS standards, Capacity Building by induction of management specialists and simplified HR management practices. The establishment of the National Health Systems Resource Center (NHSRC) helped design and formulate various initiatives. State Health Systems Resource Centers have also been established in some States.

Reproductive and Child Health services were the primary focus of NHM. The successful implementation of JSY and ASHA programs had a significant impact on behavioral changes and brought pregnant women in large numbers to public health institutions. The NRHM flexi pool resources were utilized to create adequate infrastructure at public health institutions to cope with the heavy rush of maternity cases. Ambulance services were introduced for transportation of maternity cases to public health institutions and for emergency care.

The NHM created a peoples' movement for health care. Accredited Social Health Activists Care (ASHA) workers were deployed as transformational change agents in every village. The ASHA workers acted as mobilizers for institutional deliveries, focused on integrated management of neonatal and childhood illness and advised on home based neo-natal care. The NHM has also empowered people through Village Health and Sanitation Committees to formulate village health plans and exercise supervisory oversight of ASHA workers. At the PHC and CHC level, Rogi Kalyan Samitis have been activated to establish systems of oversight

Health Care in Union Budget 2017-18

- The Budget Estimates for health show an appreciable increase of more than 27 per cent. From **Rs. 37061.55 cr** in 2016-17, the budget estimate for 2017-18 has been increased to **Rs. 47352.51 cr** (Net). This will help to attend tertiary care, human resources for health and medical education and to strengthen NHM.
- The Health Ministry has spent 73.25 per cent of 2016-17 Budget. The Ministry will also create 5000 Post Graduate seats per annum to ensure adequate availability of specialist doctors to strengthen secondary and tertiary levels of healthcare. Furthermore, two new AIIMS will be set up in Jharkhand and Gujarat.
- The Government has prepared an action plan to eliminate Kala-Azar and Filariasis by 2017; to eliminate Leprosy by 2018, Measles by 2020 and to eliminate Tuberculosis by 2025 is also targeted.
- Action plan has been prepared to reduce IMR from 39 in 2014 to 28 by 2019, and MMR 167 in 2011-13 to 100 by 2018-2020.
- Steps will be taken to roll out DNB courses in big District Hospitals and to encourage reputed Private Hospitals to start DNB courses. Steps will also be taken to strengthen PG teaching in select ESI and Municipal Corporation Hospitals.
- Government will take necessary steps for structural transformation of the Regulatory framework of Medical Education and Practice in India.
- There is a also proposal to amend the Drugs and Cosmetics Rules to ensure availability of drugs at reasonable prices and promote use of generic medicines, and New Rules for regulating medical devices will also be formulated. These Rules will be internationally harmonised to attract investment in this sector. This will reduce the cost of such devices.

over the public health facilities for creating a patient friendly institution. Besides rural areas, the urban slums are now receiving attention with the launch of the National Urban Health Mission.

Government's New Schemes:

The Ministry of Health and Family Welfare has added several new schemes since 2014 to enable implementation of the Health For All Vision for the Nation.

Mission Indradhanush, sought to achieve full immunization coverage of 90 per cent children by 2020. The mission has made good progress in improving immunization coverage by 6.7 per cent since 2014. A basket of new vaccines has been added to the Universal Immunization Program to increase the number of vaccines from 6 to 12. The prominent among them are the Inactivated Polio Vaccine, the Rota Virus Vaccine, the Adult Japanese Encephalitis Vaccine and the Rubella Vaccine as Measles Rubella Vaccine.

India New Born Action Plan with focus on reduction of neonatal mortality rate has successfully established Special New Born Care Units at District level and New Born Stabilization Units at Sub-District/ CHC level. The Mother's Absolute Affection Program was launched in 2016 with focus on promotion of breast feeding practices. The Rashtriya Bal Suraksha Karyakram and the Rashtriya Kishore Swasthya Karyakram represent the major screening programs of Government for early screening and interventions in children and adolescent girls.

The Government has added the Pradhan Mantri Surakshit Matritva Abhiyan for assured antenatal care. There is continued focus on the NHM activities of Mission Family Welfare, Janani Shishu Suraksha Karyakram and Janani Suraksha Karyakram each of which aim at reducing maternal and infant mortality by promotion of institutional deliveries.

The New Schemes in Health sector are Swach Swasth Sarvatra, the Pradhan Mantri National Dialysis Program and Kayakalp. The Kayakalp initiative was launched in 2016 to inculcate the practice of hygiene, sanitation, effective waste management and infection control in public health facilities. The competition for awards introduced under Kayakalp has been well received by all the States and significant improvements in sanitation standards are being witnessed.

NATIONAL HEALTH MISSION

- Strengthening Health Systems.
- SANCTIONED: 4343 new constructions, 7498 renovation of health facilities including SC, CHC, SDH, and DH.
- COMPLETED: 6908 constructions, 6423 renovations.

ASHA WORKERS SELECTED: 43,726

- ASHA workers provided health kits 62,047.
- 8205 additional human resources in health sector have been added.
- AYUSH doctors engaged: 8048.
- 2924 vehicles supporting DIAL 102/104 services.
- 923 vehicles supporting DIAL 108 Services.
- Rs. 19000 Crore provided for 2016-17 to NHM: An increase of Rs. 705 Crore over the last year.

National Health Policy (NHP), 2017

The primary aim of the NHP is to strengthen and prioritize the role of the Government in shaping health systems, make additional investments in health, healthcare services, prevention of diseases and promotion of good health. The NHP seeks to raise the health sector spending to 2.5 per cent of GDP, create patient centric institutions, empower the patients and lay down standards for quality of treatment. It also seeks to strengthen health infrastructure to 2 beds per 1000 population and provide free drugs, free diagnostics and essential health care in all public hospitals. The NHP's key goals are to improve the life expectancy at birth from 67.5 years to 70 years by 2025 and reduce the infant mortality to 28 by 2018. The other goals are elimination of Leprosy, Kala Azar and Filariasis by 2017-18. From a baseline of 560 in 1990, the Nation has achieved an MMR of 167 in 2011. From a baseline of 126 in 1990, the Nation has achieved an U5 MR of 39 in 2014. The challenges remain in the six large States of Bihar, Uttar Pradesh, Rajasthan, Madhya Pradesh, Jharkhand and Chattisgarh, which

account for 42 per cent of national population and 56 per cent of annual population increase.

Government has initiated policy interventions for implementing the NHP. Union Budget 2017 for health shows an appreciable increase of more than 27 per cent, from Rs. 37,061.55 Cr in 2016-17 to Rs. 47,352.51 Cr. India has a vast organization for public health care delivery and Primary care services. The NHP lists infrastructure and human resource development in Primary and Secondary Care Hospitals as a key priority area. The Government in the 2017 Union Budget has sought to upgrade 1.5 lakh health sub-centers to health wellness centers and introduce a nationwide scheme for pregnant women under which, Rs. 6000/- for each case will be transferred.

The NHP seeks to reform medical education. Government has initiated major steps in this direction. AIIMS is a national and global brand - built on more than six decades of evolution and performance of our Institute. It is the bench mark for other centers of excellence in healthcare and academics, and a fountainhead of best practices in education, research and clinical standards. The unique status of AIIMSs has been reinforced by significant infusion of financial resources for major expansion. The focus on medical education should enable India to address the iniquitous utilization of modern health services. The Government has placed a lot of emphasis on creation of several AIIMS like Institutions across India.

The NHP places a lot of emphasis on human resources as a vital component of India's health care. 5000 Post Graduate seats per annum have been created to ensure adequate availability of specialist doctors to strengthen secondary and tertiary levels of healthcare. The increased availability of PG seats along with a centralized entrance exam represent major steps in reform of medical education in the country. The expansion of postgraduate medical education is a priority as the shortage of PG medical seats in the country affects not only the availability of specialist doctors, but also the ease of getting faculty for medical colleges. The introduction of a uniform entrance examination at undergraduate and post-graduate level has brought transparency to medical education. The Medical Council of India Amendment Act 2016 introduced a common merit based entrance examination at National level. Government has notified the increase in post-graduate seats in 435 medical colleges with the objective of increasing the number of specialist doctors in India.

The NHP has placed a lot of emphasis on Digital Initiatives. Online registration system has been introduced in 71 hospitals of India as part of the Digital India initiative. Digitization of public hospitals had enabled a reduction of patient wait times and freed clinician times. A patient centric feedback system called *Mera Aspataal* has been introduced. The data sets of *Mera Aspataal* have flagged the important areas for patient dissatisfaction.

To conclude, it can be said that the significant strides envisaged to be made in Health Sector through the National Health Policy interventions will enable India to achieve the objectives of Affordable Healthcare for All.

National Health Policy 2017 – Key Highlights

- Gradually increasing public health expenditure to 2.5 per cent of GDP
- Policy Shift in Primary Health Care from selective care to assured comprehensive care.
- Establishing Health and Wellness Centers to transform PHCs from current limited package of services to larger coverage of non-communicable diseases.
- New policy formulation related to non-communicable diseases and mental health.
- Retention of doctors in remote areas, health systems strengthening, health technologies development and new institutions for research and development.
- Strategic Purchases and engagement with private sector for critical gap filling.
- Moving towards an assurance based approach, increasing access, affordability and quality.

(The Author is an IAS officer of 1989 batch, and Indian Council of World Affairs Fellow 2017, Jaipur and presently Deputy Director (Administration) AIIMS, New Delhi. Email: vsrinivas@nic.in)

PM ON HEALTH

- National Health Policy marks a historic moment in our endeavour to create a healthy India where everyone has access to quality health care.
- National Health Policy is extensive, comprehensive & citizen friendly. It covers various aspects of health and wellness.
- Apart from fitness and staying healthy, wellness is important. Yoga is a great medium to achieve wellness in life.
- Depression is not incurable. There is a need to create a psychologically conducive environment to begin with. The first mantra is the expression of depression instead of its suppression.
- Cleanliness or *Swachhta* is one of the most important aspects of preventive health care.

NATIONAL HEALTH POLICY 2017

Universal, easily accessible, affordable Primary Healthcare:

- Comprehensive primary health care package with geriatric, palliative and rehabilitative care. • Health Card to access primary healthcare anytime, anywhere. • Free drugs and diagnostics along with low cost pharmacy chains (Jan Aushadhi stores). • Free health care to victims of gender violence in public and private sector.

Preventive and promotive focus with pluralistic choice:

- Creation of public health management cadre in all states to optimize health outcomes. • Intervention from early detection of issues in childhood to prevention of chronic illness. • Tracking behavior change, education and counseling at all levels. • Plethora of options to choose from among Yoga and AYUSH umbrella of remedies.

Make in India for a healthy India:

- Special focus on production of Active Pharmaceutical Ingredient (API). • Incentivizing local manufacturing to provide customized indigenous products. • Reducing cost with indigenous medical technology and medical devices.

Fostering patient focus, quality and an assurance based approach:

- Compliance of right of patents to access information on condition and treatment. • National Health care Standards Organization –maintaining adequate standards in public and private sector. • Separate empowered medical tribunal for speedy resolution on disputes and complaints. • Grading of establishments and active promotion of standard treatment guidelines.

Digital interventions for the nation's health:

- Promoting tele-consultation liking tertiary care institutions with specialists consultation.• National Knowledge Network for Tele-education, Tele-CME, Tele-consultations and digital library. • National Digital Health Authority to regulate, develop and deploy digital health. • Introduction of Electronic Health Record (EHR)

System Strengthening and strategic engagements:

- Holistic approach addressing infrastructure and human resource gaps. • Synergizing with private and not –for-profit sectors for critical gap filling. • Better regulatory mechanisms and Quality Control.

MATERNAL AND CHILD HEALTHCARE IN RURAL INDIA

Dr. Jyoti Sharma

The initiative launched under National Rural Health Mission (NRHM) has been focused on availability of health care services across all level of health care facilities. Large numbers of community health workers (ASHAs) have huge potential for expanding coverage of community based interventions, which can be facilitated and monitored by Village Health Sanitation and Nutrition Committee (VHSNC). Village Health and Nutrition Days (VHNDs)can promote delivery of outreach services in an integrated manner. JSY and JSSK schemes facilitates institutional deliveries and this gives an opportunity for sick newborns to access care, while IPHS (Indian Public Health Standards) have a potential to significantly improve the quality of facility based care.

India has made phenomenal economic gains in the last three decades, but is still on the task to improve the health status of its population on similar terms. The public health challenges are enormous, highest number of maternal and infant deaths worldwide and accounts for one-fifth of all global maternal mortalities. Large inequalities exist in maternal and infant health status across Indian states, including significant gaps between wealthy and deprived groups and rural urban differentials.

The maternal mortality ratio (MMR) is defined as the number of maternal deaths during a given period per 100,000 live births during the same period. For 2010–12, India's MMR was estimated at 167 maternal deaths per 100,000 live births (RGI 2013). Similarly, infant mortality rate (IMR) remained disproportionately high(41/1000 live birth and Neonatal Mortality Rate (NMR) of 29 per 1,000 live births. About 70 per cent of infant deaths

Healthcare For All : Highlights

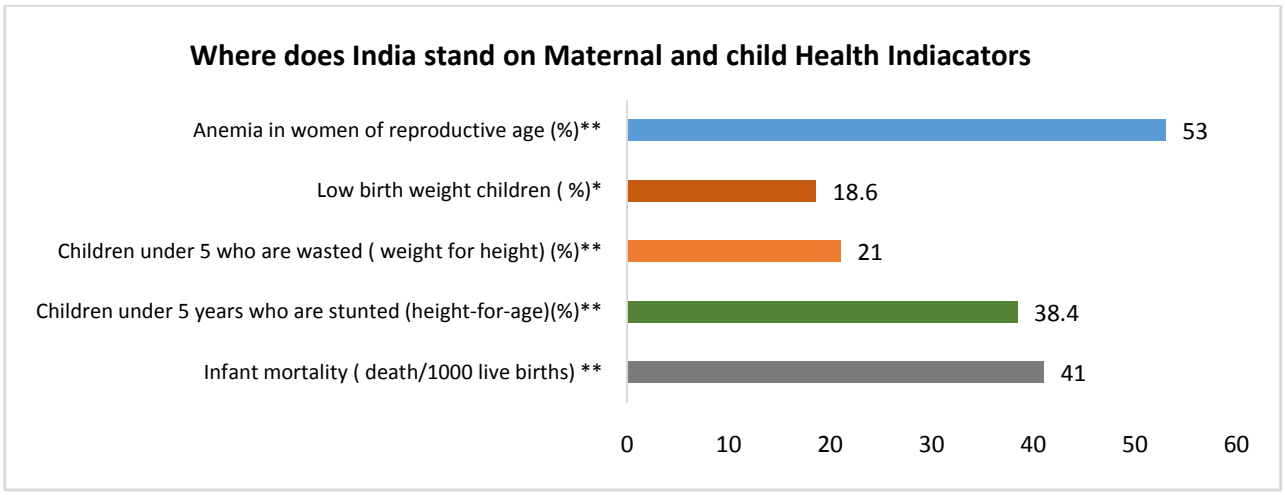
- 27.7 per cent increase in Budget allocation from 2016-17: Rs 37061.55 crores in 2016-17 to Rs 47352.51 crores in 2017-18
- 6.7 per cent increase in Immunisation coverage since 2014
- 225 lakh Children vaccinated
- 60 lakh Pregnant women vaccinated
- 2.1 per cent to 4.5 per cent: The percentage annual compound rate of decline in Infant Mortality Rate (IMR)

and more than half of under-five child deaths in the country fall in the neonatal period. Largest proportion of all these deaths are clustered in rural areas of 9poor states (8 EAG states plus Assam). Those children who survive are often afflicted with multiple morbidities (Diarrhoea, pneumonia etc.) and episodes of malnutrition. About 3 million young lives a year are lost due to malnutrition and additional 165 million children remained stunted with compromised cognitive development and physical capabilities. Similarly, large proportion of reproductive women are suffering from poor nutritional status (Anaemia and low BMI) (Fig1) that results in poor maternal and birth outcomes. Maternal factors also have a significant bearing on the child health beyond pregnancy .It is therefore prudent to consider mother and child as a single unit rather than compartmentalizing them.

Maternal Mortality:

Poor nutrition compounded by inadequate care during pregnancy is the main cause of high

Fig.1 Maternal and child health Indicators



*(Source: ** NFHS -4)*
** RSOC (2013)*

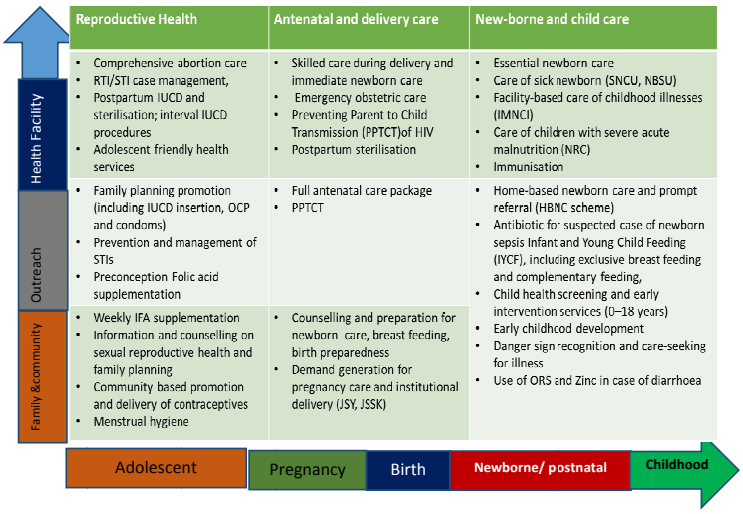
maternal mortality. The predominant direct medical causes of deaths responsible for maternal deaths include haemorrhage after delivery, sepsis or infection, abortion and difficult labour conditions.

Limited causes are related to most of (70 per cent) deaths of children under five years of age. Complications during birth account for 52 per cent of under-five deaths and post neonatal causes contributes to 48 per cent of the total burden. Two conditions, Pneumonia (16 per cent) and Diarrhoea (12 per cent) are the major causes of under-five deaths. These two conditions contribute to 56 per cent of the post neonatal deaths. It is important to note that under-nutrition is the underlying cause of a third of deaths of under five children in India.

Determinants of Maternal and Child Health:

Maternal and child health is a health issue but it encompasses much more than biomedical aspects and goes beyond the health sector. It is affected by the broader context of people's lives, including their economic circumstances, education, employment, living conditions, family environment, social and gender relationships and the traditional and legal structures within which they live. The biggest burden of maternal and infant mortality falls on marginalized communities and the poor, and the rural populations. The status of girls and women in society, and how they are treated or mistreated, is a crucial determinant of their health status. Educational opportunities for girls and women powerfully affect their status and the control they have over their own lives and their health and fertility. The empowerment of women is therefore an essential element for health. Furthermore, the health behaviour of population are governed by a myriad of complex biological,

Fig 2: Continuum of Care across Life Cycle and different Levels of Health System



*(Source: Reproductive, maternal, neonatal and child +adolescent health strategy, **MOHFW, Govt. of India (2013).***

cultural and psychosocial factors. Therefore, the attainment of maternal and child health is not limited to interventions by the health sector alone, rather interventions of other sectors will also play an important role in this regard.

Strategies and Delivery of Services:

Programmatic initiatives aim to reduce burden of maternal and child health by providing equitable access to health care, including family planning, prenatal, delivery and postnatal care for the mother and children. The Reproductive, maternal, neonatal, child and adolescent health strategy (RMNCH+A) focuses on continuum of care through lifecycle approach for adolescents, mothers and children. (Fig 2)

The health services for mothers and children are delivered through both health care facilities and community based activities. There are three domains of delivering health services

Facility based care: Consists of 'clinically based services' delivered at the individual level that includes not only the treatment of diseases, but also availability of skilled attendants at delivery and emergency care.

Outreach: Services that can be delivered on a periodic basis through visits within the community, for example, immunization programme.

Home and Community: Consists of community and family oriented services that support self -care and includes activities for health promotion and behavioural changes, such as, breastfeeding.

Programmes and Initiatives:

The initiative launched under National Rural Health Mission (NRHM) has been focused on availability of health care services across all level of health care facilities. Large numbers of community health workers (ASHAs) have huge potential for expanding coverage of community based interventions, which can be facilitated and monitored by Village Health Sanitation and Nutrition Committee (VHSNC). Village Health and Nutrition Days (VHNDs)can promote delivery of outreach services in an integrated manner. JSY and JSSK schemes facilitates institutional deliveries

Table 1:Maternal and child health service delivery at different levels of care and service delivery platforms

Domain	Programme component	Interventions	
		Mothers	Children
Family and Community	Home based newborn care	- Postpartum home visits to identify complications - Birth Spacing - Prophylactic Iron Folic Acid (IFA)	- Home visits identify complications - Community based management of key childhood illnesses (pneumonia, diarrhoea and malaria)
Outreach centres	Village Health and Nutrition Days	- Antenatal check-up - Birth spacing	- Immunization - Vitamin A - Promotion of appropriate child feeding practices
Health facility (Sun-centre, PHC, CHC, DH)	- Skilled Birth Attendance (SBA) - Emergency Obstetric Care (EmOC) - Facility based newborn Care (SNCUs and NBSUs) - Facility based IMNCI - Nutrition Rehabilitation Centrs - Indian Public Health Standards (IPHS)	- Clean delivery - Labour Monitoring - Addressing complications during labour and postpartum/ referral Lactation support	- Essential care during birth and immediately after birth - Addressing complications during birth and postpartum/ referral - Care of Low birth weight/ premature babies - initiation of breast feeding - Management of children with severe illness and severe malnutrition

and this gives an opportunity for sick newborns to access care, while IPHS (Indian Public Health Standards) have a potential to significantly improve the quality of facility based care. Details of some of these opportunities and their implications are provided below.

Janani Suraksha Yojana (JSY):

It was launched in April 2005 under National Rural Health Mission (NRHM), to give financial assistance to women who avail delivery services at the public health facility. 104.16 lacs beneficiaries availed JSY benefits in 2015-16 and institutional births have increased to 78.9 per cent in 2015 (NFHS -4). JSY payment was associated with a reduction of 3.7 perinatal deaths per 1,000 pregnancies and 2.3 neonatal deaths per 1,000 live births.

Janani Shishu Suraksha Karyakram (JSSK) :

This scheme invokes a new approach to make '*Health Care of All*' a reality, stipulating that all expenses for the delivery would be borne by the Govt. and no user fee would be charged. A pregnant mother would be entitled to free transport from home to Govt. facility, between facilities in case is referred and also drop back to home after 48 hrs of delivery. The entitlements under this scheme also include free drugs and consumables, free diagnostics, free blood wherever required and free diet for the duration women's stay in hospital, maximum expected to be three days in case of normal delivery and 7 days for caesarean section for both mother and the sick neonates.

Pradhan Mantri Surakshit Matritva Abhiyan (PMSMA):

Launched in 2016,it gives a fixed day ANC service every month across the country, in addition to the routine ANC at the health facility. This scheme envisages to improve the quality and coverage of Antenatal Care (ANC), diagnostics and counselling services as part of the RMNCH+A Strategy. These services are provided by the Medical Officer and OBGY specialist. Facilities where such trained manpower is not available, services from Private Practitioners (OBGY) on a voluntary basis are to be arranged. PMSMA also gives assistance in detection, referral, treatment and follow-up of high risk pregnancies and women having complications.

INDIA NEWBORN ACTION PLAN (INAP)

- Launched: In September 2014
- Aim: Single Digit Neonatal Mortality Rate by 2030 and single digit still birth rate by 2030.
- 661 special new born care units at district level.
- 2321 newborn stabilization units at first refferal units level
- 18,323 new born care corners at delivery points .
- 11,000 dedicated beds for newborn provided in SNCUs
- Over 24 lakh newborns treated since 2014.
- 1crore newborns being visited by ASHA workers withing 42 days of birth every year.

Table 2: Entitlements and conditions under Maternity benefit schemes

Cash Transfer	Condition	Amount
1st Installment	Early registration	1000/-
2nd Installment	Received at least one antenatal check-up (after 6 months of pregnancy)	2000/-
3rd Installment	Child birth is registered Child has received first cycle vaccines including BCG, OPV, DPT and Hepatitis- B or equivalent	2000/-

(Source: Administrative Approval on Pan India implementation of Maternity Benefit Programme dated 19th May 2017, MoWCD,http://wcd.nic.in/sites/default/files/Maternity%20Benefit%20Programme_1.pdf)

Village Health and Nutrition Day :

Village Health and Nutrition Days is a platform for providing first contact primary health care. It is organized once every month at the Anganwadi Centre (AWC) in the village (VHND guidelines, 2007). Services provided under VHND include registration of pregnant women, provide antenatal care to registered women, immunization, identification and tracking of malnourished children, administer Vitamin A, give anti-TB drugs to TB patients, distribute IFA, calcium tablets and condoms, OCPs etc.

Maternity Benefit Scheme- Conditional Cash Transfer Scheme :

A maternity benefit scheme was launched in Jan 2017 by Prime Minister for pregnant and lactating women. This scheme is implemented by Ministry of Women and Child Development. This scheme envisages providing cash incentive up to 5000/- directly to bank account/ post office account of beneficiaries during pregnancy and lactation on fulfilling following specific conditions. The remaining benefits under the existing scheme will be given after institutional delivery. Therefore, on an average, a women will receive Rs. 6000/- under this scheme. All eligible pregnant and lactating women for first live birth are entitled for this scheme.

Challenges :

The barriers for the programmes can be divided into three categories

Barriers to Availability- This includes availability of critical components required to deliver the health services such as infrastructure, human resources and financial resources to run the programme. Health facilities should be established as per the population norms and they should be well equipped with trained health care providers and equipment as per IPHS standards. Number of facilities in the country are close to the requirement although there are shortages in different states.

Barriers to Accessibility – Accessibility means physical access of health services to the clients. There are many financial and non-financial barriers which are responsible for delay or prevent people in the rural areas from seeking healthcare for mothers and their sick children. Such barriers include financial barriers, geographical access or distance, language, socio-cultural, ethnicity-related barriers, lack of knowledge and awareness, and inequalities in quality of care which can together lead to low demand for and use of services, particularly by the poor.

Barriers to Utilization- This describes the use of multi-contact services, e.g. first antenatal contact or BCG immunization. Cost of care, distance from health facilities and poor quality of care (including factors such as absence of staff at health facilities and long waiting times), poor upkeep of facilities non-functional equipment are the major reasons why people do not seek care from public health facilities.

Finally, the goal of universal coverage of health cannot be achieved without addressing these barriers. The programme benefits should be complimented with good quality of services, for all women and children.

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WATER, SANITATION, HYGIENE (WASH): INTERLINKAGES IN RURAL INDIA

Rudresh Kumar Sugam, Sunil Mani

UN sustainable development goals (SDG) recognize WASH and health as important areas to be targeted. Especially goal 6 "Ensure availability and sustainable management of water and sanitation for all". It talks about achieving universal and equitable access to safe and affordable drinking water for all, reduced pollution, increasing water use efficiency, source protection and participation of local communities in improving water and sanitation management. Swachh Bharat Mission needs a special mention as it targets the most critical challenge of Sanitation in rural areas. For the success of SBM, it is essential to work towards analysing the status of toilets and mapping people's behaviour for understanding the indigenous problems and not generalise it country-wide.

Dr Jong-Wook, WHO, succinctly highlighted the strong inter-linkage between water sanitation and health, he said that WASH is one of the primary drivers of public health and if we can secure access to clean water and to adequate sanitation facilities for all people, a huge battle against all kinds of diseases will be won.

Access to clean water, sanitation and hygiene are essential elements in achieving a basic standard of health. There are substantial evidence in the literature which indicate that interventions in the form of improved water supply, sanitation, and hygiene came up with significantly improved health outcomes (like reductions in the severity and prevalence of Diarrhoea and other infectious diseases). For example, in a study that analyzed data from a randomized controlled trial of a community sanitation program in rural area of Ahmednagar district, Maharashtra to identify effect of village sanitation on average child height, found an effect of approximately 0.3 height-for-age standard deviations (Hammer & Spears, 2016)

Improvement in WASH services has a long way to go across the globe, improper WASH services lead to second leading cause of death that is Diarrhoeal disease, around 525 000, in children under five years old (WHO, 2017). African and South-East Asian regions are struggling to provide safe WASH services leading to maximum mortality rate in these regions, (Figure 1).

India (which has a mortality rate of 27.4 per lakh associated with WASH services) also requires a significant improvement to better the WASH services as it is in the top 25 per cent of the countries with maximum mortality rate due to unsafe WASH services. Rural regions in India, which primarily have agricultural and domestic water requirements, suffer from many challenges such as lack of water supply infrastructure, inadequate sanitation facilities, insufficient irrigation facilities etc. Figure 2, highlights the poor situation of drinking water supply and sanitation facilities in India.

Only 18 per cent, and that is restricted to few states only, of the rural households in India receive treated water supply. There is huge inter-state variation in such services. For example, in Bihar, Assam, Jharkhand, West Bengal and Odisha, the percentage of rural households getting

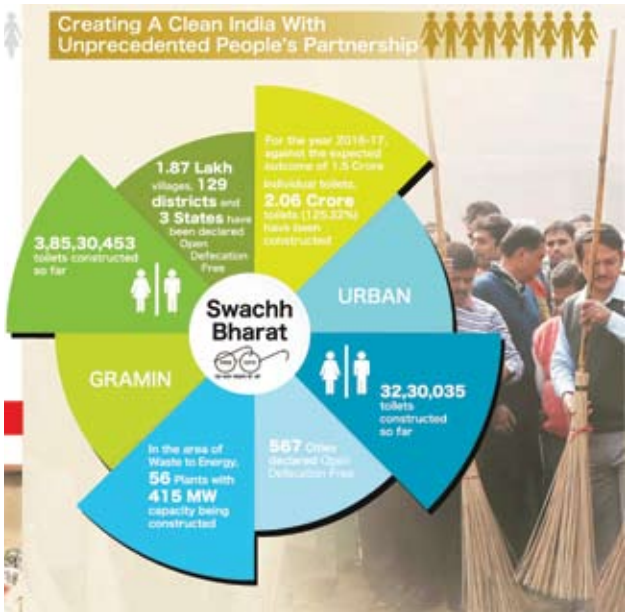
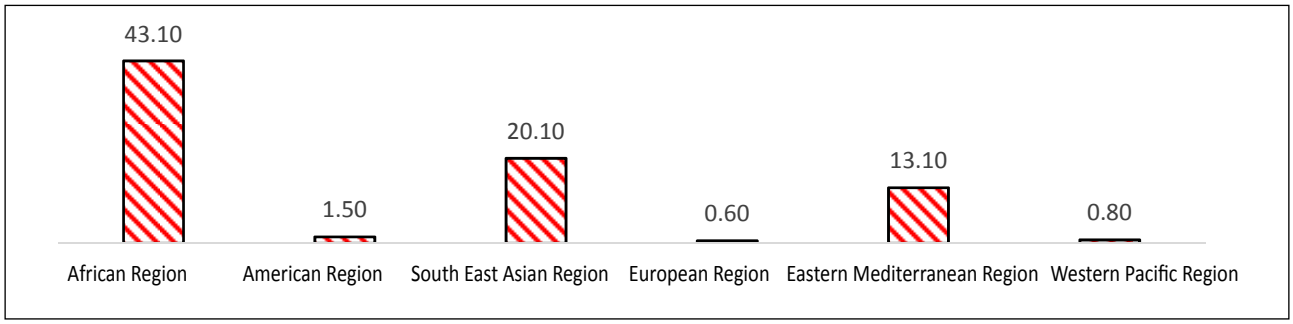


Figure 1: Mortality rate attributed to exposure to unsafe WASH services (per 100,000 population)



(Source: Adapted from the World Health Statistics, 2016)

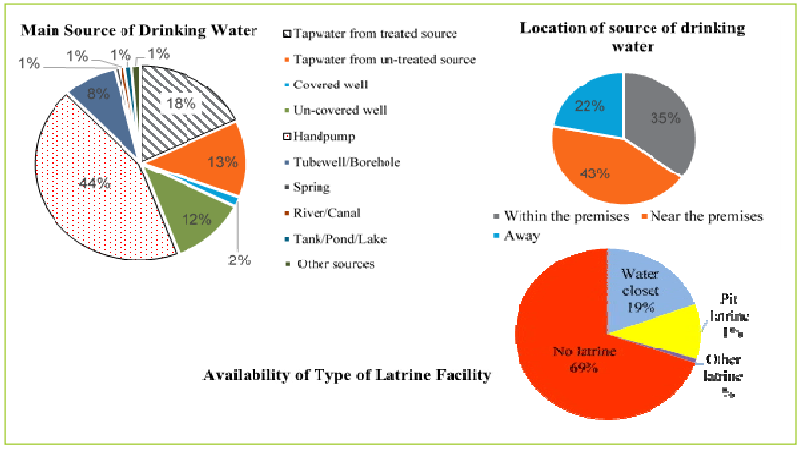
treated tap water within the premises are 2 per cent, 4 per cent, 5 per cent, 6 per cent and 6 per cent, respectively. These are all eastern states where the rural population is largely dependent on groundwater for drinking purposes. Many of these households face negative health impacts due to poor water quality, mainly arsenic contamination in these regions. Status of sanitation in India is even worse as nearly 70 per cent of the rural households have no latrine facility, and there is high scale open defecation.

On 19 November 2014, United Nations Secretary, urged that it is a moral imperative to end open defecation to ensure women and girls are not at risk of assault and rape simply because they lack a sanitation facility. This is because one out of three women worldwide lacks access to safe toilets. On the same day, UN vowed to eliminate open defecation from the globe before 2025.

Open defecation is a major cause of fatal diarrhoea. Everyday, about 2000 children aged less than five succumb to Diarrhoea and every 40 seconds, a life is lost. According to UNICEF, India (with more than 700 million people defecating in the open) accounts for 90 per cent of the people in South Asia and 59 per cent of the 1.1 billion people in the world who practise open defecation. Another joint survey by the WHO and the UNICEF indicates that close to 400 million (out of 700 million) people in India practice open defecation despite having latrines available. This clearly suggests that eliminating open defecation is not possible without the change in individual behaviour.

For holistic management of WASH services, it is essential to protect water sources used for drinking purposes. A typical rural set up in India is represented in Figure 3. In a typical rural region in India, irrigation water requirement is the major demand followed by drinking water requirements. The irrigation efficiency is low, on an average 50 per cent – 60 per cent, leading to wasteful use of water and in addition due to excess fertilizer use, which gets drained into run-off, there is large scale pollution of water sources. Also, a rural community may not be necessarily completely isolated from urban regions, such rural regions receive untreated wastewater flows from nearby cities further polluting the water sources. Due to unavailability of sewage treatment in rural set-up and large scale open defecation, several freshwater ponds have turned into sewage ponds.

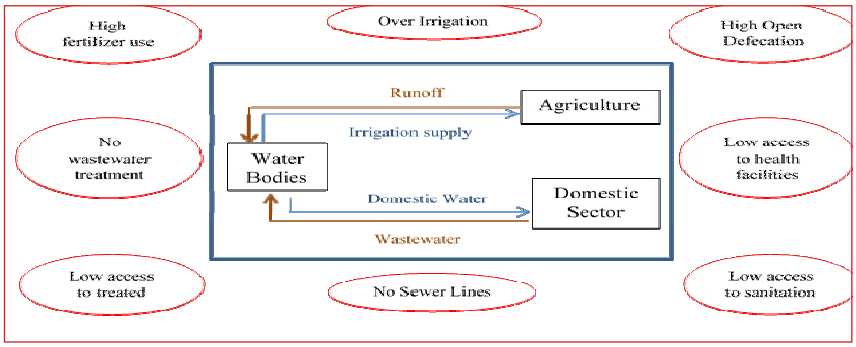
Figure 2: Rural Water Supply and Sanitation Situation in India



(Source: Census 2011)

The public health facilities in rural areas generally operate at three levels: (i) **Sub-Health Centres** (SHCs), each of which is supposed to serve a population of 3,000 (in tribal and hilly areas) to

Figure 4: Agri-water and WASH nexus in a typical Indian rural/ peri-urban set-up



Source: CEEW (Red circles represent Challenges, Blue boxes represents Agri-water and WASH Nexus)

5,000 (in plains); (ii) **Primary Health Centres** (PHCs), each of which is supposed to serve a population of 20000 (in tribal and hilly areas) to 30,000 (in plains); and (iii) **Community Health Centres** (CHCs), each of which is supposed to serve a population of 80,000 (in tribal and hilly areas) to 1,20,000 (in plains). As per Rural Health Statistics (2016), an average SHC was covering 4 villages (with an average coverage area of 20 square km). For an average PHC, this was 25 villages (with an average coverage area of 122 square km), whereas for an average CHC, this was 119 villages (with an average coverage area of 563 square km.

There are few flagship missions of Government of India which are targeted to improve the WASH and Health services in rural India:

1. **National Rural Drinking Water Programme (NRDWP) (2009) – Ministry of Drinking Water and Sanitation (MoDWS)**: The goal of this mission is to provide every rural person with adequate safe water for drinking, cooking and other domestic basic needs on a sustainable basis.
2. **National Rural Health Mission (NRHM)**: The mission to set up a fully functional community owned, decentralized health care delivery system in the country with its focus to ensure simultaneous action on an extensive range of determinants of health such as water, sanitation, education, nutrition and so on.
3. **National Rural Drinking Water Quality Monitoring & Surveillance Programme (NRDWQM&S) (2005) : MoDWS**, which is now under NRDWP is a community based programme to ensure good quality of public water supply to rural people through decentralised water quality monitoring systems.
4. **Jalmani(2008)–MoDWS**: This mission aims to supplement the on-going NRDWP mission to ensure good quality safe drinking water by installing simple Stand Alone Purification systems, especially in schools.
5. **Swachh Bharat Mission (Gramin) (2014) – MoDWS:** This mission aims to improve the general quality of life in the rural areas, by promoting cleanliness, hygiene and eliminating open defecation.
6. **Provision of Urban Amenities in Rural Areas (PURA) (2003): Ministry of Rural Development (MoRD)**: Under this scheme, amenities like water and sewerage and drainage were proposed to be made available to rural areas.
7. **National Rurban Mission (NRuM) (2015) – MoRD**: This scheme aims to provide basic amenities like piped water supply, solid and liquid waste management and drains in 'rurban clusters'.

UN sustainable development goals (SDG) recognize WASH and health as important areas to be targeted. Especially goal 6 "Ensure availability and sustainable management of water and sanitation for all". It talks about achieving universal and equitable access to safe and affordable drinking water for all, reduced pollution, increasing water use efficiency, source protection and participation of local communities in improving water and sanitation management. Swachh Bharat Mission needs a special mention as it targets the most critical challenge of Sanitation in rural areas. For the success of SBM, it is essential to work towards analysing the status of toilets and mapping people's behaviour for understanding the indigenous problems and not generalise it country-wide.

For understanding behaviour, a survey could be conducted by agencies such as Census Department, National Sample Survey Organisation (NSSO), National Rural Health Mission (NRHM), Department of Water supply and Sanitation (DWSS), Sarva Siksha Abhiyan (SSA).

Swachh Swasth Sarvatra

- A joint initiative with Ministry of Drinking Water and Sanitation to leverage achievements of complementary programmes Swachh Bharat Mission and Kayakalp.
- Grant of Rs 10 lakhs to ensure Community Health Centres achieve high quality benchmarks of sanitation , hygiene and infection control; and minimum score of 70 under Kayakalp assessment.
- Certification by the end of every financial year for such centres.

For changing the behaviour, the strategy would require mapping the village defecation area, toilets, water & food sources that could be done by Nirmal Bharat Abhiyan (NBA) workers in association with local NGOs, public personalities, local and national media. Local NGOs could be contracted by the district sanitation committee for this purpose. Behaviour could be changed by doing focussed group discussions, showing audio-visuals, community meetings etc., for associating Shame and Disgust with open defecation and Pride with having clean toilets. Also, organising improved sanitation campaigns, advertisement regarding sanitation campaigns through print and digital media, posters etc. and involving public personalities, local leaders etc., for propagating message of improved sanitation benefits would be useful. Mechanisms such as awarding/recognising households with toilets as Nirmal households or propagating ideas such as no toilet no marriage could be adopted. It would be also important to build capacity of local workers by providing training to local masons, local vendors and local people and operator of community toilet. The training could be provided to local masons in a group of 20-30 for showing them ways to use local materials for construction of toilets and also demonstrating techniques to design proper toilets. Training/awareness campaigns could be conducted for creating new and motivating existing local sanitary material vendors by educating interested local entrepreneurs about the marketing of sanitation utilities. Also, cleaning and maintaining toilet hygiene is important and this could be done by training operators of community toilets and sample households.

The institutions involved in execution of Swachh Bharat also need to be trained. Training of district level expert team and Community-Led-Total-Sanitation (CLTS) facilitators could be done by UNICEF. NBA has already created a district level sanitation team which comprises of experts from different sectors and they could act as trainers for block level CLTS facilitators. ASCI, in association with UNICEF, has designed a course especially for district level sanitation executives. Thus, the expert team could be sent to these training programmes for learning new technologies, developing management skills etc.

Every school should be mandated to build separate toilet for girls. Also, by utilising public spaces, construction of at least one community toilet complex per village is suggested. It should be provided with a dedicated operator preferably selected form one of the community toilet using households. Funds for constructing toilets at school and community level are already covered under SSA & NBA, respectively. Regular cleaning of individual and community toilets is necessary for maintaining hygiene status.

Most importantly, monitoring and evaluation could be done by the existing sanitation team. They can prepare a report of the type of toilets built at individual household and community level, but an initial training is required to be provided to the sanitation team. It is also very necessary to keep a check on the use of toilets by villagers. Again Gram Panchayat (GP) sanitation team can send data to the district about household still defecating in open.

At national level linking programmes such as NBA, SSA, MNREGA, DWSS, NRHM etc., which are working in isolation but for similar cause is important. Although, some work has been done to link MNREGA and NBA, but a more holistic approach is required for achieving secure WASH services for a healthy rural India (Sugam, Mittra, & Ghosh, 2014).

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TACKLING HEALTH HAZARDS IN RURAL INDIA

Dr. Shefali Chopra

The WHO Country Cooperation Strategy – India (2012-2017) has been jointly developed by the Ministry of Health and Family Welfare (MoH&FW) of the Government of India (GoI) and the WHO Country Office for India (WCO). Its key aim is to contribute to improving health and equity in India. It distinguishes and addresses both the challenges to unleashing India's potential globally and the challenges to solving long-standing health and health service delivery problems internally.

Health is an important component for ensuring better quality of life. Large masses of the Indian poor continue to fight and constantly losing the battle for survival and health. The war begins even before birth, as the malnourishment of the mother reduces life chances of the foetus (Mondal, 2016). Despite global progress, an increasing proportion of child deaths occur in sub-Saharan Africa and Southern Asia. Globally, the incidence of major infectious diseases has declined since 2000, including HIV/AIDS, malaria, and TB, but the challenge of these and new pandemics remains in many regions of the world, one of them being India.

The key health issues related in Rural India are:

- **Lack of Primary Health Care facilitie**s: Though, the existing infrastructural set up for providing health care in rural India is on the right track, yet the qualitative and quantitative availability of primary health care facilities is far less than the defined norms by the World Health Organization. Union Ministry of Health and Family Welfare figure of 2005 suggests a shortfall of 12 per cent for sub centers (existing 146,026), 16 per cent of Primary Health Centers (PHCs) (existing 23,236) and 50 per cent of Community Health Centers (CHCs) (existing 3346) then prescribed norms with 49.7 per cent, 78 per cent and 91.5 per cent of sub centers, PHCs and CHCs respectively located in government buildings and rest in non-government buildings requiring a figure of 60,762, 2948 and 205 additional buildings for sub centers, PHCs and CHCs respectively.
- **Proximity of Health Facilities**: Nearly 86 per cent of all the medical visits in India are made by ruralites with majority still travelling more than 100 km to avail health care facility of which 70-80 per cent is born out of pocket, landing them in poverty.
- **Sanitation and Hygiene**: Women and children are the most susceptible section of the society due to poor sanitation. In our tradition, women have to go in the open to defecate where they are vulnerable to various infections and diseases and in turn, this also poses a threat to other women, men and children. Children are often caught by Diarrhoea and insects carry harmful diseases with them. So, unfortunately they become both the victim and the carrier of the disease.
- **Water borne diseases**: Water-related diseases kill more than 5 million people each year.
- Cholera, Typhoid and Diarrhoea are transmitted by contaminated water. Most deaths are preventable with simple hygiene and water treatment.
- Diarrhoea disease causes 2.2 million deaths each year and this disease is the primary cause of child mortality in the world's cities.
- Intestinal worms infect about 10 per cent of the population of developing world and can lead to malnutrition, Anaemia and retarded growth.
- Malaria, Yellow Fever, Dengue Fever, Sleeping Sickness, Filariasis and other water-related vector-borne diseases are transmitted by mosquitoes, tse-tse flies and others. Over 1 million people die every year from Malaria, Dengue, Chickengunia ,which is endemic throughout much of the developing world.

Health Issues related to Women and Children:

Women in poor health are more likely to give birth to low weight infants. They also are less likely to

be able to provide food and adequate care for their children. This indirectly increases the chances of children being malnourished and pushed into vicious circle of illness. Finally, a woman's health affects the household economic well-being, as a woman in poor health will be less productive in the labor force. Women in India also face health concerns like reproductive health, Inadequate nutrition, and HIV/AIDS.

- Reproductive Health: Lack of appropriate care during pregnancy and child health, inadequate services for detecting and managing complications are the main cause for maternal deaths. (Bhalla, A.S., 1995)
- Inadequate Nutrition: Inadequate nutrition in the childhood affects women in their later life. More than fifty per cent of women and children in rural and tribal areas of the country are anaemic.
- HIV/AIDS**:** The Indian epidemic is concentrated among vulnerable populations at high risk for HIV. The Government of India estimates that about 2.40 million Indians are living with HIV. Of all HIV infections, 39 per cent (930,000) are among women.
- High Infant & Child Mortality Rate**:** The infant mortality rate (IMR)—probability of dying before one year of age expressed per 1000 live births and under-five mortality rate (U5MR) —probability of dying between birth and age 5 expressed per 1000 live -births have been used as measures of children's well-being for many years. Infant and child mortality rates are considered as sensitive indicators of living and socio-economic conditions of a country. NIPCCD 2014
- Malnutrition**:** World Bank data indicates that India has one of the world's highest demographics of children suffering from malnutrition – said to be double that of Sub-Saharan Africa with dire consequences.
- Sanitation and Clean Drinking Water :Its absence leads to high levels of malnutrition. Most children in rural areas are constantly exposed to germs from their neighbours' faeces. This makes them vulnerable to the kinds of chronic intestinal diseases that prevent bodies from making good use of nutrients in food, and they become malnourished.

Intensified Diarrhoea Control Fortnight

- 14.7 crore children under 5 reached with prophylactic ORS SINCE 2014 BY ASHAs
- IDCF campaign implemented since 2014
- Zero deaths due to childhood Diarrhoea

- Protein Energy Malnutrition (PEM): This affects the child at the most crucial period of time of development, which can lead to permanent impairment in later life. Protein-Energy-Malnutrition takes different forms which include Underweight, Kwashiorkor, Marasmus, Marasmic-Kwashiorkor, Stunting and Wasting.
- Iodine related deficiencies: Iodine deficiency in pregnant women limits foetal brain growth and, when severe, can lead to cretinism and the pervasive intellectual, psychomotor and sensory disabilities and congenital anomalies that accompany it.[1,2] Prenatal iodine deficiency can cause maternal Goitre and Hypothyroidism. (WHO) Iodine deficiency disorders (IDD) constitute the single largest cause of preventable brain damage worldwide.

Way Forward:

- The WHO Country Cooperation Strategy – India (2012-2017) has been jointly developed by the Ministry of Health and Family Welfare (MoH&FW) of the Government of India (GoI) and the WHO Country Office for India (WCO). Its key aim is to contribute to improving health and equity in India. It distinguishes and addresses both the challenges to unleashing India's potential globally and the challenges to solving long-standing health and health service delivery problems internally.
- India and the Sustainable Development Goals SDG'S: Health has a central place in United Nation's Sustainable Development Goals.
- SDG 3- Good health and well being: It ensures healthy lives and promote well-being for all at all ages. It provides a holistic approach to better health which requires ensuring universal access to healthcare and to making medicine and vaccines affordable. It also calls for a renewed focus on mental health issues.
- SDG 6- Clean water and sanitation: It ensures availability and sustainable management of

National Deworming Day

- Aim: Combat soil transmitted helminth infections through a single day strategy.
- Over 75 crore doses of Albendazole since 2014
- Covering children between 1-19 years
- Reached through schools and anganwadi centres.

water and sanitation for all. It aims at ensuring universal access to safe and affordable drinking water for all by 2030. Providing sanitation facilities and encourage hygiene at every level.

- UNICEF India: UNICEF India has also been at the forefront of strengthening coverage of existing nutrition interventions for women in flagships through policy, advocacy and system strengthening strategies. UNICEF contributes to national coordination efforts through its role as the lead development partner facilitator in the Technical Working Group for Rural Water Supply, Sanitation and Hygiene, led by the Ministry of Rural Development. Other key partners include the World Health Organization, World Bank, Asian Development Bank and local and international NGOs.(UNICEF)

Government's Initiatives:

- **Integrated Child Development Scheme:** ICDS is a multi-sectoral programme and involves several government departments. The programme services are coordinated at the village, block, district, state and central government levels. The beneficiaries are children below 6 years, pregnant and lactating women and women in the age group of 15 to 44 yrs. The beneficiaries of ICDS are to a large extent identical with those under the Maternal and Child Health Programme.
- **Swatch Bharat Mission:** It is a national initiative focussed on twin objective of constructing toilets and enabling behavioural changes with goal of making India Open Defecation Free.
- **Kayakalp Award Scheme**: The scheme is intended to encourage and incentivize Public Health Facilities in the country to achieve a set of standards related to cleanliness, hygiene, Waste management and infection control practices.
- **Nirmal Bharat Abhiyan (NBA)**: Its goal is not only universal toilet coverage by 2022, but also improving health and providing privacy and dignity to women, with the overall goal of improving the quality of life of people living in rural areas.
- **The National Rural Health Mission (NRHM)** The mission envisages achieving its objective by strengthening Panchayati Raj Institutions and promoting access to improved healthcare through the Accredited Female Health Activist (ASHA). It also plans on strengthening existing Primary Health Centres, Community Health Centres and District Health Missions, in addition to making maximum use of Non Governmental Organizations.
- **The India Newborn Action Plan (INAP)** is India's committed response to the Global Every Newborn Action Plan (ENAP), launched in June 2014 at the 67th World Health Assembly, to advance the Global Strategy for Women s and Children's Health. The ENAP sets forth a vision of a world that has eliminated preventable newborn deaths and stillbirths. INAP lays out a vision and a plan for India to end preventable newborn deaths, accelerate progress, and scale up high-impact yet cost effective interventions.
- **Reproductive, Maternal, Newborn, Child and Adolescent Health** : The RMNCH+A strategic approach has been developed to provide an understanding of 'continuum of care' to ensure equal focus on various life stages. It also introduces new initiatives like the use of Score Card to track the performance, National Iron + Initiative to address the issue of anaemia across all age groups and the Comprehensive Screening and Early interventions for defects at birth, diseases and deficiencies among children and adolescents.
- **Janani Shishu Suraksha Karyakaram**: Government of India has launched Janani Shishu Suraksha Karyakaram (JSSK) on 1st June, 2011.The scheme is estimated to benefit more than 12 million pregnant women who access Government health facilities for their delivery. Moreover it will motivate those who still choose to deliver at their homes to opt for institutional deliveries. It is an initiative with a hope that

Mother's Absolute Affection Programme

- Launched : 5th August 2016.
- Aim: to bring focus on promotion of breast feeding with the components:
- Inter personnel counselling at community level.
- Skilled support for breastfeeding at delivery points.
- Awareness generation.
- Promotion of breastfeeding.
- Monitoring and recognition.

states would come forward and ensure that benefits under JSSK would reach every needy pregnant woman coming to government institutional facility.

- **Rashtriya Bal Swasthya Karyakram (RBSK):** It is an important initiative aiming at early identification and early intervention for children from birth to 18 years to cover 4 'D's viz. Defects at birth, Deficiencies, Diseases, Development delays including disability.
- **Rashtriya Kishor Swasthya Karyakram (RKSK):** The program aims to ensure holistic development of adolescent population. The programme expands the scope of adolescent health programming in India - from being limited to sexual and reproductive health, it now includes in its ambit nutrition, injuries and violence (including gender based violence), non-communicable diseases, mental health and substance misuse. The strength of the program is its health promotion approach.
- **National Disease Control Programs** (NDCP'S) work on various programmes for diseases and deficiency like Iodine deficiency disorder, Vector–borne diseases, TB, control of blindness, Leprosy, non- communicable diseases, mental health. (NHM)
- It is thus, a time when one needs to understand that the development of our country shall be very half hearted if rural part of it is left unattended. It is time one rethinks, and reworks on what Mahatama Gandhi said about the rural India:

'The future of India lies in its villages'

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GOODS AND SERVICES TAX (GST)

Much awaited Goods and Services Tax (GST) is set to be implemented from July 1st, 2017. It is being lauded as the most important tax reform since 1947. Following is a brief overview of GST:

Salient Features of GST:

(i) The GST would be applicable on the **supply** of goods or services as against the present concept of tax on the **manufacture or sale** of goods or provision of services. It would be a **destination based consumption tax**. This means that tax would accrue to the State or the Union Territory where the consumption takes place. It would be a dual GST with the Centre and States simultaneously levying tax on a common tax base.

(ii) The GST would apply to all goods other than alcoholic liquor for human consumption and five petroleum products, viz. petroleum crude, motor spirit (petrol), high speed diesel, natural gas and aviation turbine fuel. It would apply to all services barring a few to be specified. The GST would replace a host of indirect taxes such as - Central Excise Duty, Service Tax, Central Surcharges and Cesses so far as they relate to supply of goods and services, State VAT, Luxury Tax, Purchase Tax etc.

(iii) The list of exempted goods and services would be common for the Centre and the States.

(iv) **Threshold Exemption**: Taxpayers with an aggregate turnover in a Financial Year up to Rs.20 lakhs would be exempted from tax. For eleven Special Category States, like those in the North-East and the hilly States, the exemption threshold shall be Rs. 10 lakhs.

(v) An Integrated tax (IGST) would be levied and collected by the Centre on inter-State supply of goods and services. Accounts would be settled periodically between the Centre and the States to ensure that the SGST/UTGST portion of IGST is transferred to the destination State where the goods or services are eventually consumed.

(vi) **Use of Input Tax Credit (ITC):** Taxpayers shall be allowed to take credit of taxes paid on inputs (input tax credit) and utilize the same for payment of output tax.

(vii) **Exports and supplies to SEZ** shall be treated as zero-rated supplies.

(viii) **Import of goods and services** would be treated as inter-State supplies and would be subject to IGST in addition to the applicable customs duties. The IGST paid shall be available as ITC for further transactions.

Benefits:

1. GST aims to make India a common market with common tax rates and procedures and remove the economic barriers, thus paving the way for an integrated economy at the national level. GST is a win-win situation for all the stakeholders of industry, government and the consumer. It will lower the cost of goods and services, give a boost to the economy and make the products and services globally competitive.

2. GST is largely technology driven. It will reduce the human interface to a great extent and this would lead to speedy decisions. GST will bring more transparency to indirect tax laws.

3. GST will give a major boost to the 'Make in India' initiative of the Government of India by making goods and services produced in India competitive in the National as well as International market.

4. Under the GST regime, exports will be zero-rated in entirety unlike the present system , where refund of some taxes may not take place due to fragmented nature of indirect taxes between the Centre and the States. This will boost Indian exports in the international market.

5. GST is expected to bring buoyancy to the Government Revenue by widening the tax base and improving the taxpayer compliance. GST is likely to improve India's ranking in the Ease of Doing Business Index and is estimated to increase the GDP growth by 1.5 to 2 per cent.

7. The taxpayers would not be required to maintain records and show compliance with a myriad of indirect tax laws of the Central and the State Governments. They would only need to maintain records and show compliance in respect of Central GST, State GST and Integrated GST.

Other provisions of GST:

(i) Valuation of goods shall be done on the basis of transaction value i.e. the invoice price, which is the current practice under the Central Excise and Customs Laws. Taxpayers are allowed to issue supplementary or revised invoice in respect of a supply made earlier. (ii) New modes of payment of tax are being introduced, viz. through credit and debit cards, National Electronic Fund Transfer (NEFT) and Real Time Gross Settlement (RTGS). (iii) E-Commerce companies are required to collect tax at source in relation to any supplies made through their online platforms, under fulfillment model, at the rate notified by the Government. (iv) An anti-profiteering measure has been incorporated in the GST law to ensure that any benefits on account of reduction in tax rates results in commensurate reduction in prices of such goods/ services.

IT preparedness:

Putting in place a robust IT network is an absolute must for implementation of GST. A Special Purpose Vehicle called the GSTN has been set up to cater to the needs of GST. The functions of the GSTN would, *inter alia,* include: (i) facilitating registration; (ii) forwarding the returns to Central and State authorities; (iii) computation and settlement of IGST; (iv) matching of tax payment details with banking network; (v) providing various MIS reports to the Central and the State Governments based on the taxpayer return information; (vi) providing analysis of taxpayers' profile; and (vii) running the matching engine for matching, reversal and reclaim of input tax credit. The target date for introduction of GST is 1st July, 2017.

The GSTN will also make available standard software for small traders to keep their accounts in that, so that straight away, it can be uploaded as their monthly returns on GSTN website. This will make compliance easier for small traders.

All States/UTs except the State of Jammu & Kashmir, are ready for roll-out of GST with effect from 1st July, 2017

As of 21st June , 2017, all the States and Union Territories (having assemblies), except the State of Jammu & Kashmir, have approved the State Goods and Services Tax (SGST) Act. The State of Kerala issued an Ordinance approving State GST Act while the State of West Bengal had issued an Ordinance in this regard on 15thJune, 2017. Now the only one State that is yet to pass the State GST Act is the State of J&K. Thus, almost the entire country including all the 30 States/UTs are now on board and ready for the smooth roll-out of GST with effect from 1stJuly, 2017.

RURAL HEALTH : HEALTH INFRASTRUCTURE, EQUITY AND QUALITY

Shashi Rani

Private and other partners who wish to work with government and help in strengthening the public health care should be made accountable by community participation and social audit. The National Health Policy 2017 also lays a lot of emphasis on Universal Health Coverage. The government should focus more on quality provision of health care for all rather than quantitative coverage of all.Above all, in order to provide just and fair health care to rural population, the Government of India needs to do justice with the budgetary allocation and development of infrastructure as per need and demand.

India is the country of vast population, as per Census 2011, the total population of India is 121 crore, out of which the rural population is 83.3 crore (68.84 per cent) and urban population is 37.7 crore (31.16)[1]. It is evident that majority of population lives in rural area. Since independence, in view of the population distribution and social structure of the society, the Government of India choose to have maximum coverage and network of public health care system in order to have preventive, promotive, curative and specialized services. India opted for three tier health care system through arrangement of Sub Centres (SCs), Primary Health Centres (PHCs) and Community Health Centres (CHCs) based on certain population norms to cater rural population. The purpose to create a network for Primary Health Care was to look at the social determinants of health and to provide the range of health care services to rural population. Therefore, the system has been developed as a three tier system with SCs, PHCs and CHCs being the three pillars of Primary Health Care System. The purpose to create such a system was to connect with the rural population and to provide different level of services as per need and regardless of their paying capacity.

In context of rural health services, the challenge of government health care system is that there are many gaps in primary health services and the health care facilities are mainly urban centric. The differences in health status in urban and rural areas are based on various factors such as: availability, accessibility and affordability of health services, literacy and educational status, poverty, employment and source of livelihood, income and family size, food intake and nutritional status, gender disparity, housing, access to clean water and sanitation facilities, information and knowledge for health programmes etc. These factors have direct impact on health status of the rural population.

All the specialized and reputed hospitals are mainly located at the state capital or the district headquarters. Whereas the rural villages where the basic health facilities are much required are neglected. The Census data 2001 and 2011shows that the number of rural villages (2279) have increased in a decade. In 2001 Census, the total number of villages were 6,38,588 and in 2011, the number had gone up to 6,40,867. On the contrary, the primary health care facilities is not showing much improvement in terms of number and services. The Government introduced various health programmes and schemes but due to many reasons, it seems there is long way for appropriate implementation of them and to get the desired

results. Recently, the government of India approved its new National Health Policy and its relevance for rural population needs to be analyzed.

National Health Policy (NHP) 2017:

The Government of India in order to provide Preventive and Promotive Health Care and Universal access to good quality health care services, has approved the new National Health Policy in March 2017. The primary aim of the NHP, 2017, is to inform, clarify, strengthen and prioritize the role of the Government in shaping the health systems in all its dimensions-investment in health, organization and financing of healthcare services, prevention of diseases and promotion of good health through cross sectoral action, access to technologies, developing human resources, encouraging medical pluralism, building the knowledge base required for better health, financial protection strategies and regulation and progressive assurance for health. The policy emphasizes reorienting and strengthening the Public Health Institutions across the country, so as to provide universal access to free drugs, diagnostics and other essential healthcare.

The NHP 2017, expressed its vision for universal health coverage and creating affordable and quality health care for all. The policy assures the availability of free, comprehensive primary health care services, for all aspects of reproductive, maternal, child and adolescent health and for the most prevalent communicable, non-communicable and occupational diseases in the population. It also talked about reinforcing trust in public health care system. The Government intended to achieve various targets by involvement of all possible stakeholders. The good policy does not make any sense until it is not implemented properly. Therefore, governance and attainment of targets needs to be supplemented with appropriate funding, utilization of resources, infrastructure, quality care standards and health equity. Even NRHM (2005) had the vision of improvement in weak infrastructure, increase in public health spending 2-3 per cent of GDP, launch of Accredited Social Health Activists (ASHA), utilization of Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homoeopathy, (AYUSH), and decentralization of health programmes. Despite all these efforts, there are gaps and shortfalls in rural health care infrastructure at all the three levels of primary health care. Matters related to health equity and quality of care are areas of concern.

Janani Shishu Suraksha Karyakram

- The scheme entitles all pregnant women delivering in public health institutions to absolutely free and no expense delivery including caesarean section.
- 3.50 crore women received free drugs, 2.92 crore free diagnostics, 2.34 crore free referral transport, 1.9 crore (48 per cent) free drop back service.

Free Diagnostics Services Initiative:

- Aim: To reduce out of pocket expenditure on diagnostics and improve quality of care. States given support to provide essential diagnostics free in public health facilities.
- Operational guidelines released and approval of Rs 1023.62 crores given to 25 States/UTs.

Table -1: Building Position for SCs, PHCs and CHCs (As on 31st March, 2016)

S. No.	All India/ Total	Total Number of units functioning	Govt. Buildings	Rented Buildings	Rent Free Panchayat / Vol. Society Buildings	Buildings Under Construction	Buildings required to be constructed
1	SCs	155069	104861	32924	17282	11019	39528
2	PHC	25354	23191	583	1503	1631	1011
3	CHCs	5510	5383	5	122	390	31

(Source: RHS, 2016)

Note : (All India figure of required number of building to be constructed = Total functioning - (Government Buildings + Under construction) (ignoring States/Uts having excess.)

Rural Health Care Infrastructure:

Since Independence, the Government of India choose to have maximum coverage and network of public health care system in order to have Preventive, Promotive, Curative and Specialized services. The most important and first contact point for immediate health care is SCs, it is also important as it is connecting the rural population with Primary Health Care programmes and schemes. The PHCs works as referral point for specialized services and CHCs suppose to serve as specialized health care centre.

The Country's majority of population lives in rural areas and at present, the biggest challenge is shortfall of public health care infrastructure in rural area. The status of health infrastructure as per 2011(Census) population in India (Table -1), shows that there is a shortfall of buildings 20 per cent for SCs, 22 per cent of PHCs and 30 per cent CHCs.

Another important area of concern is the availability of manpower/ health staff. For public health service, the manpower in rural areas, as per the data shows that against the required number 1,55,069 of health workers (Female)/ANM at sub centres, there are 24,194 vacant positions and there is a shortfall of 4679 positions. Even at PHCs level, Female Health Assistance, 1013 number of positions are vacant and there is a shortfall of 11,299 positions.

National Mobile Medical Unit Services

- Objective: Take healthcare to the doorstep of the public in the rural and under served areas.
- 1122 MMUs are operational across 335 districts.

For the Doctors, 8774 positions are vacant at the PHCs which is the primary unit for health care need. The CHCs which were established with the aim to provide referral and specialist services for the rural population are also having the gaps in terms of required manpower. The data shows that at CHCs, there is shortfall in various positions. For the Surgeons, 1811positions are vacant, another important position is of Obstetricians & Gynecologists in which, 1859 positions are vacant. For the Physicians 1989, Pediatricians 1758 and for Radiographers 1955 positions are vacant[2].

Quality of Health Care:

The Quality of care depends on the various factors such as transportation, availability of doctors, water supply, electricity, diagnostic facility and availability and distribution of drugs. To assess the standards of public health services, the government developed Indian Public Health Standards (IPHS). The Ministry of Health and

Table-2: Health status of Urban and Rural Population as per NFHS-3 and 4

Population and Household Profile	Urban (%)	Rural (%)	Total NFHS-4 (%)	Total NFHS-3 (%)
Infant mortality rate (IMR)	29	46	41	57
Under-five mortality rate (U5MR)	34	56	50	74
Mothers who had full antenatal care	31.1	16.7	21.0	11.6
Mothers who received postnatal care from a doctor/nurse/ LHV/ANM/midwife/other health personnel within 2 days of delivery	71.7	58.5	62.4	34.6
Children under 5 years who are underweight (weight-for-age)	29.1	38.3	35.7	42.5
Women who have comprehensive knowledge of HIV/AIDS	28.1	16.9	20.9	17.3
98 Men who have comprehensive knowledge of HIV/AIDS	37.4	29.3	32.3	33.0
Children under 5 years who are underweight (weight-for-age)	29.1	38.3	35.7	42.5

(Source: NFHS-4)
(Note : The table presents selected health indicators and status of population)

Mental Health Policy 2017

- A rights based statutory framework for mental health in India and strengthens
- Equality and equity in provision of Mental healthcare services.
- Strengthems the institutional mechanisms for improving access to quality and appropriate mental healthcare services.

Features of the Act:

- Provision of advance directive.
- Nominated representative
- Special clause for women and children related to admission, treatment, sanitation and personal hygiene
- Restriction on use of Electro Convulsive Therapy and Psychosurgery.

Family Welfare (2016) data shows that at SCs level, there are 1,55,069 functional units and out of that, 2155 are as per IPHS norms. In case of PHCs, there are 25354 functional units and out of it, only 5280 are as per IPHS norms, similarly there are deficiencies in CHCs , there are 5510 CHCs and out of it, 1470 are as per IPHS norms. In case of water and electricity supply at SCs, there are 28.5 per cent without regular water supply and 25.6 per cent are without proper electricity supply and 10.5 per cent are without all-weather motorable approach road. Similarly at PHCs, 4.6 per cent are functioning without electricity and 6.6 per cent are without regular water supply and 5.9 per cent are without all-weather motorable approach road. Moreover, at present, the treatment standards and attitude of health care staff are not measurable in absence of any uniform treatment standards and accountability of system.

In such a situation of shortfall in infrastructure, particularly minimum facilities and manpower, low level of budgetary allocation, the goals set by NHP 2017 to achieve by 2020 and 2025 seems to be tough and there is a need of specific plans and targets to fill these gaps in a time bound manner.

Health Equity and Rural-Urban Divide:

In rural India, health infrastructural facilities are still inadequate. All the above mentioned deficiencies and gaps resulted into vulnerable health state of rural population. The NFHS-4 data clearly reflects the urban and rural divide in terms of health outcome. As of now, NFHS -4 shows a better picture in comparison to NFHS-3 (Table- 2) but that needs to be critically analyzed in terms of equal distribution of resources and services in urban and rural areas and among all social categories. NFHS -4 data shows that, Infant Mortality Rate is 29 for urban areas and 46 for rural areas. Under five mortality rate is 29 for urban areas and 46 for rural areas.

Mothers who had full antenatal care were 31.1 per cent for urban areas and only 17 per cent in rural areas. Mothers who received postnatal care were 72 per cent in urban and 58 per cent in rural areas. Children under 5 years who are underweight 29 per cent in urban and 38 per cent in rural areas, men and women who have comprehensive knowledge of HIV/AIDS is 37 per cent in urban and 29 per cent in rural and 28 per cent in urban and 17 per cent in rural area respectively. Households using improved sanitation facility is 70.3 per cent in urban areas in comparison to 36.7 per cent in rural areas. A very important factor for good health is clean fuel for cooking, data shows Households using it is 80.6 per cent in urban areas and only 24 per cent in rural areas.

The Way forward:

To provide maximum coverage to the rural population with basic health care infrastructure, the government needs to fill up the gaps in Health care provisions that are existing at present. Due to the shortfall in infrastructure, the rural population faces many challenges and they have to travel to long distances to get the basic health care facility. In case of health care needs, the distance, and lack of transport facility is a major challenge for rural population, which creates difficulty in accessing the basic health care facility. In addition to that, they may face loss of their daily wage and work . Government needs to create specific strategies in time bound manner to create basic health care infrastructure for the rural population as per the requirement.

For the rural population, health care requirements are different than the urban due to various social economic reasons. Rural population is mainly engaged in agriculture labour activity and

NHM Free Drugs Services Initiative

- Funding available under the NHM leveraged to support and reward states that agreed to launch free drugs initiative by increasing their own state budget for this purpose.
- Detailed Operational guidelines released to the states. So far, all the states have notified free drug policy.
- Model IT Application Drugs and Vaccination Systems developed by C-DAC and shared with states.17 states are implementing DVDMS application.

Systems put in Place:

- Facility wise Essential Drug List.
- Robus procurement system.
- IT backed logistics and supply chain management.
- Proper warehousing and necessary drug regulatory and quality assurance mechanisms
- Standard treatment guidelines.
- Prescription Audit and Grievance Redressal Systems to ensure provision of quality free essential drugs.

there are many challenges of agriculture sector. The environmental conditions and unfavorable financial situation leads to mental stress and depression in farmers and daily wage labourers working in the field. The rising numbers of farmers suicides and migration is an indication of the need of immediate intervention through state and central government and protect the sources of livelihood in rural areas. As of now, the majority of mental health centers and practioners are available in urban areas whereas, the rural areas are completely neglected for mental health care. Policy makers should create a mechanism to create a network of mental health experts such as counsellors, psychologists, and psychiatrists to deal with the mental health issues of rural population.

We need to focus on occupational conditions and health risks of rural population especially those who are engaged in agricultural activities. There is a need to review the inter-sectoral coordination and status of work and its impact in the lives of rural population. Rural population engaged in agricultural activities is exposed to many other health risks. There are many studies which reveal that exposure to pesticides, chemicals, and other toxins in ground water, and other airborne pollutants, exposure to disease and animal waste for those working in animal production are some of the major threats to health status of rural population.

In absence of that basic infrastructure, the rural population has no other option than to approach private or local health care practitioners which are available in the vicinity and they have to bear out of pocket expenditure to get basic health services. Therefore, we need to carefully look at the components of private partnership in order to prevent unethical commercial activities. Private and other partners who wish to work with government and help in strengthening the public health care should be made accountable by community participation and social audit. The National Health Policy 2017 also lays a lot of emphasis on Universal Health Coverage. The government should focus more on quality provision of health care for all rather than quantitative coverage of all.Above all, in order to provide just and fair health care to rural population, the Government of India needs to do justice with the budgetary allocation and development of infrastructure as per need and demand.

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Footnotes

1 Census of India, 2011.

2 *Health manpower in Rural Areas, Section IV, Rural Health Statistics 2016, M/o HFW, GoI.*

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ADOLESCENT HEALTH IN RURAL INDIA

Dr. Prashant Bajpai

India is home to more than 200 million adolescent (10-19 years) and more than 60 per cent of these live in rural areas. Adolescents group represent a huge opportunity that can transform the social and economic fortunes of India. However, this demographic dividend has yet to be fully realized. In order to enable adolescents to fulfil their potential, we need to make substantive investments in their education, health, mental development and social environment. This requires programmes and services, which recognize the special needs of adolescents and address the problems specific to this age group in a supporting and non-judgmental manner. Designing such programs requires a better understanding of their current status and vulnerabilities within the prevailing socio-cultural settings.

Adolescence is characterized by transformation from being 'cared' by someone to taking care of 'someone'. It is a transitional phase between childhood and adulthood, characterized by a number of cognitive, emotional, physical, behavioral, intellectual and attitudinal changes as well as by changes in social roles, relationships and expectations. The quality of education, healthcare, social environment, peer group, attitude and habits a child surrounds themselves in their journey towards adulthood determines how they fulfills their responsibility as parents, employee, entrepreneur, farmer, or businessman. Thus, it is believed that adolescent's education, health, and nutrition have an inter-generational effect i.e., from their childhood to the adulthood of their children.

India is home to more than 200 million adolescent (10-19 years) and more than 60 per cent of these live in rural areas. Adolescents group represent a huge opportunity that can transform the social and economic fortunes of India. However, this demographic dividend has yet to be fully realized. In order to enable adolescents to fulfil their potential, we need to make substantive investments in their education, health, mental development and social environment. This requires programmes and services, which recognize the special needs of adolescents and address the problems specific to this age group in a supporting and non-judgmental manner. Designing such programs requires a better understanding of their current status and vulnerabilities within the prevailing socio-cultural settings.

Adolescence is ideally a healthy period. But the health choices that adolescents make or others make for them impact their lifelong health. More than 33 per cent of the disease burden and almost 60 per cent of premature deaths among adults can be associated with behavior or conditions that began or occurred during adolescence, for example, tobacco and alcohol use, poor eating habits, low physical activity, obesity, sexual abuse, and risky sexual behavior. We should provide an environment and education to adolescents that help them to develop the 'resiliency' to resist negative behavior and such an environment must be created at four levels: individual, family, school and community by providing a comprehensive package of information, commodities and services. Health program for adolescent should be based on social determinants that are associated with poor health outcomes and links relevant initiatives for the improved health of adolescents. We must be aware that non-equitable access to accurate information and high levels of socio-economic and gender disparities existing in our society should be addressed so that youth from every sphere of society can reap

Rashtriya Kishor Swasthya Karyakram

- 3.2crore children given weekly iron folic supplement
- Rs 87crore for decentralized procurement of sanitary napkins under the menstrual hygiene scheme
- More than 1.8 lakh peer educators for sustained peer education
- Areas covered: Nutrition, sexual and reproductive health, conditions for NCDs, substance misuse, mental health.

the benefits from governmental interventions. We need to achieve following objectives for our young generation: (i) Increase availability and easing access to correct information about adolescent health issues. (ii) Increase accessibility and utilization of quality health services including counselling directed at adolescent health problems. (iii) Forge multi-sectoral partnerships to create safe and supportive environments for adolescents.

To achieve above mentioned objective, we need to design a program based on following principles:

Coverage: Any adolescent health program should cover every individual in the adolescent age-group irrespective of whether they are in or out of school, working or unemployed, married or not, desires a service or not. We need to identify on priority basis the groups of adolescents, who are marginalized and vulnerable to ill health and abuse. Special programmes will be needed to connect with every young adolescent and those with physical or mental disabilities. With mobile phones and internet deeply penetrating into rural areas, and adolescents being the prime users of these social media, it is essential to make best use of this emerging technology for e-counselling and e-health promotion. These technologies are cheap, easily accessible even in deeper pockets of the country and can enable two way communication.

Communities: To reach each and every adolescent in rural villages of India, we need to go 'beyond health facility based service provision' and include places where adolescents naturally congregate. We need to actively involve and train some adolescents to act as peer educators. Peer educators will serve as the first point of contact for reaching-out to adolescents in their spaces and providing essential health education to large number of adolescent. Existing places like coaching centres, schools, sports and recreational centres can be the place for providing community-based interventions.

Content of Adolescent Health Program: The diverse nature of adolescent health needs, issues and concerns call for a holistic multi-pronged approach. We need to focus on following health issues for optimum outcome at the end of adolescent period:

***Nutrition*:** India is typically known for a high prevalence of undernutrition, but nowadays, obesity among adolescents is not uncommon. Thus, we need to focus on dual problem of undernutrition and obesity. To make youth aware of what is the right food for them nutrition, education sessions need to be conducted at the community level using existing platforms. To make deeper inroads, nutrition education should be included in school curriculum and one hour, every week or two, should be dedicated in school on healthy eating. Government of India has initiated several initiatives to promote adolescent nutrition including but not limited to Iron plus initiative, weekly Iron Folic acid supplementation, SABLA scheme. These initiatives

Adolescent Health in a Snapshot

- According to National Family Health Survey-4 (NFHS-4), 31.5 per cent of the currently married women aged 20–24 were married before 18 years of age and 24.4 per cent of men aged 25-29 years were married before 21 years of age in rural India.
- As per NFHS-4, 9.2 per cent of girls (15-19 years) from rural areas were either pregnant or have already given birth to a child.
- As per NFHS- 3, 31 per cent of ever-married female in the age group of 15–19 year, reported having experienced physical, sexual or emotional violence perpetrated by their spouse.
- According to Global Youth Tobacco Survey, 14.6 per cent of students in class 8th -10th used any form of tobacco; 4.4 per cent smoke cigarettes; 12.5 per cent currently used other forms of tobacco.
- In India, about 690,900 girls smoke cigarettes each day.
- As per National Mental Health Survey, the prevalence of mental disorders in age group 13-17 years was 6.9 per cent in rural areas.
- Nearly 3 million young Indians aged between 13-17 years and residing in rural parts were in need of active mental health interventions.

Government Of India's Key Initiatives For Improving Adolescent Health

- **Weekly Iron and Folic Acid Supplementation (WIFS):** It is a community-based intervention to addresses Iron Deficiency Anaemia amongst adolescents (boys and girls) in both rural and urban areas.
- **Adolescent Reproductive and Sexual Health (ARSH) Clinics**: Specialized preventive, promotive and curative clinics especially for adolescents.
- **Scheme for promotion of Menstrual Hygiene** among adolescent girls in rural India: Under this scheme, sanitary napkins are provided by the brand name '*Free days*'.
- The **School Health Programme**: Preventive health check-ups and screening for diseases, deficiency and disability amongst school going adolescents.
- **Rashtriya Bal Swasthya Karyakram (RBSK)**: Child Health Screening and early intervention services, a systemic approach of early identification and link to care, support and treatment.
- **Kishori Shakti Yojana**: To improve the nutritional, health and development status of adolescent girls, promote awareness of health, hygiene, nutrition and family care.
- **Balika Samridhi Yojana**: To change negative family and community attitudes towards the girl child at birth, improve enrolment and retention of girl children in schools and raise the age at marriage of girls.
- **Rajiv Gandhi Scheme for Empowerment of Adolescent Girls (RGSEAG)-SABLA**: Self-development, improvement in nutritional and health status, promote awareness about health, hygiene, upgrade their home-based skills, life skills and tie up with National Skill Development Program (NSDP) for vocational skills.
- **Integrated Child Protection Scheme (ICPS):** To build a protective environment for children in difficult circumstances through Government-Civil Society Partnership.
- **Adolescence Education Programme**: Aims to empower young people with accurate, age appropriate and culturally relevant information, promote healthy attitudes.
- **National Programme for Youth and Adolescent Development**: To develop leadership qualities and to channelize their energy towards socio-economic development and growth of the nation.

recognize the importance of nutrition particularly for adolescent girls. In addition, both adolescent boys and girls benefit in multiple ways with improvement in their iron status: Improved physical growth, cognitive development, physical fitness, improved work performance and capacity, and concentration in daily tasks and school performance.

Sexual and Reproductive Health: One of the most crucial events during the adolescent period is acquiring reproductive function. Through discussion, attitude, behavior and practice building exercise, adolescents should be taught to practice healthy reproductive behavior. Although menstruation is a normal physiological phenomenon through which every woman has to pass, but due to cultural norms and stigma associated with it, generations of women have had to endure ill health, discomfort, lack of hygiene and even personal risk in trying to manage this normal bodily function.

Mental Health: Increasing competition in school, sports and everyday life puts mental pressure on adolescent which neither they are aware of, nor they are prepare to handle. Sometime children adopt harmful habits to cope up with this undesired pressure. Thus friendly advice should be available through schools and nearby health centres to help youth better prepare and cope up with life events.

Substance Misuse Prevention: Adolescence marks the beginning of experimentation with surroundings, habits, and choices. Young people also have tendency to make more friends, wants to be

socially acceptable. In doing so, many times they make wrong choice by bowing down to peer pressure and start using tobacco, alcohol and other substance which they should not use.

Life-style or Non-Communicable Disease: The adolescent period provides an opportune time for introducing positive behavioral intervention to mitigate emergence of risk factors that lead to non-communicable diseases. As the name indicates, the root cause of these diseases is the adoption of faulty life style. Since the main risk factors for non-communicable diseases – tobacco and alcohol consumption, poor dietary habits, sedentary life style and stress– are preventable, it is imperative that a healthy life style is promoted from a young age.

Clinics: Since most of the existing clinics provide curative treatment to patients, we need to create special adolescent friendly clinics which are oriented and better equipped to meet the health needs of adolescent. Such clinics are needed to ensure availability of specialized counselling, medical and para-medical services to adolescents. To this extent, the Government of India has established special- **ARSH (Adolescent Reproductive & Sexual Health)** clinics for addressing the delicate issue of reproductive health among adolescents. These clinics can also be used to screen adolescents for under/over-nutrition and Anaemia followed by provision of general treatment. Additionally, these clinics need to be linked with robust community-based component for generating demand and mobilizing adolescents to avail services.

Counselling: The provision of correct knowledge and information is the key for health promotion among all age groups including adolescent. Counselling is not just a question & answer session, but an interactive session to increase understanding on a given topic. Counselling is essential to enable adolescents to develop a better understanding of change happening around them and to make positive changes in their lives with respect to these changes. Counselling should not only be limited to adolescents alone, but should also include parents, influencers, care-givers and teachers.

Health Communication: Mere creation of clinics and positioning the counselors isn't enough. We need to design an appropriate health education campaign for demand generation among adolescent for utilizing available health services. Effective communication by all available means viz. inter-personal, print, electronic, and social media is vital to successfully spreading the message to each and every adolescent of the country. Given the rising popularity and reach to the deeper pockets of the country, 'social media' is the right tool for broadcasting health education message.

Schools: Schools should be at the center of any adolescent health program because other than their home, school is the place where children spend most of their time. To promote healthy lifestyle and generate awareness on risk factors for NCDs, schools can serve as the platform to educate and counsel adolescents on behaviour risk modification. Schools should incorporate at least 40-60 minutes of physical activity per day. School teachers should be trained to counsel adolescents and make appropriate referrals to adolescent health clinics. School teachers can also be employed for selecting, training and mentoring peer educators to provide information on common health concerns related to adolescent. Participatory, process-oriented, teaching-learning approaches that enable providers to engage with adolescents rather than being prescriptive, stigmatizing and fear-inducing should be utilized.

Inter-sectoral Convergence: Strategic partnerships are needed to forge an alliance between allied Ministries, NGOs and educational institute to strengthen existing services and prevent duplication. The key strategies for convergence include cross-training of service providers, inclusion of the adolescent health module in the training curriculum, and the use of existing platforms for generating demand and service provision. The annual district health action plan should list all the activities which need support from other sectors. This plan will provide specific inputs, in terms of which department is responsible for undertaking a designated activity/activities. Each district needs to formulate an adolescent health plan to review different government programmes related to adolescent health and identify areas that need further strengthening.

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TELEMEDICINE: CONNECTED HEALTHCARE FOR RURAL INDIA

Abhishek Gupta

That Rural India has close to 500 million wireless telephone subscribers and is growing at a rate of 1.05 per cent per month. Most of the international mobility forums also reported that India possess one of world's largest Smartphone Internet user base. It proves that the cell/data network has reached to the farthest of the corners of our nation. If not the complicated VSAT/connectivity infra than a small PHC/telemedicine node could be tuned to run at a 2G/3G bandwidth enabled smartphone internet connection. There are companies known, to be using such simple methodologies for setting up rural PHCs' in India and abroad. Increasing penetration of smartphone network would add to simplify this further.

Health is not everything but everything else is nothing without health. One of the first literatures know to humans, Rig Veda also says "In the beginning, there was desire which was the first seed of mind". A nation with 1.3 billion people, out of them 700 million in rural areas, ensuring better healthcare access to everyone has been quite a task for the governing bodies. Lack of proper healthcare infrastructure, doctors, pharmacist and equipments have only added to those issues. How do we solve it? We hear every day about technology revolutionizing nearly everything, can it be used to offer affordable and efficient healthcare services to every Indian? No matter if he lives in New Delhi or a remote corner of Chhattisgarh. The world seems to have identified the right answer in terms of choosing the right technology, and **Telemedicine** it is!

What is Telemedicine?

The first spark of the idea came in with Dr. Hugo Gernsback in 1925, as it was illustrated in the cover page of 'Science & Invention Magazine'. His original conception was of a spindly robot fingers and radio technology to examine the patient from a far and showing a video feed of patient to the doctor. He named it "teledactyl" and over the next few decades, the world formalized for the name 'telemedicine' which typically summarizes "the remote diagnosis and treatment of patients by means of telecommunications technology".

The National Aeronautics and Space Administration (NASA) played an important part in kicking off the first commercial wave of telemedicine. Their first set of efforts in telemedicine started as early as 1960s when humans began flying in space. Physiological parameters were transmitted from both the spacecraft and the space suits during missions.

The modern worlds telemedicine is rather more comprehensive. It is not just about getting a video feed of a remote patient. In the current generation, it's about apps (mobile/desktop applications) which are installed on smartphones/tablets/desktops/ kiosks and offer muti-dimensional support in terms of organizing a remote connectivity between doctor and patient using a video feed. Connected Blood Pressure Meter to Glucose Meter capable of immediately transferring the data to the apps and making it available for review in real-time.

Whereas all the primitive telemedicine infrastructure used simple technology protocols like Bluetooth and WiFi, but to cater to the future, in terms of scale and accessibility, iOT (Internet of things) is the key.

The **Internet of things** (**IoT**) "is the inter-networking of physical devices, vehicles (also referred to as "connected devices" and "smart devices", buildings, and other items embedded with electronics, software, sensors, actuators, and network connectivity which enable these objects to collect and exchange data." Before getting to know how telemedicine could revolutionize the

Mera Aspataal Application

- Collects information on patients level of satisfaction through SMS, Outbound Dialing, Web portal, and Mobile App.
- Contacts the patient to collect information.
- Under Phase I, around 141 hospitals covered

rural healthcare, we need to understand two terms, namely preventive and reactive healthcare.

Preventive Healthcare: Preventive healthcare is all about keeping a strong check on changes happening to your body, which requires one to undergo health check-ups and routines at a regular interval and practice a lifestyle as per the outcomes of the trivial changes observed before it gets transformed into a disease or a serious health problem.

Reactive Healthcare: Reactive healthcare is more like responding to a situation. You've been diagnosed of a disease and proceeding for a corrective action or in the process of getting it diagnosed through advanced methods. For ages, Indians have not been known for keeping up to preventive healthcare standards. Although, our roots are very strong in terms of trying to maintain a healthy lifestyle, nutritious food and all, but seeing a doctor before a non-trivial change is observed in the body, more falls in for our tendencies to only react to the situations.

But in the last decade, it gradually started changing and we paid focus to preventive healthcare as well. Top corporates to govt. agencies made a big push to Yoga, marathons and walkathons motivating people to know more about their body and keep it under a strong check, not just by controlling diet, but also observing the physical/chemical changes being followed. Just-in time the first wave of telemedicine did strike India as well, when private sector healthcare providers started offering homecare services to elderly or to the ones in need of regular health monitoring.

As of today, there are several companies/ start-ups offering different form of telemedicine platforms/assistance:

- Remote Consulting, which enables you connect to a doctor when you need through a smartphone/web app.
- Remote Monitoring, enable doctors to regularly keep a regular check on the body of a remote patient using connected devices, and get real-time access to his medical data/parameters.
- Health Kiosks/PHCs' (Primary Health Care Centre), a small setup with or without the physical presence of a doctor could only be run by a para-medics. Could perform basic tasks like getting to know the basic health parameters of a person like blood pressure, blood glucose and related things and facilitate a video consultation session with a doctor on-demand.

e-AUSHADHI

- Deals with purchase , inventory management and distribution of drugs, sutures and surgical items to
- District Drug Warehouses of State/UT
- District Hospitals, their sub stores at CHC, PHC etc

Telemedicine for Strengthening the Rural Healthcare:

Imagine a Primary Healthcare Centre or a Healthcare kiosk which requires a handful number of equipment and a minimal staff installed at a remote location in a rural area. Locals could reach out at ease whenever in need. PHC could address basic pathology requirements meanwhile connecting to a qualified doctor over a video chat session who could use a digital stethoscope (iOT enabled) and get immediate access to blood pressure and other critical parameters for the first diagnosis.

A primitive solution like this could make a difference in the lives of people who have got to travel several kilometres from rural and far flung inaccessible areas to nearest town or suburbs to get access to even primary healthcare services. Although referrals/advance diagnosis could require more than this, but it is just sufficient to build an effective first response system.

Traction:

Several private sector organization and smaller start-ups have started in this direction. For some NGOs, it's a noble cause. For top corporate, its a part of the CSR and for some smaller start-ups, it's about easy access to a big market opportunity. No matter whatever form it is being considered, the common man in rural India would definitely be a beneficiary of all this. 0-100 INR, per consultation/health-check session is too low a cost to be worried about for a common man, whereas the private operators would still find it a profitable avenue considering economies of scale. In one such example, Global Healthcare Systems Pvt Limited, an integrated healthcare organization, entered into a strategic tie-up with CSC e-Governance Services India Ltd to offer telemedicine video consultation to the vast rural population who do not have access to qualified medical practitioners. The CSCs are broadband enabled e-service kiosks in

e-RAKT KOSH

- Being rolled out for all the licensed blood banks in public and private health facilities in States/UTs.
- Piloted in blood banks of Madhya Pradesh, West Bengal and IRCS Delhi.

rural areas, set up under the national e-governance plan and run by village entrepreneurs. This will not only benefit 28 per cent population with virtually no access to doctors, but also will meet the needs of almost 70 per cent people residing in rural India with patchy access to quality medical practice.

There are platforms like lybrate, askapollo, doctorsinsta, practo which offers 24X7 consultation online including some of the mobile apps like docsapp and curefy which offers your first consultation with a doctor free of cost. The operators have started to see good traction even from the rural population. In another case, a company named Evolko Systems, piloted an online-offline model with the All India Institute of Medical Sciences, Patna. It stationed 120 telemedicine officers at village councils with the hospital in Patna, Bihar's capital city, as the nodal centre. A similar start-up DoctorKePaas is organizing PHCs' in remote corners of Andhra Pradesh taking in 200 patients a day offering health packages (health scan and online consultation) at a cost as low as 100 INR per patient.In August 2015, the government of India launched a telemedicine initiative in collaboration with Apollo Hospitals under which, people can consult doctors through video link.

As part of the service named 'Sehat', people in rural areas can consult doctors online and also order generic drugs. The Common Service Centres (CSCs) have been delivering tele-consultation services with support from Apollo and Medanta in some areas and now with this initiative, the tele- consultation services are being extended to 60,000 CSCs across the country.

In July 2016, the Union Ministry of Health and Family Welfare signed a Memorandum of Understanding (MoU) with ISRO to expand its telemedicine network to remote places. These telemedicine nodes would be consisting of VSAT System, diagnostic equipment like ECG Machines, X-Ray Scanner and a paramedic staff who will recognize the vital stats before connecting the patient with the doctor over an online consultation. In similar efforts, state governments have also been partnering in PPP (Public-Private-Partnership) model to setup telemedicine nodes. For example, in Himachal Pradesh, the government partnered with Apollo Group and have been running such nodes successfully in remote district of Lahual and Spiti.

National Telemedicine Network (NTN)

Providing services to the remote areas by upgrading existing government healthcare facilities like MC, DH, PHC, SDH and CHC in states. In the current FY,7 states have been provided financial assistance for providing Telemedicine services.

Challenges:

There would be fewer challenges in the implementation and effectiveness of telemedicine into rural areas, but one of the most critical challenge is to do it in time. Given that the largest segment of our population still lives in rural areas, it is important to do it and also, at an exceptional pace. And the govt. initiatives alone, to build up the required infrastructure would just not be sufficient.

The Silver Lining:

The official Telecom Subscription data released by TRAI shows that Rural India has close to 500 million wireless telephone subscribers and is growing at a rate of 1.05 per cent per month. Most of the international mobility forums also reported that India possess one of world's largest Smartphone Internet user base. It proves that the cell/data network has reached to the farthest of the corners of our nation. If not the complicated VSAT/connectivity infra than a small PHC/telemedicine node could be tuned to run at a 2G/3G bandwidth enabled smartphone internet connection. There are companies known, to be using such simple methodologies for setting up rural PHCs' in India and abroad. Increasing penetration of smartphone network would add to simplify this further.

In a parallel effort, there is enough of innovation happening on the iOT ecosystem, where the devices are being developed to consume low power and offer higher efficiency of connectivity to the provider network directly. This would help ensure seamless connectivity of PHCs' to the nodal centres offering smoother functioning.

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RURAL HEALTH COMMUNICATION: A PARADIGM SHIFT

Keshav Chaturvedi

In the 21st century India, things have changed a lot and yet many old strands are stubbornly resisting change. Nowhere the tussle is more apparent than in rural areas. Present day rural India is characterised by many conflicting trends. The spread of mobile telephony, internet and media, especially television has increased the exposure for the young. Their aspirations are now sky high.

More than 50 years ago an iconic film of its time '*Guide*' saw a tourist guide (Dev Anand) shunning his *profession, landing* in a village and is mistaken for a spiritual man. He conducts discourses and in one of the discourse, he tells people about the need to shun a habit when suddenly a person stands up and says that it is God's gift and why should anyone do anything otherwise. In reply Dev Anand says even sun is God's gift, than why are you using an umbrella to stop its sunshine. And it immediately settles the debate and villagers are convinced of his argument.

During 1970s, the Directorate of Advertising & Visual Publicity (DAVP), Government of India, also launched few advertisements on Doordarshan, radio and through other channels that used cultural motifs and age old stories to convey a message. One of the simple ones was a message that king of the jungle has a small family while the rest move in hordes. The message ended with a lament – "Choice is yours".

The Rural Landscape of 21st Century:

In the 21st century India, things have changed a lot and yet many old strands are stubbornly resisting change. Nowhere the tussle is more apparent than in rural areas. Present day rural India is characterised by many conflicting trends. The spread of mobile telephony, internet and media, especially television has increased the exposure for the young. Their aspirations are now sky high.

However, they are living in tightly woven societies which are rigidly hierarchical and any attempt to breakout is met with violent disapproval. The social eco-system is restrictive for the growth of women, children, enterprising young men and it also acts as a barrier for any new idea to take root. In such a scenario, even two most fundamental services for human growth-education and health suffer due to this mindset.

Most of the rural initiatives by the Government are in the space of women and child healthcare. The idea is if the children and women are healthy, the new generation will be healthy and fit too. It would also bring down the disease burden and healthcare expenditure of the family.

For this reason, most of the NGOs, *angawadi* workers and panchayat workers connect with the women. They hope that if the women are convinced, they would achieve their goals. Their belief is rooted in the fact that research suggests if a woman is aware or she is literate, then her personal health and the health of her children improves as well as her family size decreases.

But in the rural scenario, this research doesn't always hold. The problem is the social structure. The patriarchal society forces her to toe their line and mostly an individual is not strong enough to take on the social pressure. Women give in to elders who

exert pressure through their husbands, mother-in-laws and other relatives.

The idea of connecting with women to deal with the women and child health issues is slightly flawed. As the men folk still exert tremendous pressure and are the proverbial elephant in the room, their involvement is of paramount importance.

They have to be involved in every stage of awareness campaign from apprising them of the problem, its causes and how it can be dealt with. The positive outcomes need to be clearly articulated specifying the timeframe and the cost involved of doing something and not doing anything. For example, the men should be apprised of the financial cost of increased disease burden.

Communication Technologies and Messaging: Opportunities and Challenges

Effective communication is a combination of right technology and apt messaging. Every communicator has to deal every geography and community as a new segment to tailor their communication. In rural areas, due to various factors, people generally tend to be wary of new ideas and initiatives. Yet, our age offers many advantages that weren't available to communicators earlier.

The health messaging like any other communication, goes through three stages. The first stage is about initial contact for making people realise the problem. Second stage is apprising them of the cost of inaction or action. The third stage is a call to action. In all the three sections, prior research and constant innovation is necessary.

For example, a multi-national soap manufacturing company wanted to enter the Indian rural market. Its soap is synonymous with killing germs. But when they started communicating with rural people they realised that the awareness about germs was woefully low. However, they understood diseases caused by unhygienic conditions. The company then positioned its soap as a hygiene promoting product and successfully entered the rural market.

Similarly, the Government of India's Pulse Polio Mission also became successful because it communicated well. Its visual ads created a stark image of physically challenged children and drove home the point the cost of inaction. In many

places in Hindi heartland, the local health workers employed an ingenious way by exhorting young parents especially men asking them, "Your 'support' in old age will himself need support. Then how will you feel?" The similar question was tweaked a little for girl child by raising doubts about who will marry her? But the clincher in Pulse Polio Mission was its call to action.

The message for call to action was simple, straightforward and delivered by a star with cult fan following. The call to action was a simple four words line - "**Do boond zindagi ki**"(two drops of life). The campaign brought home the point that the principle for connecting with the masses is by keeping it **Simple and Short**.

Another campaign in the 1970s while promoting the concept of smaller families created a slogan "*Hum do, humare do*". City signboards, walls along the railway lines and radio jingles were saturated with this message. It meant the couple (two individuals) and their two children. It was a very potent, simple and effective communication and today many of the men and women in their 30s and early 40s who just have one sibling can trace this phenomenon to the slogan.

Communication Content and the Communication Vehicle:

Communication involves message and the medium through which the message will be disseminated. Today there are plethora of mediums, television, smart phones, internet, mobile apps, films, youtube clips etc. In rural areas, even traditional mediums like loudspeakers, theatre groups, *nautanki, Jatra, Ramlila* and puppetry have been seen as very effective. The most important thing is the quality of message (how well it fits in with the context and

social milieu as well as how simple and short it is) and the frequency of its repetition.

A WHO (World Health Organisation) report on the importance of communication in immunisation catalogued the success of simple tools as loudspeakers in increasing the awareness of target audience.

The study mentioned an example of Ethiopia where community health workers followed 6-week-old to 23-month-old children who visited vaccination centres to determine whether reminder stickers applied to the inside of their home front door would reduce immunization dropout rates. They gave a circular sticker with a picture of a child receiving a vaccination and an appointment date to one group of mothers. The immunization dropout rate of children whose mothers received a reminder sticker was 55 per cent lower than that of the control group. Similarly in Mozambique, door-to-door canvassing with a mike increased the awareness of immunization programme.

However, in India where people still find it difficult to read and write, mobile phones can be a great source of follow up communication asking women and men to come back for checkups, vaccination of their children and seek institutional delivery. Date, time and venue can be communicated. Apps can be created where people can see multimedia presentations on health in their language, seek counsel from experts look for nearest hospitals and ask for ambulance. The community health worker can also use the local data to send health alerts and also plan her visit to homes.

As far as communication content is concerned, religious text and folk lore and literature as well as religious leaders are yet an untapped goldmine that can play an important role in turning people's perception. In Indian rural areas, religious scriptures and folk lore have a very powerful hold on people and using them to articulate health concerns will bring about the fastest change. It is because the religious leaders enjoy maximum authority and carry integrity that no one else does. When they say something invoking religious text and presenting a religious rationale for good health then all the doubts are suspended and people turn in droves to embrace the new message.

Films and film stars are another very powerful medium. Recently Amir Khan's 'Dangal' became successful even in Haryana and Punjab as it articulated the gender stereotyping of girls. Its immediate impact to bring about a societal change may not be visible but it has touched the lives of many families and the impact would be visible in the coming years.

Similarly Akshay Kumar's new film 'Toilet: A love story' is a great example of making a film on the subject of hygiene and health. It will impact far more than data based lectures.

While framing communication the urban experts depend a lot on data. But the ordinary citizen is inspired by experiences, stories with faces and anecdotes. They still have a powerful impact on how people connect with the message if it is sugar coated with stories.

In this regard, storytellers, soothsayers, performing artists and religious leaders hold an important place. They are key elements in rural connect. At a time when India is grappling with serious health issues of stunting, wasting, maternal mortality, anaemia etc, the government should create a national policy for health communication and involve communicators of every stripe and segment and dig deep into our cultural heritage to create mass awareness.

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SWACHHTA PAKHWADA CELEBRATED ACROSS THE COUNTRY BY MINISTRY OF AGRICULTURE & FARMERS WELFARE

The Ministry of Agriculture & Farmers Welfare observed *Swachhta Pakhwada* from 16th to 31st May, 2017. Going out from the confines of the office premises, *Swachhta* drive and awareness programme regarding cleanliness were carried out in Agricultural Mandis, Fish Markets and villages near *Krishi Vigyan Kendras* (KVKs). The message of Swachhta campaign was widely spread through media. During the *Swachhta Pakhwada*, certain dynamic measures were focused which are to be continued beyond *Pakhwada* to have optimum results.

Department of Agriculture, Cooperation and Farmers Welfare has observed the *Pakhwada* with an effort to reach amongst the farmers to sensitise them for cleanliness. Under the Swachh Bharat Mission, a waste decomposer technique has been developed by National Centre of Organic Farming (NCOF) to keep villages clean and for saving farmers income by which animal dung and village bio-waste can be converted into good quality organic manure with very low cost. During the *Pakhwada*, demonstration of this technique was organized by NCOF in 142 villages/ Agricultural Mandis. This technique was also advertised in 80 newspapers in different languages to spread awareness across the country. It was also decided to provide Rs. 36 crore funds to states under RKVY and Rs. 12.5 crore to 250 e-NAM APMCs for installation of Compost Waste management plants during 2017-18.

Besides this, various offices under this Department undertook work beyond the bare minimum housekeeping activities. A Swachhta Edition of "*Deewar*" magazine was published by Directorate of Extension comprising Swachhta articles, columns, slogans, poems etc. During the *Pakhwada*, cleanliness sensitisation drives were also undertaken in nearby villages/ area by Centers of Soil & Land Use Survey of India (SLUSI), CCS National Institute of Agricultural Marketing (NIAM), MANAGE (subordinate/ autonomous offices under DAC&FW), and the participation of local public representatives/ Ministers in the Swachhta Campaigns was also ensured. Further, awareness programmes were also organised amongst the farmers regarding safe use of chemical pesticides and the disposal of insecticides containers after use.

Swachhta Pakhwada was observed in Department of Animal Husbandry, Dairying and Fisheries (DADF) headquarter as well as in attached subordinate and autonomous offices/Institutes of the Department. During the Pakhwada, cleanliness campaign was initiated in 20 fish markets of 11 states and 23 awareness programs including a cleanliness march and three state level workshops on hygienic handling of fish were organised. The participation of local public representatives/ Ministers as well as government officers and general public in the Swachhta Campaigns was also ensured. Apart from regular cleaning activities, awareness campaign in Government Senior Secondary School, Mirzapur and Mirzapur village of Hisar was organised by Regional Fodder Station, Hisar. Similarly, Special cleanliness drive was carried out at hospital premises of Sisana, Pillukhera by Staff of Central Herd Registration Scheme, Rohtak. The Breed Improvement Institutes under this Department have undertaken activities like awareness session for staff/ workers engaged in various activities of farm, official, agricultural & livestock management. Apart from this, the officers of subordinate institutions of Livestock Health Division educated their subordinate staff about biological disposal system and clean energy use.

Under the Swachhta Action Plan (SAP) for 2017-18 of the Department, Rs. 5.32 crore has been allocated for taking up of substantive *Swachhta* related activities i.e. establishment of vermi-compost units, setting up of biogas plants, conducting stale level workshops on waste recycling, setting up of slurry/ wash water tanks etc.

During the *Swachhta Pakhwada*, the Department of Agricultural Research & Education/ ICAR *Head Quarters* in New Delhi, all the 102 Research Institutes and 671 KVKs took active part in the *Pakhwada* activities and conducted a wide range of cleanliness activities. Workshops, seminars, awareness camps, rallies, street plays and debates were organised by ICAR Institutes. Awareness and sensitisation programmes were also organised in the adopted villages through ICAR Institutes and 671 KVKs. Swachhta based activities were undertaken in more than over 5200 villages by various ICAR Institutes and KVKs with the active participation of farmers and village youth. As part of these activities, clean farming technologies and package of practices as well as 130 technologies to convert agricultural waste to wealth were also promoted which include preparation of bio-compost, vermi-composting, whey utilization, straw enrichment, waste water recycling, cotton waste and fisheries waste management among others were promoted through various field and farm activities undertaken during the pakhwada. Senior Officers from the institutes, public figures, local leaders and dignitaries participated in the events organised by various institutes & KVKs during the swachhta pakhwada.

UTTARAKHAND AND HARYANA DECLARED 4TH AND 5TH ODF STATES IN THE COUNTRY

Rural Uttarakhand and rural Haryana have declared themselves as the 4th and 5th Open Defecation Free (ODF) States of India under the Swachh Bharat Mission Gramin (SBM-G),. They have now joined the league of Sikkim, Himachal Pradesh and Kerala, which were the first three states to be declared ODF. With the total number of ODF States now rising to 5, more than 2 Lakh villages and 147 districts have also been declared ODF across the country. Uttarakhand has 13 districts, 95 blocks, 7256 gram panchayats and 15751 villages while Haryana has 21 districts, 124 blocks, and 6083 gram panchayats - all of which have declared themselves as ODF in formal declarations in Dehradun and Chandigarh, respectively.

Speaking at the event in Dehradun, the Union Minister, Ministry of Drinking Water and Sanitation, Shri Narendra Singh Tomar, said, "On 2nd October 2014, Prime Minister, Shri Narendra Modi, started the Swachh Bharat Mission. Today, it has become a true people's movement. People of Uttarakhand and Haryana, the government officials and representatives of other institutions have contributed towards this milestone."

The Union Minister for Rural Development, Panchayati Raj, Drinking Water and Sanitation, Shri Narendra Singh Tomar at the declaration of the Open Defecation Free (ODF) Uttarakhand State, under the Swachh Bharat Mission Gramin (SBM-G), at Dehradun on June 22, 2017. The Chief Minister of Uttarakhand, Shri Trivendra Singh Rawat, the Secretary, Ministry of Drinking Water and Sanitation, Shri Parameswaran Iyer and other dignitaries are also seen.

Shri Parameswaran Iyer, Secretary, Ministry of Drinking Water and Sanitation said, "Following the tremendous progress being made in ODF declaration across the country, the next step for Swachh Bharat Gramin will be to focus on sustaining this ODF status and systematic solid and liquid waste management in rural India." In just two and a half years since the launch of SBM, the sanitation coverage in the country has increased from 42 per cent to over 64 per cent.

AYUSH AND HEALTHCARE IN RURAL INDIA

Dr Aarushi Pandey

AYUSH systems continue to be widely used due to their easy accessibility, and sometimes, because they offer the only kind of medicine within the physical and financial reach of the patient. National Rural Health Mission has been successful in integrating AYUSH system to the existing public health system. This planned, meaningful and phased integration of AYUSH with the modern medicines has helped meet the challenge of the shortage of health care professionals and to strengthen the health care service delivery system in rural India.

AYUSH is an acronym for Ayurveda, Yoga, Unani, Siddha and Homeopathy. Four of these systems of medicines originated in ancient India and currently, India has the highest number of practitioners as well as users of Homeopathy in the world. Longer life expectancy and lifestyle related problems have brought with them an increased risk of developing chronic, debilitating conditions such as heart disease, cancer, diabetes and mental disorders. Although new treatments and technologies for dealing with them are plentiful, nonetheless, more and more patients than before are now looking for simpler, gentler therapies for improving the quality of life and avoiding iatrogenic problems. No single system of medicine has a cure for all the diseases which affects mankind. In this regard, India as a country is fortunate to have such varied indigenous health care systems which, if properly utilised, will benefit every citizen of India including those residing in the rural part of the country. Moreover, India can be a world leader in the era of integrative medicine because it has a strong presence of western system of medicine and an immensely rich and mature indigenous medical heritage of its own. In recent decades, Yoga has spread more rapidly and widely to western countries than in the rural parts of the India. This is something to be proud and ashamed of at the same time. The positive features of the Indian Systems of Medicine, namely, their diversity, accessibility, affordability, a broad acceptance by general public, comparatively low cost, a low level of technological input and growing economic value have great potentials to make them providers of healthcare to larger sections of the population.

Resurgence of AYUSH:

Since last decade or so, we are witnessing the resurgence of interest in Indian systems of medicine, especially, in the prevention and management of chronic lifestyle-related non-communicable diseases. The Government of India widely acknowledges that AYUSH offers a wide range of preventive, promotive and curative treatments that are both cost effective and efficacious and there is a need for ending the long neglect of these systems in India's healthcare strategy.

In rural areas of India, AYUSH systems continue to be widely used due to their easy accessibility, and sometimes, because they offer the only kind of medicine within the physical and financial reach of the patient. National Rural Health Mission has been successful in integrating AYUSH system to the existing public health system. This planned, meaningful and phased integration of AYUSH with the modern medicines has helped meet the challenge of the shortage of health care professionals and to strengthen the health care service delivery system in rural India. The co-location of AYUSH system within the existing public health system since the launch of NRHM has yielded substantial results in mainstreaming and spread of AYUSH into the rural

parts of India. But we need to initiate measures to enable each of these various systems of medicine to develop in accordance with their own genius.

AYUSH as Source of Employment: The resource base of AYUSH is largely medicinal plants. Around 6000-8000 species of medicinal plants are documented in published medical and ethnobotanical literature. In addition to plants, there are more than 300 species of medicinal fauna and around 70 different metals and minerals used by AYUSH. Additionally, there are restrictions on extraction and procurement of remedies from the wild due to existing environmental laws. Due to this, industry constantly faces the problem of raw material supply and its quality. We can preserve the gene pools of endangered species by supporting the large-scale cultivation of medicinal plants by farmers residing in the adjoining areas of forest and establishing modern processing zones for the post-harvest management of medicinal plants. Cultivation of medicinal plants on large scale can thus, boost rural economy and simultaneously preserve the gene pool. For this, government should select the districts where such plants grow under the natural conditions and promote the concept of *Ayurveda gram* wherein a cluster of ten to hundreds of villages are selected for the cultivation of medicinal plants. Many North-Eastern states, Himachal Pradesh, Uttarakhand, Chhattisgarh and Jharkhand have a wealth of medicinal plants but lack the requisite infrastructure and capacity to formulate projects for their identification, processing and selling these products.

Nowadays, there is an increasing trend for going on healing retreat/holiday. In the urban area, there are many private and not-for-profit naturopathy & spa centres which provide holistic care and specialised therapies like *Panchkarma* to patients with chronic diseases. On the same lines, rural youth can be trained in yoga and naturopathy which can then be employed in places like *ashrams* for providing holistic care for individuals from both urban and rural area.

Current Challenges for AYUSH: Of the many challenges faced by AYUSH sector, one is the lack of uniformity in preparation and prescription of drugs. But there has been a considerable improvement in this regard that National Essential Drug List has been prepared to improve the manner in which care is provided by AYUSH practitioners. At present, most AYUSH physicians are largely located at the level of primary health care and AYUSH has a marginal presence in secondary and tertiary level institute. We need to identify few tertiary care research institutes wherein physicians of the Indian and western system of medicine should jointly work on integrating treatment protocol better outcomes among patients.

The budget for research in AYUSH sector is extremely low. One challenge is to step up research investments and support reputed research

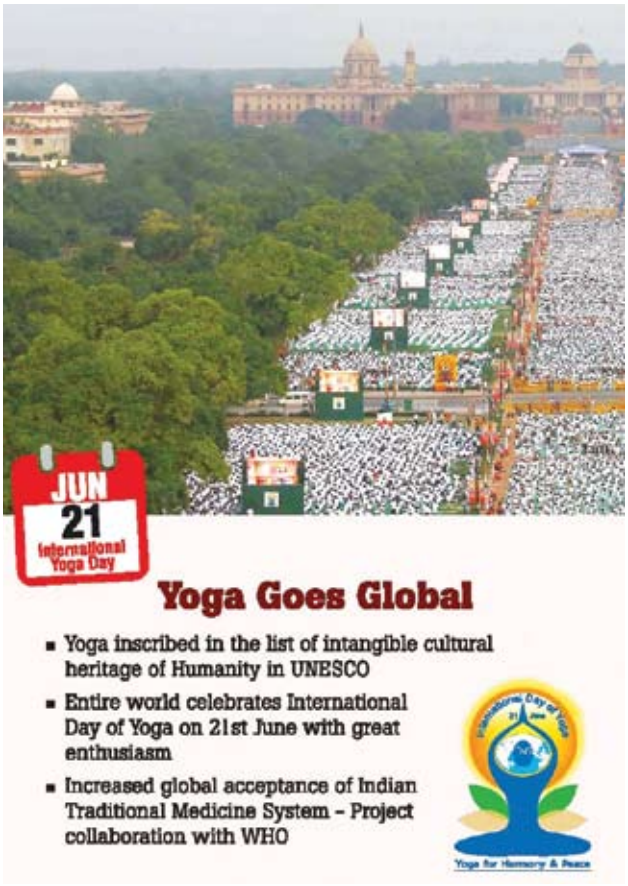
National AYUSH Mission

- Providing cost effective AYUSH services, with a universal access is one of the strategies to improve the quality and outreach of Healthcare Services.
- Grant-in- aid is being provided to the States & UTs for co-location of AYUSH facilities at Primary Health Centers (PHCs), Community Health Centers (CHCs) and District Hospitals (DHs).
- Upgradation of stand-alone AYUSH Hospitals and Dispensaries and setting up of 50 bedded integrated AYUSH Hospitals.
- Public Health Outreach Activities through AYUSH gram.
- Improvement in AYUSH education through enhanced number of AYUSH Educational Institutions up-grade.
- Sustaining availability of quality raw-materials for AYUSH Systems of Medicine.
- Improved availability of quality ASU&H drugs through increase in the number of quality Pharmacies and Drug Laboratories and enforcement mechanism of ASU&H drugs.

organisations in the government, non-government, and private sector; and promote collaborative research with reputed international institutions. Because of lack of sufficient job opportunities, lack of clear cut guidelines and other issue grabbing AYUSH sector, many graduates of these disciplines pursue higher courses in another field such as public health thus compromising their contribution in core practices of AYUSH.

Medical Tourism: We should promote facilities for *Panchakarma* and *Yoga* at hotels, and other tourist destinations. A scheme for accreditation of *Panchakarma* & *Yoga* facilities should be introduced so that services provided by these centres can be standardised and monitored. Tourist coming for exploring India should also be given offers to try these modalities so as to further popularise Ayurveda and Naturopathy in the west. AYUSH botanical gardens should be developed in collaboration with state tourism and forest department so that we can encourage citizens to grow these plants in their own garden.

AYUSH and Reproductive & Child Health: There are several areas related to reproductive and child health where the AYUSH remedies have proven their efficacy. This should be explored in details since the maternal and child mortality in rural parts of India is among the highest in the world and AYUSH can contribute in one way or the other in reducing mortality. Anaemia is a widespread public health problem among adolescent girls and women living in rural areas. There are many remedies for anemia in AYUSH system and these should be explored in details for improving the health status of Indian women.



benefits and utility of AYUSH system, they will not avail the health benefits offered by these systems, no matter how effective, cost-effective or safe it is. Thus, it is vital to launch awareness programmes on the utility, effectiveness and benefits of AYUSH. Celebration of the World Yoga Day on the 21st of June of every year is a very welcoming step in this regard. Thanks to the efforts of our Prime Minister, World Yoga Day is now celebrated on the global stage and it has tremendously benefitted the cause of India and Indians. The current students and practitioner

Veterinary Medicine: As the large population living in rural area of India depends on animal rearing for their day to day earning, the government should explore pathways for the application of Indian system of medicine in veterinary science. This will help in increasing product yield thus benefitting both rural and urban population.

Building Awareness: Until and unless, the users are aware of the

of AYUSH system should be encouraged and incentivised to come up with innovative ideas for popularising AYUSH. Schools should be encouraged to include Yoga as a part of their physical education curriculum. Students in turn can take Yoga back to their home to their parents.

Sowa-Rigpa: Sowa-Rigpa is less known Indian system of medicine, despite the fact that it is among the oldest surviving health traditions of the world with a living history of more than 2500 years. It has been practised in Himalayan regions throughout, particularly in Leh and Ladakh (J&K), Himachal Pradesh, Arunachal Pradesh, and Sikkim. Sowa- Rigpa emphasises the importance of the five cosmological physical elements in the formation of the human body, the nature of disorders and the remedial measures.

Prospects of AYUSH: As the life expectancy of Indians is increasing, geriatrics as a discipline would need greater attention. AYUSH therapies have strengths in restoration and rejuvenation. To bring together the best of care for the elderly that AYUSH systems have to offer, we need research for scientific application of AYUSH therapies in the care of elderly. In view of the growing incidence of metabolic and lifestyle diseases like diabetes and hypertension and considering the strengths of AYUSH systems, we need to explore how AYUSH can contribute towards meeting the challenges possessed by the non-communicable diseases, especially in their prevention. The problem of tobacco, alcohol and other drug abuse have become more prominent in the recent years. Considering the fact that many drugs used in modern medicine themselves have abuse potential, we need to explore the potential of AYUSH therapies, particularly of Yoga, for rehabilitation of drug addicts. Existing research institutes should be equipped with facilities to promote interdisciplinary research in the areas of healthcare which are difficult to tackle by any single system of medicine. We need to promote evidence-based use of AYUSH system in the prevention, management, and education of future healthcare Providers.

Vision For AYUSH: There are certain areas that need constant attention of the Government for the proper development of AYUSH sector, these thrust areas are:

Strengthening professional education based on their core values, strategic research programmes to explore newer areas where AYUSH system may be effective, promotion of best clinical practices, technology upgradation in industry, setting internationally acceptable pharmacopoeial standards, conserving medicinal flora, fauna, metals, and minerals, utilising human resources of AYUSH in the national health programmes, with the ultimate aim of enhancing the outreach of AYUSH healthcare in an accessible, acceptable, affordable and qualitative manner.

Conclusion: As mentioned earlier, no single system of medicine can be the answer to all diseases suffered by each and every human. Thus, it would only be logical, that every system of medicine should be nurtured based on its founding principle, by utilising their unique strengths and proven abilities. We should encourage all streams of medicine to occupy the spot best suited for them and should actively work to avoid conflicts. In this regard, India should learn from China which has both preserved as well as popularised its indigenous system of medicine in the western countries.

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PM ATTENDS MASS YOGA DEMONSTRATION AT LUCKNOW ON INTERNATIONAL DAY OF YOGA

The Third International Day of Yoga was celebrated with great enthusiasm across the country with mass yoga demonstrations taking place in various places. The Prime Minister Shri Narendra Modi, participated in the mass Yoga demonstration event in Lucknow where he was joined by a huge number of people.

Addressing the gathering at the iconic Ramabai Ambdekar Maidan in Lucknow today, the Prime Minister reached out to people in all parts of the country connected through Yoga. He said, Yoga is a practise that binds humanity together and is helping countries across the world to be connected with India. Yoga is a medium to achieve wellness and it has the power to provide health assurance at zero cost, he said.

The Prime Minister said he was glad to see several Yoga institutes take shape over the last three years, and noted that the demand for Yoga teachers is increasing. In addition to fitness, wellness is important, and that Yoga is a medium to achieve wellness. The Prime Minister also urged everyone to make Yoga a part of their lives, and said that Yoga is about health assurance, and it is not even expensive to practice.

The event at Lucknow was attended by Union Minister of State (Independent Charge) Ministry of AYUSH Shri Shripad Yesso Naik; Chief Minister of Uttar Pradesh Shri Yogi Adityanath; Deputy Chief Minister of Uttar Pradesh Shri Keshav Prasad Maurya; Deputy Chief Minister of Uttar Pradesh Dr. Dinesh Sharma; State Minister (Independent Charge) Ministry of Ayush, Dr. Dharam Singh Saini. The Chief Minister of Uttar Pradesh, Yogi Adityanath, welcomed the Prime Minister to Lucknow, and said that Yoga is a part of our tradition and it integrates us.

The Prime Minister Shri Narendra Modi participating in the mass Yoga demonstration event on the occasion of 3rd International Day of Yoga on 21st June 2017 in Lucknow where he was joined by a large number of people , despite the rains.