

Government Programmes to Improve Health and Environment

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PROLOGUE

Kindly permit me to begin my deliberation on the topic by quoting an African word “**Obuntu**” which literally means “**Shared approach**” to a problem.

This word “**Obuntu**”, defines the concept of “**shared approach**” of the South African People where “**We**” is preferred over “**I**” in solving community problems by using community approach for community services.

The “**shared approach**” of this concept is:

- **I am** there, because **we are** there,
- **We are** there, because **our country is** there,
- **Our country is** there, because **our environment** (a healthy surrounding) **is** there.

PROLOGUE, contd..

I think this concept provides us a broad outline of achieving good public health and preservation of our environment for the good of us as community, not only as a country but whole globe and universe by seeking each others co-operation.

Introduction

- Preservation and promotion of public health is a dynamic process.
- It has witnessed many hurdles in its attempt to affect lives of people in India.
- Since Independence, major public health problems like malaria, tuberculosis, leprosy, high maternal and child mortality, and lately HIV have been addressed through a concerted action of the government.
- However, the new challenges are abound, which are multidisciplinary and multifaceted.

New Agenda for Public Health in India

The new agenda for public health in India includes:

- **Epidemiological transition** (rising burden of non-communicable diseases).
- **Demographic transition** (increasing elderly population).
- **Environmental changes**

Although unfinished agenda of maternal and child mortality, HIV/AIDS pandemic and other communicable diseases still exerts immense strain on the overstretched health systems that result in health inequalities.

Health Inequalities

- Health inequalities, i.e. distribution of unequal health facilities in the country between:
 - urban and rural areas, and
 - between rich and poor is another great challenge and lie in the
 - social,
 - economic and political mechanisms that lead to social stratification according to income, education, occupation, gender, race, ethnicity or even geopolitical location.
- Lack of adequate progress on these social determinants of health has been acknowledged as a glaring failure of public health.

Environment

- The environment is a sum total of all surrounding of living beings, including natural forces and other living things, which provide condition for development and growth as well as of danger and damage.
- All physical and biological surrounding and their interaction that affect organism during its lifetime is collectively known as its environment.
- In other words, environment is everything which surround us like, water, air, land and interrelationships among themselves and also with human beings, other living organisms and property.

Environment, contd..

- Everybody is affected by environmental issues like :
 - global warming
 - depletion of ozone layer
 - dwindling forests and energy resources
 - loss of global biodiversity
- All these issues affect availability of :
 - clean and fresh air,
 - safe and clean drinking water,
 - hygienic living conditions,
 - fertility of land, and
 - an healthy surrounding and healthy planet.

Environment, contd..

- **Environment thus has multidisciplinary connotations such as:**
 - Conservation of nature and natural resources
 - Conservation of biological diversity
 - Control of environmental pollution
 - Stabilization of human population and environment
 - Social issues in relation to development and environment
 - Development of non-polluting renewable energy system and providing new dimension to nation's security.
- Environment belongs to all living beings and thus important to all.

Types of Environmental Pollutions

- Air Pollution
- Water Pollution
- Soil Pollution

India Gate on the Next Day of Diwali, the 19th October, 2017



Of the nine million deaths, air pollution was the biggest contributor, linked to 6.5 million of them, while water pollution was responsible for 1.8 million, says the Lancet study. Workplace-related pollution was the reason behind 0.8 million deaths. Photo: AFP

Impact of Environmental Pollution, Climate Change and Disasters on Public Health

- Thermal extremes, weather disasters, spread of vector-borne infections, food security and malnutrition, and air quality with associated health risks are few of the damages, the humans and biotic fauna and flora is facing today due to environment and climate change.
- Depletion of non-renewable sources of water and energy, deterioration of soil and water quality, potential extinction of habitats and species are other threats.

Impact of Environmental Pollution on NCDs and Global Estimated Deaths

- Diseases caused by all forms of pollution responsible for an estimated 9 million deaths in 2015.
- Non-communicable diseases accounted for most of total burden of disease due to pollution – approx. 71%
- All forms of pollution combined were responsible for 51% of deaths due to COPD, 43% of deaths due to lung cancer, and total deaths from cardiovascular disease 21% : 26% of deaths due to IHD, and 23% deaths due to stroke.

Impact of Environmental Pollution on Global Estimated Deaths

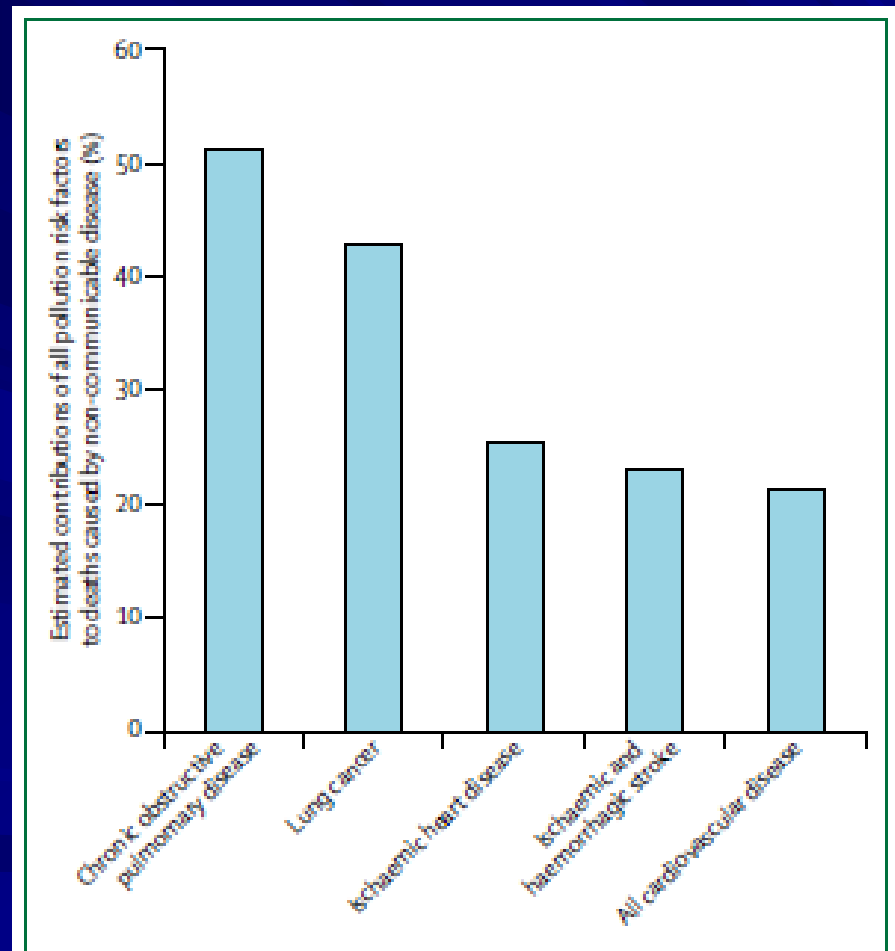


Figure 6: Estimated contributions of all pollution risk factors to deaths caused by non-communicable diseases, 2015
GBD Study, 2016.⁹

Global Estimated Deaths by Major Risk Factors and Causes

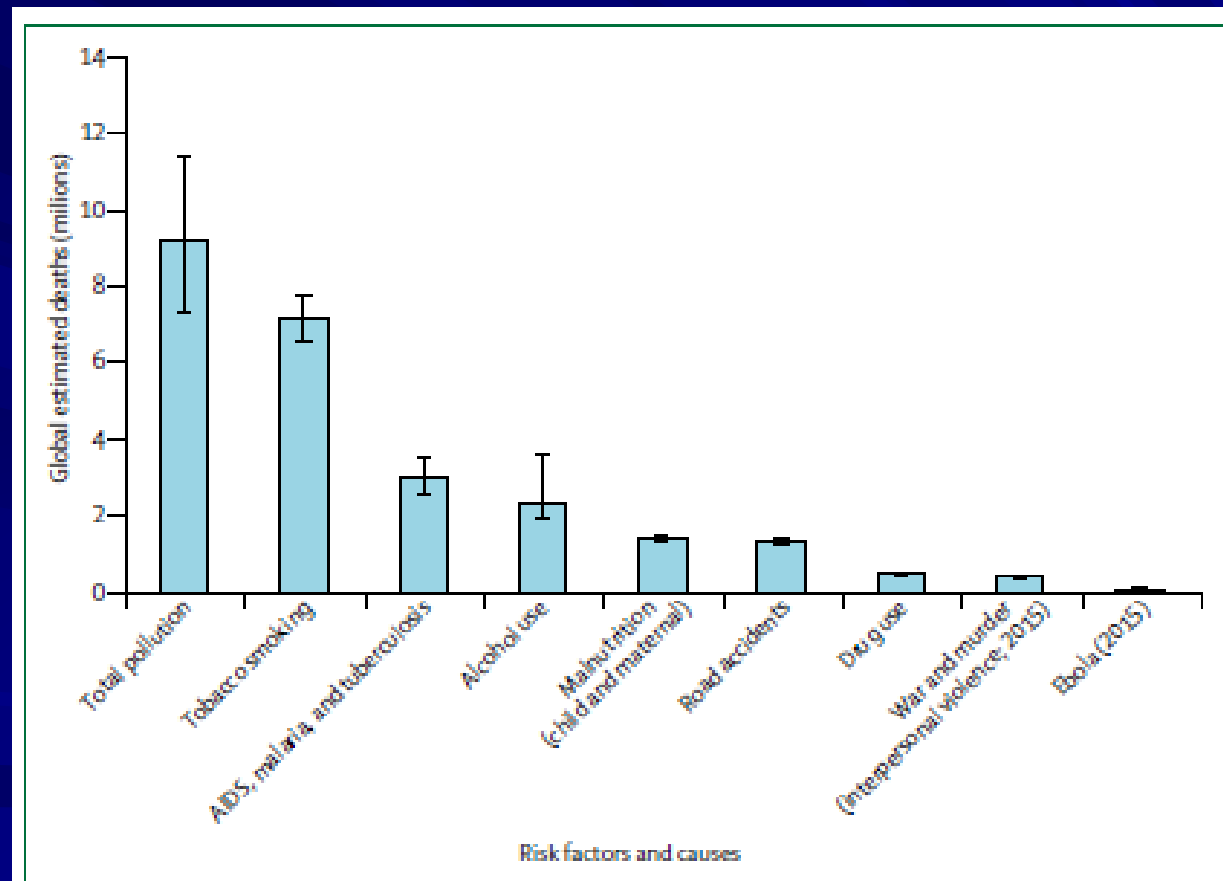


Figure 5: Global estimated deaths by major risk factor and cause, 2015
Using data from the GBD Study, 2016.⁴⁹

How to Achieve Good Health Facing the Environmental Threats

1. By improving environment safety
2. By improving host resistance to environmental hazards.
3. By improving health systems designed to increase the likelihood, efficiency & effectiveness of the first two goals.

National Action Plan on Climate Change (NAPCC)

- NAPCC is a comprehensive action plan that outlines measures on climate change related to adaptation and mitigation, while simultaneously advancing development
- NAPCC has identified 8 core National Missions (NMs) which represent multi-pronged, long-termed and integrated strategies for achieving goals by various Ministries of Govt. of India focused on understanding climate change, energy efficiency, renewable energy and national resource conservation.

National Action Plan on Climate Change (NAPCC), contd..

The 8 NAPCC Missions are:

- National Solar Mission
- National Mission for Enhanced Energy Efficiency
- National Mission for Sustainable Habitats
- National Water Mission
- National Mission for Sustaining the Himalayan Ecosystem
- National Mission of Green India
- National Mission for Sustainable Agriculture
- National Mission for Strategic Knowledge on Climate Change

Impact of Environment and Climate Change and Disasters on Public Health, contd..

- Although there are several issues concerning India's position under **United Nations Framework Convention on Climate Change (UNFCCC) treaty of 1992**, it has been agreed not to allow its per capita greenhouse gas emissions to exceed the average per capita emissions of the developed countries, even as it pursues its social and economic development objectives.

Role of MoHFW in Containment of Impact of Environment and Climate Change and Disasters on Public Health

- The MoHFW, in coordination with other GoI ministries provides technical assistance in implementing disaster management and emergency preparedness measures.
- Other deficient areas include carrying out rapid need assessment, disseminating information on impending health threat and its containment, food safety and environmental health after disasters and ensuring transparency and efficiency in the administration of aid after disasters.

Role of GoI in Preservation and Promotion of Public Health

National Health Missions

- I. National Rural Health Mission (launched in 2005)
- II. National Urban Health Mission (launched in 2013)
- iii. National Ayush Mission
- iv. Intellectual Disability-related Schemes
- v. Affordable Medicines and Reliable Implants for Treatment
- vi. Sarwa Shiksha Abhiyan
- vii. Swachh Bharat Mission
- viii. National Liquefied Petroleum Gas Programme (Ujjawala Yojana)

National Health Mission

Swachh Bharat Mission deals with the:

1. Purification of water on small scale
2. Purification of water at large scale
3. Containment of air pollution
4. Medical entomology
5. Mosquito control measures

National Health Mission

National Liquefied Petroleum Gas (LPG) Programme : Ujjawala Yojana

1. In 2016, India set a goal of providing access to LPG to 50 million additional poor families in three years through clean energy plan : **Ujjawala Yojana**.
2. More than 10 million households have already been targeted through the **National Give-it-Up Campaign**.
3. At the request of the PM of India, middle class families voluntarily gave up their LPG subsidy to a family who are BPL, and corporate social responsibility funds were earmarked for the upfront costs.

National Health Policies/other Related Policies for Promotion of Health

1. National Health Policy
2. National Population Policy
3. National AIDS Control and Prevention Policy
4. National Policy for Empowerment of Women
5. National Youth Policy
6. National Nutrition Policy
7. National Blood Policy
8. National Policy for Access to Plasma-derived Medicinal Products from Human Plasma for Clinical/Therapeutic use.
9. National charter for children
10. Right of children to Free and Compulsory Education Bill – 2009 (education to children aged between 6 – 14 yrs)

Govt Ministries Involved in Preservation & Promotion of Health in the Country

Min of Health & F W

Min of Social, Justice and Empowerment

Min of Women & Child Development

Min of Human Resource Development

Min of Rural Development

Min of Urban Development

Min of Housing & Urban Poverty Alleviation

Min of Water Resources

Min of Drinking Water and Sanitation

Min of Environment, Forests & Climate Change

Min of Earth Sciences

Min of New & Renewable Energy

Min of Petroleum and Natural Gas

Govt Ministries Involved in Preservation & Promotion of Health in the Country

Min of Power

Min of Panchayat Raj

Min of Tribal Affairs

Min of Minority Affairs

Min of Labour

Min of Youth Affairs and Sports

Min of Consumer Affairs, Food and Public Distributions

Min of Agriculture

Min of Food Processing Industries

Min of Science & Technology

Min of Electronics and Information Technology (Meity) : (Centre for Development of Advanced Computing (CDAC), Hyderabad)

Min of Home Affairs

National Health Programmes

(I) National Health Mission on :

(A) Communicable Diseases

1. Revised National TB Control Programme (RNTCP)
2. National Leprosy Eradication Programme (NLEP)
3. National Filaria Control Programme (NFCP)
4. National AIDS Control Programme (NACP)
5. National Vector Borne Disease Control Programme (NVBDCP) : for diseases like malaria, dengue, lymphatic filariasis, kala-azar, Japanese encephalitis & chickengunya)
6. National Guinea Worm Eradication Programme (NGEP)
7. Yaws Control Programme
8. Universal Immunization Programme (UIP launched in 2005)/Mission Indradhanush)
9. Voluntary Blood Donation Programme (VBDP)
10. Integrated Disease Surveillance Projects (IDSP)

National Health Programmes, contd..

(B) Non-Communicable Diseases, Injury & Trauma

1. National Programme on Prevention and Control of Diabetes, CVD and Stroke
2. National Programme for Prevention and Control of Deafness (NPPCD)
3. National Cancer Control Programme (NCCP)/National Programme for Prevention and Control of Cancer (NPPCC)
4. National Mental Health Programme (NMHP)
5. National Iodine Deficiency Disorder Control Programme (NIDPCP)
6. National Programme for Control of Blindness (NPCB)
7. National Programme for Prevention and Control of Fluorosis (NPPCF)
8. National Programme for Health Care in Elderly (NPHCE)
9. National Tobacco Control Programme (NTCP)
10. National Programme for Control and Treatment of Occupational Diseases (NPCTOD)

National Health Programmes, contd..

(C) Other Programmes of MoHFW

1. Pradhan Mantri Swasthya Suraksha Yojana (PMSSY)
2. Janani Shishu Suraksha Karyakram (JSSK)
3. Janani Suraksha Yojana

National Health Programmes, contd..

(D) Min of Social Justice and Empowerment / Min of Child Development & Women Welfare Programmes

1. Integrated Child Development Services (ICDS) scheme
2. Mid-day Meal (MDM) Programme
3. Special Nutrition Programme
4. National Nutritional Anaemia Prophylaxis Programme (NNAPP)
5. Reproductive and Child Health Programme
6. School Health Programme

National Health Programmes, contd..

(E) Min of Drinking Water and Sanitation

1. Rajiv Gandhi National Drinking Water Mission (RGNDWM)

Role of MoHFW in Addressing Public Health Issues : the Strategy and Coordination with other Stakeholders

- To meet the formidable challenges of above programmes and associated problems, there is an urgent need for revitalizing primary health care based on principles outlined in Alma Ata in 1978:
 - universal access and coverage of whole population to quality health care,
 - community participation in defining and implementing health agendas,
 - inter-sectoral approaches to health.
- Attempt to achieve “Health for All” as per Alma Ata, 1978 have been carried forward in the form of Millennium Development Goals (MDGs) and subsequently as Sustainable Development Goals (SDGs).

Role of MoHFW in Addressing Public Health Issues : the Strategy and Coordination with other Stakeholders, contd..

- At the heart of any good public health system there should be a human-centric design.
- Involving human and community perspective for a immersive understanding of the problem faced on the front of health and environment allows for more innovative solutions to be developed, so that communities become empowered
- Public health is concerned with diseases, their prevention and control at the population level through organized efforts and informed choices of society, organizations, public and private communities and individuals.
- Contribution to health of a population derives from systems outside the formal health care system, and **this potential of inter-sectoral contributions to the health of people and communities is increasingly recognized worldwide, and MoHFW is no exception**

Role of MoHFW in Addressing Public Health Issues : the Strategy and Coordination with other Stakeholders, contd..

- Therefore, the role of MoHFW in influencing public health is not limited within the health sector but also by the contribution of various sectors outside the health systems, i.e. other GoI Ministries. However, the role of MoHFW is crucial in addressing these challenges and assuring/achieving health equity.
- To meet these challenges, the MoHFW is not only playing a key role in guiding India's public health which basically falls in its domain but also coordinating and making partnership with other GoI Ministries and Agencies involved directly or indirectly in public health, because many inter-sectoral factors and agents influencing the health outcomes are outside of its direct jurisdiction.

Environmental pollution is tiny like an ant to begin with, becomes a mammoth like tusker with time!



Concluding Thoughts

“The health of people is the foundation upon which all their happiness and all their powers as a state depend”

-- Benjamin Disraeli, two-time British Prime Minister (1868-1868/1874-1880)
(Life: 21 December 1804 - 19 April 1881)

Concluding Thoughts, contd..

- In this fast changing world, with unique challenges arising locally and worldwidely that threaten the health and well being of the population, it is important that the govt. and community collectively rise to the occasion and face these challenges simultaneously, inclusively and sustainably.
- Social determinants of health, economic issues, environment and climate change threats must be dealt with a consensus on ethical principles—universalism, justice, dignity, security, human rights, and above all with the spirit of “Vasudhav Kutumbakam” as envisaged in our Vedas and Spiritual Scriptures.

Concluding Thoughts, contd..

The ultimate yardstick of success in the area of achieving “Health for all” would be if every Indian from remote helmet of Arunachal Pradesh, Bihar & Meghalaya to Maharashtra, Goa & Mumbai on one side and Ladakh, J&K to Kerala & Kanyakumari on the other side, experiences the change.

Concluding Thoughts, contd..

The ultimate goal of a great nation would be one where :

- the rural and urban divide has been reduced to a thin line;
- an adequate access to healthy nutrition, safe water and clean energy is assured;
- the best of health care is available to all;
- the governance is responsible, transparent and corruption free;
- poverty and illiteracy have been eradicated; and crimes against women and children are eliminated – **a healthy nation that is one of the best places to live in.**

Thank You