CHAPTER

1

Determinants of Health, Major Health Problems and Disease Burden in India

"Attack root causes of the problems,
not symptoms otherwise problems persist"

World Health Day 2024 "My Health, My Right" focus on—Fundamental Human Right: Access to Quality Health Care, Education and Information.

Right to Health Fundamental Under Constitution (Punjab and Haryana High Court. The "Tribune" Jan 30, 2020). World Health Day—2021—'Building a fairer, healthier world'.

DIMENSIONS AND DETERMINANTS OF HEALTH

Major goal of public health is to achieve 'health for all', i.e. attain highest possible level of health. Means of achieving health include providing health services, promoting healthy behaviours, promoting healthy environments and enforcing health legislations. Means should not be considered as ends.

Health is a development function as much more health comes through sectors other than health such as water and sanitation, literacy, nutrition and women and child development. There is renewed focus on the "One Health" approach which proposes to protect the health of animals, environment and humans.

Definition

World Health Organization (WHO) has given a comprehensive definition of health which includes important dimensions, such as physical, mental and social health. WHO in its constitution has defined health in the largest sense of the term that states:

"**Health** is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity". WHO's 199 member states have endorsed this statement. The Executive Board of the World Health Organization (WHO) proposed redefining 'health' as "a dynamic state of complete physical, mental, social and spiritual well-being, and not merely the absence of disease or infirmity" (WHO 1998).[1]

WHO recognizes 'health' as a fundamental human right of an individual, family and community and it sets a most important social goal of attainment of highest possible standards of health by all nations or countries "without distinction of race, religion, political belief, economic or social condition". Realization of this goal requires the action of many other social and economic sectors in addition to health sector. Health is thus a multisectoral subject. Inter- and intra-sectoral coordination is essential to achieve the goal of health for all. In the international conference on primary health care jointly organized by the WHO and UNICEF in Alma-Ata, USSR, in September 1978, fundamental principles of health were enunciated and a declaration was made; the following declaration endorsed the earlier resolution of 30th World Health Assembly (1977).

"The attainment by all citizens of the world by the year 2000 a level of health, that will permit them to lead a socially and economically productive life".[2]

This is popularly known as "Health for All" (HFA) and it is to be achieved through primary health care approach, in a spirit of social justice and as a part of overall development. Development of health is to be based on self-determination and self-reliance in health on the part of individual, the community and the nation. Ottawa Charter (1986) further lends support to health promotion by developing personal skills through education, strengthening community action by community participation, reorienting health services in favour of prevention and promotion, building healthy policy and creating supportive environments.

1 DIMENSIONS OF HEALTH

There are three dimensions of health: *Physical, mental* and *social well-being*. A fourth dimension of *spiritual health* has been added now.

Physical Well-being

It means adequate body weight, height and circumference as per age and sex with acceptable level of vision, hearing, locomotion or movements, acceptable levels of pulse rate, blood pressure, respiratory rate, chest circumference, head circumference, and waist/hip ratio. The body structures and functions confirming to laid down standards within the range of normal development and functions of all the systems. Some of the physical health standards are:

- Birth weight should range between 2.7 and 2.9 kg "cut-off", level of low birth weight is 2.5 kg.
- Standard growth charts have been evolved to monitor growth of young children.

Body mass index: Normal range is 18.5–25 and waist/hip ratio normal range is 0.6–0.9 and triceps skin fold thickness 12–15 mm and subscapular skin fold 18–20 mm.

Similarly, ideal weights as per age and height for male and female have been worked out. Reference Indian adult man and woman have been defined.

Reference Indian Adult Man and Woman (NNMB)

Reference man is in age group 19–39 years and weighs 65 kg with a height of 1.77 m with a BMI of 20.75 and is free from disease and physically fit for active work; on each working day, he is engaged in 8 hours of occupation which usually involves moderate activity, while when not at work he spends 8 hours in bed, 4–6 hours in sitting and moving, about 2 hours in walking and in active recreation or household duties.

Reference women is in age group 19–39 years, non-pregnant non-lactating (NPNL) and weighs 55 kg with a height of 1.62 m and a BMI of 20.95, is free from disease and physically fit for active work; on each working day she is engaged in 8 hours of occupation which usually involves moderate activity, while when not at work she spends 8 hours in bed, 4–6 hours in sitting and moving, about 2 hours in walking and in active recreation or household duties.

***Reference body weight and height*:** Reference weights and heights of Indians as under physical health are easier to understand and easier to measure. Periodical health examination and pre-placement health examination determine the level of health of an individual. We want best of physical health standards to be attained by all individuals and we are most particular for recruitment in army for physical standards apart from mental health.

Mental Well-being

The positive dimension of mental health as stressed in WHO's definition of health is contained in its constitution.

Mental health is defined as "a state of well-being in which the individual realizes his or her own abilities, can cope with normal stresses of life, can work productively and fruitfully and is able to make a contribution to his or her community".[3]

A mentally normal person has the ability to mix up with others, he/she makes friendship, behaves in a balanced manner, keeps himself tidy and observes adequate personal hygiene, well oriented to time, place and person and environments and is unduly not suspicious of others, he is cheerful and happy and enjoys life with a purpose and he thinks positively and has normal development and contributes fully and is useful and productive to society and nation. He or she is a balanced person and emotionally stable and realizes his shortcomings and strengths and abilities. People are judged by others. The friends circle or family members are the one's who can endorse the mental health status of an individual first of all.

Mental Ill Health (Warning Signal of Mental Disorders)

A person who behaves in a strange manner and people consider his behaviour as abnormal and strange or who stays aloof and is very quiet and does not talk or mix with people and is not interested in his personal hygiene and is a withdrawn person, and who claims to hear and see things which others do not see and hear and who is abnormally suspicious of others (abnormally suspicious and claiming that others are trying to harm him), who is unusually cheerful and boastful without reason and who is unusually sad, sits alone, feeling sad and crying without reason, person having suicidal tendency and the family members feel that a person is being possessed by spirits (Bhoots) and being influenced by evil spirits and a person who is slow in development and has delayed mental development are suspected to be suffering from mental ill health.

Social Well-being

It is third dimension of health. It means ability of a person to adjust with others in his social life, at home, at work place and with people. Men interact with men and they interrelate and interdepend on each other and play their effective role in accordance with a situation. Essentially social well-being includes harmonius interrelation and interaction of human beings.

Social well-being is a composite function of income level, literacy, occupation and working conditions, marital harmony, institution of family, social groups and cultural and behavioural pattern of the society and stressful situation. Social well-being is conditioned by the influence of environments as well. Social well-being can be measured on a scale by taking into consideration indicators like income, literacy and occupation (as discussed under socioeconomic status of family).

Spiritual Well-being

The WHO at its 37th World Health Assembly has added the spiritual dimension to health. The recognition of this dimension speaks of the importance of multidimensional well-being of *swasthya*.

Spiritual health has been defined as "That part of the individual which reaches out and strives for meaning and purpose in life. It includes integrity, principles and ethics, the purpose in life, commitment to some higher beings and beliefs in concepts that are not subject to the state-of-the-art explanation."

Positive health: A person who enjoys all the four dimensions of health (physical, mental, social and spiritual) is said to be in a state of positive health. The concept of perfect positive health cannot become a reality because a person can never be in perfect state of all the four dimensions.

Medical Classification—Officers

Health of serving officers is continuously monitored through periodical medical check ups during the entire length of their service. Similarly periodic health check-up of industrial workers is done regularly.

Medical classification of serving officers is done by medical board after assessing their fitness under five factors, indicating by the code letter "SHAPE" which represent the following factors:

S Psychological
H Hearing
A Appendages
P Physical capacity
E Eyesight

Medical classification under the system is based on functional capacity of the individual as a whole for military duties. Thus classification done under this system enables the administrative authorities to assign appropriate assignment to officers depending upon their employment capacity. Functional capacity of an officer under each factor is denoted by numerals 1–5 against each code letter, indicating declining functional efficiency. The numerals are written next to the code letter, except that where an officer is in grade 1 in all factors, his categorization may be denoted by writing SHAPE-1 instead of writing S1 H1 A1 P1 E1. General evaluation of numerals is as under:

1. Fit for all duties anywhere.
2. Fit for all duties but may have limitations as to type of duties of employability. Employment restrictions are given separately by the medical board.
3. Excepting for 'S' factor fit for routine or sedentary duties but may have limitations of employability at high altitude (above 2700 m), extreme cold area/hilly terrain and for lone assignments for which specific recommendations are given.
4. Temporary unfit for military duties on account of hospitalization/sick leave.
5. Permanent unfit for military duties.

DETERMINANTS OF HEALTH

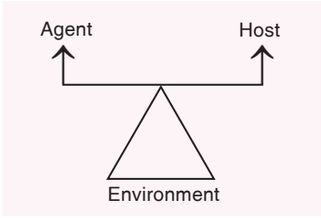
Recognizing the importance of health in the process of economic and social development and improving the quality of life of our citizens, the Government of India has resolved to launch the National Rural Health Mission. The mission adopts a synergistic approach by effective integration of *Health* concerns with determinants of good health, *viz.* of *nutrition*, *sanitation*, hygiene and safe drinking water through district plan for health.[4] The aim at achieving "Universal Health Coverage" without ensuring access to following determinants of health will be a strategic mistake and plainly unworkable:

Environment—Water, Sanitation, and Air

This is considered to be the most important determinant and input of health. The environment is defined as "The aggregate of all external conditions and influences affecting the life and development of an organism, human behaviour and society". A

composite of physical, economic pressures, culture and education contributes largely to the background to which one's genetic apparatus reacts. Harmonious environment relationship to man contributes to an improved state of health (Fig. 1.1).

Rightly so the national health planners have included in their agenda to control and improve the natural physical environments, e.g. **air, water** and **soil**.



***Man-made environment*:** In man-made environment or artificial environment items like **housing, transport, industries** and **communication** are included.

Environment forms the fulcrum in the chain of transmission (epidemiological triad) as shown in the diagram above. There is continuous interaction between agent, host and environment:

Agent ⇄ environment ⇄ host. If there is an equilibrium between agent, host and environment, the balance is maintained and the individual, family and community enjoy perfect health. If the environments become favourable for agent (disease producing stimulus/factors/conditions/micro-organisms), the balance is tilted, health is disturbed and the result is disease or bad outcome. Treating and modification of environments favourable to human host promotes health and prevents diseases.

Over 80% of diseases are due to bad environments like unsafe water supply, widespread insanitary conditions due to indiscriminate defecations, poor disposal of waste water, garbage and refuse leads to widespread filthy conditions and are perpetual threat to endemic diseases and outbreaks. **Mosquitoes and fly breed** enormously and pose threat to occurrence of several diseases. Environment is a global concern and all energies are now focused to save the planet (our earth) by improving the deteriorating environments. By 2030, target is to substantially reduce the number of deaths and illnesses from hazardous chemicals and **air, water** and **soil pollution** and contamination (sustainable development goals). While talking of environments, community treatment has been successful by handling the environment by three methods:

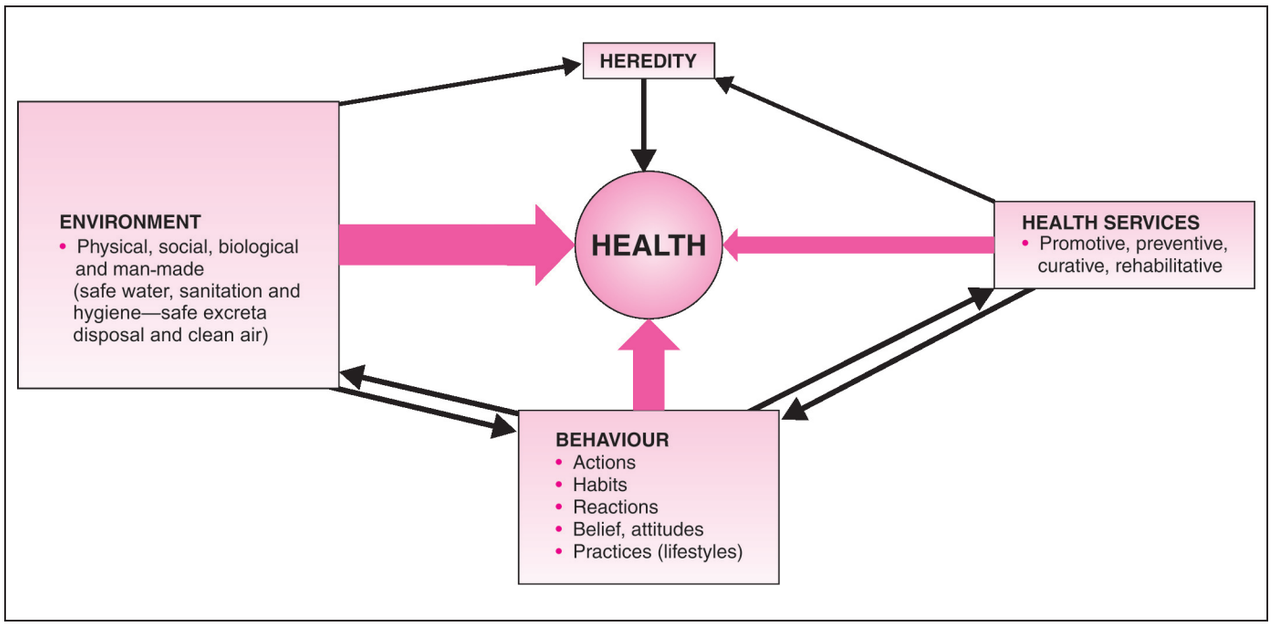


Fig. 1.1: Determinants of health (WHO*)—Renewed focus on "one health" approach—to protect the health of animals, human and environment

*The direction of the arrow indicates the direction of impact while the width of the arrow indicates the relative weight or importance of the input to health (WHO).

The Environment (Protection) Act of 1986 is an Umbrella Act for the *protection of the environment*. Relevant to the water environment, this Act has (among others) the following features:

- Nationwide programme for prevention, control and abatement of environmental pollution.
- Empower any person to enter, inspect, sample and test.
- Establish/recognize environmental laboratories.
- Regulate, close, prohibit industries, processes, and operations.
- Require Government organizations to furnish information, etc.

The Central Pollution Control Board (CPCB) is the national apex body for assessment, monitoring and control of water and air pollution. Well-managed and integrated water and sanitation programmes are crucial to health and development. A clean environment and adequate safe water are essential prerequisites for all children to grow and develop and attain good health. There is now distinct change in the strategy for promoting sanitation by the Government. The Central Rural Sanitation Programme now promotes sanitation as a seven-component package: Handling of drinking water, disposal of waste water, disposal of human excreta, disposal of garbage and animal excreta, home sanitation and food hygiene, personal hygiene and village sanitation. Investments for ensuring access to safe drinking water will bring the desired health benefits only when complemented by investment in all the seven components of sanitation.

A staggering 29% of Indians defecate in open risking the environments and leaving the excreta to seep through the soil and contaminate the water table and water bodies with pathogens which come back into food chain. This is a key causative factor behind the high prevalence of soil- and water-borne diseases in rural India as also in urban slums. According to World Health Organization, 80% of all diseases such as diarrhoea, cholera, typhoid fever, infective hepatitis, vector-borne diseases, etc. are caused due to lack of safe water and sanitation.

As per UNICEF 2020 data, nearly 71% of Indian households have toilets. This percentage is lower in villages where nearly 67% use toilets (Table 1.1).

Swachh Bharat Abhiyan is a sound beginning. Its objectives are to bring about improvement in the general quality of life in urban and rural areas, accelerate sanitation coverage and generate demand for toilets in all schools and Anganwadis in rural areas through awareness and education. Open defecation free India was declared on 2nd October 2019. *Nirmal Gram Puraskar*, a National Award under total sanitation campaign (TSC),[5] has been launched on Feb 24, 2005 by the Government. Panchayati Raj Institutions (PRIs) can look forward to get cash prizes ranging from ₹50,000 to 5,00,000, if:

- All households in the village have access to toilets with full usage.
- There is no open defecation.
- All Anganwadi centres have access to sanitation facilities.
- There is general cleanliness all around.

Table 1.1: Households basic sanitation services 2020 (UNICEF)

Country	*Improved sanitation coverage (%)*		
	Urban	*Rural*	*Total*
China	95	88	92
India	79	67	71
Iraq	100	100	100
Pakistan	82	60	68
Sri Lanka	100	100	100
World	88	66	78

Environment being Compulsory Subject

50 hours compulsory core module course in *Environmental studies*, spread over to 6 months, at undergraduate level in all streams has been introduced by various universities in view of direction of the Hon'ble Supreme Court of India; with effect from 2004 to 2005. This course will enhance knowledge, skills and attitudes towards environment. The syllabus is divided into 8 units covering 50 lectures including field work activities of 5 lecture hours.

a. Socioeconomics

The terms social and economics although susceptible to different definitions are completely interdependent in relation to environment. Economic life is chief determinant of social existence, hence the term socioeconomics. The poor governments do not have enough money and so are the people of that government. *Poverty affects* the health in that productivity is lost due to partial disability. There is vicious circle because *people are poor as they are sick and sick because they are poor.* However, the high economics does not always assure good health. They may purchase things which impair health.

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b. Wealth Distribution

Remunerating jobs, freedom from unemployment provides for improving living standards which in turn can help provide personal and environmental health, these are considered purchasable commodities. Wealth ensures good housing facility, nourishment, clothing, recreation, good use of leisure, and all these contribute to health.

Poverty: It is a situation in which a person is unable to get minimum basic necessities, i.e. food, clothing and shelter for his/her sustenance or inability to attain a minimum standard of living.

Poverty line: Poverty estimates in our country are derived from household consumer expenditure data Collected by National Sample Survey Organization (NSSO) every 5 years. The poverty line has been calculated for 2009–10 to be ₹672.8 per month per capita for rural India and ₹859.6 per month per capita in urban India (According to Tendulkar Committee Report), consumption expenditure.

National security measures: Government of India has initiated several schemes to reduce poverty in India: Example—Employment Guarantee scheme, Health Protection scheme (Ayushman Bharat) for 500 million people, Free and Compulsory Elementary **Education** and **Food** Security Act—to provide subsidized food to poor at affordable cost to 820 million apart from housing scheme for poor besides Jan Dhan Yojna (Direct Benefit Transfer of social welfare schemes to the bank account of beneficiaries).

Before 2005, the official measure of poverty line was based primarily on food security. It was defined by Planning Commission of India as the per capita expenditure needed for a person to consume enough calories—2400 calories per person in rural and 2100 in urban area and be able to pay for associated essentials to survive. Since 2005, the government adopted Tendulkar methodology which moved away from calories anchor to a basket of goods. Using the Tendulkar methodology based on per capita monthly consumption expenditure of < ₹1640 in rural and ₹2500 in urban areas at current prices (2014), NITI Aayog estimates that during the year 2011–12, close to 25.7% of population in rural and 13.7% in urban areas lived below poverty line. Overall 21.9% of people were below poverty line in India in 2011–12. Population below poverty line has declined from 28.5% in 2004–05 to 21.9% in 2011–12; however, population below poverty line varies from state-to-state. Close to 40% of population in Chhattisgarh, 37% in Jharkhand, 37% in Manipur, 34.7% in Arunachal Pradesh, 33.7% in Bihar, 32.6% in Odisha, 32% in Assam, 31.6% in MP and 29.4% in UP are below poverty line. Kerala, Punjab, Haryana, Tamil Nadu and Andhra Pradesh are the richest states in India. Poverty is a significant disease in itself and is an important determinant of illness and health, malnutrition, high birth rate, high infant and maternal mortality rate and high burden of all infectious and communicable diseases.

Household Consumption Survey 2022–23

Data of 2.6 lakh households survey indicates that average monthly expenditure on goods and services in rural area was Rs 3773 per person while it was Rs 6459 in urban areas per person, with an average of Rs 4850 per person per month. This is just half of the average consumption figure of Rs 9896 determined by GDP of year 2023.

This excludes the imputed cost of free food and other subsidies given by goverment to 600 million people. Based on household consumption data world poverty clock indicates that less than 3% of Indian population is now living below extreme poverty line of $ 1.9 (PPP) purchasing power parity a day which translates to about 34 million people. Thus extreme poverty is nearly eliminated in India. Time has come for India to graduate to higher poverty line much like other countries, that provides an opportunity to redefine existing social protection measures. Around 250 million Indians escaped multidimensional poverty in last 9 years (2014–23). Thus there was steep decline in poverty headcount ratio from 29.17% in 2013–14 to 11.28% in 2022–23. As a result India is likely to achieve its SDG target of halving multidimensional poverty well before 2030.

Global Multidimensional Poverty Index (MPI) 2022

A Progress Story

In 2005–06, the population in India living in multi-dimensional poverty stood at 645 million and this has reduced to 230 million in 2019–21. Thus, India lifted 415 million people out of poverty between 2006 and 2021 as per United Nations report of 2022. India's MPI value reduced from 0.283 in 2005–06 to 0.069 in 2019–21. The country significantly reduced deprivations in all indicators. In India, 16.4% of people were multidimensionally poor in 2022 (UNDP-OPHI 2022).

About 400 million people working in informal economy in India are at risk of falling deeper into poverty due to COVID-19 crisis (ILO) which is having catastrophic consequences.

Multidimensional poverty index (MPI) means deprivations suffered by individuals in three dimensions: **Health**, **education** and **standard of living**. The health dimension is based on nutrition and child mortality. The education dimension is based on school attendance and mean years of schooling. Standard of living index is based on six indications: Cooking fuel, sanitation, drinking water, electricity, housing and assets. Income poverty (people living below US $ 1.90 per day) tells only part of story. MPI of 27.9% is 5.4% points higher than income below poverty line of 22.5% in India. This complies that individual living above income poverty line may still suffer deprivations in health, education and/or standard of living.

Social security measures (poverty reduction policies): Government of India has initiated several schemes to reduce poverty in India. Examples—employment guarantee scheme, health protection scheme (*Ayushman Bharat*) for 500 million people, free and Compulsory Elementary Education, Food Security Act to provide subsidized food to poors at affordable cost to 820 million, **PM Grib Kalyan** Ann **Yojna** (Free food grains to poor 5 kg per person per month) apart from housing scheme for poor to name a few. *Pradhan Mantri Jan Dhan Yojna* is yet another social security measure.

India has eliminated extreme poverty and achieved less than 1% of extreme poverty for the last 3 successive years (2019–2021,—as per IMF report study.

c. Education—National Education Policy 2020

Besides socioeconomics, education is another variate for contribution to health. Educational progress conditions biological, domestic and technical progress. Its positive contribution to economic growth including health is recognized by all. Planning for education is thus considered planning for health and vice versa. "Education for all" and universal elementary education are the thrust areas which will contribute substantially to improved health for all including environments besides health seeking behaviour.

Behaviour

1. It is considered second largest area of determinant/input to one's health and at some places it is even higher than environment. Like most personally held values and beliefs, certain habits are first learnt from family, community and school, all of these play an important role in general behaviour pattern. In terms of satisfactory survival, one's behaviour may not be the most rational and will, therefore, require modification through effective behaviour change communication (BCC) (Fig. 1.1).
2. Each society and indeed individual has cultural values, ideologies and interests relating to health and health services. The beliefs inimical to survival indicate need for health promoting changes in cultural pattern. But it may also be determined whether such changes are desirable or even tolerable. Behaviour change communication is to create healthy **lifestyles**, healthy habits, responsible reproductive behaviour, for spacing and limiting births values of traditional and indigenous foods, safe sex (prevention of HIV) and practice of personal hygiene to promote health and prevent diseases. Proper evaluation of beliefs, social values and motivation should determine the needed changes and in which way the services are to be provided to be acceptable.
3. Attitude change is a major change and may bring about permanent behavioural change (feeding young children, promotion of exclusive breast-feeding, feeding and eating habits—a core cultural variable, adequate diet for physical and mental alertness).
4. Primary values are respected and self-image is not destroyed.
5. Geographical social mobility and dissatisfaction foster change.
6. Attitudes are also related to utilization of services provided. Even for the existing services, the utilization rates are low at 50% or even less for antenatal care, use of iron and folic acid and vitamin A prophylaxis.
7. ***Habits:*** Habits die very hard. In the word 'HABIT' if you remove 'H' ABIT of it is there, if you further remove 'A' BIT of it is there, if you remove 'B' IT is still there. It means to change habit you have to make lot of efforts.

Health Services—Availability and Accessibility

Availability, accessibility, affordability and acceptability of organized health services are considered an important determinant/input to health. Health services utilization depends on quality of services offered as also faith and satisfaction derived from services apart from accessibility. Health services include promotive, preventive, curative and rehabilitative services available through various systems. Utilization of health services depends upon health behaviour and socioeconomic conditions

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(income, literacy and occupation). In India, favourable primary health care infrastructure has been created for health services.

Health Interventions

These are specific activities meant to reduce disease risks, promote health, treat illness or palliate the consequences of disease or disability. Health intervention must be cost-effective and evidence based, with high coverage levels.

Heredity as Determinant of Health

Genetic inheritance may provide the initial significant contribution to one's state of health, may be modified by environments and specifically by health services. Even before individual's birth, comprehensive health planning will need to include such aspects of health care as prenatal counselling and prenatal care; apart from marriage and genetic counselling.

Social Determinants of Health

The World Health Organization has defined social determinants of health as "conditions in which people are born, grow, live, work and age". It furthers states that such circumstances are 'artificial' and are shaped by "distribution of money, power and resources at global, national and local levels".

Health **inequities** arise from the societal conditions in which the people are born, grow, live, work and age, referred to as **social determinants of health** (RIO Political Declaration on Social Determinants of Health—Brazil, Oct. 2011). Social determinants are the underlying causes of ill health or are "causes for the causes". These require social, political and community actions.

These include early year's experiences, education, economic status, employment and decent work, housing and environment and effective systems of preventing and treating ill health. Actions on these determinants, such as—eradicating poverty and hunger, ensuring food security, access to safe drinking water and sanitation, employment and decent work and social protection, protecting environments and delivering equitable economic growth will ensure economically productive and healthy society to attain sustainable development goals.

Actions on Social Determinants of Health

Actions on social determinants include: 'Whole of Government' or "Health in all Government Policies" which takes into account the needs of the entire population with specific attention to vulnerable groups and high-risk areas. Many of the social determinants of health lie outside the purview of health sector. Involvement of other sectors is crucial for achieving sustainable development goals including health and well-being in all at all ages as also to address inequalities in social determinants of health.

Intersectoral coordination between health, rural and urban development, agriculture, education, poverty alleviation, women and child development, water and sanitation, Panchayati Raj Institutions (PRIs) is essential to address the social determinants of health to reduce **inequities** in **health**. Working together across all sectors is a challenging task.

All Ministries and sectors and departments converge at the lowest level—village or equivalent institution in urban community. Therefore, active involvement of PRIs is rural areas (VHSNC) and urban local bodies become cardinal approach to elicit community participation in local planning and implementation and control of programmes/activities. All these sectors must extend support to PRIs and local urban bodies for convergence of services.

NATIONAL PROGRAMMES ON SOCIAL DETERMINANTS OF HEALTH IN INDIA

The Government of India has launched several national socioeconomic programmes for social determinants of health, to name a few, as mentioned below:

- **National Nutrition Policy,** POSHAN Abhiyan ICDS, Micronutrient supplements, mid-day meal and food security Act. Subsidized food grains to poor to mitigate hunger and malnutrition in the country besides Anaemia Mukt Bharat and Deworming programme.
- Mahatma Gandhi National Rural Employment Guarantee Scheme/Act (MNREGA) and other livelihood and income generation programmes to eliminate poverty (Jan-Dhan Yojna-Direct benefits transfer).
- **Swachh Bharat Abhiyan** for safe water and sanitation for all.
- **National Education Policy,** Right to education Act and preschool and school education and skill development for decent employment.
- National Health Mission and National Health protection (PMJAY) scheme for poor
- Housing for poor people and old age pension.

Village Health Sanitation and Nutrition Committees (VHSNCs) and **Urban Health Sanitation and Nutrition Committee (UHSNC)** in urban slums: Following the launch of revised guidelines for community processes VHSNCs are envisaged as a standing/subcommittee of the Panchayat and the role of ASHA as member secretary has been strengthened. Village panch has been made the chairperson and VHSNCs have been reconstituted. Over 5.59 lakh VHSNCs have been constituted by March 2024.

Composition of VHSNC—Minimum of 15 members, chairperson—Mahila panch—schedule caste preferred, member secretary—ASHA.

Members: Elected gram panchayat members—5, ANM, AWW, School Teacher, PHED, NGO Members/ self-help groups volunteers 10, including users of health services.

Untied grant: ₹10,000 per annum for local action, e.g. village sanitation and reduction of breeding of mosquitoes and houseflies.

Activities of VHSNC/UHSNC

The activities of VHSNC can be clustered into five broad categories:

1. **Monitoring and Facilitating Access to essential Government services and correlating such access with health outcomes:**

   VHSNC monitors, facilitates and generators awareness on:

   - Health services at village level/subcentre/PHC level
   - Access to work under Mahatma Gandhi National Rural Employment Guarantee Act (MNREGA), Mid-day meal, Anganwadi services, safe drinking water, access to toilets, ration from public distribution system, elementary education, etc. VHSNC serves as platform for convergence action to address gaps in services.

2. **Organising Local Collective Action for Health Promotion:** Health is an outcome of actions/ activities/practices at the level of household/family and community. Some of the activities for health promotion where VHSNC are involved include:

   Construction of individual toilets, garbage and refuse disposal by manure pits, waste water management and reduction of vector breeding (source reduction) of mosquitoes, housefly and sandfly and antilarval measures as also prevention of air pollution—by education to farmers not to burn crop residue in the field after harvesting.

3. **Facilitating service delivery and service providers in the village by:** Organization of Village Health, Nutrition and Sanitation Day once a month at Anganwadi, for service delivery such as immunization, antenatal check ups, growth monitoring, supplementary nutrition and nutrients, registration of births and deaths and causes of deaths, distribution of IFA tablets, Vit A administration and treatment of common ailments, etc.

4. **Village Health Action Planning by VHSNC for convergent actions on social determinants of health by Household survey:** To elicit total population, weaker section/marginalized groups, health needs assessment in relation to common diseases, causes of disability and death, water, sanitation and nutrition and determining health care priorities.

5. **Community Monitoring of Health Facilities:** VHSNC organizes meetings at least one meeting per month to monitor and review the health work or activities undertaken and plan future activities. It monitors the health facilities to observe gaps in the system of health care delivery and draws the attention of authorities to address these gaps.

Convergent Action on Social Determinants of Health

A year long campaign—Swasth Nagric Abhiyan and VISHWAS—(**Village**-based **Initiative** to **Synergise Health, Water** and **Sanitation**) has been launched which will be conducted by each VHSNC in its village across all the states. ASHA will play key role in facilitating this process, but the campaign will be led by VHSNC members, and core group of volunteers from community. Eleven monthly campaigns will be conducted on selected themes, viz:

Open defection free village day, School and Anganwadi Sanitation day, liquid and solid waste management, healthy lifestyles/health promotion, vectors control day—dengue and malaria, safe water, and personal hygiene, intensified diarrhoea control fortnight, breastfeeding week. Nutrition week/month in September, Leprosy and TB days, No Tobacco day, etc.

Each of these monthly campaign days will aim at building a platform for convergence of all programmes, resources and community action on the day's theme. A manual for the campaign has been prepared. The campaign has been rolled out in October 2017. These activities are part of strategic

1 IEC/communication plan of MOH and FW using mass media along with mid-media and inter-personal communication.

National Urban Health Mission (NUHM) Launched in 2013

NUHM envisaged a women collective/samiti in urban slums/slum like settlements as a leadership platform for community level actions. As per guidelines, Mahila Arogya Samiti (MAS) has been constituted at the level of 50–100 households. MAS is expected to generate demand, ensure optimal utilization of services, increase community ownership and sustainability, and to establish community based monitoring system. Over 62000 MAS have been formed in urban slums as part of urban health centres under NUHM.

Reducing Health Inequities through Actions on Social Determinants of Health

Good health requires universal health coverage. But it is also dependent on other sectors and actors. Health in all policies together with intersectoral cooperation and action, is one promising approach to enhance **equity**.

World Health Day April 7, 2021—"Building a fairer, healthier world" focuses on addressing health inequities across the globe. It calls for actions to eliminate health inequities as part of a year-long global campaign to bring people together to 'build a fairer, healthier world'. The world is still an unequal one. The health inequities are preventable with strategies that place greater attention to improving health equity.

All the world over, some groups struggle to make ends meet with little daily income, have poorer housing conditions, and eduction, limited employment opportunities, experience greater gender inequalities, have little access to safe environments, clean water and air, food security and health services. This leads to unnecessary suffering, avoidable illness and premature deaths.

A situation analysis of health status shows that there are inequalities, in respect of various indicators such as—a long and healthy life (life expectancy at birth), access to knowledge and gross national income per capita per year across the countries, within the country—in different states and districts within the states, across rural, tribal and urban areas, between rich and the poor, social classes and castes. Inequities in respect of fertility rates, adverse sex ratio at birth, gender imbalance, nutritional status, disease burden, death rates (MMR, IMR and under 5 mortality), disability, gender, access to health care, utilization of health care, health seeking behaviour, health protection coverage, health infrastructure, health manpower, safe water and sanitation, literacy, employment and many other areas, are widespread across different states of India. To mitigate these inequalities the government India, is implementing various national policies and programmes to achieve sustainable goals by 2030, e.g. in health sector we have national health policy, population policy national health protection mission (Ayushman Bharat), health and wellness centres to cover poorest and socially vulnerables.

'Health in All Policies' with whole of 'government' and 'whole of society' approach is required to reduce inequalities. By engaging local self government—PRIs/urban local bodies, ASHAs in addressing inequities can be most rewarding. Targeted programmes, for those population and geographical areas that face maximum disadvantage or are vulnerable, have been implemented. The priority areas included-hunger and malnutrition, poverty reduction, livelihood and employment, safe drinking water and sanitation and preschool and school education. Community institutions like VHSNC, urban HSNC ensures that entitlements related to food security, access to food through public distribution systems, food supplements through ICDS, mid-day meal, access to MNREGA and other livelihood programmes reach those who need it most.

Under the National Health Mission 184 high priority districts approach is essentially based on identifying geographies with poor health outcomes and providing enhanced inputs in infrastructure, human resources and finances to ensure equity. Each year 30% additional budget is there for high priority districts of 112 aspirational districts programme under "Transforming India by 2022" is yet another example of reducing inequality in weakest and deprived districts.

Aspirational Districts Programme (ADP)

ADP targets 112 most backward districts of 28 states to improve their socioeconomic status/quality of life. It focuses on 5 themes—health and nutrition, education, agriculture and water, financial inclusion, skill development and basic infrastructure. High weightage (30% each) is given to health and education respectively, followed by agriculture and water resources. In health focus is on antenatal, postnatal, newborn and child care, control of

contagious diseases, under 5 mortality besides health care infrastructure of subcentres (HWC), first referral unit and specialist services at district level.

Education theme focuses on learning outcomes, transition from primary to secondary level and scores in mathematical and language skills.

In agriculture focus is on household food security and safe water supply.

Basic infrastructure focuses on housing, electricity latrines, all weather road for accessibility. Scoring system has been developed for objective monitoring.

Independent appraisal by UNDP ranked these districts on various parameters. It concluded that the programme had helped to achieve the objectives of accelerated growth in 112 most backward districts of the country through convergence of government programmes.

CONCEPT OF PUBLIC HEALTH

- Winslow defined **public health** as "the art and science of preventing diseases, prolonging life, and promoting physical health and efficiency through organized community efforts".

  It means organizing health care systems, resources and infrastructure. Health management (Chapter 3) is an example of public health.
- WHO and Acheson report defined **public health** as, "the science and art of preventing diseases, prolonging life and promoting health through organized efforts of society".
- Focus of public health is total population.

The Ottawa Charter (1986) is the pivot of principles and practices of health promotion. It recognizes the fundamental conditions and resources for health—peace, shelter, education, food income, a stable ecosystem, sustainable resources, social justice and equity. The Ottawa Charter on health promotion advocates five key strategies:

1. Building healthy public policy.
2. Create supportive environments.
3. Strengthen community action.
4. Develop personal skills.
5. Reorient health services.[6]

HEALTH INDICATORS

It is somewhat easier to define health of an individual or person or child or adolescent or youth but to define 'community health' is somewhat more difficult. 'Community health' parameters are different from health parameters of an individual. Community health can be measured through indicators of economics (gross national product, gross national income and per capita income), life expectancy, under five mortality, infant mortality, literacy level, composite index like human development index, maternal mortality, etc.

The other indicators of community health are environmental indicators, demographic, health services, health-care utilization and health policy indicators.

A community is healthy when it enjoys sound health where disease and death rate is acceptably low, it is not threatened with bad environments and its economy is sound and the health practices are sound and based on scientific evidences. Its literacy levels are high and demographically it has balanced sex ratio and people live long, quality of life is good and human development index is high. A village is said to be healthy if it has safe source of improved water supply, safe method of waste water disposal, paved streets, disposal of garbage, refuse and animal excreta by manure pits, people use sanitary latrines, female literacy is high, girls enrolment is universal, deliveries are conducted by trained persons, birth rate and death rate are within acceptable limits, immunization coverage is high, children are well-nourished and housing condition is good.

INDICATORS OF QUALITY OF LIFE

Gross National Income (GNI) Per Capita

Definition: The gross national income (GNI), formerly referred to as gross national product (GNP) measures the total domestic and foreign value added claimed by the resident producers, at a given period in time, usually a year expressed in constant 2017 international dollars converted using purchasing power parity (PPP) conversion rates.

Limitations of GNI

Growth of GNP does not necessarily 'trickle down' to the poor and governments often struggle to intervene to ensure the distribution of economic progress to the poor but it percolates very slowly.

The GNI is concerned with production which is traded or monetarized, it does not reflect such factors as growing of food for family consumption or the unpaid labour of women or do it yourself building of homes, or local collection and consumption of water or firewood and varieties of activities in home settings in rural and urban areas.