- Healthcare refers to the transaction between one caregiver and one sick person at a time – hence the client is the sick person and therapy is the mainstay. For public health, the client is the community at large and the goal is disease prevention and control.
- Dimension of health are evolving from staying free of illness to living a happy life - it occupies wider meanings of mental health.
- India has largest number of medical colleges in the world & among largest producers of doctors - approximately 30,000 new doctors qualify every year.
- In 1950, year there were only 2,717 government hospitals. In 1991, there were 11,174 hospitals. In 2017, the number grew to 23,583.
- India is the third largest producer of medicines in the world and is also a large exporter of medicines.
- Most doctors settle in urban areas. About 5 lakh die from Tuberculosis every year. Almost 2 million cases are from Malaria
- Growing private healthcare services causing inflation in health facilities
- It was reported in a study that 40% of people who are admitted to a hospital for some illness or injury have to borrow money or sell some of their possessions to pay for the expenses.
- In 1996, the Kerala government made some major changes in the state. Forty per cent of the entire state budget was given to panchayats.
- Minimum healthcare is assured under Articles 21, 41 and 47 of the Constitution
- Costa Rica is considered to be one of the healthiest countries in Central America. Costa Rica took a very important decision and decided not to have an army. It diverted the funds to spend more on health and education.

A STATE SUBJECT

- Though 'health' is a State subject, — States have been reducing their health-care spending efforts in relation to total government spending.
- These statistics show that health has never been a political priority in the State.
- The patterns of public expenditure on health show that the provisioning of curative care through hospitals received disproportionate policy significance, ignoring the importance of preventive health care and public health actions that have brought down infectious disease outbreaks or epidemics

INTERNATIONAL PUBLIC HEALTH MODELS

- The prominent role of governments in health care goes back as far back as the 1880s when German Chancellor Otto Von Bismarck established a national health-care system to gain political advantage over the Socialist Party. After World War II, most governments in Europe became extensively involved in health care.
- National Health Service, a publicly funded health-care system in the U.K., set up in 1948.
- Government health spending now accounts for 80-90% of total health expenditure in most countries of the European Union and North America; public expenditure contributes to less than 30% of the total health expenditure in India.
- As public health-care provisioning becomes more limited and the quality of services deteriorates, people are left with no option but to seek services from private providers
- Thai government channelised a greater amount of public resources to the rural areas than to in the urban places
- The IIT Madras research team shows the Tamil Nadu to be 'unique' for its strong body of public health managers at district level, and for having trained and deployed village health nurses since the late 1970s; Tamil Nadu has better indices than most other states for fertility, and for perinatal and maternal mortality.

FOUR TIER PUBLIC HEALTH SYSTEM

- Public health involves several inter-connected activities conducted simultaneously, starting from the village to the State Health Directorate. At each level, specific skills are required and the complexity increases as one moves higher
- ASHAs or Accredited Social Health Activists are the interface between the public health system and the community, with one for every 1,000 persons
- They can immediately warn the female health workers at the sub centre (Auxiliary Nurse Midwives or ANMs) of unusual incidents. ANMs can report to the medical officer at the Primary Health Centre (PHC).
- PHCs should have diagnostic facilities, fully functional laboratory, rapid test kits for detecting infections like COVID and isolation facilities for mild presentations of infectious diseases.
- If necessary, they should be authorised to use local schools or community buildings as isolation centres. Oxygen facilities can be provided for immediate management before transfer, if need be.
- At the next level, Community Health Centres will continue all PHC activities plus have a trained block level epidemiologist — one who can be chosen from an existing senior staffer to focus solely on public health response
- At the district level, an epidemiology and public health surveillance unit should be set up headed by a trained public health professional with all vertical promotional avenues.
- At the State level, six to eight public health cadre positions should be created with specific responsibilities for controlling outbreaks, monitoring, surveillance, training of peripheral staff, compiling data and planning the response based on available scientific evidence.

HEALTHCARE DATA

- Data are required on baseline disease burden and real-time monitoring to track the control trajectory of all the highly prevalent infectious diseases
- Reliable data must be collected from all sources including every healthcare provider, for monitoring disease burden by diagnosis and outcomes; for this exercise, the total population is the denominator.
- Data collection for HIV control is sample-based, under the unique Indian design of sentinel surveillance, established in 1986 and still continuing.
- Our health management does not have a way of prospectively collecting data on all diseases and deaths by diagnosis. That is precisely the task of public health. In its absence, we have only the numerator data on various diseases, including COVID-19, but not the denominator.

PUBLIC HEALTH NUTRITION

- Public health nutrition is the field of study that is concerned with promotion of good health through prevention of nutrition–related illnesses / problems in the population, and the government policies and programmes that are aimed at solving these problems.
- This field is multidisciplinary in nature and is built on the foundations of biological and social sciences. It differs from other fields of nutrition

PUBLIC HEALTH PROFESSIONAL

- The kind of training provided to aspirants, the job market as well as the ineligibility of several Masters in Public Health (MPH) graduates to join hardcore epidemiology services.
- There is no shortage of public health colleges in India.
- Recently, state health universities (Maharashtra University of Health Sciences, MUHS, for instance) mandated their government medical colleges to offer MPH courses.
- Students and practitioners from all the medical streams allied health sciences as well as the pharmaceutical industry can take up these courses.
- No formal accreditation body in India for MPH courses. Through its National Centre for Disease Control (NCDC), the Government of India offers a robust two-year field epidemiology training program (Epidemic Intelligence Services).
- Only allopathic graduates or MDs in community medicine are eligible for this programme.

- The competencies acquired by these graduates may differ due to the lack of a robust and unified curriculum.
- Not all public health graduates work directly in public health.
- While we need these professionals to work in the development sector, we miss the opportunity to train them in epidemiological investigations that could help create a robust public health infrastructure.
- Many medical colleges now require completion of public health courses and experience at the undergraduate level as eligibility for their MD programmes.
- India has a pluralistic healthcare system, and therefore, the western model of public health education may not work here entirely.
- It is a multidisciplinary field where experts from other fields such as sociology, medicine, engineering, etc are required.
- People often do not distinguish between medical services and public health.
- While it is pertinent to repair India's healthcare system, it is also time for the country to develop a public health culture by creating a robust public health education system.

DISEASE SURVEILLANCE NETWORK

- We have a poor disease-surveillance network, which makes timely detection of outbreaks difficult.
- Inadequate coordination among ministries to prevent zoonotic infections complicates the response.
- Dismal investment in scientific research disincentivises researchers involved in the public health sector, who could help by developing capacities to identify, treat and vaccinate against threatening organisms.
- India may have developed comprehensive guidelines to ensure safety of biotechnological research, but implementation of biosafety guidelines falls under the ambit of the Union Ministry of Science and Technology and the Ministry of Environment, Forest and Climate Change (MoEFCC).
- Researchers though are often affiliated to laboratories supported by the Indian Council of Medical Research and the Indian Council of Agricultural Research — research bodies set up under the Ministry of Health and Family Welfare (MoHFW) and the Ministry of Agriculture and Farmers' Welfare
- This multiplicity of organisations operating under different ministries makes it difficult to ensure the implementation of biosafety guidelines across the country.
- With regard to potential bioterrorism, the country has no dedicated policy that deals with risks of intentional release of dangerous organisms
- Multiple ministries are empowered to ensure protection of plants, animals and humans from disease-causing organisms.
- Ministry of Health and Family Welfare (mandates is to prevent export and import of plants and livestock that can pose risks to agricultural and animal biosecurity, respectively.
- MoEFCC takes charge of the import and export of plants for commercial purposes. Similarly, MoHFW is tasked to ensure availability of safe and wholesome food to strengthen human biosecurity in the country.
- Discussions regarding possible threats to national security due to deliberate biological attacks are often limited to closed policy circles with minimal or no intervention of experts from outside the government.
- The spread of infectious diseases is a long-term, continually evolving threat
- A full-time office of biological threats preparedness and response under the National Disaster Management Authority can be one possible alternative in this regard.

PUBLIC HEALTH MODEL OF CUBA

- Cuba govt emphasized creation of the family doctor-and-nurse programme since the 1980s, ensuring that every neighbourhood of Cuba had access to primary healthcare.
- Cuba's infant mortality rate stands at 4.2 per 1,000 ,the lowest in Latin America and even lower than the rate in the US (1980s)
- Taking healthcare beyond its borders, Cuba has been sending its doctors and health workers to help deprived populations in developing countries during emergency since 1963.

- Today, over 30,000 Cuban healthcare workers, dubbed “army of white coats”, work in more than 60 countries.
- During the recent Ebola epidemic in western Africa, the Cuban medical contingent was the largest foreign medical team from any country, providing care to people in Sierra Leone, Guinea and Liberia.

SUICIDES DUE TO ILLNESS

- In India, 1,33,623 people committed suicide in the year 2015. Family problems and diseases were the two biggest known reasons for people's suicide
- In the year 2015, 21178 people committed suicide due to diseases in India.
- Every hour in India 4 people commit suicide due to illness.
- Global studies suggest that social and cultural factors also influence this behavior.
- Suicidal feelings are more prevalent in communities or groups that have limited access to health services and are discouraged from seeking healthcare support.
- Mental health systems in India are very weak, but at the level of society, Indian society has been operating its system in dealing with mental diseases.
- As we began to implement the idea of economic change in which “the interests of the individual and the individual are above society and the family”, it affected other aspects of life as well
- We also cannot deny that in the changing social fabric, a person “suffering from serious diseases” has come to be considered as a burden.
- In Indian society, the acceptance of the disabled and the elderly has decreased in the society.
- If there is a task of public teaching about mental disorders in the society, then the possibility of such behavior can be understood from the signs.
- The incidence of suicide in India has increased in the last 5 decades.
- Lack of humane behavior in health services - due to very less number of doctors posted in public health services, the pressure on them has increased a lot - affected their behaviour.
- It is said that not all those who attempt suicide want to die and not all who aspire to die commit suicide.
- The promise of health for all includes not only medicines or treatments but also creating better conditions for healthy living.
- The right to health needs to be established from the perspective of human sensibilities, not from the point of view of the technical system.

HEALTH ECONOMICS

- In India, about 80 percent of the total expenditure on health comes from the pockets of the people. Only 20 percent of the expenditure comes from the account of the government.
- Every year about 4 percent of people become poor simply because they have to "expend too much" to treat their illness.
- In India between 1 and 20 million people suffer from severe mental disorders, 50 million suffer from severe depression, yet we spend only 0.06 percent of our total health budget on mental health.
- There are only three psychiatrists available in India for a population of one million, whereas there should be 56 psychiatrists by the standards.
- There is a need of around 66,200 psychiatrists in India. In such a situation, it is our health system that compels people to go towards the expensive and out-of-control private health system.
- A study conducted by the Center for Insurance and Risk Management and International Food Policy Research in two districts of Madhya Pradesh revealed that 40% of households in rural areas suffer a severe loss of family income due to illness of a member.
- According to this study, Every household in the village has an average debt of Rs 78,828; Out of this, 17 to 18 percent loan was taken for the treatment of disease at 29 percent annual interest.
- Primary health services remain very poor in India
- The total expenditure on health in India in the year 2011 is about Rs 2,500 per person. Out of this, the govt is spending only Rs 675 and the remaining Rs 1,825 is being spent from the pockets of the people.
- It is very sad that in the year 2011, only Rs 43 per person was being allocated for medicines annually in India and only 5.4 percent people are getting free medicines.

- **The need of the hour is to restore the social order of proper and positive care of persons affected by chronic, incurable and painful diseases.**

IMMUNISATION

- **India has a universal immunization program that covers 12 diseases like tuberculosis, diphtheria, whooping cough, measles, polio just to name a few.**
- **Centre procures the vaccines and distributes it to the state governments for delivery.**

PRIVATE HEALTHCARE

- **COVID-19, influenza and TB has strong social determinants of infection transmission. Overcrowding, lack of cough/sneeze etiquette, and urban-rural divide in health awareness and education.**
- **We have more hospital beds in the private sector than in the public sector.**
- **It is estimated that there are 19 lakh hospital beds, 95,000 ICU beds and 48,000 ventilators in India. Most of these are concentrated in seven States, Uttar Pradesh, Maharashtra, Tamil Nadu, Kerala, Karnataka, Telangana and West Bengal.**
- **Except for Tamil Nadu, Delhi and West Bengal, there are far more beds and ventilators in the private sector than in the public, according to the Center For Disease Dynamics, Economics & Policy.**
- **The reason for this abundance of private health care is obviously the lack of adequate public health care.**
- **India has, quite rightly, focused attention on the larger picture. The priority in a developing country would be the provision of primary care at the peripheral level, preventive measures, immunisation, maternity and paediatric care as well as dealing with common infections such as tuberculosis.**
- **The burgeoning middle class and increasing wealth produced an explosion in the demand for good quality health care. Private medicine was quick to capitalise on this demand.**
- **The second reason for the dominance of private medicine in India is the lack of adequate investment in public health.**
- **The Indian government spends an abysmally low 1.3% of GDP on public health care, which is woefully inadequate. Allocation has to be at least double this to address some of our pressing needs**
- **Private medicine in India is by no means uniform. It is estimated that there are more than one million unqualified medical practitioners, mostly in the rural areas.**
- **Most of them provide basic health care, charging a modest fee. Some may have claims of expertise (often unproven) in alternative systems of medicine such as Ayurveda and homoeopathy.**
- **State-of-the-art corporate hospitals are well equipped and well-staffed and provide excellent service at very high cost.**
- **These are often set up in metro cities at huge cost and have successfully engineered a reverse brain drain of many specialists from pursuing lucrative jobs abroad and staying back in or returning to India.**
- **Between the two extremes are a large number of private practitioners and institutions providing a wide range of services of varying quality.**
- **Some are run by trusts, charitable organisations and religious missions, often providing excellent quality at modest costs.**
- **It is estimated that the wealth of the top 1% in India is four times the combined wealth of the bottom 70%**
- **The public health-care system desperately needs higher government spending. Health care cannot be left to private medicine in a developing country, or indeed, in any country.**
- **The United States, despite spending more than 15% of its enormous GDP on health care in the form of largely insurance-based private medicine, has poorer health-care indices than Europe, where government-funded universal health care (e.g. The National Health Service of the United Kingdom) is available, though the per capita health-care expenditure in Europe is substantially less than in the U.S.**
- **NITI Aayog has recently published the document, 'Investment Opportunities in India's Health care Sector'. This promotes further privatisation of health care in a country which already has one of the most privatised health systems in the world.**
- **There is robust evidence that investments in public health and primary care pay rich economic dividends. Apart from the WHO Commission on Macroeconomics and Health (2001), two other**

economists-led reports on Investing in Health (1993, 2013) concluded that investments in population health will yield rich returns of economic growth.

- Despite accumulating evidence on the need for comprehensive regulation of private hospitals, the central government is yet to take necessary steps to promote the implementation of the Clinical Establishments (Registration and Regulation) Act (CEA).
- Passed in 2010 and presently applicable to 11 States across India, this Act is not effectively implemented due to a major delay in notification of central minimum standards, and failure to develop the central framework for regulation of rates.
- Responding to public distress, around 15 State governments invoked disaster-related provisions to regulate rates for COVID-19 treatment in private hospitals.
- World Bank data reveal that India had 85.7 physicians per 1,00,000 people in 2017 (in contrast to 98 in Pakistan, 58 in Bangladesh, 100 in Sri Lanka and 241 in Japan), 53 beds per 1,00,000 people (in contrast to 63 in Pakistan, 79.5 in Bangladesh, 415 in Sri Lanka and 1,298 in Japan), and 172.7 nurses and midwives per 1,00,000 people (in contrast to 220 in Sri Lanka, 40 in Bangladesh, 70 in Pakistan, and 1,220 in Japan).
- Training of doctors and health-care workers also need to be the responsibility of the government mainly.
- Private hospitals and institutions will need to be regulated. Costing and auditing of care and procedures need to be done by independent bodies
- No hospital, business, institution or individual should profiteer from a national calamity such as the COVID-19 pandemic. Hospitals, like any other institution, have a social responsibility to provide care in times of need.
- The cost of medical care often follows the law of diminishing returns; as the treatment gets more sophisticated, further and further increments, although small, cost enormously more.
- Increase in healthcare expenditure from 1.2% to 2.5% of the GDP in the 2021 budget though it wasn't enough according to changing situations
- Public health is no more confined to elements such as sanitation and housing, but has also become a vast field of study with pandemics like COVID-19 becoming one of the biggest threats to the world. It works toward the betterment of an individual, community, and nation.
- To become an industry-ready professional, opting for a Master's in Public Health (MPH), is the way forward. This programme is a skill-based learning that teaches the best practices of research and development and its application to turn into policies that contribute to making the lifestyle of an individual or a community better and healthier.

NATIONAL URBAN HEALTH MISSION

- Although urban people across India have experienced major shortages of public health services during COVID-19, the condition of the National Urban Health Mission (NUHM) remains pathetic.
- This year's Central allocation for the NUHM is ₹1,000 crore, which amounts to less than ₹2 per month per urban Indian.
- According Parliamentary Standing Committee, for reaching National Health Policy targets, the Government must allocate ₹1.6-lakh crore for public health during the current year
- The data narrative from the Centre for Economic Data and Analysis (CEDA), Ashoka University, shows that Govt expenditure this has been stagnant for years: 1% of GDP 2013-14 and 1.28% in 2017-18
- Health is a State subject in India and State spending constitutes 68.6% of all the government health expenditure. However, the Centre ends up being the key player in public health management because the main bodies with technical expertise are under central control.
- The States lack corresponding expert bodies such as the National Centre for Disease Control or the Indian Council of Medical Research.
- States differ a great deal in terms of the fiscal space to deal with the novel coronavirus pandemic because of the wide variation in per capita health expenditure.
- Kerala and Delhi have been close to the top in all the years in per capita health expenditure
- Bihar, Jharkhand and Uttar Pradesh, States that have been consistently towards the bottom of the ranking in all years

- **Odisha is noteworthy as it had the same per capita health expenditure as Uttar Pradesh in 2010, but now has more than double that of Uttar Pradesh. This is reflected in its relatively good COVID-19 management.**
- **India has among the highest out-of-pocket (OOP) expenditures of all countries in the world, i.e. money that people spend on their own at the time they receive health care.**
- **The World Health Organization estimates that 62% of the total health expenditure in India is OOP, among the highest in the world.**
- **CEDA's analysis shows that some of the poorest States (Uttar Pradesh, Bihar, Madhya Pradesh, Jharkhand and Odisha) have a high ratio of OOP expenditures in total health expenditure.**
- **This regressive nature of OOP health expenditure has been highlighted in the past. Essentially, this means that the poor in the poorest States, the most vulnerable sections, are the worst victims of a health emergency**
- **The inter-State variation in health expenditure highlights the need for a coordinated national plan at the central level to fight the pandemic.**
- **The Centre already tightly controls major decisions, including additional resources raised specifically for pandemic relief, e.g. the Prime Minister's Citizen Assistance and Relief in Emergency Situations (PM CARES) Fund.**
- **In April 2020, Centre for Economic Data & Analysis came out with a policy brief, recommended the creation of a "Pandemic Preparedness Unit" (PPU) by the central government, which would streamline disease surveillance and reporting systems; coordinate public health management and policy responses across all levels of government; formulate policies to mitigate economic and social costs, and communicate effectively about the health crisis.**
- **India has one-of-the highest level of Out-Of-Pocket Expenditures (OOPE) contributing directly to the high incidence of catastrophic expenditures and poverty, notes the Economic Survey.**
- **It suggested an increase in public spending from 1% to 2.5-3% of GDP — as envisaged in the National Health Policy 2017, can decrease the OOPE from 65% to 30% of overall healthcare spend.**
- **The Survey states about 65% of deaths in India are now caused by non-communicable diseases (NCDs)**
- **The Survey also underlines that OOPE for health increases the risk of vulnerable groups slipping into poverty because of catastrophic health expenditures.**
- **The life expectancy in a country correlates positively with per capita public health expenditure, it notes.**
- **Curative medicine or health care for medical conditions where a cure is considered achievable involves therapeutics, surgery and rehabilitation**
- **Disease treatment is individual-centric, which involves an interaction between care-givers and patients.**
- **India does not have a ministry of public health or even a full-fledged division of public health in the health ministry.**
- **Patients seek only curative medicine, which suits the interests of medical professionals. Public health interventions are both environment- and population-centric**
- **The National Health Protection Scheme (NHPS) — called the world's largest health-care programme — offers medical insurance to eligible families for financing curative medicine.**
- **The public health system looks at the social ecology and determinants focusing on optimising wellness. Healthcare services, on the other hand, primarily focus on preventing morbidity and mortality. A comprehensive healthcare system will seamlessly bridge the two.**