Pandemic & Public Health System: RSTV- Big Picture

What's in the News?

- India currently has over 900 confirmed cases of COVID-19.
- The government has been quick to adopt a multipronged strategy, including issuance of clear guidelines to ministries for coordinated action, imposition of travel restrictions, suspension of visas, large-scale screening and contact tracing as well as regular dissemination of information to the public.
- Mounting a swift response involving all stakeholders in a country of India's scale and diversity is undoubtedly commendable. With these measures in place we can be confident that India might be able to successfully limit the spread of the disease.
- Meanwhile in Italy, the number of coronavirus cases and deaths continue to surge. Doctors and nurses are under increasing pressure and are calling out for help while medical supplies run out rapidly.
- In the US, dozens of health-care workers have fallen ill with COVID-19, and more are quarantined after exposure to the virus, an expected but worrisome development as the U.S. health system braces for a surge in infections.
- The need of the hour is to build a resilient public health system that can prevent diseases, promote good health and respond quickly to minimise loss of life when faced with an outbreak of this magnitude.

Is COVID-19 threatening India's Public Health System?

- The primary problem associated with COVID-19, which is a newly discovered strain of coronavirus, is that it doesn't have a definitive cure yet. The treatment for COVID-19 infection is only based on symptomatic treatment & supportive care.
- Management of the infected people and ensuring that the infection does not spread to a larger population, especially in a country, such as India, puts pressure on the Public Health System (PHS).
- There are a range of challenges on this particular front, such as testing the suspected cases, tracking the people who might have come in contact with an infected person, and ensuring adequate treatment according to the severity of the case.

Current Scenario:

- India's public health expenditure is quite low, and thus the infrastructure and facilities of public hospitals is also quite strained.
- **Community transmission** or stage 3 of the infection, in a country such as India, which is densely populated would be a challenge to deal with.
- India also has to defend itself against the remission of the infection as observed in certain cases in China, wherein some of the discharged patients were re-diagnosed with COVID-19.
- India has also founded the global coalition which is supporting the first vaccine trial in the US for COVID-19.

Is India's Public Healthcare systems prepared to handle community transmission?

- India would struggle to deal with a situation similar to that in Italy or the other European countries. There are three primary concerns which would prove to be a roadblock:
  - The diversity and variance in needs of every region, would not allow India impose a unitary set of rules. Each region would have to be assessed and given a separate set of exemptions under lockdown, depending on the needs.
  - The partnering of the Indian Government with the private stakeholders is very crucial as 70% of the medical care provision in India is through the private sector and the rest 30% through the Government.

- o High-end tertiary medical care is the real challenge. High-end tertiary medical care is quite expensive and would prove to be a long drawn process for patients. It is doubtful as to which extent the Government would be able to rely on schemes such as Aayushman Bharath.
- The urban areas would be at a slight advantage than the rural areas in terms of surveillance and containment of the infection.

What is the status of the Public Health System in the Country?

- India has a strong surveillance system in the country. It is called the Integrated Disease Surveillance Programme. It is already active in all the districts of the country and would aid in quick detection of cases and providing accurate information regarding the spread of the infection.
- India has also deployed a rapid response team in all the districts.
- Thus, currently, India is doing its responsibility of early detection and response, however, the availability of infrastructure such as ventilators and isolation beds might prove to be a problem in India.

What measures has India taken to strengthen its Public Health System?

- India's PHS in the face of epidemics is quite strong as India has repeatedly faced a number of such infections. Eg. Swine flu epidemic, Polio etc.
- India has improved with every challenge it has faced. The Integrated Disease Surveillance Network has strengthened over the years and has now been put to use in all districts providing for 100% coverage.
- Indian Council of Medical Research (ICMR) is the apex medical research council in India, has created a testing capacity in India without waiting for the caseloads to increase before enhancing the testing process, demonstrating preparedness.
- The testing laboratories were initially localized to ICMR labs and the National Institute of Virology, but are now expanding. 49 additional laboratories would be constructed and established within the Government system in non-ICMR facilities, thereby involving DRDO, DBT and CSIR.
- All the systems have come together to prevent India from transitioning to the third stage of infection-Community Transmission.
- Social media advisories are a very important pillar of the public health response to COVID-19.
- The Indian Government has started the India Epidemic Intelligence Service Training Programme, in 2012. This training programme trains epidemiologists in epidemiology skills.

Additional measures being taken:

- Private Industries have been asked to consider allowing its employees to work from home.
- Most of the educational, and recreational institutions have been shut down.
- The Government is asking its own employees who are categorized as "vulnerable" to remain at home.
  - o Vulnerable people include older people, and those with underlying medical problems like cardiovascular disease, diabetes, chronic respiratory disease, and cancer who are more likely to develop serious illness.
  - o Those above the age of 60 have been categorized as a high-risk population.
- The DGCA had ordered every flight to be disinfected every 24 hours.

How can the front-line healthcare workers be supported?

- The Government has come up with a plan to support the healthcare workers who would need protection against the infection while working.
- As it is estimated that about 20 percent of the frontline healthcare workers contract the infection themselves while being on the frontline of treatment.

- The regulatory arm of the Government has to come into work and ensure that the individual institutions, and the field workers are able to get access to proper protective equipment.

The initiatives to further strengthen the Healthcare system and Way Forward:

- Increase the overall expenditure on the public healthcare system in India.
- Build an epidemiological skill base in the country.
- Ensure the availability of enough public health manpower in the country.
- Enhance the public healthcare infrastructure whilst ensuring that the price of the services offered doesn't increase, which is a possibility when the private sector is involved.
- The PHS is composed of communities, individuals and the government. It has three levels of response:
  - The Government level
  - The Individual level
  - The Public-Health workers
- The public has to step up and recognize their responsibilities, and ensure that India does not transition into stage three of the infection. The entire social distancing advisory has to be taken seriously by the public.
- The initiatives have to be enhanced from Government preparedness to Community preparedness.

Conclusion:

Social responsibility is one of the key factors in containment of the infection. India would also have to be better prepared and work on improving its PHS infrastructure and the overall healthcare budget. India should also adopt evidence-based decision making.