LAW

COMMENT

Covid-19: Catalyst for a comprehensive law to combat potential pandemics in India

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Abstract

Despite the relative decline in communicable diseases, India witnesses hundreds of outbreaks every year. Including the current Covid-19 pandemic, India has suffered through several major pandemics and large-scale epidemics since 1900s. However, the response to most of the epidemics has been inadequate. The Epidemic Diseases Act, enacted in 1897 (EDA 1897), has been in action since and is based on the science and the socio-political environment of the country in the nineteenth century. India has several legal mechanisms to help contain and control the spread of epidemics, but on different platforms. There has been a paradigm shift in the socio-political milieu as well as scientific advancements in the prevention and control of epidemics. The century-old EDA 1897 has not been effective in containing and controlling such epidemics/pandemics, as has been witnessed during the ongoing Covid-19 pandemic. Hence, it needs to be revised to define an appropriate structural scalar chain, provide clear-cut and unambiguous terms/definitions and guidelines, delineate ethics and human rights, determine the duties and responsibilities of the affected population/community, determine the role of the private health sector, and provide for appropriate punitive measures to deter repeated violations.

Keywords: *pandemic, Epidemic Diseases Act, Covid-19, amendment*

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Introduction

India has undergone an epidemiological transition since the start of the 21st century. Despite changes in disease dynamics due to changing lifestyles, socio-economic growth, and industrialisation, communicable diseases remain a major and significant threat to the health, development, and economy of developing countries like India [1, 2]. Communicable diseases account for nearly 28% of all deaths in India [3], and occur in two forms: the endemic form, and the epidemic form that has pandemic potential. Disease spread, including that of communicable diseases, can be controlled using a mix of public health interventions, such as biological, behavioural, political, and structural measures [4]. The administrative approach is determined by the laws and Acts instituted by the concerned states [5].

The Central Surveillance Unit (CSU), India, reports nearly 50 outbreaks every week [6-8]. A few of them have the potential to affect a large geographical area including the entire world. In light of globalisation, increased international travel, the threat of bioterrorism, and the emergence and re-emergence of infections of global concern, India is always at risk of suffering during pandemics [7-9].

History of major outbreaks/epidemics in India

Some devastating epidemics and pandemics in India have caused havoc throughout the subcontinent. Table 1 provides a list of major epidemics that have occurred over the last century.

Table 1: List of epidemics/pandemics in India over the last two centuries

Year	Epidemic
1910–1911	Cholera
1918–1920	Spanish flu (Pandemic)
1974	Smallpox
1994	Plague
2002–2004	Severe Acute Respiratory Syndrome (SARS) (Pandemic)
2006	Chikungunya
2009	Swine flu (Pandemic)
2018	Nipah virus outbreak
2020	Covid-19

(Source: Author's compilation, 2020)

The genesis of the Epidemic Diseases Act, 1897

In the pre-colonial era, the West considered India as a breeding ground for epidemics such as the plague, cholera, leprosy, malaria, etc. During the eighteenth and mid-nineteenth centuries, British India was blamed by the colonial powers for the import of cholera into Europe. Indians were deprecated as "unhygienic" and ideal carriers of communicable diseases. It was reported that deaths due to disease were most common among young Europeans who worked as soldiers or sailors and who made frequent contact with the local population, either through general contact or sexual interactions with local women [10]. This led the East India Company to pass The Contagious Diseases Act in 1868. Although confined to specific enclaves, the Act enforced monitoring and confinement of sex workers and created provisions for sanitary improvements around the enclaves [11].

The focus shifted away from cholera when outbreaks of the plague were reported in different parts of India, including Kutch, Gujarat; Hisar, Punjab; and the Marwar region of Rajputana during the 19th century. Documented evidence of the plague dates back to the 1896 outbreak in Bombay (now Mumbai) [12]. As Bombay was located on the international trade route, the plague directly impacted business and plans for colonisation. The British imperial government was forced to adopt health interventions to prevent and control the spread of the epidemic, which led to the genesis of the Epidemic Diseases Act (EDA) in 1897 [13-15]. The EDA enabled the governor-general of India to authorise local leaders to implement steps to control the spread, including coercive inspection, segregation, and isolation of suspected persons [16].

Subsequently, the century-old EDA 1897 has been repeatedly invoked to contain the spread of various diseases, including swine flu, cholera, malaria, and dengue. According to reports, in 2018, the Act was invoked to contain the spread of cholera in villages of Vadodara region of Gujarat [17]. In 2009, the Act was enforced in Pune to combat a swine flu outbreak; and in 2015, it was brought into force to cope with dengue and malaria in Chandigarh.

Other structural measures in India to control epidemics

Apart from the EDA and the Disaster Management Act (DMA), 2005, over the years, many public health legislations have been instituted, or proposed, for the effective management of epidemics [Table 2]. The DMA was enacted in 2005 in the aftermath of the tsunami of 2004 in order to make the management of disasters more efficient.

However, all the Acts have been executed on different platforms, ie, there is no single comprehensive legislation for epidemic control. This prevents the development of a comprehensive public health response plan for the containment and control of epidemics. The National Health Bill, 2009 [18] additionally focuses on providing a legal framework for essential public health services by recognising health as a crucial right of the individual. However, none of these schemes ever fructified as the states considered them infringements of their jurisdiction.

Table 2: List of regulatory instruments for epidemic control in India

Year	Regulatory mechanism
1898	Live–Stock Importation Act
1908	Indian Ports Act
1940	Drugs and Cosmetics Act
1954	Aircraft Rules
1939	Madras Public Health Act
1939	Malabar Public Health Act
1955	Travancore-Cochin Public Health Act
1955 & 1987	Model Public Health Act (Proposed but rejected)
2009	National Health Bill (Proposed and after initial neglect, on the table since 2017)
2020	Epidemic Diseases (Amendment) Act
Note: Himachal Pradesh has made amendments to the EDA to support compulsory vaccination. Similarly, Madhya Pradesh, Punjab, and Haryana have made amendments to the EDA to empower designated officials to execute provisions under the Act.	

The Epidemic Diseases (Amendment) Act, 2020

The latest of the regulatory mechanisms is the Epidemic Diseases (Amendment) Act, 2020 [19]. It amended the Act to provide protection for health workers against acts of violence by the public, and expanded the power of the central government to control the spread of diseases. The ordinance defines "acts of violence" and specifies the penalty for such acts — imprisonment of three months to seven years, and a fine of between ₹ 50 thousand and ₹ 2 lakh — depending on the severity of the offences, which are classified as cognisable and non-bailable. The ordinance also expanded the power of the government to regulate surface and air transport services, including the right to inspect people intending to travel by such means.

Keeping in view the expansive nature of the Covid-19 pandemic, various regulatory measures have been taken by the Government of India (GoI).

1. Travel restrictions

The travel advisories issued by the Ministry of Health and Family Welfare, GoI, establish the following restrictions on travel:

> *"With effect from 13 March 2020, all existing visas (other than those issued with respect to diplomats, officials, the United Nations, international organizations, employment, and projects) issued to nationals of any country stand suspended. If any foreign national intends to travel to India*

for compelling reasons, they may contact the nearest Indian Mission to have the visa issued. The visas issued to foreign nationals presently in India, however, remain valid" [20].

2. Nationwide lockdown

As discussed, the central government invoked the DMA 2005 to order a nationwide lockdown. Similarly, state governments invoked other Acts to address concerns pertaining to the spread of Covid-19. EDA 1897 empowers a state government to prescribe temporary regulations to be followed by the public or any person to prevent a disease outbreak.

Scope of EDA, 1897

The GoI has invoked a 123-year-old Act in light of the Covid-19 spread, given that the Act has been verifiably used to contain the spread of other illnesses such as the plague. The EDA comprises four sections [21].

Box 1: Various sections of the EDA 1897

Section 1

Explains the title and scope of the Act.

Section 2

Enables the state and central governments to take preventive steps and invoke laws to prevent disease transmission. These measures include screening travellers commuting by rail or any other means of transport, isolation or segregation of infected persons in hospitals, temporary confinement of people suspected to be infected with any such disease.

Section 3

Endorses punishment for resisting or disobeying any law or order issued under the Act, in accordance with Section 188 of the Indian Penal Code (IPC).

Section 4

States that no complaint or other legal action may be taken against any person for any act done or intended in good faith under this Act.

Section 2, which enables the central and state governments to execute measures to control the pandemic, needs a special mention [21]. It empowers the authorities to take extraordinary measures and gives them greater control over the public for its safety. Under this section, temporary and specific provisions and regulations pertaining to the public can be introduced to contain and prevent outbreaks. This section also gives authorities the power to inspect "persons travelling by railway or otherwise, and the segregation, in hospital, temporary accommodation or otherwise, of persons suspected by the inspecting officer of being infected with any such disease." A sub-section provides the central government the power to inspect any ship or vessel arriving at or leaving any port, and detain it or any person arriving or intending to depart on it.

Section 188 of the Indian Penal Code (IPC)

Section 188 of the Indian Penal Code (IPC) specifies the "penalty for disobedience of an order duly promulgated by a public servant". Any person engaging in such disobedience that causes or risks obstruction, annoyance, or injury to any individual employed in public service will face simple imprisonment up to one month and/or a fine of up to ₹ 200. If the person's non-compliance endangers life, health and safety, or causes disturbances such as riots, the punishment may be increased to six months of imprisonment and/or a fine of ₹ 1000.

Disaster Management Act (DMA), 2005

The DMA was enacted in 2005 in response to the 2004 tsunami and is applicable to the entirety of India. The DMA aims to support effective preparation, mitigation, and supervision during natural or man-made catastrophes such as tsunamis, earthquakes, and cyclones. These happenings are often geographically localised events that disrupt normal life for hours or days, but unlike an epidemic, they do not last for a long period of time [22]. The Guidelines on Management of Biological Disasters, 2008, and the National Disaster Management Plan, 2019, prescribe measures to address biological disasters and health emergencies in India. The central government may use the DMA and the reserves made available under it for epidemic response at different levels.

Current Covid-19 scenario and merger of the three Acts by the Government of India

A composite regulatory framework is an integral part of any public health response mechanism adopted by the government to deal with a health emergency. In the absence of a comprehensive Act, this framework can be adapted to changing population dynamics, varying kinds of diseases, and the prevailing environmental context for the swift and effective control and management of health emergencies. This composite approach not only makes the government more responsible and accountable but also empowers citizens with responsibilities and rights [23].

The union and states have managed to coordinate their response under the EDA 1897 and the DMA 2005. The wide architecture and flexibility of both Acts permit both union and state governments to address the pandemic in diverse ways. While the union government has introduced preventive emergency measures to control spread through ports of entry and exit, the states are adopting preventative regulatory and administrative measures such as restrictions on mass and religious gatherings, shutting down recreational exercises and institutions, and ordering businesses to work from home.

Although the Covid-19 pandemic response in India was touted as one of the best in the world [24], the reality is that it is far from over. The combined response under the EDA, including the 2020 Ordinance, and the DMA was insufficient for the smooth and effective containment and control of Covid-19. To reach any conclusion regarding India's potential handling of the future dynamics of Covid-19, there is a need to understand how our country has handled this pandemic so far.

Critical analysis of the EDA in the management of Covid-19

Despite being nearly 125 years old, the EDA is the only Act instituted at a national level to combat and control epidemics. Apart from vesting the central and state governments with the power to take necessary steps to contain epidemics, the Act also has provisions to penalise those disobeying orders related to epidemic control. Samaritan efforts are protected under this Act. Although the EDA is relevant and still applicable, it needs to be revised in light of changing and newly available scientific evidence.

In 2006, an American epidemiologist, Larry Brilliant, who was part of the World Health Organization team that worked to eradicate smallpox in India, predicted that the next pandemic could kill 165 million people globally [25]. "Early detection, early response" is key to the successful prevention and mitigation of pandemics. As per expert opinion, the provisions of the EDA have not, until now, undergone judicial scrutiny. The global Covid-19 health emergency offers the union government the chance to amend the country's laws. To prevent and control infectious diseases in India, the legal structures need to be strengthened. The use of a combined legal framework and an ad-hoc legal architecture with multiple statutes has resulted in a patchwork epidemic response. Moreover, the regulation-centric EDA needs further scrutiny amid human rights concerns and the need to reform the health sector to promote greater disease surveillance and control [23].

The EDA has limited provisions. The four sections under this Act provide the government with wide discretionary powers; but they (a) do not define the organisational structure of the disaster response, (b) do not define the roles and responsibilities of the various levels of government, (c) do not specify the rights and responsibilities of the general population, and (d) do not provide for adequate preparation in case of an infectious disease outbreak.

Without an adequate organisational structure, the scalar chain is interrupted. Implementation gets hampered, leading to incoherent responses in different parts of the country. Under Section 2, the state government can empower any person to take necessary measures to contain the epidemic, but it does not specify who the person should be and in what context(s) they can be bestowed with powers, or by whom and how the conferred power will be monitored to prevent misuse. During the Covid-19 pandemic, the government of Odisha conferred the powers of a district collector on panchayat *sarpanches* (office bearers of village committees) in good faith to contain the epidemic [26]. It has worked to a large extent; however, there have been reports of misuse of power by a few *sarpanches*.

The amendment to Denmark's Epidemic Act, 1915 [27] is one example of a national government centralising power with the Health Ministry for a stronger pandemic control and response mechanism. The Danish Epidemic Act has specific clauses that grant power to the government, especially the Ministry of Health, to impose special rules by issuing executive orders. The most important amendment to the Act was the transfer of power from the regional Epidemic Commissions (decision-making bodies) to the health minister to better coordinate the epidemic response. The Act also bestows power on the government to prohibit the assembly of more than 10 persons. The involvement of health sector especially the public health was minimal concerning the decisions on Covid-19 pandemic response and control in India. If public health experts are brought into the loop making the decisions on epidemic control like Denmark, the response to the epidemic would be better.

Utilising the skill, vision, and intellectual capacity of epidemiologists, infectious disease specialists, and public health specialists is of utmost importance for the containment and control of epidemics. However, the EDA in its current form does not mention such roles. Rather, officials untrained in the control of epidemics are coordinating the effort.

The Act does not provide scientific guidelines for surveillance, inspection, quarantine, isolation, and treatment. The EDA reflects the scientific and regulatory knowledge that existed during the late 19th century. It did not incorporate modern and evolving scientific approaches to the prevention and control of epidemics. The EDA also does not provide for a surveillance mechanism for diseases with epidemic potential, research and development, and distribution of vaccines. Without a clear framework detailing these steps, multiple guidelines have been circulated since the beginning of the Covid-19 pandemic, leading to confusion and mental fatigue for the implementing workforce. The EDA focuses on controlling the spread of epidemics but does not specify guidelines for the management of cases. The Act lacks clear guidelines for the distribution of vaccines and drugs developed during epidemics/pandemics.

The provisions under the law appear indeterminate as key terms are not defined precisely. The terms "dangerous epidemic disease", "lethal", "infectious", and "contagious diseases" have not been defined in the legislation. The EDA also does not specify who will decide how "dangerous" the epidemic is, based on what criteria.

The government is empowered to inspect and regulate only ships and vessels leaving or arriving in India. Naturally, the Act does not mention air travel, given the period when it was initially drafted, but this is now an essential factor for consideration. The Act is also silent on travel and transport within the country by train, bus, and private means. With air travel becoming the principal mode of international travel along with increased migration, higher population density, urbanisation, and industrialisation resulting in greater population movement within the country, some provisions related to population movement need to be revised. Such factors have contributed to a change in the transmission and propagation of communicable diseases. The Epidemic

Diseases (Amendment) Act, 2020 [19], empowered the government to regulate other modes of travel to, from, and within the country. However, the ordinance is temporary and is applicable only for the duration of the Covid-19 pandemic. The question of what happens "after Covid-19" needs to be addressed, and such provisions need to be incorporated into the Act.

The EDA empowers local authorities to take necessary steps to control the spread of the epidemic if the government feels the need to do so. Coercive actions adopted by authorities to contain the epidemic sometimes violate human rights. Reports of such actions by implementing officials have emerged in some parts of India during the current pandemic [28]. The legislation does not provide for the protection of human rights. Moreover, the Act does not make clear whether the powers bestowed on the government may be exercised in violation of any existing statute. Hence, it must also include provisions to protect human rights during times of emergency.

The Public Health Emergency Response Act, Mexico, 1978 [29] states that public health emergencies must be managed such that the civil rights and liberties of individual persons are preserved. The Act clearly defines under which circumstances a person may be quarantined or isolated, the vaccination and treatment protocol, and the standards of hygiene that need to be maintained at the centre. Similar provisions can be drawn for the Act in the Indian context.

Epidemics are inevitable without the cooperation and support of the public. However, the EDA of India is silent about the rights and responsibilities of the general public unlike Singapore law. The COVID-19 (Temporary Measure) Act (CTMA), 2020 [30] of Singapore provides specific guidelines for the general public to prevent the spread of disease. The COVID-19 (Temporary Measures) Regulations, 2020, under CTMA mandate every individual to stay indoors, and not leave their ordinary place of residence in Singapore, except to the extent necessary for certain specified reasons.

Though the EDA penalises offenders under Section 3, the penalty is non-compoundable and too small to prevent the recurrence of such incidents. Thus, it may only help a little in deterring people from repeating offences. Though this has been addressed by increasing the penalty through the Epidemic Disease (Amendment) Act 2020, it seems temporary. The amendment should be reflected in the Act.

Section 4 of the EDA provides for the protection of frontline workers from complaints or legal action, but it does not provide for redressal if they get infected or sustain physical/mental trauma while providing healthcare services during epidemics. The section is also silent on the compensation to be paid in case of death or permanent/temporary disability suffered by frontline workers on duty.

The dynamics of healthcare delivery have changed post-Independence. In the last couple of decades, the private health sector has emerged an important contributor to the healthcare delivery system in India. The private sector contributes to more than 80% of healthcare delivery services in India [31]. Despite invoking the EDA several times during past epidemics, the inclusion of the private health sector in the fight against epidemics has never been streamlined.

The way forward

The EDA is over a century old and needs to be updated in the context of the changing socio-political milieu as well as advancements in scientific knowledge regarding the prevention and control of epidemics. Though there are a few other Acts that pertain to the control of epidemics, they are not well coordinated or appropriate to the current context. There is a need to modify and add relevant clauses to EDA to make it comprehensive and actionable, taking into consideration the socio-political milieu and scientific advancements.

First, the Act should provide for the creation of an institutional body such as the National Disaster Management Authority (NDMA) with representation from both the centre and states to design and implement well-coordinated surveillance, identification, contact tracing, quarantine, isolation, testing, and treatment strategies. The Act should specify the members of the decision-making body. The body should also include healthcare professionals, especially public health experts (epidemiologists/infectious disease specialists). The Act must empower the body to plan a comprehensive and well-reasoned lockdown strategy, taking into account disruptions to supply lines, essential and non-essential services, human migration, relief, food support, and non-health services and utilities.

Second, the Act should provide clear direction and guidelines for the government to act swiftly and effectively. The line of authority must be clearly defined.

Third, the Act must have provisions for strict containment measures like lockdowns or shutdowns and must provide for multi-sectoral emergency relief measures for local authorities, farmers, businesses, and healthcare providers and for animal care and livelihood safeguards.

Fourth, the Act must provide adequate autonomy to the states to design and enforce responses as per their local assessments, including preparing health facilities to respond to various challenges at the district, block, and *gram panchayat* levels. A good example of this is the Odisha government's conferring on *sarpanches* the powers of the collector to enforce isolation and quarantining of migrant workers returning home.

Fifth, the Act must include more robust disincentives to deter people from abusing and mistreating frontline workers; while at the same time, safeguarding against its overuse or misuse. This may include both civil and criminal penalties.

Sixth, the Act should specify the duties and responsibilities of

the general public at the time of the epidemic. At the same time, the Act should also focus on the rights of the individual, especially of those who are suspected, quarantined, and isolated.

Seventh, the Act should have provisions to incorporate the private health sector into the epidemic response to provide comprehensive and optimum healthcare services to the community.

Conclusion

The century-old EDA 1897 is the only existing legal means of epidemic control across India. The existing EDA needs to be revised amid changing public health priorities and scientific developments. This Act needs to be made comprehensive and provide an explicit description of various measures including the establishment of an implementing agency. The role of epidemiologists, public health specialists, and infectious disease specialists should be given prime importance along with the fundamental rights of civilians. This will strengthen the capacity and preparedness of our country for a future pandemic.

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