



PROBLEMS AND CHALLENGES IN COMMUNICABLE DISEASES IN INDIA

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Abstract: Since the turn of the mid-twentieth century, mankind has witnessed prodigious health improvements. But its effects keep varying from country to country. Considering our country, India continues to face high mortality. Children are highly prone to ill health, with infections and parasitic diseases. Even adults are now experiencing substantial premature mortality. If we dwell deep, the condition of poorer groups has worsened considerably as compared to the richer ones. Recent mortality analysis emphasizes the significance of the communicable disease, which epitomizes approximately 90 per cent of avoidable death cases for all age/sex groups. But now research has the tools to address the great burden of communicable diseases, like malaria, TB, and HIV/AIDS, as well as other vaccine-preventable diseases. Despite this, the majority of common mass lacks effective access to prevention and treatment. This paper is trying to attempt reviewing the gravity of problems and challenges in communicable disease in India.

Keywords: mortality, communicable disease, prevention, Malaria, TB, HIV/AIDS

I. INTRODUCTION

Currently, India is undergoing an amendment economically, demographically, and epidemiologically with reference to health. And since the last decade associate exceptional economic development is seen particularly in terms of rate of gross domestic product (GDP). Regrettably, this progress is hampered tons by growing disparities between made and poor. The financial gain difference or distinction between the various socioeconomic categories of society is connected with worse health outcomes and there is sturdy evidence to recommend that.

The damaging health and social consequences are the results of this widening gap between the made and therefore the poor. Tho' social insurance measures and money inclusions are being enforced by the govt to bridge economic inequalities, it ought to be ensured that health disparities between and among social and economic categories also are addressed adequately. The new demographic changes afoot are probably to contribute to well-raised labour. However, the country is going to be benefited providing the population is healthy. The country at the moment suffers from the triple burden of sickness — the unfinished agenda of infectious diseases; the challenge of non-communicable diseases (NCDs), joined with lifestyle changes; and the emergence of latest pathogens inflicting epidemics and pandemics. additionally, the health infrastructure is already over-stretched and wishes to be reinforced to change it confronts these challenges within the 21st century.

Health Sector and its Challenges in India:

India has created monumental strides in the health sector, over the past decades. The anticipation has crossed sixty-seven years, child and under-five mortality rates square measure declining as is that the rate of malady incidence. several diseases, like an infectious disease, guinea worm malady, yaws, and tetanus, are eradicated. In spite of this progress, the communicable diseases still stay a significant public unhealthiness within the returning decade motility a threat to each national and international health security. Endemic diseases like human immunological disorder viral infection and purchased immune deficiency syndrome (HIV/AIDS), infectious disease (TB), malaria, and neglected tropical diseases, the disease outbreaks can still challenge public health, which needs high level of readiness in terms of early detection and fast response. during this regard, vector-borne diseases, like dengue fever and acute cephalate syndrome, square measure of explicit concern. And one in all the largest health challenges facing humanity is antimicrobial resistance that has to be tackled with all seriousness. These non-communicable diseases or NCDs square measure currently the leading reason behind death within the country, conducive to the hour of deaths. Four diseases particularly cardiopathy, cancer, diabetes, and chronic pulmonic diseases contribute nearly eightieth of all deaths because of NCDs and that they share four common risk factors particularly tobacco use, harmful use of alcohol, unhealthy diet, and lack of physical activities. The maternal mortality quantitative relation and morbidity rate (IMR) is additionally of great concern that remains intolerably high. The IMR, that was eighty-one in 1990, declined to forty per one,000 live births in 2015 in step with the globe Health Organization (WHO)

2015. However, it still is far more than the worldwide average for a constant amount of 33.6 per 1,000 live births (World Health Statistics 2015). in step with the sample registration system (SRS) report of Gregorian calendar month 2015, the IMR is currently forty per one,000 live births. As already expressed, the mortality rates square measure declining however the speed of decline remains comparatively slow, compared to it being achieved by alternative South Asian neighbours, with exception of the Islamic Republic of Pakistan. The medicine transition is, in fact, being fueled by the social and economic determinants of health and by some recent and a few new risk factors like globalization, unplanned and unregulated urbanization, dynamic life designs, environmental causes (e.g., temperature change and air pollution), and the increasing influence of media and advertising. Moreover, nice disparities between the wealthy and poor (and between those living in urban and rural areas) in access to health services still exist within the society. as an example, the poorest of the poor and also the most marginalized sections of the society aren't solely at a bigger risk for communicable and NCDs, however also are least ready to deal with the diseases ensuing from these risk factors. If somebody within the family gets sick, the family usually gets at bay in poorness, partially because of the high value of health care.

Source: [World Health Statistics 2015 and Sample Registration System \(SRS\) report Oct 2015](#)

In Equity in Health Care:

A dark cloud, however, threatens to obliterate the sun from this landscape. virtually everyplace, the poor suffer poor health and therefore the poor suffer appallingly. The gap in health between wealthy and poor remains terribly wide like ever. Addressing this drawback, each between countries and among countries constitutes one among the best challenges of the new century. Failure to try to thus properly can have dire consequences for the world economy, for social order and justice, and for the civilization as a full.

Source: [Ministry of Health and Family Welfare, 2010, \(http://mohfw.nic.in/index.php\)](#)

Health Care in India

--India has forty-eight doctors per one hundred persons that are nothing compared to it in developed nations
 --The wide urban-rural gap within the availableness of medical services: Inequity
 --Poor facilities even in massive Government establishments compared to company hospitals (Lack of funds, poor management, political and government officials interference, lack of leadership in the medical community)

Source: [Ministry of Health and Family Welfare, 2010, \(http://mohfw.nic.in/index.php\)](#)

Communicable Disease:

Communicable Disease a contagious **disease** transmissible (as from person to person) by direct contact with an affected individual or the individual's discharges or by indirect **means** (as by a vector)—compares contagion.

Trends of communicable diseases in India

Diseases showing increasing trends	Diseases showing decreasing trends
Dengue, chikungunya	Poliomyelitis
HIV-TB co-infection	Tuberculosis
Cholera O139	Neonatal tetanus
Japanese encephalitis	Measles
Leptospirosis	HIV/AIDS
Novel H1N1 infections	
Eradicated: smallpox, guinea worm	
Eliminated: yaws, leprosy	

Source: [Ministry of Health and Family Welfare, 2010, \(http://mohfw.nic.in/index.php\)](#)

Non-Communicable Disease:

(NCD) could be a restorative condition or disease that is not caused by infectious agents (**non-infectious** or **non-transmissible**). NCDs can allude to persistent ailment which last for long periods of time and advances gradually. ... NCDs are the driving cause of death universally.

Communicable Diseases and its challenges in India

India has a colossal vary and burden of infectious diseases. The central (federal) and state governments share the executive responsibilities of the health system. The central Ministry of Health management has the responsibilities of diseases and outbreaks, that lacks a proper public health department for this purpose. Management of HIV infection and infectious disease, however not of T.B., appears to get on track. The early success of protozoal infection management wasn't sustained, and Assam fever prevalence has exaggerated. continual outbreaks of illness} and re-emergence of Chikungunya virus disease

and rickettsia disease may be a result of inadequate containment of the vector. alternative infectious diseases caused by faecal transmitted pathogens (enteric fevers, cholera, infectious hepatitis and E viruses) and zoonotic disease (rabies, zoonosis, anthrax) aren't within the method of being consistently controlled. there's a necessity to handle massive gaps within the police investigation and response system for infectious diseases. Replication of the model of vertical single-disease management for all infectious diseases won't be economical or viable. And to broaden the agenda of unwellness management, Asian nation must rethink and revise its health policy. A comprehensive review and plan of the health system are required desperately to make sure equity and quality in health care. The introduction of a sensible public fitness infrastructure that is shared among the central as well as the state governments, with skilled leadership related a formally skilled public fitness cadre of employees World Health Organization manage an integrated management mechanism of diseases in districts that has infectious and non-infectious diseases, and injuries is extremely needed.

Challenges of communicable diseases.

Communicable diseases	The magnitude of the burden
TB	217 cases per lakh population in 2015
HIV	2.1 million HIV-positive persons in 2015
Malaria	0.85 million cases per year
Leprosy	110,000 affected people

Source: [Ministry of Health and Family Welfare, 2015](#)

The causes of death.

Causes of death	Overall	Rural areas
Communicable diseases, maternal, peri-natal and nutritional	38%	41%
Non-communicable diseases	42%	40%
Injuries	10%	10%
Ill-defined causes	10%	9%

Source: [Ministry of Health and Family Welfare, 2010](#), (<http://mohfw.nic.in/index.php>)

Who Can Play Role?

1. Government:

Today's health policy is facing the challenge of keeping the health care system up to a high commonplace and cheap at an equivalent time. A comprehensive health protection system that's economical and pronto accessible to all or any is needed. though to a good extent, it's the responsibility of each subject to market and sustains their own health, it's the duty of the central to produce for risks that may emanate from pathogens, merchandise or environmental factors. Protection against all legendary risks ought to be improved, new health threats need to be countered and new scientific findings should be thought of. Prevention, health promotion and health protection area unit vital key factors to boost the health of the final population and to cut back health care prices. The interference and protection from infectious diseases area unit high priority tasks for more development of a good health care system. So as to perform those tasks in the management of infectious diseases close collaboration between a number of federal agencies and federal institutes beneath the responsibility of the Ministry of Health and Social Security , the Ministry of client Protection, Food and Agriculture ought to be ensured.

2. Individual

One's health is essentially an element that he/she is accountable for. during this section we tend to handle personal health care reform: the distinction between realization and actualization

Realizing one's health is his/her responsibility.

It's no secret that health problems square measure completely different once age fifty than before. it's exceptional, however, simply however simple it's for folks to stay their head within the sand. for many of the elements of their lives, folks live a health care-free life, wherever the implications of their habits weren't immediate. folks don't sometimes understand the importance of their health not unless they lose it!

Actualizing good health habits.

Not solely is it exceptional however long folks square measure able to keep their head within the sand on the conclusion aspect, they need a weird ability to ignore their own realizations. In different words, they'll understand however not actualize. We've all done this to ourselves, right? That's what tomorrow is for – as in I will be able to begin "tomorrow." No more. nowadays is my day. nowadays is that the day that I will be able to STEP into the physiological state tomorrow. therefore it's terribly necessary for a person to adopt healthy habits as for a more robust future.

Interventions by Govt. for Communicable Disease:

The Union Ministry of Health and Family Welfare play a significant role within the national efforts to assist people to lead a healthy and happy life. It is the responsibility of the ministry for implementing programs of national importance like family welfare, primary health care services, hindrance and management of diseases, etc., that kind the most plank of our development efforts.

Broadly, health coming up with and programs thus far have worked to (a) management and eradicate communicable diseases, (b) give preventive and curative health care system within the community development block and to reinforce the hindrance of non-communicable diseases, (c) give programs to coach medical and paramedical personnel, (d) involve community-level staff, that is, teachers, postmasters, Anganwadi staff, gram Sevak and sevika within the delivery of health, and (e) extend monetary fund resources to voluntary organizations/institutions underneath grant-in-aid schemes National Health Policy 2002:

National Rural Health Mission:

The prime minister launched the National Rural Health Mission (NRHM) on 12th April 2005. The mission could be a seven-year recent commitment inclusive of 2 years-2005-07 of the Tenth set up and therefore the entire term of the Eleventh set up for rural health care.

The NRHM, as explicit within the Preamble, has as its goal up “the accessibility of and access to quality health care by individuals, particularly for those residing in rural areas—the poor, girls and children”. The thrust of the mission was on establishing a completely useful, community-owned, suburbanized health delivery system. The NRHM makes an attempt a serious shift within the governance of public health by giving leadership to the Panchayati dominion establishments altogether matters associated with health at the district and sub-district levels.

The vision of the NRHM encompasses the following:

- i. To be implemented all through the nation, particularly aiming at the eighteen states with frail public health indicators and/or weak infrastructure.
- ii. to upgrade the supply of and reach to quality medical service.
- iii. to make action between health and determinants of fine health like nutrition, sanitation, hygiene and safe drink.
- iv. To thought the Indian Systems of Medicines to facilitate comprehensive health care.
- v. to extend the hygroscopic capability of the health delivery system to change it to handle magnified allocations.
- vi. To involve the community over the design plan.
- vii. Up-gradation of infrastructure.
- viii. capability building.
- ix. Increasing the fund allocation for the health sector.

One of the key ways beneath the NRHM could be a community physician, i.e., licensed Social Health Activist (ASHA) for each village at the norm of a thousand populations. ASHAs would reinforce community action for universal immunisation, safe delivery, and new-born care, hindrance of waterborne diseases, nutrition and service.

ASHAs would conjointly give easy accessibility to essential health providers for the agricultural population (such as ORS, a collection of 10 basic medicine, contraceptives, and a health communication kit). beneath the implementation framework for the NRHM, the theme of ASHA has currently been extended to all or any the eighteen high focus states. Besides, the theme would even be enforced within the social group districts of the opposite states.

National Urban Health Mission:

During the Eleventh set up, a National Urban Health Mission (NUHM) is planned, that in conjunction with NRHM would produce the national Sana Swasthya Abhiyan. The NUHM can cowl a hundred cities, as well as the four metros and metropolis, within the 1st section. Of the 429 cities known for the five-year-mission, that aims at rising the health of the urban poor and alternative deprived sections, facilitating access to the health system, the remaining 329 are going to be lined within the second section. this can profit twenty-two large integer folks, with the main focus on a five-crore slum population.

National Vector Borne Disease Control Programme:

The National Vector Borne malady management Programme (NVBDCP) was initiated throughout the Tenth set up with the convergence of on-going programmes for hindrance and management of vector-borne diseases like protozoal infection, filariasis, kala-azar, Japanese encephalitis (JE), dengue and chikungunya. Most of those diseases are epidemic-prone and have seasonal fluctuations.

Malaria presently regarding a hundred districts are known as extremely protozoal infection endemic wherever centred interventions are being undertaken.

Japanese Encephalitis:

After the incidence of JE epidemic in several states in 1977-78, the govt. reached associate agreement with the govt. of Japan for the manufacture of JE vaccines. This immunogen is being factory-made at CRI, Kasauli.

Dengue and Chikungunya:

Dengue is prevailing in several elements of Asian country however the irruption of the malady is reportable principally in urban areas, however, within the recent past, dengue fever is reportable from rural areas likewise. throughout 2006, chikungunya fever had re-emerged within the country in epidemic proportions once a quiescence of regarding 3 decades. the govt. has taken varied steps to tackle dengue fever and chikungunya that embrace the implementation of strategic action arrange for hindrance and management of chikungunya by the state governments

AIDS Control:

AIDS has emerged as a daunting malady on a worldwide level, and Asian country features an aggressive rate of AIDS patients. AIDS was 1st detected in the Asian country in 1986. out there police work information clearly indicates that HIV, that was at first reportable principally among business sex employees in city and urban centre and among injecting drug users within the north-eastern state of the state, has unfolded speedily and is currently prevailing in the majority elements of the country.

Controlling Tuberculosis;

India accounts for a nearly simple fraction of world infectious disease cases, says the Eleventh set up document. around, 2 persons die from TB in Asian country every 3 minutes, i.e., over a thousand folks daily. The unfold of HIV/AIDS complicates the issue; TB cases and death are probably to extend because of HIV/AIDS.

The National infectious disease management Programme (NTCP) was launched in 1962 with the target of police work and activity the TB-affected. For over twenty years since it absolutely was launched, NTCP couldn't come through a lot of in rising the TB scenario within the country, a number of the explanations being- poor-placed priorities, non-availability of uninterrupted drug offer, and multiplicity of treatment regimes.

Ignorance on the part of patients concerning the character and treatment of the malady additionally side to the matter. Most patients stop the treatment before the specified time (the treatment completion rate was solely forty-one per cent in 1991) and their condition gets a lot of difficult. Neglect of malady and premature stoppage of treatment results in the growth of drug-resistant TB within the patients

State of Chhattisgarh: Challenges:

Though Chhattisgarh has progressed a lot in the field of health, it still has a long way to go. Communicable diseases such as diarrhoea, malaria, leprosy, and tuberculosis still present a major health problem in the State. Measles still contribute to child mortality in the state. Tribal communities in India, in common, and of Chhattisgarh state in specific, are exceedingly exposed to different hereditary maladies, dietary insufficiencies, and unfortunate social honours such as consanguineous relational unions. marriages. The recurrence of sickle cell hemoglobinopathy (3.2- 22.5%), Beta thalassemia characteristic (0.5-8.5%), and G6 PD dearth (6-16%) is exceptionally large among the tribes of Chhattisgarh. Malaria has been a major health problem in the state. Due to shifted environmental conditions and topography, the bulk of the burden of malaria is borne by the tribal of the forested region within the north and the south. In 2006, Chhattisgarh contributed 7% of the total malaria cases and 11% of the *P. falciparum* cases reported in the country (NVBDCP, 2007). As per the available data on malaria, the central part of the state (represented by eight districts having 61.09% of the state's population) reports the low-to-moderate incidence of malaria (8.16%) and *P. falciparum* (4.58%). The rest of the malaria burden is collectively contributed by the five districts in the north and three districts in the south. The issue is encourage compounded by the reports of chloroquine resistance in *P. falciparum* from Surguja, Kanker, and Bastar locale.

Source: [National Family Health Survey \(NFHS-2 and NFHS-3\)](#)

Status of Communicable disease i.e.(Tuberculosis) in the state of Chhattisgarh:

The median weights and BMI of people with tuberculosis were 42.4 kg and 16.2 kg/m² in men and 36.4 kg and 15.8 kg/m² in women, respectively among 1517 adult patients seen over 2010 to 2013. More women (260 of 481, 54 %) than men (485 of 1036, 46.8%) had severe undernutrition (BMI < 16 kg/m² (P=0.008). While people from several social categories such as tribal, Schedule Castes and OBCs had low median weights and BMI, no significant difference was observed between their anthropometric statuses. Median BMIs were not different between tribal and non-tribal.

Not surprisingly, sputum positive tuberculosis was high as a proportion of all pulmonary tuberculosis in all groups of patients (894 of 1272; 70.2%), suggesting delayed presentation. Further, 443 of 685 tribals with pulmonary tuberculosis were sputum positive compared to 451 of 587 in the non-tribals (P<0.001), (Table I). There were 95 deaths (4.8%) in four years. Seventy-two per cent of these deaths happened in those with BMI less than 16.

Chhattisgarh does not have an adequate number of key frontline health care providers and specialists, especially for maternal and child health services. Chhattisgarh has pioneered an innovative approach in health care delivery to rural masses. The well-known Mitani scheme has been lauded all over the country and has been replicated. Other schemes such as "Rural Medical Assistant and Phulwari" have also been launched. A detailed review of the health scenario will help in highlighting the priority areas for further actions.

Source: [Revised National Tuberculosis Control Program Govt. of India \(2013\)](#)

Conclusion:

As a predominant share of the population of Chhattisgarh being tribal, and since it absolutely was at first a region of a giant state Madhya Pradesh, it absolutely was bereft of the gains of the development method. The human resources gap, poor physical infrastructure, and alternative supply-side gaps compound the matter. there's poor community participation publicly health interventions dispensed by the govt. and therefore the reasons that are still to be unearthed. Chhattisgarh lacks economic and social infrastructure that if provided may boost the economic process. It lags behind the country as a full-on many socioeconomic and health indicators reflective the important want for rising access to public health services. there's conjointly want for more analysis in these areas to produce the baseline information and conjointly to spot the causative factors/determinants that are to blame for the present public health situation so the corrective steps may be taken by the governmental and nongovernmental agencies consequently.

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