



Right to Health and a Healthy Environment in India: The Situation of Health and Environment and the Core State Obligations towards it under Economic, Social and Cultural Rights

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ABSTRACT

Health is an essential element of concern for every human being. Being healthy is crucial for having a good life as a person's interaction with society, the ability to work, and civil involvement depend on it. It is a massive topic of importance, and hence it has been given the legal entitlement through the right to health, which is present in several international and domestic legal frameworks. A primary reason for the deterioration of people's health is environmental factors and the conditions of the environment in which they live in. Human rights and environmental protection have often surfaced as essential topics on the human rights bodies' agenda. The United Nations, and human rights treaty bodies, recognizes the inherent connection between the environment and the fulfillment of a range of human rights, specifically the Economic, Social, and Cultural Rights (ESCR). When considering the impact of environmental harm, a frequently addressed human right by the ESCR Committee is the right to the highest attainable standard of physical and mental health. This paper analyses the link between the right to health and the right to a healthy environment in India. India's healthcare infrastructure could be more robust, and health issues are massive and deserve more importance. Moreover, environmental conditions harm health due to multiple contributors, like pollution, rapid urbanization, deforestation, and industrialization. The effect of these contributors on public health is further aggravated due to widespread poverty and severe lack of public infrastructures, such as access to clean drinking water, sanitation, lack of healthcare, and emerging industrial pollution problems. The International Covenant on Economic, Social, and Cultural Rights (ICESCR) includes both the right to health and a healthy environment in Article 12. As a signatory to this covenant, India is bound by the obligations to respect, protect, and fulfil the rights to health and a healthy environment for its citizens. Focusing on the situation in India, the main question that this paper aims to answer is that considering that the environmental condition in India significantly contributes to poor health conditions for the people living in India, the question arises whether the state complies with its obligations. If not, where does it lack, and what can be done about it?

Keywords: Human rights; Environment; Health; ESCR; United Nations; India

INTRODUCTION

Health is an essential element and a matter of concern for every

human being. Being healthy is crucial for having a good life as a person's interaction with society, the ability to work, and civil involvement depends on it. It is a massive topic of importance,

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and hence it has been given the legal entitlement through the right to health, which is present in several legal frameworks, internationally, and in domestic laws. However, numerous factors such as weak immunity, genetic conditions, and various anatomical and physiological issues generally affect people's health. One primary reason for the deterioration of people's health is environmental factors and the condition of the environment in which they live.

The environment concerns health in numerous ways. The environmental conditions have proven to have significant impact human health, either directly by exposing people to hazardous waste/pollutants, or indirectly, by disrupting life-sustaining ecosystems. The World Health Organization (WHO) reported that "In 2012, an estimated 12.6 million people died as a result of living or working in an unhealthy environment-nearly 1 in 4 of total global deaths. Environmental risk factors, such as air, water and soil pollution, chemical exposures, climate change, and ultraviolet radiation, contribute to more than 100 diseases and injuries... Environmental risks take their greatest toll on young children and older people, the report finds, with children under 5 and adults aged 50 to 75 years most impacted. Yearly, the deaths of 1.7 million children under 5 and 4.9 million adults aged 50 to 75 could be prevented through better environmental management. Lower respiratory infections and diarrhoeal diseases mostly impact children under 5, while older people are most impacted by NCDs"[1]. Human rights and environmental protection have often surfaced as an essential topic on the human rights bodies' agenda. The United Nations human rights treaty bodies recognize the inherent connection amongst the environment and the fulfillment of a range of human rights, such as the right to life, health, food, water, and housing. Specifically, the Economic, Social and Cultural rights (ESCR) include the human right to work, the right to an adequate standard of living, food, housing, clothing, the right to health, the right to social security, and education. Although the right to a healthy environment is considered a third generation right or a Solidarity Right, and viewed under the broad concept of group and collective rights, it also affects the ESCR of individuals [2].

A frequently addressed human right by the ESCR Committee, when considering the impact of environmental harm, is the right to the highest attainable standard of physical and mental health and this is generally done through concluding observations of the state parties [3,4]. Additionally, documents and reports have been published concerning the effects of environmental deterioration, for example, the report 'Analytical study on the relationship between human rights and the environment (A/HRC/19/34)' of the UN High Commissioner for Human Rights, focuses on how the environment plays a significant role in the full enjoyment and attainment of all human rights. In the report of United Nations, 'Mapping Human Rights Obligations Relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment (2013),' written by legal experts working pro bono under the supervision of John H. Knox, special rapporteur on Human Rights and environment, it was mentioned that environmental degradation and damage threaten the enjoyment of several human rights protected under the International Covenant on Economic, Social and Cultural Rights (ICESCR) [5,6].

This paper analyzes the link between the right to health and the right to a healthy environment in the context of India. In-

dia's healthcare infrastructure is not robust, and health issues are massive and deserve more importance. Moreover, the environmental conditions are detrimental to health due to the existence of multiple contributors like pollution, rapid urbanization, deforestation, and industrialization. The effect of these contributors on public health is further aggravated due to widespread poverty and severe lack of public infrastructures, such as access to clean drinking water, sanitation, lack of healthcare and emerging industrial pollution problems. ICESCR includes both the aspects of right to health and the right to a healthy environment in its Article 12. India, being a signatory to this covenant, is bound by the obligations to respect, protect, and fulfill the rights to health and a healthy environment for its citizens [7]. Considering that the environmental condition in India is a major contributor to poor health conditions for the people living in India, the question arises whether the state complies with its obligations? If not, where does it lack and what can be done about it? These are the main questions that this paper aims to answer.

Section 2 of the paper is about the the right to health and right to a healthy environment, where both the rights will be discussed, presenting the link between both the rights. This section also includes the existing legal framework focusing on ESCR, the interpretation of general comment 14 and non-binding international law agreements such as the Stockholm declaration, Rio conference and sustainable development goals. Section 3 of the paper is regarding the current situation in India concerning health and environment, showing the problems that exist, i.e., how the unhealthy aspects of the environment harms people's health. This section includes the available data which shows the grave conditions in India concerning health and environmental conditions, with the aim to reveal the magnitude of the problem. Also the domestic laws are discussed in this section to see where India stands on its legal framework concerning right to health and healthy environment, with the objective of showing the gaps that exist between the legislation and implementation. Section 4 is about the the state's obligations that should be followed in order to protect these rights, and how the state fails to adhere to them for which the citizen's rights to health and a healthy environment gets violated. Section 5 is the conclusion and recommendations, which is the summary of the paper, followed by recommendations that can be seen as possible solutions to the existing problems.

THE RIGHT TO HEALTH AND THE RIGHT TO A HEALTHY ENVIRONMENT

Right to Health

Article 12 of the ICESCR is regarding health, mentions

- "The States Parties to the present Covenant recognize the right of everyone to the enjoyment of the highest attainable standard of physical and mental health.
- The steps to be taken by the States Parties to the present Covenant to achieve the full realization of this right shall include those necessary for:
 - a). The provision for the reduction of the stillbirth-rate and of infant mortality and for the healthy development of the child;

- b). The improvement of all aspects of environmental and industrial hygiene;
- c). The prevention, treatment and control of epidemic, endemic, occupational and other diseases;
- d). The creation of conditions, which would assure to all medical service and medical attention in the event of sickness [8]."

The right to health aims at the highest attainable standard of health, which entails a set of legal obligations on states to ensure appropriate conditions for all people's enjoyment of health without discrimination. It is also dependent upon the realization of other human rights concerning right to food, housing, work, education, and a healthy environment. The right to health calls on state parties to improve all aspects of environmental and industrial hygiene and the prevention, treatment, and control of epidemic, endemic, occupational, and other diseases [9].

Right to Healthy Environment

As mentioned in ICESCR Article 12(2)(b), a healthy environment is considered necessary for effectuating other human rights, be it right to life, food, health, or adequate living standard. It notes that States must realize the right to health through, among other steps, the improvement of all aspects of environmental hygiene, which comprises of precautionary measures regarding occupational accidents and diseases. The State must ensure adequate access to clean water, access to food and proper nutrition, adequate housing, and hygienic sanitation condition. Measures should be taken to prevent and reduce the population's exposure to harmful substances, like radiation and harmful chemicals or other harmful environmental conditions, which harm human health. Moreover, industrial hygiene refers to healthy practices, ensuring the minimization of health hazards in the working environment. The article further discourages alcohol abuse and the use of tobacco, drugs, and other harmful substances [10].

Special rapporteur John H. Knox has stated that environmental degradation can and does adversely affect the enjoyment of a broad range of human rights, and there is a direct link between the right to health and the right to a healthy environment [11]. This statement can be further illustrated by understanding the aspects of the environment, and how it affects health.

Aspects of the Environment Related to Right to Health

A healthy environment is vital to human life. This right is relevant as it allows a person to grow physically, mentally, and intellectually healthy in the natural and existing environment.

The World Health Organization (WHO) defines the environment, as it relates to health, as "all the physical, chemical, and biological factors to a person, and all the related behaviours". "Environmental health consists of preventing or controlling disease, injury, and disability related to people's interactions and environment [12,13]."

Environmental health includes good quality of air, water, land, and the overall surroundings. The countries with high levels of pollution are the countries that witness a much higher health

risk, diseases, and difficulties in livelihood [14].

A clean environment is essential for human health and well-being. Simultaneously, the local environment can be a source of stressors, such as air pollution, noise, and hazardous chemicals that negatively affect health. The most prominent example of environmental degradation is climate change, affecting many people's lives across the globe. Climate change, through heatwaves, droughts, floods, loss of biodiversity, land degradation adversely affects health by threatening the delivery of ecosystem services, such as access to fresh water and affecting the food production.

These problems associated with the environment, which directly affect the health of the population in general, further affects their right to health. More factors such as population growth and setting up of industries also play a major role in all of it.

In terms of rights, it can be seen that to enjoy the right to health, there needs to be an improvement in the provision of the fundamental determinants of health, such as safe water and healthy environmental conditions. Human rights and environmental protection have often surfaced together as essential topics on the human rights bodies' agenda, and in ICESCR, the importance of maintaining a clean environment and related environmental factors for the betterment of health status is specified [15].

Current International Laws Concerning Health and Environment

Article 12 of ICESCR stresses on the enjoyment of highest attainable standard of physical and mental health for everyone, and focuses on the steps that should be taken by states to work in their best capacity to develop good standards of health, by working towards providing proper treatments, and medical services and controlling diseases and endemics [16]. Special attention has been given to reduction of the stillbirth-rate and of infant mortality in ICESCR Article 12 2(a). Additionally, Article 10(3) of the Covenant mentions that special measure should be taken by the state to protect children and young persons, even in the context of employment and work related affairs which is dangerous to life and health and hampers normal development of children. Any such practice should be punishable by law [17].

The CESCR General Comment 14 (The Right to the Highest Attainable Standard of Health (Art. 12)) focuses on the requirement of environmental hygiene that entitles individuals to be free from exposure to harmful substances such as radiation and harmful chemicals or other detrimental environmental conditions that directly or indirectly impact upon human health. The ESCR Committee expressed the direct connection between industrial pollution and the environment's degradation, resulting in adverse health effects and has stated it is the state's responsibility to enforce or implement laws to prevent water, air, and soil pollution by industrialization, and states should take action to protect the environment [18].

The growing importance of the topic has been incorporated in non-legal bindings to set and achieve specified goals. There also have been conferences where the same topics have been brought up, acting as a reinforcement in support of the existing rights.

Non-binding International Law Agreements Regarding Health and Environment

Different human rights movements led to applying a rights-based approach to confront global environmental devastation [19]. In 1972, in the Stockholm Conference took place, where the right to a healthy environment was explicitly recognized. Then, in 1992, the United Nations Conference on Environment and Development in Rio de Janeiro reemphasized the link between human rights and protecting the environment [20,21]. Principle 1 of the Rio Declaration reads as follows:

"Human beings are at the centre of sustainable development concerns. They are entitled to a healthy and productive life in harmony with nature [22]."

Apart from these declarations, sustainable development goals were introduced, which are legally non-binding, but take ownership and establish national frameworks for the achievement of the set goals. The principles of both declarations were an essential milestone regarding environmental awareness and linking the environment to human rights [23]. Infact, the Stockholm Declaration had a significant impact on the evolution of international environmental laws for the next two decades, where 1100 international legal instruments (binding and non-binding), concerned with the environment, or with provisions relating to the environment were introduced in several countries [24].

Inspired by the international laws and non-binding international instruments, the aspect and recognition of right to health and a healthy environment became a part of the domestic laws as well in several countries, such as India. The Indian domestic law incorporates certain aspects of environment and health in its constitution, and there are several acts, which were passed by the government in different points in time, concerning the status of health and environment in India.

THE STATUS IN INDIA CONCERNING HEALTH AND ENVIRONMENT

The situation regarding health and environment is generally regarded as a matter of grave concern in India. Despite having domestic laws and being a signatory of the ICESCR treaty, the country has failed at several levels concerning standards of health and good environmental quality, which further affects people's rights to health and a healthy environment. In order to understand whether India complies with its obligations, it is important to look at the status of health and environmental issues in India, to reflect how serious the matter is, and how it affects the people residing in India.

SITUATION IN INDIA

Status of Health

The problem related to Indian health depends on 5A's:

Awareness: There is a lack of awareness amongst the Indian population regarding their health and their rights in the field of healthcare

Accessibility: The poor infrastructure of the healthcare sector creates a lack of accessibility

Absence: There is a high rate of absence of hospitals and health-care workers

Affordability: With the existing poverty rate in the country, affordability of adequate health facilities is a big issue in the country

Accountability: The issues mentioned in the above points are massive, and reflects significant lack of accountability from the state's side [25].

India invests 1.15% of its Gross Domestic Product (GDP) in its public healthcare sector, which is not sufficient to aid 1.3 billion people [26]. The insufficiency can be understood better when compared to a country like Germany, a country with 3 million people and comparable GDP, where 11.7% of GDP contribution goes towards healthcare [8,27]. In India, there is a genuine shortage of doctors and healthcare professionals. There is 1 doctor available for 1445 people and only 20 health workers per 10,000 people [28,29]. In addition to this, there is a wide disparity between the public sector and the private sector, with public healthcare sector lagging way behind. Though the public sector offers healthcare at low or no cost, it is perceived as being unreliable. This makes people seek healthcare at private hospitals, which are much more expensive, often pushing them towards poverty. For example, in 2018, 55 million Indians were pushed into poverty due to healthcare expenditures [30].

Moreover, in India's rural and hilly areas, there are significantly fewer hospitals than the national average, and even if there is a hospital, many of them do not have doctors or healthcare workers. Even after 73 years of independence, the country has failed to build the required healthcare infrastructure needed to cater to its population.

Status of Environment

India's environmental performance is one of the worst in the world. As per the global index India is placed 177th in a list of 180 countries ranked on their environmental performance [31]. Pollution is a vital problem in India, be it air, water, ground, or noise. India is the third most polluted country globally, and India has 26 cities out of the world's most polluted 50 cities [32].

India is the third-largest emitter of carbon dioxide due to the high amount of greenhouse gas discharge [33]. The high industrialization rate, growing population, and lack of active measures to improve environmental pollution contribute to environmental degradation.

"It is estimated that around 70% of surface water in India is unfit for consumption. Almost 40 million liters of wastewater enter rivers and other water bodies every day, with only a tiny fraction adequately treated [34]." In 1995, 18 major rivers were declared extremely polluted by the Central Pollution Control Board, and to date, it remains polluted. As a part of water pollution, approximately 19,000 villages in India lack access to clean or drinkable water [35,36].

The list of problems are a reflection of the real situation in India, and it is necessary to understand how the environmental issues have a high adverse effect on health in the Indian context.

EFFECT OF UNHEALTHY ENVIRONMENT

ON HEALTH IN INDIA

Despite the several provisions of the right to health and right to a healthy environment, and India being a ratifier of the ICESCR, the conditions are dreadful.

The first major problem is regarding the mortality rates amongst all ages. Poor environmental conditions in India led to about 2.3 million deaths in 2017. Poor air quality is a major contributor to such deaths. India's toxic air led to the death of 1.24 million people, accounting for 12.5% of total deaths recorded in 2017 [37]. In 2016, 1,10,000 children died in India due to high air pollution, out of which 60,987 deaths were of children under five years of age [38]. Other than the mortalities, the constant exposure to pollution adversely affects their health [39]. Constant exposure to air pollution takes a toll on a person's health and it is generally associated with acute respiratory infections, contributing 68.47% to its morbidity burden as reported on 2019. Lung disease is the most obvious condition resulting from the inhalation of pollutants [40]. In 2018 a study showed that due to air pollution, Indians lose 1.5 years of their life [41].

Water pollution degrades the quality of health by increasing the number of diseases amongst people. When consumed by people, the polluted water exposes them to multiple diseases like diarrhea, typhoid, liver and kidney dysfunctions, and many more diseases and also leads to vector-borne diseases. In 2018, 2,439 people died in India because of water-borne diseases [42].

The waste fills and soil pollution affects health and makes the environment polluted and skin cancer is caused significantly for this reason. Soil pollution also leads to loss of land fertility, and both water pollution and land pollution have adverse effects on food production by contaminating the food. The consumption of contaminated food further affects people's health. Also, immense noise pollution in urban areas leads to deafness in many people, and unfortunately due to the existing healthcare structure and poverty, people are not even able to afford hearing aids [43].

The past few decades in India have witnessed widescale industrialization, which has resulted in disastrous effects on public health and environmental health. Environmental violations are caused majorly by the industries which leads to environmental degradation that further results in human rights violations. One prominent example is that in the first decade of the 21st century, international metal prices rose more than 400%. It sparked a mining boom across India, with massive amounts of forest land diverted towards iron, coal, and bauxite extraction. The mining boom corroded the political system through corruption and cronyism, which had a devastating social and environmental impact. It has adversely impacted wildlife and biodiversity as well as the local village economy which thrives on fertile soil, clean water, and healthy forests to provide wood for fuel, and food. Finally, residents around the mining areas also faced the effects of the inefficient disposal of large amounts of industry-generated waste products. Due to these activities, the air and water quality degraded immensely, where people died after drinking contaminated water.

A group of ecological economists working at the World Bank computed the costs to Indian society in the form of ill health,

lost income, and increased economic vulnerability of specific forms of environmental abuse: Among them air pollution, forest and pasture loss, degradation of croplands, and poor sanitation and water supply. This World Bank report estimated that the cost of environmental degradation in India was about Rs.3.75 trillion (47 billion Euros approximately), equivalent to 5.7% GDP. This is just one example, but there are many such cases.

The industries and factories are set without proper environmental checking measures or even safety for the people exposed to such circumstances, which leads to a high level of environmental degradation. There have been no prominent governmental interventions to stop these activities. One recent incident happened on May 7, 2020, the Visakhapatnam gas leak, where LG Polymers company had been operating without the necessary environment clearances since 1997. The Andhra Pradesh Pollution Control Board (APPCB) had permitted the factory's operation without the company obtaining the necessary environmental clearance certificate. 12 people lost their lives in this incident, and people need to be monitored from then on because there might be a higher risk of getting affected by lung cancer [44].

The problems listed in the above sections brings the question that with the existing issues related to health and the environment, what is the state doing to overcome the problem? For that, the Indian laws and acts need to be looked at, to understand the legal scenario of rights related to health and a healthy environment.

DOMESTIC LAWS RELATED TO HEALTH AND ENVIRONMENT IN INDIA

Though the right to health is not an absolute fundamental right, it is found in various articles in the Indian constitution. As per the Indian Constitution, Article 38 imposes responsibility on the State to secure a social order to promote the people's welfare, which cannot be achieved without good public health; Article 39(e) is related to workers, to protect their health and imposes duty on State for public assistance. Article 42 states that it is a primary responsibility of the State to protect the infant and mother's health by maternity benefit and spells out the duty of the State to raise the level of nutrition and the standard of living of its people as the primary responsibility in Article 47.

Moreover, the Indian constitution also incorporates the right to a healthy environment. Article 21 of the Indian Constitution states 'No person shall be deprived of his life or personal liberty except according to procedures established by law.' The Supreme Court of India has interpreted this right to life and personal liberty to include the right to a clean environment [45]. In 1976, Indian Constitution's 42nd amendment took place where Article 48A was introduced, which aims to protect and improve the environment, to safeguard of forests and wildlife. It was seen as a proactive measure by the Indian government. Additionally, the fundamental duties of the State and citizens was extended through Article 51 A(g), to safeguard country's forests and wildlife. India also adopted several acts introduced during the British rule in India, e.g., Shore Nuisance Bombay and Kolkata Act 1857, Bengal Smoke Nuisance Act 1905, and Bombay Smoke Nuisance Act of 1912, into its constitution for the protection of the environment [46].

In addition to these, there are several acts in India which concern the environment, such as the Water (Prevention and Control of Pollution) Act 1974, the Air (Prevention and Control of Pollution) Act 1981, the Environment Protection Act 1986, the Hazardous Waste Management Regulations 1989 and the National Green Tribunal Act 2010. Of particular interest is the Environment Protection Act 1986 which was introduced after the Bhopal gas Tragedy in 1984, which had resulted in the death of around 3,000 people and adversely affected 7,00,000 people's health [47]. The adoption of these acts has allowed India to extend the right to a healthy environment, including the right to enjoy pollution-free water and air, protection and preservation of the environment, sanitation, and surroundings free from pollution.

Although Indian legislations include the right to health and the right to a healthy environment, the data which is available regarding the environmental degradation and its effect on health (refer: Effect of unhealthy environment on health in India) clearly shows that there is a gap between the existing legislation and their implementation. The Indian state needs to ensure that the right to health and the right to a health environment stay intact which is reflected through a good quality of environment and better health conditions.

Apart from the existing national legislations; India being a ratifier to ICESCR is bound by certain obligations. The next section looks into the obligations of the state, and analyses its adherence to its obligations.

THE STATE'S OBLIGATIONS

State's Obligation to Protect ESCR

The environment is defined as all the physical, chemical, and biological factors external to a person, and all the related behaviours. Ill health is often a result of an interaction between the human and the environment. Since many of these factors are human-made, protecting the environment is not only in man's best interest but also a good investment from the health aspect [48]. Human rights and environmental protection are interdependent. A healthy environment is necessary for full enjoyment of human rights, as human rights depend on it. There are three essential obligations-to respect, protect, and fulfill.

As a ratifier of the ICESCR, India has immediate obligations that include taking steps towards the full realization of rights, to ensure a minimum of essential levels of each of the rights and to guarantee the exercise of rights without any form of discrimination [49].

The obligation to respect includes that the state respects the human rights to health and a healthy environment. It should abstain from violating human rights by causing or allowing environmental harm and providing proper measures to safeguard the population's health.

The obligation to protect the state and its citizens from harmful interference by the industries, factories, and private actors; by intervening wherever necessary, by implementing safety measures and taking steps for health by taking necessary steps to safeguard people from harmful environmental impacts.

Obligation to fulfill includes the state to take due diligence to

prevent harm to the health and healthy environment and prevent all possible harms. It also includes providing remedies for the harms caused to create the infrastructure to serve people's health. It is a requirement that the state fully complies with its obligations regarding human rights related to the health and healthy environment [50].

Other than that, there are procedural and substantive obligations, mainly articulated by John H. Knox. The procedural obligations include, to effectively assess the impacts of environmental actions that may interfere with the enjoyment of human rights; to provide for effective participation in environmental decision-making of potentially affected individuals and groups; to provide effective remedies to those whose rights are affected by environmental harm; and to protect the rights to speak out against activities that may cause environmental harm [51,52]. The substantive obligations include the state to refrain from directly engaging in activities that cause environmental harm that interferes with the enjoyment of rights; to take measures to safeguard the enjoyment of economic, social, and cultural rights against environmental harm and to ensure environmental sustainability [53].

Additionally, there is an obligation of the state to provide the data to the public, to account for the problems that exist in the country, and be answerable for the situation. A States' obligation is to support the rights including through the allocation of maximum available resources to realize this goal progressively. The obligations are reviewed through various international human rights mechanisms, such as the Universal Periodic Review of the Committee Economic, Social and Cultural Rights, and to work towards the suggestions and recommendations provided by the committee [54].

The mentioned problems in Section 3 of the paper, and the obligations stated above show that the obligations are not fulfilled by the State, and there is failure on the part of the State in the fulfilment of these obligations.

Failure of India Regarding its Obligations

India has well lined up laws and policies regarding health as well as the environment. However, the available data and statistics highlight the poor condition of health due to an unhealthy environment.

The Human Rights Council has recognized that "environmental damage is felt most acutely by those segments of the population already in vulnerable situations" This stands true in the case of India, where 21.2% (as per census 2011) of the population lives below the poverty line (defined as income of \$ 1.90 per day) [55]. The people from this section are mostly involved in jobs in factories, construction sites and cannot afford a good livelihood, which results in their exposure to industrial pollutants and poor sanitation further affecting their health. It majorly affects the children and pregnant women. For example, inhaling harmful toxic elements or drinking polluted water during pregnancy affects both the mother and child. In India the maternal mortality rate is 145 per 1,00,000 (2017) and infant mortality rate is 28 per 1000 live births (2019) [56,57]. Additionally, India is also home to 46.6 million stunted children [58]. Inadequate clean water, sanitation, and hygiene also contributes to the high neonatal mortality rate, which was last reported to

be 24 deaths per 1000 live births [59]. The state's failure to its obligations here is that there is no form of development initiative for the people who belong to the lower strata of the society and live in miserable conditions. The measures taken by the state have been invisible, especially for the poor people who are deprived of their right to a healthy environment. The state gives much focus on economic development with measures like opening new industries and granting contracts to various companies to set up their factories to generate profits in India but the people who work in these factories and industries are not ensured a healthy a safe working environment resulting in them getting exposed to toxins and harmful waste, which affects their health. Here the state has failed to take strict measures to improve the situation.

It has been suggested that the high population density is the primary cause of India's environmental degradation and the unavailability of proper healthcare infrastructure [60]. However, the government's failure can be seen where it has never taken any strict measures to eradicate this problem of population explosion. Despite having schemes, there has not been a proper implementation of the education programs to control the population.

Urban immigration is also a common phenomenon in India, where people move to bigger cities for better opportunities and livelihood. It makes the population explosion in certain cities more than the other creating an imbalanced population density, where the high population concentrated zones get highly polluted due to the difference in the population density and the available facilities. It is the state's failure that there has been an uneven distribution of facilities and opportunities in different parts in India, which leads people to move from their place of origin to urban areas in search of better opportunities and improved livelihood.

There is also a large gap between the generation and treatment of domestic wastewater in India. India does not have sufficient treatment capacity for it. Approximately 62,000 million litres of sewage is generated in urban areas with only 18,883 million litres getting treated [61,62]. The wastewater generated in these areas naturally percolates in the soil or evaporates. The uncollected wastes collect in the areas and cause unhygienic conditions and release pollutants that leach to the surface and groundwater [63]. This is further consumed by the people, which affects their health deeply.

According to a World Health Organization, "Out of India's 3,119 towns and cities, just 209 had partial sewage treatment facilities, and only 8 have full wastewater treatment facilities (1992). Over 100 Indian cities dump untreated sewage directly into the river Ganga [64]." The state has failed to adhere to its obligation, by not investing sufficiently to solve this issue, by not opening sewage treatment facilities, hence India's waste problem also points to a striking failure of governance.

India has large number of consumers of traditional fuel, especially in rural areas where the culture of using wood and burner gas stove is very high. Smokes from factories and vehicle emissions also have a lot to contribute to the air pollution, and the strict measures for pollution check are missing from the state's side. All these factors lead to the generation of greenhouse gases, release of smoke, soot and particulate matters further

contributing to climate change [65]. These factors affect a massive number of people's health. The state has failed to get rid of the traditional practices and uplift it to advanced methods that will work out as energy conservation and save people from direct harm. Essentially, the state should have taken measures to eliminate the traditional practices and shift to modern and sustainable fuel sources.

The country's existing corruption also encourages the culture of establishment of factories without proper protection measures, such as the generation of noise pollution (affecting people's hearing abilities), disposal of waste and deforestation, all finally affecting the health, and not taking measures to take care of these issues shows the neglecting attitude from the side of the government. Moreover, the lack of availability of data from the state's side demonstrates the state's failure and accounts for human rights violation by the state.

DISCUSSION

India's report to the ICESCR committee acknowledges that a healthy environment is essential for a healthy life, and the Indian constitution directs the State to improve public health and endeavor to protect and improve the environment. The report further mentions that the Indian courts have recognized that a hygienic environment is an essential facet of the right to a healthy life. It is impossible to live with human dignity without a humane and healthy environment, and the state should be active in preventing environmental pollution affecting the quality of life [66]. But the report did not include details about the environmental issues in India that affects health of the people. In response to the report, in the concluding observation by the ICESCR committee, several suggestions were provided related to health but nothing about the right to healthy environment. But the committee has requested India to provide the data in general terms [67]. The issue of unavailability of data shows the lack of transparency from the state's side, which restricts the people from getting the clear picture of the real scenario in the country. The above mentioned points are the reflection of how the state fails to adhere to its obligations to health as per Art 12 of ICESCR [68,69].

CONCLUSION AND RECOMMENDATIONS

A healthy environment is essential for a healthy population. A requirement and integrated strategy to health and environment are required to protect both the environment and public health. Funding in environmental health is unquestionably a good investment from the state's side. In India, though there has been development in reducing the public's mortality rate and general health, the progress has been rugged. According to data collection and environment assessment studies of World Bank experts, between 1995 through 2010, "India has made some of the fastest progress in addressing its environmental and improving its environmental quality in the world." However, a joint UNDP and World Bank report states "Still, India has a long way to go to reach environmental quality, similar to those enjoyed in developed economies. Pollution remains a noteworthy challenge for India."

India has been a ratifier of ICESCR since 1979 and has been part of forums like the Rio +20 United Nations Conference on Sus-

tainable Development and Stockholm conference. Besides the environment, these include socio-economic factors, predominating customs, traditions, policies, and the access and use of health services by the people affected. People's right to health and to a healthy environment gets violated when the conditions are inappropriate for living, and hampers the physical or mental state of a person. The inaccessibility to a clean environment to live in, clean water to use and drink, breathing polluted air and getting exposed to the toxic wastes, all cumulatively account for the human rights violations. Furthermore, the lack of healthcare infrastructure and proper medical facilities further augments the problems, ridiculing the human rights. It is necessary that some strict measures are taken by the State towards the access to and proper implementation of people's right to health and right to a healthy environment. For this, the state needs to fulfill its obligations.

As part of its obligation, India should recognize the right to health and right to a healthy environment as a part of its fundamental rights. It might increase the recognition of the existing problems where health is affected by low environmental quality, considering it is a living instrument.

Secondly, the state should impart knowledge amongst the different state parties and citizens about how people's health is affected due to the poor condition of the environment to generate more awareness. There also needs to be transparency and accountability from the government's side about the environmental and health degradation. There is an issue of unavailability and inaccessibility of data from the government's side, which does not provide a clear picture of health deterioration in general, primarily due to the environment. There needs to be integration and linking of environment and health. The general tendency is to see these as two separate units, to avoid accountability. However, combining these two units where necessary will help to get knowledge about this serious problem. This will let the policymakers and advisors to design a solution for this issue. For Example, as mentioned in Section 4.2, in the last concluding observations by the ESCR committee (2008), issues and obligations related to health was mentioned, but nothing about the environment. This is also because nothing was mentioned in the UPR submitted by the state; hence, its magnitude is unknown. Nevertheless, if there is interference from the committee regarding this issue, the state might take this problem more seriously. To address health and the environment's issues requires a comprehensive and inter-sectorial approach to prepare and implement a national environment and health action plan.

Thirdly, Health has a critical role in promoting, mobilizing and supporting other sectors to contribute to the health and the environment. For this, the health professionals' leadership skills must be built in negotiating with other relevant sectors to play their role in protecting the environment and health. The health sector should be strengthened such that it could take the lead in carrying out health impact assessments and advise other sectors in developing policies that protect human health.

Finally, and most importantly, India needs to take steps to strengthen its infrastructure. It should invest on strengthening and growing the physical infrastructure and create more hospitals, water sewage treatment plants, install air purifiers in public

places, shift to electric vehicles, replace traditional fuel sources with sustainable alternatives, shift to more modern farming techniques and employ more doctors and healthcare workers to serve the people.

India, as a country moving on the path to become a developed nation, needs ensure that this development does not come at the cost of severe environmental degradation and further deterioration of public health situation.

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CONFLICT OF INTEREST

The authors declare no conflict of interest.

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