# The Problem of the Healthcare System and Resources in the Perspective of Fast-Growing Urbanization

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#### ABSTRACT

With increased worldwide urbanisation, the need of understanding links between the fast-growing urban environment and health care system is becoming more acknowledged. The science supporting the intricacy of links, however, remains underdeveloped. This study analyzes many health and wellness issues that arise in urban surroundings, their dynamic, perpetual evolution, and definitions of both their geographical and socioeconomic aspects.

# I. INTRODUCTION

Urbanization is growing globally as a result of the advancement of industry (1). Urbanization is an inherent tendency and important necessity to advance the advancement of human civilization (2) which enhances economic growth by raising demand. The United Nations estimates that more than 55% of the world's population will reside in cities by the year 2050, with 96% of this urban expansion taking place in developing nations. The term "urbanisation" refers to the whole process of qualitative transition from a rural to an urban lifestyle, which is often seen to have significant effects on people's living standards and health. Nonetheless, it is unclear how urbanisation would affect inhabitants' health (3). On the one hand, more access to healthcare services and greater healthcare resources are made possible by urbanization's advancement, which may help inhabitants' overall health. On the other side, urbanisation is linked to unhealthy eating habits, sedentary lifestyles, and other environmental issues that are bad for people's health, such air pollution. Urbanization might thus have two opposing effects on health status, making it unknown how it would affect health care costs. Health care spending, which is a necessary component of everyday expenses for residents and one of the key determinants of how well inhabitants are living, includes payments for prescription drugs as well as for medical and health services (4). An overburdened medical system will prevent inhabitants from spending on other things, which might even impede a nation's economic growth. Given the two possible antagonistic impacts, a more thorough examination of how urbanisation affects health care system is needed.

Cities are understood to provide a variety of purposes in our society. Cities are the driving force behind the technical advancement and economic expansion of many countries, but they are also a breeding ground for poverty, inequality, environmental dangers, and the spread of contagious diseases [5]. Cities become more populated, which causes numerous issues, especially for the poor. Nonetheless, the issues that the poor experience affect other city people as well. This spillover effect grows and becomes a global character as more and more people throughout the globe are impacted as urbanisation continues to be a trend. Poor nutrition, pollution, and infectious illnesses are a few of the primary health issues brought on by urbanisation. Although placing a pressure on public health services and resources, they have a direct influence on people's quality of life [6].

The nutritional health of underprivileged communities is significantly harmed by urbanisation [7]. The urban poor lack nutrient-rich meals due to their limited financial means and the greater cost of food in cities, which results in disease that impairs nutrition absorption and causes loss of desire. Environmental contamination also plays a role in undernutrition; for example, street food is often cooked in unclean settings, which may cause outbreaks of food-borne diseases such botulism, salmonellosis, and shigellosis [8]. Overeating and obesity, two issues with expanding worldwide public health, are also problems for urban people. Chronic illnesses (including malignancies, diabetes, and heart disorders) are exacerbated by obesity and other lifestyle factors [9]. International organisations have highlighted the recent development of rising weight among the middle class and poor as well, despite the fact that obesity is more prevalent among the rich.

Another significant factor in poor health in urban settings is pollution. The impoverished are more likely to live in crowded areas, close to open sewers, and around standing water, all of which increase their exposure to harmful waste. Helminthiasis and other intestinal parasites may be spread due to poor sanitation. Both wealthy and poor people have immediate health issues, such as respiratory ailments, as a result of pollution (such as CO2

emission) from such crowded metropolitan areas, which also contributes to localised and worldwide climate change.

An infectious illness outbreak is a third important problem for urban people, one that is exacerbated by both poor nutrition and pollution. Animals and insects, in addition to human-to-human transmission, are effective disease vectors in cities and do not distinguish between the wealthy and the poor. Infectious illnesses such the human immunodeficiency virus (HIV), tuberculosis (TB), malaria, cholera, dengue, and others are common in urban areas and have a negative influence on residents.

Many approaches to solving these issues have been investigated by national and international scholars and policy makers, yet the issues still exist. For instance, studies for megacity solutions have been underway since the early 1990s. Even though these studies found that tackling pollution, unstable energy, and broken infrastructure should be top priorities, they failed to address concerns with air pollution, water quality in cities, traffic, disaster management, and infrastructure implementation [10].

Every city in the globe still has environmental difficulties, many of which go beyond the more common ones that are being thought about. Traffic congestion is one aspect of inner city transportation that has a negative influence on health. According to recent statistics from India, around 10 people pass away on Mumbai's trains each day. Another city that has had a striking rise in traffic accidents is Vietnam. The nation's infrastructure has not been able to keep up with the rise in both the number of vehicles and people using the roads. Vietnam is said to have a million people living there and more than 18 million motorcycles on its highways. A determined approach is required to decrease accidents [11].

Inadequate physical space is another factor in bad health. The use of the word "responsible" in the title of this article is not intended to be a statement of fact, but rather a statement of the responsible party's position. Despite the fact that urbanisation has become an unstoppable trend, some people contend that in order to alleviate urban issues, we must address their underlying causes, such as improving the socioeconomic circumstances of the urban poor. Populations will continue to move to metropolitan regions unless rural circumstances are rectified. Considering the difficulties rural development presents, it seems doubtful that the fundamental problem can be solved very soon. Governments and development organisations should thus focus on coping with the difficulties of urbanisation while attempting to slow it down.

A youth policy that incorporates concerns of employment, community involvement, environmental issues, mobility/migration, livelihood, urban space, and social transition to enhance the lot of the young is one example of a policy or practise that should be taken into consideration; the introduction of programs/services to cover the urban poor, for instance by establishing clinics in slums to take care of health needs; efforts to lessen the growing disparity in poverty levels among urban dwellers; taxes on the use of vehicles to reduce vehicle use or to encourage vehicles that use less fuel; and the promotion of bicycle use, walking, and other forms of human transportation.

## II. REVIEW OF LITERATURE

Due to lower levels of education and less frequent use of medical services, Chen et al. (12) found that rural children had poorer self-reported mental health and more symptoms of anxiety and sadness than urban children.

From interviews with senior citizens in Taipei, Lee et al. (13) came to the conclusion that a less urbanised lifestyle had a substantial correlation with an impairment. Nonetheless, the majority of research claimed that urbanisation has a negative impact on people's health that outweighs its positive impacts and has increased the cost of medical and health care.

Yu et al. (14) discovered that among Chinese adults, urbanisation was a risk factor for hyperuricemia (HUA). According to Miao and Wu (15), despite the fact that wealth rises as urbanisation progresses in China, the health advantages of high income are counterbalanced by an increase in high-fat diet and a decline in physical activity. With the rise of urbanisation in China, the healthcare needs of people have been growing.

According to Lin et al. (16), more people in Taiwan now see access to health care as a fundamental human right and demand health care services as a result of political liberalisation and the spread of human rights concept. Hence, in places with a high degree of urbanisation, it will lead to increased medical cost, resulting in the differential of medical resources between urban and rural areas. Luo et al. (17) observed that the degree of urbanisation has a beneficial influence on the personal medical expenditure because of the uneven distribution of medical resources throughout the urbanisation process. They did this by using the public data given by the Shanghai Municipal Government.

Through the use of a health expenditures-augmented growth model, Ahmad et al. (18) examined the dynamic interactive causal relationships between urban agglomeration and health expenditures across developmental disparities in China and discovered a bidirectional positive causal relationship between the two.

# III. IMPACT OF URBANIZATION ON HEALTH CARE SYSTEM

The process of people moving from rural to urban areas seeking improved living conditions is known as urbanisation. People have been moving from rural to urban regions often throughout the last several decades, thus it is a constant process. It has numerous negative effects on human life, the environment, health, and nutrition despite being done to improve lives, making it a hot subject in today's society. It has a significant impact on how diseases like water-borne illnesses, diseases carried by vectors, other infectious diseases, and chronic illnesses as well. In other words, it is one of the main causes of the double burden of illness, which is a measurement of the effect of premature death and disability on a nation or area.

Various nations define "urban" populations differently, but some fundamental characteristics that all urban areas share are a high population density, a large number of people living there, a high proportion of people who are not dependent on agriculture, and the availability of public utilities and services. Nowadays, there are a variety of startling urbanisation data available. Urbanization is increasing in both wealthy and developing nations, making this a critical worldwide concern. Large cities, on the other hand, are seeing tremendous expansion. Now, half of all people on Earth live in urban areas, and by 2050, that number is projected to rise to around 70% [5].

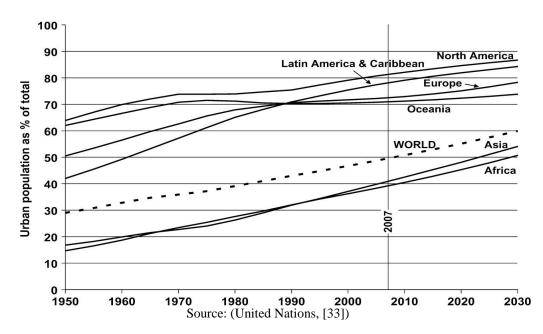


Figure 1: Urban population trends and predictions from 1950 to 2030, expressed as a proportion of the world's population.

We can see from Fig. 1 above that as urbanisation continues to grow on a worldwide scale, it is deteriorating people's health and nutrition. Because of this, attention must be paid to this problem. Poorer populations are more susceptible to these effects than are wealthy ones.

The following points may be used to address the issues with the health care system in rapidly urbanising areas:

#### □ Infectious Diseases Prevalence:

Typhoid and diarrhoeal illnesses are brought on by contaminated water. Vector-borne infections are caused by unclean and unhealthy living conditions, particularly for urban poor populations. respiratory conditions are present because to indoor and outdoor air pollution. The following is a list of possible sources for information on the subject of this article. While infectious illness incidence is equally high in rural areas, epidemic risk is higher in urban areas owing to crowded conditions, contaminated water, and high population density. Also, the urban poor do not have easy access to clean water.

#### □ Non-communicable Disease Prevalence:

Non-communicable diseases are likely to be more prevalent in urban areas due to pollution, tobacco and alcohol use, a lack of physical activity, and dietary habits because people there tend to eat more junk food and high-calorie western foods, which can cause metabolic syndrome, a condition that increases the risk of heart disease, cancer, diabetes, and other diseases. According to estimates, the prevalence of diabetes would rise from 2.8% to 4.4% globally between 2000 and 2030 as a result of urbanisation.

#### **Drug Misuse:**

Drug misuse is one of the most prevalent issues in metropolitan areas, affecting teenagers and children from both wealthy and impoverished backgrounds. Teenagers are particularly vulnerable to this because of the urban, stylish lifestyle. They are used by street kids to combat hunger. Some wealthy kids utilise it as a modernity, fashion, and style tool. Maybe their classmates are also to blame. Some adults' unemployment is a consequence of their dissatisfaction.

#### □ Road Traffic Accidents, Injuries, Violence, and Crime:

As metropolitan areas' populations rise, so do the number of cars on the road, which leads to an increase in the number of accidents. It is increased by careless driving, breaking traffic laws, and driving after drinking. Road traffic accidents are predicted to rank third among the leading sources of disease burden in the developing countries by the year 2020. Serious injuries and disabilities are caused by this. We are also unable to escape urban crime and violence. With growth in the urban population, the rate of unemployment likewise grows high. Owing to high cost to cities as comparison to rural region, it is quite tough to remain in city without any money or poor income. Thus, there is violence and criminality. For instance, in Karachi, Pakistan, approximately 100 people have been senselessly slaughtered in the last three days [19].

#### □ Housing, Security and Sanitation:

Most of the urban poor live in slums which are uncontrolled and congested, and are frequently exposed to dangers, such as steep slopes prone to landslides, riverbanks and water basin areas subject to floods, or places near industrial hazards. Housing that is inadequate, overcrowded, or in poor condition raises health risks from environmental dangers, violence, and crime. It is also linked to injuries, respiratory issues, infectious illnesses, mental health issues, and is at risk for nutritional insufficiency [19].

A huge number of people who do not have access to water and sanitation dwell in the rural region. 807 million city dwellers worldwide need access to better sanitation. Of of them 170 million do not have basic latrine and are forced to open defecate. Almost 500 million urban residents use communal restrooms across the globe.

#### □ Water, food, and nutrition crises:

There will undoubtedly be a shortage of clean drinking water as urbanisation picks up speed. As water is continuously mined from an aquifer that is a non-renewable source to meet the need for water supply. When the water crisis worsens, there will also be a food crisis since producing large quantities of food requires a lot of water, and 70% of water is used for agriculture. Also, because industries use 20% of the water, they will suffer. Urbanization is first affected by the food crisis, which has a direct impact on residents' diets. Since food is a person's primary source of nutrition and a nutrition crisis is what causes other morbidities and mortalities among individuals, a lack of food also means a lack of nutrients.

#### □ Indoor, outdoor, and climate change pollution:

Worldwide, outdoor urban air pollution claimed the lives of almost 1.2 million people in 2004. The biggest threat to human health from urban air pollution is caused by fine particulate matter, mostly from the burning of industrial and vehicular fuels. Around 8% of lung cancer fatalities, 5% of cardiovascular deaths, and approximately 3% of respiratory infection deaths are thought to be caused globally by fine particulate matter. These are the major reasons of non-communicable chronic illnesses. Indeed, since greenhouse gases are heavily released during interior and outdoor air pollution in cities, this pollution is also a major contributor to climate change.

Owing to climate change there is increased risk for the coastal urban area. Due to the increased heat absorption of dense urban constructed spaces and the reduced potential for evaporative cooling, it is also projected that urban temperatures may be up to 5 to 11 °C higher than in nearby rural regions.

#### Social Services and Environment:

An individual's health has a lot to do with the social environment of a city. It may have favourable or unfavourable consequences. High levels of social stresses, such as social isolation and severe poverty, as well as health-harming behaviours like drug misuse and violence may constitute a bad social environment. Due to the high cost of private practitioners, urban slum dwellers have limited access to the healthcare facility despite living near by and being expected to get poor quality treatment.

## IV. DISCUSSION

According to studies and literature, the majority of people in low- and middle-income nations live in rural regions and are less likely to be urbanised than their urban counterparts. With their high level of urbanisation and many health and nutrition indicators, industrialised nations are in a better position than

developing nations in every area. Thus, it is a reality that industrialised nations, despite their urbanisation, have less infectious illnesses such water-borne, food-borne, or vector-borne diseases. Also, their nutritional status is rather good. Their rates of maternal and newborn death are quite low. They have a long life expectancy. They have access to more advanced medical services. They have strong economic independence, and their literacy rate is high [12, 18].

People in low- and middle-income nations are attempting to replicate their approach in an effort to attain their status in light of these indicators and prospects. As they say, the grass is always greener on the other side of low- and middle-income nations, where urbanisation is growing quickly. While they could be making other kinds of development, like as improvements in the economy, it is unsustainable urbanisation that counts in these nations. Without a long-term strategy for water and other resources, cities are expanding quickly. Simply said, they are too crowded. Many health and nutritional risks result from this. Consequently, health sector should also be integrated in urban, transportation, energy planning and environmental rules.

One such issue is why, despite wealthy countries being more urbanised than developing countries, urbanisation is only contributing to greater difficulties in underdeveloped nations. The result of chaotic urbanisation is that. People in industrialised nations are less prone to infectious diseases; instead, they only experience chronic illnesses, which may also be related to longer life expectancies. Nonetheless, communicable diseases are still widespread in emerging nations, where urbanisation is further raising the risk of chronic illnesses. The affluent are growing more rich while poorest are becoming more destitute. For urban poor, every factor weighs heavily. They lack access to food, clean water, adequate sanitation, and other necessities. When they have a sickness, they are unable to pay for the expense of treatment in an urban health facility. Moreover, urbanisation is ineffectively handled less impoverished nations owing to a lack of resources. And also they are adopting the dietary habits of urbanised life which makes them more immobilised towards their health, nutrition and well-being. According to estimates, low- and middle-income nations in Asia and Africa will have the highest rates of urbanisation during the next 25 years.

The issue with the proliferation of infectious diseases is urbanisation. Sajor (2001) [20] calculated a model to regulate urbanisation, this model lead us individuals who born near the country are not permitted to relocate permanently to the metropolitan regions. People must thus reside in locations that are comparable to those in which they were born. This implies that both urban and rural residents may relocate to other urban and rural areas as well as vice versa. Another South African model was calculated by the author. The major goal of this concept is to reduce family migration rather than single migration. Imagine that people desire to move their whole family to the city if the migration is permanent. The population of the urban area will grow as a result. This concept forbade migrants from bringing their family along. Since individuals do not want to reside in a city region by themselves, this will aid in lowering the rate of permanent migration. The ladies in rural areas will also be under a lot of stress as a result of having to care for the whole family while their husbands are at work in the city.

## V. CONCLUSION

Due to poor sanitation, a lack of clean water, and overcrowding, infectious diseases are more common in urban settings. As was already noted, coughing, sneezing, sharing food or beverages, and skin contact are all ways that infectious diseases may spread from one person to another. Hence, infectious illness may be managed if we enhance the infrastructure for clean water supplies and sanitization and quarantine the diseased individuals. Additionally, the human body needs a healthy diet. Those who are in good health tend to be more alert, focused, and healthy, all of which help to defend the body's organs. Those who are malnourished are introverted, quiet, and more prone to disease and infection. Hence, the incidence of infectious diseases will decrease if we increase dietary status.

At the end we can conclude that we can claim urbanisation may be beneficial for all the activities but it is always danger to health and nutrition regardless despite how planned it is. As public health professionals, we must constantly be concerned about the health and nutritional well-being of the vulnerable groups because they are the ones who move to cities to work as lower level labourers. If it is highly planned and well organised, it also poses a threat to the poor urban population.

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