

Impact of Urban Infrastructure Development on Living Environment

Iskandarov Aziz Baxromovich^{1,*}, Xayitova Shaxnoza Inatullayevna²

¹Central Asian Medical University, Fergana, Uzbekistan

²Termez Branch of Tashkent State Medical University, Termez, Uzbekistan

Abstract Urban infrastructure has a significant impact on the health and life of the population. Such related transport infrastructure, residential infrastructure, social infrastructure, economic infrastructure, technological infrastructure, environmental infrastructure, protection and security of the population are determined. Factors affecting people and the environment arising as a result of the development of cities were considered, measures to improve the environmental situation in the urban environment were analyzed.

Keywords Habitat, Urban environment, Anthropogenic factor, Air environment, Microclimate, Urban objects, Natural landscape, Greening, Infrastructure

1. Introduction

The growth of large cities and the processes of population growth in them are observed in all periods of the historical development of mankind and play a significant positive role in the scientific-technical, economic, social and cultural development of the population of the earth. The concentration of the population in one place significantly reduces the costs of engineering support and infrastructure, allows to organize production related to the employment of a large number of workers and servants, to establish the conditions of mutual communication of the population and the organization of close communication relations with the governing bodies, as a result of which scientific and cultural conditions for cooperation are created [1].

Urbanization is an important positive factor in the development of any country, regardless of its political structure. At the same time, this process presents complex, difficult-to-solve problems with its strict laws and causal relationships, which determine the pace of this situation. In recent years, the emergence and development of cities in our country, as in other countries, is determined by environmental, political and military arguments. [2]. For obvious reasons, the causes of population growth in large cities are not uniform both in time and in space, and it depends on many factors, which can be predicted in advance (economic development of the city), and sometimes it is possible to predict it (economic crisis, external influences and population migration

associated with it) do not exist [3]. It is precisely in the cities that the high rate of population growth has a negative impact on the quality of life of the city dwellers, causing problems in the economic life of the population that has not adapted to city life and public tension. Unfortunately, in recent years, a high rate of population growth has been observed in megacities. The number of state statistical indicators describing the growth of residential buildings put into use does not show the real situation of providing housing to the growing population and hides the real shortage [4]. The development vector of urbanization, especially population growth, is directed only in one direction and it is not expected to decrease in the near future. The cited cases describe the urgency and importance of the problem, and their solution requires new approaches to the problem and their timely solution. Hygienists have already formed a scientific basis for the regulation of the urban environment, which is reflected in normative documents [5].

The modern history of the development of society, the market relations of the investment network of residential buildings, the reduction of forms of control functions over the construction system of cities, in the last decade have led to the following: an increase in the density of construction, a decrease in the area of recreational zones, a reduction in the sanitary protection zones established for objects that pollute the environment, commercial objects led to an increase in the number and height of buildings [6]. In addition to the above, it was connected with the carization of the population, the increase in the number of public utility facilities and transport services to a large number of trade points, the creation of a new artificial living environment, and in this environment, the official standards introduced for the comfortable and safe living of the population do not pass [7]. In addition, the dense

* Corresponding author:

info@camuf.uz (Iskandarov Aziz Baxromovich)

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living of the population and the increase in urban migration increase the epidemiological risk of the spread of infectious and parasitic diseases, lead to the mental and emotional stress of the population and the development of psychosomatic diseases, as evidenced by the information provided by the Ministry of Health of the Republic of Uzbekistan. People living in large cities are exposed to many harmful factors associated with urbanization, such as air pollution with dust, nitrogen oxide, formaldehyde, benzpyrene, traffic, as well as noise, vibration, and infrasound [8]. The measures being developed and implemented to protect the health of city residents are inconsistent in terms of the scope and speed of the impact. The aforementioned information does not surprise anyone, because the harmful effects of the urban environment are already well known. Therefore, the problem that we want to study, with its relevance and necessity, attracts representatives of a wide range of fields, including hygienists.

2. Materials and Methods

Data analysis (statistical processing of data on the quality and availability of various elements of the infrastructure), sociological research (surveying of the population), and interviewing of participants and experts were used in the conduct of scientific work. The combined use of these methods allows to get a complete picture of the impact of infrastructure on the health of the population and its lifestyle, and to determine more effective ways to improve the situation [9].

3. Results and Discussion

Surkhondaryo region is a region within the Republic of Uzbekistan. It was established on March 6, 1941 (from June 29, 1925 it became Surkhondaryo district). On January 25, 1960, it was joined with Kashkadaryo region. It was reorganized on February 7, 1964. It is located in the south-east of the republic, in the Surkhan-Sherabad valley. It borders Afghanistan along the Amudaryo river in the south, Tajikistan in the north, northeast and east, Turkmenistan in the southwest, and Kashkadaryo region in the northwest. The area is 20.1 thousand km². Surkhondaryo region includes 14 districts subordinate to the region (Angor, Boysun, Denov, Jarkurgan, Muzrabot, Altinsoy, Sariosiya, Termiz, Uzun, Sherabad, Shorchi, Kyziriq Kumkurgan), 8 cities subordinate to the district (Boysun, Denov, Jarkurgan, Termiz, Shargun, Sherabad, Shorchi, Kumkurgan), 7 towns (Angor, Dostlik, Kakaydi, Sariosiya, Sariq, Elbayon, Hurriyat), 114 village assemblies, 698 neighborhood assemblies and 847 rural settlements.

The terrain of Surkhondaryo region consists of mountains and plains, sloping and widening from north to south. Many rivers and streams flowing down from the mountains have formed gorges. The plain through which the Surkhondaryo and Sherabad rivers flow is surrounded from the north, west and east by the high Hisar ridge (the highest point is 4643 m

and its branches (Boysuntog, Kohitang tog, Bobotog).

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The population is 2 million 52 thousand, which is 7.3% of the population of the Republic. 80.9% of the population or 1647.3 thousand people live in villages, 19.1% or 389.8 thousand people live in cities. In the last ten years, 111 multi-storey buildings were built in the city of Termiz.

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The population is 2 million 52 thousand, which is 7.3% of the population of the Republic. 80.9 percent of the population or 1647.3 thousand people live in villages, 19.1 percent or 389.8 thousand people live in cities. In the last ten years, 111 multi-storey buildings were built in the city of Termiz. The infrastructure of the city of Termiz plays a key role in determining and shaping the quality of life of the population. This includes transport, energy, communication, health, education and others. The impact of infrastructure on public health is huge and diverse. The transport infrastructure in Termiz city is well established, the road and street network is in good condition for the active movement of buses and private cars, taxi system. However, the annual increase in the amount of waste related to motor transport causes various objections among the population. This condition is especially evident in the hot months of the year. The second element of the infrastructure, energy, has a positive effect on

improving the quality of life of the city's population, but due to interruptions in the power grid, lighting of residential buildings, cooling of rooms, and devices used in the business activity and technological process malfunction, which certainly affects the health and lifestyle of the population. does not remain without negative effects [10]. The level of development of large-scale Internet and communication networks is important for the social and economic development of the city's population, but the poor development of the communication infrastructure in the city of Termiz has a negative impact on the quality of life of the population. The next main element of the infrastructure is healthcare and education, and the most deficient place in these two systems is the lack of material support of these organizations. This will have a negative impact on the health of the population and its quality of life. Proper planning of the city territory and the level of development of the residential area lead to the correct formation of safe, comfortable and functional places for living, but the rapid construction in the city of Termiz in recent years has created a number of shortcomings in the city planning (due to the unplanned construction of buildings, their water supply and lack of sewage systems, lack of green spaces for residents to relax, and the use of saffron trees for landscaping are among them). How to behave in such a situation is a very difficult task. It is not possible to stop population growth in Ravshanki city, this situation arises by its own laws and there are no directive solutions for it.

As an artificial environment, housing is an integral part of the urban environment, which is regularly affected by factors caused by urbanization. For this reason, hygienists, architects, and urban planners have the task of predicting climatic and ecological changes occurring in the city and planning urban or other types of residential areas accordingly.

4. Conclusions

Thus, the collective impact of the environment on people creates the need to develop new methodological approaches that provide the possibility of a collective hygienic assessment of the environment. This makes it possible to study the relationship between the health status of the population and the quality of the environment and to determine the scope of measures to optimize the lifestyle and environment of the population living in modern large cities. In this regard, in

order to solve the tasks of improving the urban environment, it is necessary to supplement them with methods of assessment of the microclimate of the environment, lighting, quality of life and other different parameters.

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