

Health Inequality in Different Areas of Urban: Illustrated by the Case of Fuzhou, China

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Abstract: *In China, there is a phenomenon of uneven development in different regions of the same urban. These uneven developments lead to health inequality. Base on Fuzhou, China, this article analyzes the uneven distribution of urban resources in different areas in Fuzhou, includes the uneven distribution of hospitals, the uneven distribution of parks, and the uneven distribution of education resources. Through the analysis, this article draws a conclusion that the uneven distribution of urban resources eventually leads to the occurrence of health inequality in different areas of the urban. These factors are directly or indirectly related to people's health and affect people's physical or mental health.*

Keywords: *Health Inequality, SES, China, Fuzhou*

1. Introduction

In the history of urban development, the uneven distribution of resources phenomenon is very common. Due to the scarcity of resources, most of them are concentrated in a few areas. For example, shopping centers, schools, and hospitals are all concentrated in the central area of the urban, while these resources are often not available in the suburbs. This uneven distribution of resources leads to many types of inequalities. Inequality refers to the unequal distribution of rewards, resources, and opportunities across and within groups, places, and spaces.

Health inequality in space standpoint is that due to the uneven distribution of resources, people in different regions often have different health conditions. People living in central areas usually have better resources to maintain their high health standards, while people living in suburbs usually face worse resources. These resources include hospitals, parks, education, and so on. To explain in detail how health inequality occurs in different areas of an urban, this article will use Fuzhou, China to explain.

Fuzhou is the largest urban in Fujian, China. In 2018, the total population was estimated at 7,740,000 whom 4,665,000 lived in the built-up (or metro) area made of 5 urban districts plus Minhou County. In 2020, Fuzhou's GDP has reached about 1,50 billion dollars. Among them, Gulou District and Taijiang District account for about 1 / 3 of GDP, and they are regarded as the core areas of Fuzhou. Cangshan District, Jin'an District, Mawei District, and Minhou County are regarded as the sub-central areas of Fuzhou (they account for about 1/3 of Fuzhou's GDP). Other areas are regarded as suburbs of Fuzhou. The form of Fuzhou's space like a ring. Both Gulou District and Taijiang District are in the center of the ring, and they have most of the resources of Fuzhou. Cangshan District, Jin'an District, Mawei District, and Minhou County are distributed in the periphery of Gulou District and Taijiang District. The remaining areas are scattered in the periphery of the ring.

2. Health Inequality by Uneven Hospitals Distribution

In China, "Tertiary Grade A Hospital" is the highest-level hospital. There are eighteen "Tertiary Grade A Hospital" in Fuzhou, and all these hospitals are located in the core areas or sub-central areas of Fuzhou. In the suburban areas of Fuzhou, the number of "Tertiary Grade A Hospital" is zero. The uneven distribution of medical resources leads to health inequality. Because people living in suburban areas can't enjoy the top medical resources in the urban. When they have a major illness, they have to spend a long time commuting.

The distribution of municipal public hospitals also shows health inequality. There are thirteen municipal public hospitals in Fuzhou, including eight in core areas, four in subcentral areas, and only one in suburbs. According to the Fuzhou government, the area of the suburbs areas of Fuzhou is about 8609 square kilometers, while the total area of Fuzhou is about 11968 square kilometers, and the

population of the suburbs areas of Fuzhou is about 3,075,000, while the total population of Fuzhou is 7,740,000. This means that there is only one municipal public hospital in the suburb areas, which occupies about 72% of the total area and 40% of the total population in Fuzhou.

The distribution of medical resources is very uneven in Fuzhou, and people living in the suburbs have fewer medical resources than people living in the core areas and subcentral areas. Most part of the hospital are located in the central areas (core areas and subcentral areas) of Fuzhou, resulting in the inequality of medical resources between the central area and suburb areas. The top hospitals are usually located in the central areas of the urban, so people living in these places usually don't need to worry about medical problems. When they are sick, they don't need to spend too long to get to the hospital. However, people in suburban areas have to worry about medical problems. First, there are no large hospitals in suburban areas. When they encounter major diseases, they have to go to central areas for treatment. Second, they are on the edge of the urban, which means a lot of commuting time. One example is first aid. When people encounter an emergency, such as a sudden major illness, they usually need to go to the hospital as soon as possible. However, people living in suburban areas need to commute for a long time because they are far away from large hospitals. Due to the geographical distance and the uncertainty of road conditions (such as traffic jams), they may miss the best rescue opportunity and cause irreversible injury. Generally, uneven hospital distribution leads to health inequality. People in suburban areas have to spend more cost and time on medical treatment.

3. Health Inequality and Uneven Parks Distribution

Urban parks play an important role in the life of urban residents' sports, leisure and social interaction, and have great potential effect on promote people's physical and mental health (Wang et al, 2020). According to research from Huang et al (2020), Most of the communities in Gulou District and Taijiang District are basically within 400 m of a certain park. A small part of Cangshan District and Jin'an District can access a certain park within 400 m. With rapid urban development, the population has expanded, and the downtown has been well developed. As most of the park resources are concentrated in the downtown, most residential areas far from the downtown still lack access to parks.

The parks in Fuzhou are concentrated in the center of the urban. Most residents in the urban center can easily visit the park. However, suburban residents, can not easily visit the park. The uneven distribution of parks eventually leads to health inequality. Although parks have a positive effect on health, when residents living in the suburbs try to relax through parks, they often need to spend more time than residents living in central areas. As a result, it is difficult for those who live in the suburbs to improve their health through parks.

4. Health Inequality and Uneven Education Resource Distribution

Education inequality is a very common phenomenon in China. In Fuzhou, almost all the high-quality schools are concentrated in Gulou District. Because the Chinese government will allocate schools according to the location of the house. The houses that are assigned to high-quality schools are called "school district houses". One of the important means for children to enter key primary schools is to buy "school district houses". Therefore, many parents do not hesitate to pay high prices to buy these houses, which leads to the rising price of "school district houses". The value per square meter of "school district houses" in the same area can reach two to three times that of "non-school district houses".

In addition to schools, the allocation of libraries is also worthy of attention. The major libraries in Fuzhou are Fujian Provincial Library, Fuzhou Library, and Fujian Juvenile & Children's library. Fujian Provincial Library and Fujian Juvenile Children's library are located in Gulou District, and Fuzhou Library is located in Taijiang District.

The number of rare libraries is in sharp contrast to the large population. More importantly, these major libraries are all concentrated in the core areas of the urban, and neither subcentral areas nor suburb areas have such major libraries.

Education plays a very important role in health. Educational attainment is one of the strongest social determinants of health among U.S. adults (Galea et al, 2011). In China, families who can afford expensive "school district houses" tend to give their children a better education. Those children usually get better teachers, a better learning environment, and more guidance. Families who can't afford "School District Housing" usually can't enjoy high-quality educational resources. Uneven distribution of

educational resources eventually leads to health equality.

5. Conclusion

In Fuzhou, health equality exists in different regions. Core areas and sub-central areas have better resources, while suburb areas lack high-quality resources. Due to the circular distribution of Fuzhou, a large number of resources are concentrated in the center of the geographical space, which makes people living in the periphery of the urban have to commute for a long time to access these high-quality resources. In the case of long-term lack of high-quality public resources, the health status of people living in suburban areas is not as good as those living in core areas and subcentral areas. In addition to the uneven distribution of urban resources, there are many possible reasons for health inequality. Urban managers should try to think about resource allocation and take action to reduce health inequality.

Although the uneven distribution of resources and health inequality exist, Fuzhou is trying to change the status quo. In May 2021, the national regional medical center put into operation. The national regional medical center is located in Changle District, which is far away from the main urban area of Fuzhou. This national regional medical center is of great significance to fill the lack of suburban areas medical resources. In 2020, 230 New Street parks will be built in Fuzhou. These parks are scattered in every corner of the urban, which further improves the park coverage, especially the number of sub-central areas. With the completion of the park, the happiness and quality of life of the surrounding residents will be improved.

To reduce health inequality, managers need to take many actions. First of all, we need to expand the urban area and improve the coverage of urban public facilities. Secondly, we should optimize the spatial layout, evacuate the functions of the central city, and enrich the outer space of the city.

References

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