Exploring the Factors Influencing Individuals' Choices of Primary Medical Treatment

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Abstract. China is currently promoting the construction of a hierarchical medical system. Primary diagnosis is an important part of the hierarchical medical system, which promotes the sinking of medical resources, reduces the burden on hospitals, and facilitates residents' access to medical care. This article reviews relevant research from authoritative domestic journals such as Health Policy Research over the past three years and compares them, focusing on the current situation of primary diagnosis in China and analyzing the factors that affect residents' access to primary medical care from the three main parties involved in the primary medical care process: policy makers, primary medical service providers, and patients. The study found that factors related to policy makers include policy formulation, reimbursement rates, ongoing supervision, and investment. Factors related to primary medical service providers include medical level, policy promotion, and accessibility of medical services for patients. Factors related to patients include personal basic information, understanding of policies, and inherent habits and concepts.

Keywords: Primary Care, Medical Treatment, Influential Factors.

1 Introduction

In recent years, people have become increasingly demanding when it comes to medical care, expecting higher quality healthcare services. As a result, many people choose to seek medical treatment at higher-level secondary and tertiary hospitals, while primary hospitals are almost ignored. This is because primary hospitals do not have the same level of professional equipment and personnel services as higher-level hospitals. Meanwhile, medical resources are concentrated in higher-level medical institutions, which has a negative impact on the balance of the medical structure. This article focuses on the current situation of first diagnosis at the grassroots level in China, analyzing three main factors related to whether residents choose to seek first diagnosis at the grassroots level - namely service providers, demanders, and the guidance of macro policies. As the foundation of hierarchical medical treatment, the role of primary diagnosis and treatment is crucial. By analyzing the influencing factors of primary diagnosis and treatment, targeted measures can be taken to gradually improve the system of primary

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S. Yacob et al. (eds.), *Proceedings of the 2023 7th International Seminar on Education, Management and Social Sciences (ISEMSS 2023)*, Advances in Social Science, Education and Humanities Research 779,
https://doi.org/10.2991/978-2-38476-126-5_46

diagnosis and treatment and hierarchical medical treatment. It can also promote the sinking of medical resources in hospitals, improve the allocation of medical resources, and increase the utilization of medical resources. For patients, it can improve the experience of seeking medical treatment and make it more convenient to obtain high-quality medical services. Currently, our country's policy for first diagnosis at the grassroots level adopts non-compulsory measures and methods to guide residents to choose primary medical and health institutions as their first choice when seeking medical treatment. This allows patients with common diseases, chronic diseases, and multiple diseases to obtain convenient, continuous, effective, and economical medical services through primary diagnosis, promoting the satisfaction of basic medical needs in basic medical institutions and optimizing the allocation and use of health resources. However, data from the "2020 Statistical Bulletin on the Development of China's Health Care Industry" shows that the outpatient rate of primary medical institutions in our country has been declining year by year since 2009. The hierarchical diagnosis and treatment pattern has not been fully formed. Currently, research in China is mostly based on quantitative studies of specific regions, while literature reviews are relatively scarce.

2 Influential Factors

According to the different entities involved in the tiered diagnosis and treatment, the influencing factors can be classified as follows (See Table1).

Table 1. Factors influencing residents' choice of primary care providers

Entity	Policy makers	Supply side	Demand side
Factor1	policy on basic medical services	medical treatment level	demographic information
Factor2	reimbursement rate	policy advocacy	awareness of policies
Factor3	monitoring and investiment	accessibility	habits and perceptions

2.1 Policy Makers

From the perspective of policy makers, the state uses its macro power to make everything in a stable developing process, and the primary diagnosis is no exception. As a macro-regulator, China made a breakthrough in proposing this concept and formulating program planning after examining the situation of primary medical care. After that, in the operation stage, from the perspective of the supply side and the demand side, provide strategies suitable for grassroots development, and thereafter use laws and regulations at all levels to determine and implement. It is this macro-level regulation that enables the steady progress of the primary diagnosis.

The Relevant Policy Plays the Leading Role. According to the Law of the People's Republic of China on Basic Medical Care and Health Promotion, the state promotes the

grading of basic medical services [1].

The diagnosis and treatment system guides patients not in emergency to go to primary medical and health institutions first. As a program for the implementation of primary diagnosis, it has played a role in restricting, planning and guaranteeing various work since it took effect, so that the system construction of primary diagnosis can maintain a stable tone and step by step. In China, there are legal norms such as the "Basic Medical Insurance and Health Promotion Law of the People's Republic of China", which clearly stipulate the relevant requirements for primary diagnosis [1]. In the subsequent execution process, each entity will deploy the plan in accordance with laws and regulations; After that, this will be more conducive to grasping the situation in the primary areas and transmitting information upward in a timely manner, so that policy norms can be adjusted in a timely manner to adapt to new changes.

The Determination of the Reimbursement Rate is An Important Aspect of Public Opinion. From the perspective of ordinary people, the most concerned issue for primary diagnosis is their own economic affordability, so the reimbursement ratio of medical expenses has become the focus of attention. In the current policy, the state is gradually promoting the reduction of the proportion of outpatient reimbursement and the increase of the reimbursement ratio of primary medical and health institutions [2]. For example, In Qingdao, the reimbursement rate of insured residents in primary medical institutions has been increased from 50% to 60%. And in the case the residents themselves bear less medical expenses, improve the economic accessibility of primary care, make residents tend to choose primary care under the same circumstances, and reduce the medical burden of secondary and tertiary hospitals.

Monitoring and Continuous Improvement in Operation [3]. The hardware and software equipment of primary care is also an important factor affecting its popularization. At present, there are mainly problems such as uneven technical level of the doctor team, incomplete laboratory examination equipment, insufficient utilization of primary medical facilities and unbalanced allocation of medical resources. In response to this situation, macro policy input is essential. Through the introduction of high-quality talents and the introduction of suitable equipment, the quality of primary medical care is improved, so that residents' sense of identity and trust in primary diagnosis is improved, and more people choose primary medical treatment. Faced with some confusion and inconvenience of residents, whether policy makers can understand it in a timely manner, then adjust the policy, whether they can make timely decisions to increase investment and continue to improve to meet the medical needs of residents is also an important factor affecting residents' choice of primary care.

2.2 Supply Side

From a supply-side perspective, given that primary hospitals are the main body that has the most direct contact with community residents in graded diagnosis and treatment, they are not only carried with the professional task of diagnosing diseases, but also

undertake the social task of publicizing and communicating with residents in the community. Meanwhile, the pivotal role of primary hospitals in upward referral, daily reception, and sinking services is also an important factor affecting the residents in preferring primary diagnosis. So, they play a relatively composite role in the process.

The Medical Treatment Level of Community Hospitals Is the Primary Factor in Attracting Residents to Choose Them. As the income level of residents increases, people are willing to spend more on their own health. What they are seeking for is relatively the best treatment for their health. So their preference is mainly oriented by medical treatment level. That determines the fundamental role of medical treatment level of community hospitals. the Law of the People's Republic of China on Basic Medical Care and Health Promotion clearly states that governments at all levels in China will take measures to support community medical and health institutions [1]. One study showed that the highest factor in patients' reluctance to primary care was the perception that the capacity of primary care was insufficient [4].

Lack of Policy Advocacy Is an Important Reason for Residents' Failing to Make Reasonable Medical Choices. At present, the overall awareness of primary diagnosis and two-way referral in the community is not high among Chinese residents. To some extent, this can show that the lack of policy publicity has not played a strong role in promoting patients' reasonable medical treatment [5]. So in many communities in China, the primary medical institutions hold health education for residants on a regular basis. And in some areas, the service of family doctors is offered to promote primary diagnosis.

Accessibility to Services and Two-way Referral Processes in Primary Medical Facilities Are an Important Nudge. According to the survey on the situation of primary diagnosis in different areas of China, an important reason why people are willing to choose primary medical treatment is that it is convenient and close to home [4]. Due to the time and energy consuming are much lower in primary medical institutions, people tend to choose them exclude emergency situations. Meanwhile, enhancing collaboration between hospitals of different levels, streamlining and clarifying the two-way referral process to facility residents for upward referrals when necessary and downward referrals to save cost more smoothly. The above two ideas are to use the inertia of social people and reduce the cost of giving priority to primary medical care to promote residents to choose them, which has played a good role in nudge [6].

2.3 Demand Side

From a demand-side perspective, why do some people would choose the community hospital while others insist turning to Third Level 1st Class hospitals? Factors can be divided into the follwing three parts: some basic information about residants, their

understanding of the policy of grading diagnosis, and the collaboration of their cognitive biases and inertia.

The Basic Information of Individuals. Basic information includes region, age, occupation, literacy, income and so on. According to some relevant studies, the difference among the above factors and the influence of these factors on whether residents choose primary care is statistically significant [7-8]. This is of guiding significance for research in practice in primary diagnosis.

Take China for example. The basic situation of residents under the difference between urban and rural areas affects the participation in insurance.

In addition to the guidance and support of the state at the macro level, the basic situation of residents themselves (such as urban and rural location, education level, age, etc.) is also an important factor affecting the popularization of primary diagnosis at the grassroots level.

Awareness of Policies Also Affects Residents' Choices. According to several studies, familiarity with the policy affects whether residents would like to choose primary diagnosis. This mainly includes two-way referral, medical insurance reimbursement, hardware investment, etc. It is only possible for residents to choose to believe the capacity of primary medical institutions after they understand the convenience behind these policies. According to a study, through logistic regression analysis, understanding the connotation of family doctors correctly, having a higher demand for family bed services, and learning about family doctors through community medical staff recommendations, residential area publicity columns and other means, residents who seek medical treatment are more willing to sign contracts. Residents who are clear about the health management services provided by family doctors, medical insurance discounts, and the long prescription policy are more inclined to choose primary care as their first consultation for a longer signing time [9].

People's Inherent Habits and Perceptions. For a significant number of people, it is difficult to change the habits and perceptions that have been formed in the past. Even if they have learned about the new policy in detail. To be specific, their long-standing distrust of primary medical institutions and their almost zero-based primary medical habits will become factors that hinder their choice of primary medical treatment. Another factor which may have collaborative effect with the deviation of people's recognition of the ability of primary medical institutions is feelings of uncertainty of their disease. It was first introduced by Mishel in 1981. When individuals cannot make sense of the stimuli caused by illness and its meanings, the uncertainty of illness arises [10]. So if a person has a high degree of uncertainty about a disease, then he is likely to be willing to spend more time and money to avoid this risk and more willing to choose large hospitals for medical treatment [11].

3 Discussion

3.1 Insurance Participation as A Key Factor

An important factor affecting residents' choice of primary care is insurance coverage rate. The difference in insurance participation rates will be influenced by the urban-rural regional background.

In terms of urban and rural locations, the participation rate of urban residents is generally higher than that in rural areas [12-13]. In the process of modernization, the city, as a regional political, economic and information center, has always occupied a central position in the flow of information. In the process of promoting primary diagnosis at the grassroots level, relevant information is first radiated through the city and then to the countryside. Due to the delay in the transmission of information, rural residents are more backward in the cognition and choice of medical insurance policies. At the same time, in view of the policy update of the superiors, there may be conflicts between the old and new policies, resulting in residents' confusion and dissatisfaction with the first diagnosis at the grassroots level, which will eventually lead to the inability to popularize on a large scale.

In terms of cultural level, people with high education level generally have a stronger sense of insurance participation [13]. Due to the generally higher level of education in cities, residents are also more aware of their own health risks and protection. In rural areas, due to the low level of long-term education compared with urban areas, residents have a weak awareness of risks and health protection, except for daily minor diseases, the rest of the diseases are basically referred upward after primary diagnosis and treatment, and there is no awareness of participating in insurance in advance, and the habit of "treating if there is a disease, not avoiding it" has been formed in the long-term diagnosis and treatment process, which has no positive effect on primary diagnosis and treatment.

In addition, in terms of age, structural differences also lead to differences in residents' participation in insurance [7]. In cities, most of the people living are young and middle-aged people, who generally have a higher level of cognition and have more independent judgment and selection ability. Therefore, based on this, the active participation rate of this group will be higher. In rural areas, however, the population is dominated by young and old people under the age of 18. Such people are not familiar with the medical insurance reimbursement policy of the primary clinic, and even more have not heard of such policies, which leads to the fact that most of these people are passively insured, and ultimately make the participation of urban residents better than that of rural areas.

3.2 Suggestions

This study systematically categorizes previous research results from three aspects of "policy maker-supply-demand". In this way, targeted advice can be provided to different subjects.

For Policymakers. Policy makers should not only formulate reasonable medical insurance reimbursement policies based on local conditions, but also increase investment in grassroots medical institutions, update equipment and introduce talents to enhance their medical standards.

For Supply-side. On one hand, primary medical service institutions should enhance their own professional abilities, and on the other hand, they should also improve residents' awareness of primary care and family doctors through health education, while providing more convenient services for residents

For Demand-side. Residents should actively pay attention to the basic medical services provided by the community as stipulated by the country, and increase their understanding of their own disease severity. This will help reduce unnecessary expenses and improve the sense of experience of primary diagnosis.

3.3 Limitation

This study mainly synthesizes the conclusions drawn from previous articles on the factors influencing primary care as the first point of contact. However, it lacks quantitative statistical analysis and is difficult to validate the impact mechanism based on display data.

4 Conclusion

The implementation and promotion of primary diagnosis and treatment in the primary areas are influenced by various factors. The balanced linkage between the "supply side-demand side-policy" tripartite is the key to maintaining the operation of the entire system in its internal mechanism. As a construction guideline, policy plays an important role in guaranteeing and sustaining supervision, and it is an important weight to maintain the balance of supply and demand. In the population, people's inherent cognition makes them have a superficial understanding of the true level of service of grassroots health service institutions and make hasty conclusions. At the same time, their understanding of policies (or the degree to which policies meet their own needs) will affect the population's choices. From the supply side, firstly, it is necessary to meet the hard requirements of the population by improving service quality; secondly, to publicize itself through the circulation of information among the population and let more people know about the strength of grassroots health service institutions; thirdly, to improve the accessibility of primary diagnosis and treatment in terms of economy, time and space and enable residents to receive convenience at the first time, use social inertia, reduce the cost of giving priority to primary medical care, and guide residents to choose primary diagnosis and treatment. Through the stable operation of the above mechanism, the operational system of primary diagnosis and treatment at the grassroots level can be more perfect, and the referral mechanism between it and higher-level hospitals can

be streamlined, achieving true efficiency and simplicity.

Primary care diagnosis is the focus of the hierarchical medical system construction. As researchers, we should conduct extensive research and adopt a combination of quantitative statistics and qualitative analysis for research purposes.In this way, the probability of various errors in the analysis can be reduced and the validity and reliability of the study can be guaranteed1. In addition, when studying the residents' willingness to see a doctor, we should also pay attention to combining knowledge from psychology, behavioral economics, and other fields. This will provide valuable information for policy formulation and adjustment, management, and construction work.

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