

Exploring the Problems and Suggestions of Treatment-prevention Integration in Chronic Disease Management

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Abstract. Chronic diseases have become the main risk factor affecting the physical health of Chinese residents. China adopts a method of integrating medical and preventive measures for chronic diseases, with the aim of strengthening the prevention and control of chronic diseases. However, the application of medical prevention integration in chronic disease management is still in its early stages, with low work efficiency and inadequate implementation of policies and systems. This article analyzes the reasons for the problems in the application of medical prevention integration in chronic diseases, focusing on three aspects: the signing mode of family doctors, the service and hospital treatment of primary public health institutions, and the communication of health information. It is hoped that through the training of general practitioners and public health personnel, the performance evaluation mechanism of family doctors can be improved, accelerate the construction of medical and health information data platforms to make the policy of medical prevention integration play a greater role, benefit more residents, and help achieve the goal of universal health.

Keywords: Treatment-prevention Integration, chronic disease management, primary public health services.

1. Introduction

With the development of cities and changes in residents' lifestyles, China's aging level has deepened, and the prevalence of chronic diseases has been increasing year by year. The proportion of deaths caused by chronic diseases has also continued to increase. In 2019, the number of deaths caused by chronic diseases in China accounted for 88.5% of the total number of deaths. It can be seen that chronic non communicable diseases (hereinafter referred to as chronic diseases) have become the main factor that endangers residents' health, reduces their quality of life, and affects their healthy lifespan [1, 2]. The increasing demand for chronic disease services, the rapid increase in medical and health costs, and the increasing complexity of chronic disease management work have made traditional methods of chronic disease management unable to meet the needs of community chronic disease management. This requires the health service system to explore new management models [3]. In addition, the National Health Commission officially launched the "Healthy China Action (2019-2030)" development strategy in July 2019, proposing to focus on health, prioritize prevention, and unite resources from all sectors of society to guide policies. It requires the government and medical institutions at all levels to provide comprehensive and continuous services to chronic patients [4]. The characteristics of chronic diseases, such as long course, complex etiology, and persistent illness, have highlighted the importance of "medical prevention integration" in the national "health centered" strategy. The integration of medical treatment and prevention is the combination of "treating diseases" and "preventing diseases", forming an effective link between medical treatment and prevention, allowing residents to get sick less and less, and providing personalized health services throughout the entire process based on patients [4, 5]. Although the integration of medical and preventive measures has already achieved certain results in chronic disease management to a certain extent, improving the ability to prevent and control chronic diseases, it is still in the initial stage at the community level, and there are still problems such as weak grassroots health service capabilities, low efficiency of health services, and inability to meet the medical needs of residents [6]. This article mainly analyzes the reasons and manifestations of the problems in the application of medical prevention integration in the management of chronic diseases, and proposes strategies and suggestions for the integration of

medical prevention in the management of chronic diseases. It is hoped that this can provide new ideas for the management of chronic diseases in China, the construction of effective medical prevention integration mechanisms, and another related research.

2. Problems

2.1. Lack of Mature Family Doctor Signing Model

In 2018, China's Health Commission proposed to explore a model of integrated medical and preventive services in primary medical and health institutions. The integration of medical and preventive measures plays a crucial role in the screening and comprehensive prevention and control of chronic diseases [7]. After several years of implementation, specific measures for treatment-prevention integration have been innovated and piloted across the country, and the family doctor signing model is one of the bold attempts [8]. However, due to the immature development of the contract signing model for family doctors in China, there are still low levels of quantity and quality supply of primary medical and health resources, misconceptions among residents about contract signing services, and a widespread concept of seeking medical treatment in large hospitals. The relevant operating mechanisms for family doctors, such as the selection, assessment, and incentive mechanisms for family doctors, are not perfect, significantly reducing the enthusiasm of family doctors [9].

Family doctor signing services, as the main content of medical prevention integration, are mostly just formal contracts, lacking effective service connotations and unable to truly respond to the demands of residents. The integration of medical and preventive measures has not played a very effective role in primary health services. The use of acute disease management models for chronic disease management still relies mainly on doctors and nurses providing services. The preferred treatment location is still high-end hospitals, and the treatment methods are mainly outpatient injections and on-site examinations. Family doctors are only "part-time" doctors in hospitals, working to complete tasks assigned by superiors. The quality of completion is not high, and the service efficiency is too low, causing patients to distrust primary public health personnel [10].

The above reasons have led to a situation where family doctors sign contracts but have no practical effect, making the signing model of family doctors unable to play its due role in prevention, nursing, and other aspects of chronic disease management [9].

2.2. Poor Connectivity between Primary Public Health Services and Hospital Treatment

In the entire health system, primary public health institutions and hospitals each have a set of management systems, each acting independently, with no information flow between each other, access standards, and performance evaluation systems completely different. The policies between each institution lack continuity, leading to difficulties in cooperation between the two parties, and some measures cannot be implemented to form a truly integrated and integrated health service work. This makes it impossible for primary health service institutions and hospitals to carry out unified management in the management of chronic diseases, and cannot handle chronic diseases [8].

Another reason for the poor connectivity between primary public health services and hospital treatment is that the personnel training methods for public health and clinical diagnosis and treatment are also different. The integration of knowledge structure between public health and clinical personnel is low, and the courses taught are different, resulting in significant differences in assessment systems. There is a great demand for general practitioners in public health, but now there is a shortage of highly skilled general practitioners. The training of general practitioners needs to be strengthened, which cannot meet the needs of continuous treatment well. Most medical students still choose to become specialized doctors due to higher salaries, as they believe that general practitioners cannot earn money and have heavy tasks [11]. In addition, the development of primary public health institutions and hospitals is imbalanced, with low service levels at the primary level, insufficient primary health service personnel, and lower professional and technical levels compared to doctors. Personnel lack

professional knowledge of chronic diseases and have not received systematic training on chronic disease prevention, relying solely on their own experience; The main reasons for the slow development of primary public health are outdated and outdated medical equipment, poor medical environment, and insufficient funds [12].

Based on the nature of chronic diseases, the treatment of chronic diseases requires continuous and long-term treatment, and the separation between primary public health services and hospital treatment makes the health service process unsustainable and cannot form a comprehensive and comprehensive health service for chronic diseases [7].

Primary public health cannot meet the needs of patients, leading to a vicious cycle that ultimately leads to patients losing trust in primary medical services. The situation of no one seeking medical treatment in primary hospitals and overcrowding in large hospitals has been formed. Primary hospitals, as the first step in graded diagnosis and treatment and an important part of daily care for chronic diseases, have led to the inability to prevent and detect diseases in a timely manner in the early stages, as well as the inability to recover during the treatment process, and the inability to form a closed-loop management system that ensures the health of the masses [12].

2.3. Poor Communication of Chronic Disease Information between Health Institutions

The poor communication of chronic disease information is reflected in operational barriers between medical institutions and public health systems, as well as data collection during chronic disease screening and follow-up processes.

The operational barriers between medical institutions and the public health system prevent the rapid and accurate transmission of information, and data cannot be synchronously updated, resulting in a lack of information during the treatment of chronic diseases and the inability to sustain the diagnosis and treatment process. Chronic diseases require long-term monitoring, and the preservation and organization of past data, as well as the updating of the latest data, are key to continuous treatment. There are various types of public service projects required, which will generate a large amount of data. The organization, screening, and analysis of data require a lot of time. In addition, there is a lack of public health talents and no unified standards in the public health system, making it difficult to share information on chronic diseases [7].

The impact of chronic disease screening and follow-up on comprehensive prevention and control of chronic diseases is limited, resulting in a lack of significant benefits for basic public services. The imperfect public health system has led to loopholes in the collection of chronic disease data, with high data duplication and invalidity rates, which have not played a significant role in the continuous treatment of chronic disease patients [7].

The distribution of high-quality medical resources in China is uneven, mainly concentrated in tertiary hospitals. As long as the region leans towards the eastern region, patients tend to seek medical treatment in tertiary hospitals, and regardless of major or minor illnesses, they have to go to major hospitals, causing difficulties in seeking medical treatment [13]. The daily basic care of some chronic diseases can be carried out in the primary health system, for example, the daily blood sugar health of diabetes can be completed at the primary level. However, because the hospital information is not connected with the information of the primary health institutions, the primary service providers can not grasp all the information of patients, and cannot prescribe the right medicine according to the time and degree of patients' chronic diseases, whether there are complications or not. Unable to track the entire process of health data for chronic disease patients, unable to achieve a series of services such as chronic disease prevention, diagnosis, treatment, rehabilitation, and management, thus providing health management for the entire life cycle of the people [12].

3. Suggestion

3.1. Improve the Service Quality of the Family Doctor Signing Model and Improve the Situation of "Signing but not Achieving Good Results"

At present, the family doctor model still cannot provide high-quality medical services and cannot meet the medical needs of residents, leading to the widespread phenomenon of "signing contracts but low efficiency" among family doctors, which cannot effectively promote family doctor signing services [14]. Based on the above issues, China should pay attention to the cultivation of general practitioners and public health personnel, especially in the field of chronic diseases, strengthen the construction of primary health service personnel, strengthen the integration of medical schools, hospitals and disease control centers, pay attention to the construction of geriatric and chronic disease disciplines, form a theoretical and practical training system, and comprehensively improve the professional literacy of family doctors [15]. Secondly, the government should find ways to improve the incentive mechanism for family doctors as soon as possible, using performance evaluation, third-party evaluation, or internal team self-evaluation methods to improve the overall treatment of family doctors, mobilize the enthusiasm of family doctors, actively improve service quality, and make medical students willing to join the family doctor team. Family doctors are also willing to work for a long time, and strengthen the stability of the family doctor service model [16]. With the support of the government, various institutions, departments, and regions are accelerating the informatization process of chronic disease services for family doctors, changing the current way of recording information using paper materials. The old method not only increases the workload of family doctors, but also increases the risk of information leakage. Moreover, the information on chronic diseases is abundant and complex, and new advanced databases can be utilized to establish smart information platforms such as WeChat, in order to reduce the workload of family doctors, which is both time-saving and labor-saving [17].

3.2. Break down the "Barrier" between Primary Public Health Services and Hospital Treatment, and Create a Systematic and Full Cycle Chronic Disease Care System

One of the reasons for the poor connectivity between primary public health services and hospital treatment is the lack of a unified information platform, which hinders information communication. Both primary doctors and attending physicians can only grasp a portion of the information of chronic disease patients. Therefore, it is imperative for the overall medical system to strengthen the informatization and intelligence level of health services in the future. Primary health service institutions and hospitals utilize databases to establish a health cloud platform, achieving information sharing and seamless connection of patient treatment. Utilizing big data platforms to achieve information sharing of electronic cases and residents' health records between hospitals and primary public health institutions; At the same time, using the Internet to carry out remote medical care and remote consultations can effectively solve the problem of insufficient talent and low level of primary health services. Patients, especially those with chronic diseases, many elderly people who are inconvenient to move, can receive high-quality health services without leaving the "community", making it convenient for patients to seek medical treatment [18]. The health system needs to establish a collaborative mechanism between public health services and hospital organizational management and resources, to unify the integration of talent introduction and assessment, technical equipment, and reward and punishment standards, to achieve two-way flow of resource information, and to provide human and institutional guarantees for creating a systematic and full cycle chronic disease service system [19].

4. Summary

Through research, this article found that due to the lack of primary medical resources, insufficient supply of general practitioners, and the existence of old medical concepts among residents, family

doctors are unable to meet the medical needs of residents and provide effective basic protection against chronic diseases. Secondly, due to the lack of a unified data sharing platform and management system, the medical data of chronic disease patients cannot be exchanged between primary public health service providers and hospital attending physicians, making it difficult for institutions to form cooperative relationships. As a result, the health system cannot provide continuous, full cycle, and comprehensive health services for chronic disease patients, which brings inconvenience to residents' lives. Therefore, it is recommended to pay attention to the cultivation of general practitioners, integrate medical schools, encourage medical students to "enter the community and go to the grassroots", and pay attention to the combination of practice and theory; Improve the performance evaluation mechanism for family doctors, increase their treatment, and mobilize their enthusiasm; Accelerate the construction of medical and health informatization, utilize data, establish a unified health information platform, facilitate information exchange, and form a closed-loop information circulation channel. The application of treatment-prevention Integration in chronic diseases not only requires the efforts of primary public health institutions and hospitals, but also requires the cooperation of medical insurance policies. However, current research has not fully considered the role of medical insurance institutions in promoting the integration of medical and preventive measures, and has not taken into account chronic disease medical insurance policies. The payment methods, proportion, and scope of medical insurance have a significant impact on residents' choice of medical methods, and suitable medical insurance policies are conducive to patients' reasonable medical treatment. In the future, further refinement and in-depth research can be conducted on medical insurance related issues.

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