Research on the New Model of Mutual Elderly Care in the Context of ''Internet+''

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Abstract: With the intensification of population ageing, it has become difficult for traditional ways of ageing to fully solve the current problems. The combination of the Internet model with the elderly care problem can provide middle-aged and elderly people with a more convenient and fast way to age and a happier life in their old age, which is of great practical significance to solve the elderly care problem faced by the elderly in China. The article starts from the Internet pension model, studies the definition criteria at the current stage, and on this basis proposes a new "Internet+" pension model, introduces in detail the different modules under this model to suit the current pension needs, and at the same time analyses the current problems faced, mainly including both technology and acceptance, and proposes corresponding solutions to these two aspects, so as to better solve the current pension problems in China.

1. Introduction

Since the "Internet+" concept was introduced at the 5th Mobile Internet Exhibition in 2012, "Internet+" has been developing rapidly in China, promoting the optimization and evolution of various traditional fields and continuously outputting new results of cross-border integration and development. The development of the ageing population has promoted the integration of "Internet+" with the elderly care issue, and a new model of "Internet+ elderly care" has emerged, which has strong research significance. Based on this, this paper outlines and summarizes the research background and the definition of relevant concepts.

1.1. Research Background

At this stage, the ageing of China's population is becoming increasingly evident: information shows that by 2050, the proportion of elderly people will reach 16% and one sixth of the population will be over 65 years old. In some of the regions with the most serious ageing problems, the proportion of the population aged over 65 will reach 20%. At the same time, more and more young people are deciding to leave home to work in cities, leading to a sharp increase in the number of elderly people living alone. The issue of ageing in this part of the population has become very urgent. According to incomplete statistics from Foresight Intelligence, more than 70 policies on smart ageing have been introduced across the country in 2019. Both the demographic changes and

the government's attention have brought unprecedented opportunities for the elderly care industry.

At the same time, along with the development of social technology, new thinking has emerged to solve the problem of elderly people living alone, and existing technological advances have brought new models to the lives of elderly people living alone, and have provided the technical support for "ageing in place". It is believed that over time, the "Internet+" model of ageing will completely change the way we care for the elderly.

From 2018 to 2020, the smart ageing industry will develop rapidly and gradually enter a mature phase, when various companies will emerge, various innovative service models will emerge, and the investment and financing markets will be very active.

Therefore, this paper argues that in this new context, the "Internet+" elderly care model is a new way of ageing. It can help solve the problem of ageing, maintain stability at the back for young people who are struggling, and contribute to better social development and human happiness.

1.2. Definition of Relevant Concepts

Based on this, this paper proposes a new model of elderly care based on the Internet and explains the relevant concepts as follows:

1.2.1. Mutual Help Elderly Care Model

This model is organised by professional elderly social workers in the community to awaken and enhance the life vitality of the elderly as the first priority, and to form a systematic healthy life guidance programme through exercise, diet, living and emotional management. By mobilising mutual help among the elderly and companionship, a healthy lifestyle is cultivated and a health guidance programme is implemented, which is highly effective for physical and psychological rehabilitation. Mutual help groups are set up to guide elders of a lower age to provide elders of a higher age for elders of a higher age, in the form of mutual help groups to solve care problems in the community [1]. Based on accurate assessment and analysis of needs, the database will be used as a basis to link up social resources such as caring service providers to provide various ageing-in-place services. To provide a sustainable and mutually supportive system solution for ageing in place in the community.

1.2.2. Mutual Aid Elderly Care Model in the Context of the Internet

"Internet+" elderly care service refers to the updating and transformation of traditional elderly care services, thus forming a new upgraded version of "Internet+" elderly care service [2], which is provided by elderly care institutions, community and home-based elderly care service centres using "Internet+" technology, and by Internet-operated institutions using their own network information platforms.

2. Existing Models of "Internet+" Mutual Help Elderly Care Model

As "Internet+" mutual help elderly care is a new research field, it is of great importance to discover its development process, which is not completely uniform at domestic and international level. In this regard, this paper explores the current situation of the "Internet+" elderly care model from two different perspectives, both at the domestic and international level, in order to better grasp the current research trends, find the shortcomings of the current research and explore possible innovation points.

2.1 Current Status and Development of Domestic Research

At present, most of the research results on the "Internet +" mutual care model in China believe that this model is still in its initial stage, and the social recognition and participation of social forces are not high enough, so more efforts are needed to promote it. The only few studies on the role of Internet technology in the community mutual care model are mainly based on the sharing of elderly care spaces and online mutual help platforms. In<Exploring the capital operation mode of " Internet+ " shared elderly care base>, Feng builds an innovative and open " Internet+ "shared elderly care base, introduces corporate capital for commercial operation, realises joint cooperation between the government, enterprises and individuals, further utilises resources such as idle properties and sports venues, and empowers the elderly to move in at any time [3]. The "Internet + Senior Village" senior care model proposed by Wu. in <Research on the "Internet + Senior Village" Model from the Perspective of Sharing Economy>is based on a sharing economy, with the Internet resource platform making full use of the elderly care resources of the "elderly village" and achieving a rational matching of resources [4]. Yang in <An analysis of the construction of the " Internet + "shared elderly care platform> suggest that the above model faces various problems, such as insufficient policy support and financial difficulties, etc [5]. They suggest the establishment of a purely online service platform for shared ageing, by integrating existing offline resources to meet the supply and demand requirements of both parties, and building multiple channels to connect with other social institutions and organisations to establish a database for the elderly. In "An Exploration of the Sustainability of the "Assisting the Elderly" Model in Community Aging Services", Yan argues that the path to optimising mutual care comes from a complete information-based time banking system [6]. Zhou argues that the "Internet+" model of mutual help for the elderly is mainly based on "time banking" and is a kind of paid voluntary service, which makes up for some of the problems of traditional elderly care but still suffers from low efficiency and lack of professional talents [7].

To sum up, there is a certain degree of understanding and awareness of the "mutual care" model in China, and the concept of "Internet+" has also been introduced, but it still faces unsolved problems and has not been developed effectively.

2.2. Current Status and Development of Foreign Research

At present, developed countries such as Europe, the United States and Japan have already invested in corresponding construction projects in the area of "Internet+" mutual help elderly services, and have achieved good practical results. For example, Japan has developed electronic devices such as smart chairs and smart blood glucose meters, which allow the elderly to obtain real-time information on their physical condition simply by sitting in the smart devices. Smart robots developed in developed countries such as the UK and the US can be operated by remote control to provide psychological counselling services and health check-up services for the elderly. All these measurements and conversation data are transmitted to the network cloud in real time so as to provide reference for subsequent service projects.

In addition, there are some new forms of mutual care that are rarely seen in the international arena, such as membership-based community-based mutual care in the US, the German "Multi-Generation House" project and shared-tenancy mutual care. It is a top-down, open, voluntary and mutually supportive model of community care that creatively answers the question of whether care services for young families and older people can be provided under the same roof. Under one roof. The project is not limited to the elderly, but provides a platform for social interaction and integration of people of different ages, as well as numerous volunteer opportunities, by arranging for children, young people and the elderly to live in interchangeable functional areas.

"As a welfare project, the Multigenerational House offers a non-remunerated service that is less expensive than a traditional nursing home, maintains individuality and a group lifestyle, making it a popular choice for older people.

3. Construction and Advantages of the "Internet+" Mutual Help Elderly Care Model

With the deepening of population ageing in China and the increasing needs of the elderly, in order to better meet the needs of the elderly in old age, promote the process of healthy ageing, advance the goal of building a happy China for all, and promote and develop the cause of home care services. This paper proposes a new model of mutual help for the elderly as follows.

3.1. Construction of the "Internet+" Mutual Help Elderly Care Model

Through the analysis of relevant domestic and foreign research and the real situation, this paper proposes an "Internet+" elderly care model that can enable the elderly to better achieve the goal of "making steady progress in elderly care". It is expected to solve some of the problems of the elderly living alone at the present stage through the establishment of a new type of small program for mutual assistance in old age. The programme will focus on the following sections:

(1) Help-seeking section, which focuses on various inconvenient matters in the life of elderly people living alone, such as inconvenient going out for shopping and inconvenience, by placing orders for help remotely in this small program and having local users help to complete them.

(2) The public welfare section, which focuses on the spiritual world of the elderly, providing companionship mainly for elderly people living alone. It is of a public welfare nature and is served by local volunteers, while the applet mainly plays the role of information collection and dissemination.

(3) Health section, in this section, mainly with the community where the elderly live, children can register a "health file" for the elderly in the small program, and bind a family doctor. The doctor can visit the home every week for health monitoring, and then enter the most basic data into the account of the elderly, forming a complete health file. The doctor can then enter the most basic data into the account of the elderly person after weekly visits to monitor their health, forming a complete health file.

3.2. Advantages of the "Internet+" Model Of Mutual Help Elderly Care Model

According to a survey, nearly 70% of elderly people over 55 years of age now use smartphones [8]. Moreover, the popularity of the network continued to grow during the epidemic. Therefore, at this stage, this model is perfectly feasible, and it also possesses several advantages as follows:

3.2.1. Innovation

It is a wisdom platform that uses the Internet to provide quality elderly care services to the elderly by introducing the "mutual help" model. The platform comes with several sub-systems such as home care, institutional care, long-term care insurance, family doctors and medical care integration, which provide personalised elderly care services for the elderly. This is a bold and innovative attempt to combine the concept of "mutual care for the elderly" with the traditional elderly care industry and technology.

3.2.2. Practicality

The project focuses on social reality and meets the needs of the elderly population. The project is

based on scientific research and investigation, and is designed on the basis of the most up-to-date and comprehensive information and data, while the needs of the elderly of all ages are widely collected. The project has a high practical value.

3.2.3. Forward-looking

Building a smart ageing platform, which not only fits in with the development of smart ageing, but also focuses on the future of ageing in an ageing society. The new model built in this paper sets up three sections: help, public welfare and health, and provides one-stop services to meet the different needs of middle-aged and elderly people of all ages, and introduces the concept of "mutual help" for the elderly, which better solves the problems of families not being able to take full responsibility for care and the imbalance between supply and demand in the community.

3.2.4. Mutual Assistance

Residents can help each other and realise the concept of "honor old people as we do our own aged parents". The "mutual help" model constructed in this paper upholds the value concept of "helping people to help themselves", and while children provide services for local elderly groups, they are also providing protection for their parents who are far away. When more people are involved in the programme, it is possible to help each other through an 'exchange' of help, with young people in their parents' area helping them to solve their problems. At the same time, this not only allows children who are away to take better care of their elderly family members who have mobility problems by placing orders, but also allows some old people to use their abilities and resources to serve others, in the process making them realise that they are valuable and not abandoned by society, enriching their retirement life and enhancing their ability to take care of themselves in the process of serving others.

4. Problems of the "Internet+" Mutual Help Elderly Care Model

Nowadays, the "Internet+" mutual help elderly care model has been initially launched in some areas, but according to the survey and research, the following problems still exist in its operation:

4.1. The Technical Support Requirements for Service Systems and Hardware Platforms Are Large

In an attempt to build a complete "Internet+" intelligent mutual care service model, it is necessary to use Internet information technology as the basis and cloud computing as the platform [9], which requires greater technical support such as service systems and hardware platforms, and has technical problems in remote areas such as rural areas (especially areas where the Internet development is not well developed) and cannot be fully developed, and there are certain difficulties in implementing the "Internet+" elderly care model nationwide.

4.2. Low Acceptance by the Elderly

The main service targets of this mutual care model are the middle-aged and elderly people, some of whom are affected by old ideas and are unable to accept new developments quickly. For example, some older people are unable to accept strangers entering their homes to help them, and are often suspicious of the purpose of their actions, making it impossible for volunteers to carry out their services. This adds to the difficulties of promoting this model of care.

5. Optimization Path of "Internet+" Mutual Care Model

The "Internet+" mutual care model can be optimised in three ways: by improving technology, by increasing publicity and by helping human resources, in order to better achieve the goal of "care for the elderly".

5.1. Enhance Technology to Provide a New Model of Elderly Care from Multiple Perspectives

With the help of Internet technology, a cross-regional smart service platform can be established to integrate information on the service needs of the elderly and volunteers from multiple regions, and improve the efficiency and security of information storage [10]; promote the popularity of the Internet, so that even remote areas can make better use of the Internet for high-quality elderly care; at the same time, it is possible to conduct deeper research on the basis of existing technologies and develop relevant prediction technologies to anticipate the needs of the elderly, so as to better serve them.

5.2. Increase Publicity to Enhance the Acceptance of Older People in Many Ways

Publicity can be done both in the community and by offspring. In the community, the "Internet+" model of ageing can be promoted as a new business for the community [11], through events, door-to-door presentations or posting advertisements in the community. At the same time, children should also play a part in persuading the elderly in the family by analysing the pros and cons of the new model and advising them to use it for their old age.

5.3. Talented People Help to Expand Volunteer Service Groups in Multiple Dimensions

The Government and the community have stepped up publicity efforts to attract more people to join the volunteer service. The larger and broader the group of volunteers spread across the community, the more it will help to ensure that the retirement of older people is secured. At the same time, the quality of volunteers should be carefully checked so as to provide a more secure and comfortable experience for the elderly.

6. Conclusion

With today's ageing society becoming more and more serious, it has become imperative to adopt appropriate solutions to the difficult problem of ageing. With the imbalance between the supply and demand of urban elderly services, the emergence of the new "Internet+" model has provided a new solution to this problem. In order to effectively use the internet to promote elderly care, not only do we need the unified planning and guidance of the government to upgrade the technology, but we also need the cooperation of communities and enterprises to improve the acceptance of the elderly and recruit talents to solve the problem. It is only through the cooperation of many parties that we can promote the development of the elderly care industry and a happier life for the elderly in their old age.

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