A Comparative Study on the Policy Promotion of the Combination of Medical Treatment and Endowment in Guangdong Province Before and After the Epidemic

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ABSTRACT

According to the investigation of the policy promotion of combination of medical treatment and endowment in Guangdong Province before and after the epidemic, this paper analyzed the difference in the policy implementation of combination of medical treatment and endowment before and after COVID-19. According to the study, after the epidemic, the daily care, humanistic care and mental health counseling services in the community increased, the meal assistance decreased, the residents' satisfaction with the service increased significantly, and the promotion of the combination of medical treatment and endowment through community activities increased. However, the promotion of contracted services of family doctors in medical institutions was not ideal, and the proportion of convenient services such as registration, appointment, one-stop medical treatment, regular free clinic and discharge follow-up increased. In addition, the proportion of home-based elderly care service centers, day care centers for the aged and elderly rehabilitation centers in nursing institutions for the aged increased, and the proportion of residents unwilling to stay in nursing institutions for the aged decreased. After the epidemic, the residents' understanding and satisfaction with the mode of combination of medical treatment and endowment improved. They believe that the shortage of medical talents and high personal expenses are the main problems of this mode.

Keywords: Combination of medical treatment and endowment, Community, Medical institutions, Nursing institution for the aged.

1. INTRODUCTION

1.1 Raising Questions

With the rapid economic growth, the progress of science and technology, the implementation of family planning policy and the population aging for a long time, the problem of supporting old people has become a major livelihood issue of concern to all walks of life. In this context, "Suggestions of the State Council on accelerating the development of services for the aged" (GF [2013] No. 35) and other documents put forward that it is necessary to promote the pension mode (that is, the combination of medical treatment and endowment), so as to meet the growing demand for healthy services for the aged. The State Council issued the "opinions on promoting the development of services for the aged" (GBF [2019] No. 5), and proposed to continuously improve the service system for the aged based on home, supported by community, supplemented by institutions and combined with medical treatment, so as to establish and improve the long-term service system for the healthy aged and disabled elderly and effectively meet the diversified and multi-level pension service needs of the elderly.

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The traditional "filial piety culture" affects the government's policy formulation of pension mode[1]. The key to the increasingly acute pension service in China is to explore and establish a perfect home-based pension service system[2], and pay attention to the training of applied medical and nursing professionals[3].

1.2 Combination of Medical Treatment and Endowment in the Context of the Epidemic

Due to the outbreak of COVID-19 in 2019, the State Council issued the "Notice on Doing a Good Job in the Prevention and Control of the COVID-19 in Institutions of Combination of Medical Treatment and Endowment" (Pneumonia Mechanism ZF [2020] No. 67) in response to the Joint Prevention and Control Mechanism. And then, people can do well in the prevention and control of COVID-19 in medical and nursing institutions from four aspects, such as improving the prevention and control mechanism, obeying the unified command of local joint prevention and control, effectively carrying out epidemic prevention and control, and strengthening the implementation of responsibilities. With the outbreak of COVID-19, the situation of US pension institutions is serious, highlighting the necessity of the combination of medical treatment and endowment for the pension institutions. With the deepening of the aging in China, pension institutions will play a more important role in pension service system.

Against the background of the normalization of epidemic prevention and control, the promotion of the mode of combination of medical treatment and endowment in China needs to be adjusted in time.

Therefore, the project team conducted a comparative study on the policy promotion of combination of medical treatment and endowment in Guangdong Province before and after the epidemic, understood the differences in the promotion of the combination of medical treatment and endowment in communities, medical institutions and pension institutions in Guangdong Province before and after the epidemic, analyzed the differences in residents’ attitudes towards the mode of combining medical treatment and endowment before and after the epidemic, and explored the changes, existing problems and difficulties, so as to provide practical suggestions for the promotion of the combination of medical treatment and endowment in Guangdong Province.

2. RESEARCH METHODS

2.1 The Respondents

The respondents were middle-aged and elderly residents of 6 regions (Guangzhou, Shenzhen, Pearl River Delta, Eastern Guangdong, Northern Guangdong, Western Guangdong) in Guangdong Province. ("Table 1")

| Table 1. Basic situation of the respondents |
|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| Age               | 85 years old and above | 75-84 years old | 65-74 years old | 55-64 years old | 45-54 years old | 35-44 years old | Below 34 years old |
| 1.40%             | 4.10%               | 10.10%           | 12.9%           | 21.9%           | 25.10%           | 24.50%           |

| Gender            | Male               | Female            | Household registered population | Migrant population | Childless | One child | Two children | Three children and above |
|-------------------|--------------------|-------------------|---------------------------------|-------------------|-----------|-----------|-------------|-------------------------|
| 46.80%            | 53.20%             | 78.00%            | 16%                             | 21.70%            | 26.80%    | 20.10%    | 30.30%      | 22.70%                  |

| Educational background | Uneducated | Primary school | Junior high school | Senior high school/technical secondary school | Junior college | Undergraduate | Postgraduate or above |
|------------------------|------------|----------------|--------------------|---------------------------------------------|----------------|----------------|----------------------|
| 5.00%                  | 15.00%     | 24.50%         | 14.80%             | 25.80%                                      | 13.50%         | 1.90%          |

| Region          | Guangzhou | Shenzhen | Pearl River Delta | Eastern Guangdong | Northern Guangdong | Qingyuan | Western Guangdong |
|-----------------|-----------|----------|-------------------|-------------------|-------------------|----------|------------------|
| 21.20%          | 7.20%     | 25%      | 23%               | 7.20%             | 7.10%             | 9.40%    |
2.2 Survey Methods

2.2.1 Questionnaire

1100 field surveys and online questionnaires were recovered before the epidemic in 2019, and 437 new online questionnaires were recovered after the epidemic in 2020. In order to make the samples more representative, more young samples in the two-year data were randomly deleted, and 1265 valid samples were finally obtained, including 882 samples in 2019 and 383 samples in 2020.

2.2.2 Interview Method

After the epidemic, different interview outlines were drawn up and interviews were conducted for residents, pension institutions, medical and health institutions and institutions of combination of medical treatment and endowment in Guangdong Province, including 1 interview with institutions of combination of medical treatment and endowment, 2 interviews with pension institutions, 3 interviews with medical institutions and 17 interviews with residents.

3. ANALYSIS OF SURVEY RESULTS

3.1 The Promotion of Combination of Medical Treatment and Endowment in Community After the Epidemic

3.1.1 Daily Care, Psychological Counseling and Other Service Activities Were Increased in Community

There were various forms of elderly care services in the community where residents lived, among which daily care accounted for 53.8%, humanistic care accounted for 47.7% and sports and entertainment (44.8%) accounted for the highest proportion, which could meet the diversified service needs of the elderly. ("Figure 1")

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Figure 1 Elderly residents’ access to pension services relying on the community.
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| Elderly care services in community | Year 2019 | Year 2020 | Total | P    | L    |
|-----------------------------------|-----------|-----------|-------|------|------|
| Daily care                        | 48.1%     | 65.6%     | 53.8% | 0.000| 0.032|
| Humanistic care                   | 45.2%     | 53.1%     | 47.7% | 0.012| 0.025|
| Mental health                     | 31.5%     | 38.4%     | 33.7% | 0.019| 0.000|
| Daily management                  | 36.2%     | 45.6%     | 39.3% | 0.002| 0.000|
| Counseling                        |           |           |       |      |      |
| Entertainment                      | 44.0%     | 46.4%     | 44.8% | 0.448| 0.000|
| Others                            | 5.0%      | 5.6%      | 5.2%  | 0.671| 0.000|
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Comparing the service situation before and after the epidemic, it was found that daily care (65.6%), humanistic care (53.1%), mental health counseling (38.4%) and daily health management (45.6%) in community service activities in 2020 were significant than that in 2019 (48.1%, 45.2%, 31.5%, 36.2% respectively). According to the data, people can see that in order to take care of elderly residents who are inconvenient to go out during the epidemic, the community has invested more energy in increasing the service activities in the community to meet the care needs of the elderly. ("Table 2")

### 3.1.2 The Government Provided the Most Daily Care Services, and Meal Assistance Services Decreased

Among various pension services provided by the government for elderly residents, daily care services accounted for the largest proportion (45.5%), followed by other services (28.2%), meal assistance services (20.7%), and bath assistance services (5.5%). Before and after the epidemic, there was little difference in elderly residents' access to government-provided elderly care services before and after the epidemic. In order to reduce the risk of infection and spread of the epidemic, there would be a reduction in the meal assistance service after the epidemic. ("Figure 2")

![Figure 2 Comparison of elderly care services provided by the government before and after the epidemic.](image)

### 3.1.3 Residents Were More Satisfied with the Elderly Supplies and Services Provided in Local Area After the Epidemic

After the epidemic, the proportion of residents who were quite satisfied (38.9%) and satisfied (10.6%) with the elderly supplies and services provided locally increased significantly (35.7%, 4.6%, P=0.000<005) than that before the epidemic (35.7%, 4.6%, P=0.000<005), but the proportion of residents who were very dissatisfied with (2.5%) and unsatisfied with (4.4%) the elderly supplies and services slightly was higher than that before the epidemic (2.3%, 3.1%). There were great differences in residents' satisfaction with elderly supplies, appliances and services before and after the epidemic, which might be due to differences in the effectiveness of prevention and control and the policy implementation of combination of medical treatment and endowment in different regions. ("Figure 3")

![Figure 3](image)
3.1.4 Publicizing the Model of Combining Medical Treatment with Endowment Through Community Activities

There are diversified ways to promote the model of combination of medical treatment and endowment. Among them, online publicity (60.4%), TV publicity (58.4%) and community activity publicity (55.3%) are the most widely used, followed by household visits (50.6%) and hospital publicity (41.3%), newspapers and magazines (40.6%), radio (28.0%) and others (1.2%).

Table 3. Comparison of the publicity methods of the model of combination of medical treatment and endowment before and after the epidemic

| Pension model of combining medical treatment with endowment | Year 2019 | Year 2020 | P      |
|-----------------------------------------------------------|----------|----------|--------|
| Online                                                   | 58.90%   | 63.70%   | 0.111  |
| Newspapers and magazines                                 | 42.20%   | 37.10%   | 0.091  |
| Tv                                                       | 59.00%   | 57.20%   | 0.550  |
| Radio                                                    | 26.90%   | 30.30%   | 0.221  |
| Community activity                                        | 52.10%   | 62.10%   | 0.001  |
| Household interview                                       | 49.50%   | 53.00%   | 0.259  |
| Hospital publicity                                        | 41.40%   | 41.30%   | 0.971  |
| Others                                                   | 0.90%    | 1.80%    | 0.141  |

After the epidemic, the proportion of community activities publicity (62.1%, P = 0.001 < 0.05) was significantly higher than that before the epidemic (52.1%), reflecting the increase in the use of community activities to publicize the combination of medical treatment and endowment after the epidemic. This may be that during the epidemic period, the community popularized the combination of medical treatment and endowment while popularizing COVID-19 prevention knowledge for the elderly, urging the elderly to get vaccinations and nucleic acid tests.
3.2 Promotion of the Combination of Medical Treatment and Endowment in Medical Institutions After the Epidemic

3.2.1 Nearly 70% of the Residents Did Not Hear the Service of Signing up Family Doctors, and the Publicity Effect Was Not Ideal After the Epidemic

Nearly 70% of the residents had not heard of the contracted services of family doctors. After the epidemic, the medical institutions focused on epidemic prevention and control, and the promotion of the contracted services of family doctors was suspended, resulting in no significant change in residents' cognition before and after the epidemic ($P = 0.849 < 0.05$). This situation was consistent with the results of interviews with residents and medical institutions. ("Figure 4")

![Figure 4 Residents' understanding of the service of signing up family doctors.](image)

3.2.2 Registration, Appointment for Medical Treatment and "One-Stop" Medical Convenience Services Were Increased

Medical institutions provided various preferential services for elderly residents, the most of which were registration (47.4%), appointment (38.4%) and emergency referral (30.7%), followed by hospitalization (28.6%), charging (27.6%), taking medicine (26.9%), one-stop medical convenience service (17%), comprehensive treatment (16.2%), postoperative rehabilitation (8.3%) and telemedicine (7.7%) and "whole-process escort" medical convenience service (7.5%). ("Table 4")

![Table 4. Comparative analysis of preferential services provided by medical institutions for elderly residents before and after the epidemic.](table)

| Preferential policies                      | Year       | Total | P     |
|-------------------------------------------|------------|-------|-------|
| Registration                              | 43.90%     | 54.90%| 47.40%| 0.000 |
| Make an appointment to see a doctor       | 35.70%     | 44.00%| 38.40%| 0.007 |
| Emergency referral                        | 29.90%     | 32.30%| 30.70%| 0.416 |
| Get the medicine                          | 25.70%     | 29.60%| 26.90%| 0.159 |
| Charge                                    | 26.20%     | 30.70%| 27.60%| 0.111 |
| Hospitalization                           | 29.00%     | 27.70%| 28.60%| 0.653 |
| Polyclinic                                | 15.30%     | 18.10%| 16.20%| 0.217 |
| One-stop medical treatment                | 15.30%     | 20.50%| 17.00%| 0.026 |
| Tele medicine                             | 7.70%      | 7.70% | 7.70% | 0.985 |
| Postoperative rehabilitation visits       | 7.80%      | 9.30% | 8.30% | 0.387 |
| Whole-process of accompanying to medical treatment | 6.90% | 8.80% | 7.50% | 0.260 |
| Unaware                                   | 25.80%     | 22.90%| 24.90%| 0.291 |
After the epidemic, registration (P = 0.000 < 0.05), appointment (P = 0.007 < 0.05) and "one-stop" medical convenience (p=0.026 < 0.05) increased significantly. According to the data, during the epidemic period, medical institutions greatly increased convenient services such as registration, appointment for medical treatment and "one-stop" medical treatment in order to facilitate the elderly who are unwell to get screening and treatment faster, so that the elderly who are unwell in special periods can get medical resources as soon as possible. On the one hand, it reflects that China does not give up any elderly in the process of anti-epidemic; on the other hand, it also promotes the development of convenient services in medical institutions.

3.2.3 Regular Free Clinic and Discharge Follow-Up Services Provided by Medical Volunteers Increased

After the epidemic, medical institutions and medical volunteers provided more elderly care services for elderly residents than that before the epidemic. Among them, regular free clinic (66.8%, P = 0.000 < 0.05) and discharge follow-up (26.7%, P = 0.049 < 0.05) were significantly higher than that before the epidemic. According to the interview with medical institutions, under the epidemic situation, medical institutions provided regular free clinic, discharge and rehabilitation guidance, nucleic acid detection, psychological counseling and other services for the elderly. ("Figure 5")

Figure 5 Comparison of elderly care services provided by medical volunteers to elderly residents before and after the epidemic.

3.3 Development of Pension Institutions of Combination of Medical Treatment and Endowment After the Epidemic

3.3.1 Two-Way Referral of Elderly Care Institutions Reduced

Before the epidemic, regular visits accounted for the largest proportion (42.3%) of the medical treatment services provided by pension institutions, but appointment visits accounted for the largest proportion (26.3%) of services after the epidemic, among them, two-way referrals were significantly reduced after the epidemic (P=0.018) <0.05). This change might be due to the shortage of medical staff during the epidemic prevention and control period, and most of staff was concentrated in medical institutions, so regular visits in pension institutions decreased. Coupled with the impact of epidemic prevention and control factors, the elderly were restricted from going out, and the crowding in medical institutions they were worried would
increase the risk of infection, so two-way referrals had been greatly reduced. ("Figure 6")

Through interviews with pension institutions, institution conducts physical examinations for the elderly every year and provides one-to-one services for some special elderly residents. After the epidemic, elderly persons in institutions had symptoms of colds and flu, they could be treated in the hospital after the infection of the COVID-19 was ruled out. Serious illnesses should be treated by institutional doctors before being referred to medical institutions.

3.3.2 The Number of Day Care Centers, Home-based Care Centers and Rehabilitation Homes for the Elderly Increased

Sanatoriums (36.4%) and home-based care centers for the elderly (35.9%) were established most among the institutions of combination of medical treatment and endowment. After the epidemic, the number of day care centers for the elderly (P = 0.002 < 0.05), home-based care centers for the elderly (P = 0.005 < 0.05) and elderly rehabilitation hospitals (P = 0.000 < 0.05) increased significantly. After the epidemic, people pay more attention to their physical condition and tend to find scientific and professional pension institutions. According to the needs of epidemic prevention, personnel gathering will be avoided as far as possible. Therefore, day care centers and home-based elderly care centers with family as the core and community as the support are more favored. ("Table 5")

![Figure 6 Comparison of medical treatment services provided by elderly care institutions before and after the epidemic.](image)

Table 5. Comparison of the establishment of institutions of combination of medical treatment and endowment before and after the epidemic

| Institutions of combination of medical treatment and endowment | Year 2019 | Year 2020 | Total | P     |
|---------------------------------------------------------------|----------|----------|-------|-------|
| Day care centre for the elderly                               | 22.3     | 30.9     | 25.1  | 0.002 |
| Home-based care center for the elderly                        | 33.1     | 41.6     | 35.9  | 0.005 |
| Geriatric hospital                                            | 18.0     | 21.9     | 19.2  | 0.116 |
| Geriatric rehabilitation hospital                             | 21.2     | 30.9     | 24.4  | 0.000 |
| Nursing home                                                  | 24.5     | 25.9     | 25.0  | 0.620 |
| Sanatorium                                                    | 37.4     | 34.4     | 36.4  | 0.328 |
| Geriatric health management center                            | 23.4     | 20.0     | 22.3  | 0.198 |
| Chronic disease hospital                                      | 8.3      | 9.1      | 8.6   | 0.681 |
| Hospice care institution                                       | 5.6      | 4.0      | 5.1   | 0.234 |
| Others                                                        | 9.5      | 8.8      | 9.3   | 0.701 |
3.3.3 The Proportion of Residents Unwilling to Stay in Pension Institutions of Combination of Medical Treatment and Endowment Decreased

Influenced by the culture of "filial piety" and the traditional concept of providing for the aged, less than 30% of the residents expressed their willingness to stay in pension institutions of combination of medical treatment and endowment. After the epidemic, the proportion of residents who were uncertain (57.7%) and willing (24.4%) to stay in pension institutions of combination of medical treatment and endowment increased, while the proportion of residents who were unwilling to stay decreased. According to the data, it is found that the promotion of the combination of medical treatment and endowment has achieved certain results; the residents' traditional concept of elderly care is changing; with the uncertain factors, the residents' exclusion from living in the pension institutions of combination of medical treatment and endowment has decreased in order to seek scientific and professional care. ("Figure 7")

Figure 7 Comparison of residents' willingness to stay in pension institutions of combination of medical treatment and endowment before and after the epidemic.

According to the interviews with residents, 80% of the residents did not choose to stay in pension institutions of combination of medical treatment and endowment because they had the ability to take care of themselves, could provide for the elderly at home and did not want to leave the familiar environment. According to the interviews with pension institutions of combination of medical treatment and endowment, due to the closed management during the epidemic, only some professional nursing staff were left in the pension institutions, and the work was tense, so that the elderly living in the elderly care institutions might not receive considerate care, which might also be the reason why residents were worried about entering the pension institutions.

3.4 Cognition of Residents on the Mode of Combination of Medical Treatment and Endowment After the Epidemic

3.4.1 Residents' Understanding of the Pension Model of Combination of Medical Treatment and Endowment Improved Steadily

Only 1.8% of the residents had a good understanding of the model of combination of medical treatment and endowment; 9.8% of the residents had a better understanding; and 51.8% of the residents had a general understanding; and 36.5% of the residents had never heard of it. ("Table 6")
According to further comparison, it was found that after the epidemic, residents' understanding of the model of combination of medical treatment and endowment improved. The proportion of residents who had never heard of the model of combination of medical treatment and endowment decreased from 37.6% to 34.2%, and the number of residents with general understanding increased (50.7% and 54.1%). According to the data, people can see that in the period of epidemic prevention and control, the mode of combination of medical treatment and endowment is still being promoted steadily, and the residents pay attention to the development of medical and health care and related institutions to a certain extent.

### Table 6. Cross-analysis of cognition of pension model of combination of medical treatment and endowment and years

| Understanding of pension model of combination of medical treatment and endowment | Year | 2019 | 2020 | Total |
|---|---|---|---|---|
| Never hear of | 37.60% | 34.20% | 36.50% |
| General understanding | 50.70% | 43.10% | 51.80% |
| Understand | 10.10% | 9.30% | 9.8% |
| Know a lot about | 1.60% | 2.4% | 1.8% |
| Total | 100.00% | 100.00% | 100.00% |

3.4.2 Residents Were Generally Satisfied with the Mode of Combination of Medical Treatment and Endowment, Which Increased Significantly After the Epidemic

Residents were very satisfied and satisfied with the mode of combination of medical treatment and endowment, accounting for 7% and 25.3%, followed by the general satisfaction (56.8%), and residents were less satisfied and dissatisfied with the mode, only accounting for 8% and 2.8%. It can be seen that residents' satisfaction with the mode of combination of mode is generally biased towards satisfaction. ("Figure 8")

![Figure 8](image-url)

Figure 8: Comparison of residents' satisfaction with the model of combination of medical treatment and endowment before and after the epidemic.

When analyzing the difference in satisfaction with the mode of combination of medical treatment and endowment before and after the epidemic, it was found that the residents' satisfaction with the mode of combination of medical treatment and endowment in 2020 was significantly higher than that in 2019 before the epidemic (P = 0.009 < 0.05). Through further cross-analysis of "residents'
satisfaction with the model of combination of medical treatment and endowment" and "residents' views on the quality of elderly care services provided in the region", it was found that residents' satisfaction with the model of combination of medical treatment and endowment had a significant positive correlation with residents' satisfaction with "hospitalization during treatment", "rehabilitation nursing", "life care" and "hospice care", and Gamma values were 0.504, 0.485, 0.544, and 0.581, respectively.

3.4.3 Some Problems in the Mode of Combination of Medical Treatment and Endowment Were Improved

Among the problems existing in the development of the current model of combination of medical treatment and endowment, the residents had the highest recognition (the lower the average value, the higher the recognition) of "high personal expenses" (2.42), followed by "less publicity" (2.52) and "not dense distribution" (2.56), and then the shortage of medical talents (2.57), the lack of close cooperation between leading departments (2.60), too few service contents (2.64), insufficient vocational training for employees (2.66), low quality of nursing workers (2.67), inconvenient transportation (2.71), poor medical equipment (2.71), etc.

Comparing the average values of residents' views on the development status of the mode of combination of medical treatment and endowment before and after the epidemic, it was found that the average value of evaluation was mostly higher than that before the epidemic, except that the P values of "shortage of medical talents" and "high personal expenses" were greater than 0.05, and the P values of other existing problems were less than 0.05. According to the data, people can see that the problems existing in the development of the mode of combination of medical treatment and endowment have been solved to a certain extent in the past year. Next, the problems of "shortage of medical talents" and "high personal expenses" need to be solved.

3.4.4 The Service Quality of Hospice Care Was Improved

Residents believed that the best quality of health and elderly care services provided in this region was hospitalization during treatment (2.75), followed by rehabilitation care (2.79), life care in stable period (2.81) and hospice care (2.87). ("Figure 9")

![Figure 9](image_url)

Figure 9 Comparison of average values of residents' views on the quality of elderly care services provided in the region before and after the epidemic.

Comparing the average recognition of the quality of health and elderly care services provided in the region before and after the epidemic, it was found that the recognition of residents for various services was improved after the epidemic. Among them, in terms of hospice care, the average value
(2.77, P = 0.007 < 0.05) was significantly lower than that before the epidemic (2.92), indicating that residents’ recognition of hospice care services increased after the epidemic.

### 3.4.5 Residents' Desire for Medical Talents Was Increased

Nearly 70% of the residents believed that nursing professionals (63.2%) need to be trained most for the elderly, followed by geriatric professionals (63.2%), psychologists (56.0%), nutrition (49.5%), social work (35.4%), rehabilitation (24.9%) and others (0.4%). ("Figure 10")

![Figure 10](image)

**Figure 10** Residents' views on the types of talents most needed for elderly care before and after the epidemic.

After further analyzing the differences of residents' views on the professionals most needed to be trained for the elderly before and after the epidemic, it was found that after the epidemic, except for rehabilitation (P = 0.143) and others (0 = 0.693), the residents' demand for all majors of elderly care talents increased significantly, reflecting the residents' attention to the field of medical care and higher requirements for the combination of medical treatment and endowment after the epidemic.

### 4. DISCUSSION AND SUGGESTION

#### 4.1 Community Elderly Care Services and Publicity Ways Were Adjusted According to the Epidemic Situation, and Residents' Satisfaction Was Improved

While fully implementing the epidemic prevention and control measures, community elderly care services paid more attention to the actual needs of the elderly than that in previous years in daily care, humanistic care, psychological counseling and daily health management. During the epidemic period, the elderly, as the susceptible and vulnerable population of COVID-19, should reduce the crowd gathering and meal assistance service. In order to cooperate with the epidemic prevention and control publicity, the combination of medical treatment and endowment was promoted through community activities, and residents' satisfaction with the elderly appliances and service items provided was improved.

With the normalization of epidemic prevention and control, the elderly care services in community should be adjusted accordingly. It is suggested to pay special attention to the daily care and mental status of elderly residents, and provide services according to the needs of special elderly residents. According to community epidemic prevention publicity activities, the policy publicity materials of combination of medical treatment and endowment were distributed and explained to the residents, so that the residents could understand the epidemic prevention knowledge and the contents and advantages of the policy of combination of medical treatment and endowment.


4.2 Preferential Treatment Services for the Elderly in Medical Institutions Increased, But the Publicity Effect of Family Doctors' Contracted Services Was Still Not Ideal

In order to meet the medical care needs of elderly residents during the epidemic, medical institutions increased convenience services for elderly residents than that before the epidemic, such as registration, appointment and "one-stop" medical service. In order to prevent elderly residents with low immunity or inconvenient movement from contracting COVID-19 in medical institutions, they also provided more regular free clinic and discharge follow-up services than that before the epidemic. However, the publicity effect of family doctors' contracted service was not ideal, and most residents still did not understand it after the epidemic.

During the epidemic period, equal attention should be paid to the physical and mental health of the elderly, the preferential treatment policy of medical services for elderly residents should be implemented, the green channel for elderly residents should be established and improved, and the medical treatment process should be optimized. At the same time, it is suggested to reasonably allocate and integrate various medical and elderly care service resources, strengthen the publicity of medical treatment services and health services, improve residents' recognition of the combination of medical treatment and endowment, and put the life safety and health of elderly residents in the first place [4].

4.3 Residents' Rejection of Living in Pension Institutions of the Combination of Medical Treatment and Endowment Reduced

With the outbreak of the epidemic, residents were aware of the importance of the medical and health industry, the advantages of pension institutions of the combination of medical treatment and endowment were highlighted, and the proportion of residents unwilling to stay in pension institutions of the combination of medical treatment and endowment was significantly lower than that before the epidemic. At the same time, the proportion of two-way referral in pension institutions of combination of medical treatment and endowment decreased, and pension institutions with daily care, home-based elderly care and rehabilitation services increased.

Residents want to reduce the burden on their families when they stay in pension institutions of combination of medical treatment and endowment, but high fees and a reluctance to leave the familiar environment are barriers to moving into a pension institution [5]. During the epidemic period, the elderly residents realized that it was more important to live in professional and safe pension institutions compared to high fees. Therefore, the exclusion of pension institutions of combination of medical treatment and endowment was reduced. As a pension institution of combination of medical treatment and endowment, in addition to doing a good job in epidemic prevention and control, it is suggested to provide different nutritional conditioning and treatment services for different people with chronic diseases. And then, the physical quality of the elderly would be guaranteed, and the ability to resist diseases would be enhanced, effectively improving the quality of life of the elderly [6].

4.4 Residents' Understanding and Satisfaction with the Mode of Combining Medical Treatment with Endowment Improved

After the epidemic, the residents' understanding and satisfaction with the mode of combining medical treatment with endowment improved. They believe that some problems existing in the combination of medical treatment and endowment before the epidemic, such as low quality of nursing workers and non-intensive distribution, have been alleviated. The two problems that need to be solved are the shortage of medical talents and high personal expenses. At the same time, residents pay more attention to and thirst for medical talents than that before the epidemic.

It is suggested that under the normalization of epidemic prevention and control, residents should establish the awareness of regular physical examination, timely understand their own health status, change their ideas, and choose a suitable pension model in combination with their own situation [7]. At the same time, residents should also actively participate in the construction of elderly care services, and feedback the problems to be improved in the services to institutions or their own elderly care needs [8].
5. CONCLUSION

After the epidemic, Guangdong residents’ understanding, acceptance, and satisfaction with the pension model of the combination of medical treatment and endowment have increased to a certain extent. The communities have adjusted the promotion ways for pension services and the combination of medical treatment and endowment in accordance with the epidemic situation. Medical institutions have concentrated their manpower and material resources to prevent and fight against the epidemic, and the promotion of services signed by family doctors has been suspended. Pension institutions of combination of medical treatment and endowment have increased, providing daily care, home-based care, and rehabilitation services, and residents’ rejection of institutions of combination of medical treatment and endowment has decreased. It is suggested that the government should strengthen inter-departmental collaboration to ensure the training of medical talents; institutions pay attention to the needs of residents for elderly care and ensure the quality of elderly care services; the community should implement epidemic prevention and control, and at the same time, intensify publicity on the combination of medical treatment and endowment; residents strengthen health awareness and actively change the concept of elderly care.

AUTHORS’ CONTRIBUTIONS

Fucai Li is responsible for questionnaire design and wrote the manuscript, Yaling Liu analysed data, and Jinggao Wu contributed to revising and editing.

REFERENCES

[1] Wang Suying, Zhang Zuosen, Sun Wencan. The model and path of the combination of medical treatment and endowment — Research report on promoting the combination of medical treatment and endowment [J]. Social Welfare, 2013(12). doi: 10.3969/j.issn.2095-2414.2013.12.003

[2] Yuan Xiaohang. Innovative research on the pension model of institutions of combination of medical treatment and endowment [D]. Zhejiang University, 2013. (in Chinese)

[3] Cheng Qiuxian, Feng Zeyong. PACE in the United States and its enlightenment to the combination of medical treatment and endowment in communities in China [J]. Medicine and Philosophy, 2015 (9). doi: CNKI:SUN:YXZX.0.2015-09-022

[4] She Ruifang. Research on the status quo, problems and countermeasures of the pension model with the combination of medical treatment and endowment in China [D]. Graduate School of Chinese Academy of Social Sciences, 2014. doi: CNKI:CDMD:2.1014.054706

[5] Ma Yuqin, Dong Gang, Xiong Shunping. Research on the guarantee of medical and health services for the elderly in China: Based on the needs of medical and health services [J]. Chinese Health Economics, 2012(7). doi: CNKI:SUN:WEIJ.0.2012-07-008

[6] Wang Xinjun, Zheng Chao. Empirical analysis of elderly health and long-term care [J]. Journal of Shandong University (Philosophy and Social Sciences Edition), 2014(3). doi: CNKI:SUN:SDZS.0.2014-03-005

[7] Zhang Xiuhui. Research on the home-based pension model of the community with the combination of medical treatment and endowment [D]. Zhejiang University, 2015. (in Chinese)

[8] Zhang Qiangzhong, Guo Wenjia. Separation and Cooperation: Research on Departmental Collaboration with the Combination of Medical Treatment and Endowment [J]. Journal of Shangqiu Normal University, 2020. (in Chinese)