The Analysis of the Current Situation and Influencing Factors of Medical Demand Combining in North Third District of Qigihar City

Lina Wu¹,a,*, Yexiang Yao¹,a and Fengjiao Zhang¹,a
¹Qiqihar Medical University 161006 China
*261102958@qq.com
Corresponding author

Keywords: Combination of Medical Treatment and Maintenance, Demand for Medical Care and Combination, Influencing Factors of Medical Maintenance Combination, Qigihar

Abstract. To understand the present situation of the elderly medical care in the northern third district of Qigihar (Jian Hua District, Long Sha district and Tie Feng District), analyze the influencing factors and analyze the old-age mode of the combination of home medical care according to the actual demand, and provide the basis for the development of home medical care and the old-age mode in Qigihar. Now healthy aging is needed to improve the quality of life of the elderly. Methods: The stratified random sampling of Qigihar North Third District (Jian Hua District, Long Sha District and Tie Feng District) was selected, and 3 residential areas of 7 streets were randomly selected, 25 cases each, and 482 elderly people were interviewed on the spot. The questionnaire survey included two aspects, namely the basic situation of the elderly and the combination of medical care. A total of 525 questionnaires were sent out, and 482 valid questionnaires were collected. The effective recovery rate of the questionnaire was 91.8%. Results: Among the 482 questionnaires, there were 259 (129 men and 130 women) who had the demand for medical support, and the demand rate of medical maintenance combined was 53.7%. Different sex, age, marriage, number of children, living mode, personal monthly income, medical insurance form, self-care ability, self-assessment health status, chronic disease condition and medical care combined with willingness to pay willingness of elderly people combined demand rate, the analysis difference had statistical significance (P<0.05). Conclusion: the number of children, age, self-care status, chronic disease condition, self-assessment health status, medical insurance type and the willingness to pay for medical care are the influencing factors of the combination of medical care in the northern third district of Qigihar. The mode of medical care combined with pension in Qigihar is being gradually promoted. It is of far-reaching significance to solve the urgent need for the elderly to provide services for the elderly.

Introduction

The physical function of the elderly is declining with increasing of the aging in Qiqihar City, there are limitations in the traditional family pension model and the pension model of relevant institutions. The combination of medical treatment and maintenance is a new pension model which are effectively combined with modern medical service technology and old-age security model. President Xi Jinping clearly pointed out in the report of the 19th National Congress that "we should actively respond to the aging of the population, construct a policy system and social environment of providing for the aged, filial piety and respect for the elderly, promote the combination of medical care and support, and accelerate the development of the cause of aging and industry". The elderly have different physical health, self-care ability and different family economic conditions. We should establish diversified development models to satisfy the health needs of the elderly. This study was conducted to analyze the influencing factors of the combination of medicine and nursing on the basis of field investigation of the elderly in the three northern districts of Qiqihar City, propose a proposal to develop the integrated medical and nursing services in our city.
Objects and Methods

Object of Investigation

A stratified random sampling was conducted in the three northern districts of Qiqihar (Jian Hua, Long Sha and Tie Feng) in November 2017, randomly selected 25 elderly people from 3 residential areas in 7 streets, the living time was more than 6 months, the age was greater than 60 years old, selected 525 elderly who participated in the survey on the basis of informed consent and willingness to cooperate.

Investigation Method

The questionnaires were used to conduct the survey on the basis of references and the actual situation of old-age care in our city, “The Needs of Old-age Care for the Elderly in the North Three Districts of Qiqihar City.” The main contents of the questionnaire are as follows:(1) The basic situation of the elderly: including gender, age, marital status, educational level, number of children, living style, personal monthly income, medical insurance, self-care ability, self-assessment of health status, chronic diseases, current pension satisfaction, etc.(2) The demand of the combination of health care and health care: whether it needs the combination of health care and health care services, the expected combination of health care and health care services, the willingness to pay for the combination of health care and health care, etc. 525 questionnaires were distributed, and 482 valid questionnaires (91.8%) were collected in the end.

Statistical Methods

SPSS 17.0 statistical software was used for statistical analysis. The counting data were tested by X2 test, and the influencing factors were analyzed by multivariate logistic regression analysis, there was significant difference with P < 0.05.

Results

Basic Situation of the Elderly

260 males (54.0%) and 222 females (46.0%) among 482 elderly people, the age ranged from 60 to 91 years. The general situation is shown in Table 1.

Table 1. Single-factor analysis of influencing the demand of the elderly for the combination of medical care and nursing.

| Items         | n  | Demand rate (%) | χ²  | P    | Items         | n  | Demand rate (%) |
|--------------|----|-----------------|-----|------|--------------|----|-----------------|
| Gender       |    |                 |     |      |              |    |                 |
| Male         | 260| 129 (49.6)      | 3.583 | 0.050| Female       | 222| 130 (58.6)      |
| Age          |    |                 |     |      |              |    |                 |
| 60-69        | 232| 155(66.8)       | 21.64 | <0.001| 70-79        | 188| 101(53.7)       |
| ≥80          | 62 | 22(35.8)        |     |      |              |    |                 |
| Marital status|  |                 |     |      |              |    |                 |
| married      | 291| 160(55.0)       | 7.214 | 0.027| Widowed      | 158| 86(54.4)        |
| Divorce      | 33 | 26(78.8)        |     |      |              |    |                 |
|                       |        |          |        |          |        |          |        |          |
|-----------------------|--------|----------|--------|----------|--------|----------|--------|----------|
| **Education**         | 4.722  | 0.193    |        |          |        |          |        |          |
| Uneducated            | 58     | 26 (44.8)|        |          |        |          |        |          |
| Primary               | 155    | 80 (51.6)|        |          |        |          |        |          |
| Junior and high school| 256    | 147 (57.4)|        |          |        |          |        |          |
| Junior college or above | 13   | 9 (69.2)|        |          |        |          |        |          |
| **Number of children**| 13.06  | 0.005    |        |          |        |          |        |          |
| 0                     | 8      | 6 (75.0) |        |          |        |          |        |          |
| 2                     | 182    | 98 (53.8)|        |          |        |          |        |          |
| 1                     | 132    | 84 (63.6)|        |          |        |          |        |          |
| ≥3                    | 160    | 70 (43.8)|        |          |        |          |        |          |
| **Living style**      | 13.16  | 0.004    |        |          |        |          |        |          |
| alone                 | 60     | 42 (70.0)|        |          |        |          |        |          |
| Spouse and children   | 130    | 59 (45.4)|        |          |        |          |        |          |
| spouse                | 292    | 170 (58.2)|        |          |        |          |        |          |
| others                | 48     | 22 (45.8)|        |          |        |          |        |          |
| **Personal monthly income** | 14.53 | 0.002    |        |          |        |          |        |          |
| <1000                 | 86     | 37 (43.0)|        |          |        |          |        |          |
| 1000-3000             | 192    | 103 (53.6)|        |          |        |          |        |          |
| ≥5000                 | 45     | 34 (75.6)|        |          |        |          |        |          |
| **Medical insurance** | 20.29  | <0.001   |        |          |        |          |        |          |
| Urban health insurance| 226    | 156 (69.0)|        |          |        |          |        |          |
| New rural cooperation | 124    | 66 (53.2)|        |          |        |          |        |          |
| Self-expense          | 40     | 17 (42.5)|        |          |        |          |        |          |
| others                | 92     | 44 (47.8)|        |          |        |          |        |          |
| **Self-care ability** | 10.22  | 0.006    |        |          |        |          |        |          |
| Self-care             | 285    | 133 (46.7)|        |          |        |          |        |          |
| Part self-care        | 156    | 88 (56.4)|        |          |        |          |        |          |
| Not self-care         | 41     | 29 (70.7)|        |          |        |          |        |          |
| **Self rated health status** | 11.12 | 0.025    |        |          |        |          |        |          |
| better                | 80     | 32 (40.0)|        |          |        |          |        |          |
| good                  | 141    | 84 (59.6)|        |          |        |          |        |          |
| General               | 175    | 96 (54.9)|        |          |        |          |        |          |
| poor                  | 66     | 40 (60.6)|        |          |        |          |        |          |
| Worse                 | 20     | 14 (70.0)|        |          |        |          |        |          |
Needs of Medical Care for the Elderly

There were 259 cases (129 males and 130 females) with the demand rate of 53.7% in 482 questionnaires, 79.2% (206/259) wished to have access to health care services (including medical treatment, nursing, physical examination, rehabilitation, health education, etc.) among the elderly people who need medical care, 61.0% (159/259) wanted to obtain economic security services, 52.5% (136/259) wished to receive life care services (including domestic service, family care, chatting with others, etc.), 47.1% (122/259) wished to obtain cultural and recreational services (including entertainment, fitness, books, etc.).

Single Factor Analysis of Influencing the Demand of the Elderly for the Combination of Medical Care and Nursing

The results of single factor analysis showed that there were significant differences in the demand rate of medical care integration among the elderly with different gender, age, marriage, number of children, living style, personal monthly income, form of medical insurance, self-care ability, self-rated health status, chronic diseases and willingness to pay for medical care integration. (P < 0.05) (Table1).

Multivariate Logistic Regression Analysis of the Influencing Factors on the Demand of the Elderly for Integrative Medical and Nursing Care

The logistic regression model was fitted to analyze the demand of medical and nursing combination as dependent variable, and gender, age, marriage, number of children, living style, personal monthly income, form of medical insurance, self-care ability, self-assessment health status, chronic diseases and willingness to pay for different medical and nursing combination as independent variables.

Discussion and Recommendations

Current situation of demand for medical care for the elderly in North three District of Qiqihar City

The survey shows that the demand rate of the elderly in North three District of Qiqihar City is 53.7%. Compared with the demand rate of the elderly in Quan Zhou City[1], the demand rate of the elderly in the community is relatively low.
Analysis of the Influencing Factors on the Demand of the Elderly for Medical and Nursing Combination in North three District of Qiqihar City

Subjective Influencing Factors. The results of the "number of children" analysis showed that the needs of the elderly with no children and only one child were 2.708 times and 1.861 times of those with three or more children respectively (OR = 2.708 and 1.861). With the increase of the number of children, the demand rate of medical care combination decreased. This may be due to the small family and the increase of empty nest families, resulting in children's inability to care for the elderly [2]. At present, the family structure of Qiqihar has basically formed a "4-2-1" population model, that is, a couple needs to support four parents of both sides while raising a child, which has become unbearable in terms of human, material and financial resources, indirectly affecting the elderly pension problem, on the other hand, the process of social development has increased. Faster, faster pace of work, increased intensity of work, faster population mobility, more empty-nest families, the difficulty of caring for the elderly has also increased. The results of "age" and "chronic diseases" analysis showed that the demand for medical care integration of the elderly aged 60-69 and 70-79 was 2.112 times and 1.597 times that of the elderly aged 80 years and over respectively (OR=2.112 and 1.597). The demand for medical care integration of the elderly under 80 years old was higher, and was proportional to the increase of age. The needs of the elderly with chronic diseases are 2.048 times that of the elderly without chronic diseases (OR=2.048). With the increase of age, the health status of the elderly is gradually going downhill. The elderly are the high-risk group of chronic diseases and other major diseases [3, 4], and their health expenditure is increasing steadily and steadily. In order to get timely medical and nursing services, the willingness to maintain their own health will become more and more intense, and the willingness to maintain health will also become more intense, gradually changing from the elastic demand of previous subjective willingness to the rigid demand of realistic needs. The main reasons for the low demand of people over 80 years old may be due to the factors of age, the number of children, the influence of traditional old-age concepts or the unclear spirit, the lack of a deep understanding of the contents of the survey and so on. The results of "types of medical insurance" analysis show that the demand of the elderly with new rural cooperative medical care is 1.756 times that of the elderly with self-paid medical care (OR=1.756), and the demand of the elderly with urban medical insurance is 1.937 times that of the elderly with self-paid medical care (OR=1.937); the number of elderly living with illness is increasing, and the demand for medical care is increasing. The demand for services is becoming more and more obvious, and the high cost makes the self-financed people hesitate. Relative to the different types of medical insurance, the reimbursement ratio is different. Different types of medical insurance have different demands for the combination of medical care and maintenance. The type of medical insurance is the influencing factor of the demand for the combination of medical care and maintenance for the elderly.

Objective Influencing Factors. The results of "self-rated health" analysis showed that the needs of the elderly with poor self-rated health were 2.765 times that of the elderly with better self-rated health (OR=2.765). Self-rated health status is poor elderly people's increasing demand for medical care [5, 6], consistent with the relevant research results 5-6. The elderly with poor self-rated health are in poor health, and the demand for medical care is more obvious. They hope to get medical services anytime and anywhere. The mode of medical care combined with old-age care is the first choice for this kind of population. The results of "self-care situation" analysis showed that the needs of the elderly who could not take care of themselves were 2.494 times that of the elderly who could take care of themselves (OR=2.494). The better the health status of the elderly, the higher the self-care status of the elderly, and the more perfect the physical activity function in the quality of life, the smaller the demand for the combination of medical care and self-care [7, 8]. With the increase of age, various functions of the body deteriorate, health condition deteriorates gradually, and the demand for medical and nursing combination increases relatively. According to the analysis of willingness to pay, the demand of the elderly who are willing to pay 2,000 yuan or more is 3.929 times that of the elderly who are willing to pay less than 1,000 yuan. The elderly with high willingness to pay and strong
purchasing power have higher demand for medical care combination, which may be due to their better social status, economic income and educational background [9].

Summary
This paper studies the influencing factors of the demand for integrated medical and nursing care in the old-age model of integrated medical and nursing care, and puts forward the following suggestions in view of the influential factors: subjective factors, strengthen the propaganda of integrated medical and nursing care, pay attention to the demand for medical and nursing services in time, and improve medical care through all means such as media, television, radio, network, etc. Combining the degree of recognition, attention and acceptance, we should renew the concept of old-age care, keep pace with the times, fully integrate medical resources into the process of old-age care, and emphasize that prevention is far more meaningful than treatment. In terms of objective factors, it is imperative to improve the purchasing power of the elderly, which requires the cooperation of the government, family and society, to establish a social security system consistent with the level of economic development, to increase pension and pension income, and to gradually incorporate old-age care into medical insurance, so as to enable the elderly to pay for old-age care services. Increasing capacity, improving the allocation of resources in health institutions and government support to promote the sustainable development of the combination of health care and health care, but also the key to the effectiveness of the combination of health care and health care.

Literature References
References are cited in the text just by square brackets [1]. (If square brackets are not available, slashes may be used instead, e.g. /2/.) Two or more references at a time may be put in one set of brackets [3,4]. The references are to be numbered in the order in which they are cited in the text and are to be listed at the end of the contribution under a heading References, see our example below.

Summary
If you follow the “checklist” your paper will conform to the requirements of the publisher and facilitate a problem-free publication process.

Acknowledgement
This research was financially supported by the Heilongjiang Philosophy and Social Science Research Planning Project Foundation. (Project Number: 18RKC228)

References
[1] S.F. Huang. Quanzhou empty-nester community elderly demand for health care services and influencing factors, J. Nursing research, 2017 (31): 2517-2520.
[2] H.Z. Cui, Z.H. Li. Research on the content of old-age care under the background of aging, J. Shandong Social Science, 2012, 26 (4): 29-35.
[3] X.X. Li, T. Liu, Research on the Income and Health Expenditure of the Elderly - Take Beijing as an example, J. Managing the World, 2008 (12): 75-82.
[4] J. Feng, Medical Demand and the Growth of Medical Expenditure in China - From the Perspective of the Difference between Urban and Rural Medical Expenditure for the Elderly, J. Social Science of China, 2015 (03) 85-103
[5] S.X. Jing, Research on the mode and path of "combining medical care with nursing care" for the aged in Banan District of Chongqing, D. Chongqing: Chongqing Medical University, 2014:20.
[6] H.L. Song, Z.J. Chen, Analysis of influencing factors of the elderly's willingness to provide for the aged in Nan Tong, J. Medical theory and practice, 2013, 26 (16): 2224-2226.

[7] S.X. Zhang, N.L. Wang, Current situation, planning and Countermeasures of health industry for the elderly, J. Journal of Demography, 2001 (2): 18-24.

[8] K. Lin, H.R. Lv, Four concepts of aging and their policy implications, J. Journal of Zhe Jiang University, 2016 (4) 136-143.

[9] X.M. Li, et al, J. China General Practice, 2016 (4): 1199-1203.