

Research on the Development of Traditional Chinese Medicine Health Care in Guilin

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Abstract: *Objective:* To understand the cognition and demand of elderly people in Guilin for traditional Chinese medicine health and its influencing factors, and to propose relevant health management measures, take measures to improve the health of the population, and promote the sustainable development of the traditional Chinese medicine health industry.

Method: A self-designed questionnaire was used to conduct an on-site survey of 261 elderly people in Guilin Xiyanghong Elderly Care Center from March to April 2023, with the elderly as the research subjects. *Result:* (1) The elderly in Guilin have a low level of understanding of traditional Chinese medicine for health and wellness; (2) Elderly people with chronic diseases have a higher demand for traditional Chinese medicine for health and wellness; (3) Educational background, marital status, and number of children are the influencing factors of TCM health and wellness cognition, with marital status having the greatest impact on TCM health and wellness cognition; (4) Age, educational background, chronic disease status, and source of medical expenses are the influencing factors of the demand for traditional Chinese medicine health and wellness, with educational background having the greatest impact on the demand for traditional Chinese medicine health and wellness. *Conclusion:* (1) Elderly people have insufficient awareness of traditional Chinese medicine for health and wellness, and it is necessary to strengthen health education and promote health concepts. (2) The elderly and chronic patients are the population that needs to be focused on in the future development of the health industry. Traditional Chinese medicine therapy has significant advantages in the prevention and treatment of chronic diseases, which can improve the management technology of traditional Chinese medicine for chronic diseases and provide targeted diagnosis and treatment plans to meet the health needs of the people.

Keywords: Guilin; Traditional Chinese medicine health care; Health management; Old people

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1. Introduction

The “Healthy China 2030” Planning Outline points out that it is necessary to implement the Healthy China

strategy, combine the advantages of traditional Chinese medicine and health management, explore the health security model of traditional Chinese medicine, combine health management, health culture, health insurance, traditional Chinese medicine health care and the development of preventive disease treatment services, and implement the health project of traditional Chinese medicine to treat preventive diseases. It is also necessary to encourage social forces to set up institutions for the integration of medical care and elderly care, promote the integrated development of traditional Chinese medicine and elderly care, promote the integration of medical care and elderly care, and strengthen the health management of the elderly. Nowadays, the pace of social and economic development is rapid ^[1-3]. Traditional Chinese medicine health care conforms to the needs of the development of the times and is a key project to build a healthy China. Traditional Chinese medicine health care and health management are guided by the idea of “curing diseases before they occur”, to improve people’s health. TCM health management comprehensively uses the theoretical ideas of TCM such as “preventive treatment”, “holistic concept”, “syndrome differentiation and treatment”, and health management theory and methods to carry out TCM information collection, health monitoring, health assessment, and health intervention for the sick population, to achieve the goal of disease prevention and treatment ^[4-5]. Traditional Chinese medicine health care is not only suitable for the prevention of diseases but also for the treatment of diseases ^[6-7].

1.1. The concept of healthcare

The definition of the concept of health care has not yet formed a unified understanding among scholars at home and abroad. The concept of health care first appeared in foreign “horticultural therapy”, in which the word “health care” is translated from “wellness”, which is a combination of wellbeing (self-realization) and fitness (health preservation) ^[8]. In 1959, Halbert Dunn, a United States physician, first proposed the term health care, believing that health care is the harmony and unity of people’s thoughts, spirits, and external environment, and is a higher state of health preservation — a state of self-satisfaction. In 2004, Liu Liqin, the first scholar in China to propose the term “health care”, used the word “health care” in his research on the development of forest parks, but did not clearly define it. Subsequently, the concept of “health and wellness” has been applied to the field of tourism research, and the concept of “health and wellness” has been interpreted with an understanding of common sense, without systematic analysis and establishment of a conceptual system ^[8]. There are great differences between relevant research results at home and abroad in terms of research perspective and research content. Foreign research on health care focuses on medical treatment, health, pension, and other aspects, and the research content is biased toward health economics. The research on healthcare in China focuses on the industrial perspective, mainly the practical research of healthcare industry projects, such as the development model and development dilemma of the healthcare industry ^[9].

1.2. Health care industry

Traditional Chinese medicine (TCM) health care, which is derived from the health care industry, has three mainstream models: preventive treatment, health preservation, and tourism experience. At present, the development of TCM health care is in its infancy, and there is still a lack of research on TCM health care, mainly on TCM health tourism ^[10]. In his research on the development of TCM health tourism products, Gan Yonghe proposed targeted development strategies for different product categories based on consumer preferences. The theoretical research on health care in traditional Chinese medicine lags behind the development of practice, and scholars at home and abroad have not yet formed a unified concept of health care, and there is

a lack of a systematic theoretical system [3, 5, 7]. At present, there is no such thing as a healthcare industry in foreign countries, but it is called a health industry, and the most studied one is health tourism ^[1]. According to the different natural resources, the health care industry can be divided into several categories, such as traditional Chinese medicine health care, hot spring health care, marine health care, climate health care, and forest health care ^[1].

This paper takes the elderly in Guilin Sunset Red Elderly Care Center as the research object, and explores the influencing factors of the cognition and demand of traditional Chinese medicine health care through the combination of theoretical research and empirical research, so as to further discover and solve the problems. Providing high-quality traditional Chinese medicine healthcare services to meet people's healthcare needs can better promote the sustainable development of Guilin's healthcare industry.

2. Methods

This study followed a four-step process to extract and analyze data from the accreditation reports: (1) data sourcing, (2) data extraction, (3) data labeling, and (4) data analysis.

2.1. Data sourcing

In this study, 261 elderly people from Guilin Sunset Red Elderly Care Center were selected as the research subjects, and questionnaires were conducted in the field from March 2023 to April 2023. A total of 261 questionnaires were distributed and 261 were recovered, with a recovery rate of 100%, of which 251 were valid, with an effective rate of 97%.

Inclusion Criteria: Residence in a nursing center; Those who voluntarily cooperate with the investigation; Those who have experienced traditional Chinese medicine health care projects. Exclusion Criteria: Consciousness or psychiatric disorders; refusal to participate in the survey; Those who are unable to sit in bed; People with hearing impairments.

2.2. Data extraction

According to the needs of the research, the questionnaire on the cognition and needs of traditional Chinese medicine among the elderly was designed according to the relevant literature and the questionnaire of the relevant online platform, and the content of the questionnaire was determined after the review and approval of the instructor. The questionnaire consists of two parts: (1) a survey on the awareness and demand of the elderly for TCM health care; and (2) Basic personal information. There are a total of 28 questions, including multiple-choice questions, sequencing questions, and open-ended questions. The questionnaire star was used to collect and enter the survey data.

2.3. Data labelling

In this study, the investigators were composed of the author and four other students who went to the research site to carry out the investigation.

2.3.1. Pre-survey

With the consent of the management of the nursing center, 9 elderly people living in the Guilin Sunset Red Elderly Care Center were selected, the purpose and method of the investigation were informed, and the

elderly in the elderly care center were communicated and pre-surveyed. Through the problems found in the communication process with the elderly and the feelings and opinions of the elderly on the survey after the survey, the number of questionnaire questions and the way of asking questions were revised and improved.

2.3.2. Survey methodology

In this study, a questionnaire survey was used to conduct an on-site survey of the elderly. Before the survey, the other 4 students were asked to read the questionnaire, and then the questions raised were answered one by one, and the survey methods and precautions were informed. For those who can complete it on their own, a paper version of the questionnaire will be issued for them to read and fill in on their own. For those who are unable to complete it on their own, the investigators will fill in the questionnaire through communication and questions, entering the answers into the questionnaire star. All questionnaires will be collected immediately after completion.

2.4. Data analysis

The collected data were analyzed and screened, 10 invalid questionnaires were removed, the sorted data were entered and exported using the questionnaire star, and then the data were statistically analyzed by SPSS 27.0 software. Qualitative data were expressed as composition ratios, and descriptive statistical analysis was carried out; The quantitative data were expressed by ($x \pm SD$), and the independent samples *t*-test and one-way ANOVA were used to analyze whether there was any difference in the variables' cognition and demand for TCM health care in the elderly. Multiple linear regression analysis was used to analyze the influencing factors of each variable on the cognition and demand for traditional Chinese medicine health care in the elderly. $P < 0.05$ indicates statistically significant.

3. Results

3.1. Demographic analysis

The demographic analysis included variables such as personal basic information, educational background, marital status, number of children, occupation, chronic diseases, sources of medical expenses, and place of origin. In the sample, the number of males was 127, accounting for 50.6%; The number of females was 124, accounting for 49.4%. Most of the respondents were in the age group of 50–70, accounting for 92.8%, and the remaining 7.2% were 71 and above. Primary school education was the most prevalent among respondents, accounting for 45.8%. The number of married people is the largest, accounting for 94.0%, and the number of unmarried is 0. Of the respondents, 167 (66.5%) had three or more children, 80 (31.9%) had two children, 4 (1.6%) had only one child, and none had no children. The number of workers in the business and services sectors was the largest, accounting for 44.2%. Of the sample, 82.5% had a chronic disease and 17.5% did not have a chronic disease. Medical insurance is the most common source of medical expenses, accounting for 75.3%; 16.7% were self-financed, 7.2% were publicly funded, and 0.8% were from other sources. Of these, 190 (75.7%) were from Guilin City and 61 (24.3%) were from other regions.

3.2. Analysis of the overall situation of TCM healthcare cognition and demand

In terms of health care cognition, the surveyed users have a medium level of understanding of TCM health care, with an average score of 3.50 (the highest score is 5). It can be seen that the interviewed users have a certain

understanding and recognition of traditional Chinese medicine health care. In addition, the respondents had a moderate level of interest in TCM, with an average score of 3.85 (the highest score was 5). At the same time, the surveyed users have a certain agreement on the importance of health care, with an average score of 3.79 (the highest score is 5). The respondents' cognition of health care exceeded 3 points, which indicated that the interviewed users had a certain cognition and understanding of health care, and could better accept the concepts related to health care, but there were still some people who did not have a high level of understanding of traditional Chinese medicine health care.

In terms of health care needs, the surveyed users had a higher attitude towards whether they were willing to repeat the experience of TCM health care projects, with an average score of 3.09 (the highest score was 4). This indicates that the respondents have a certain interest and demand for TCM healthcare projects, but may not have fully grasped the true value of healthcare (**Table 1**)

Table 1. Analysis of the overall situation of respondents' awareness and demand for TCM health care ($n = 251$)

Dimension	Item	Minimum	Maximum	Mean	Standard deviation
Health care cognition	Degree of understanding of Chinese medicine health care	2	5	3.50	0.641
	How to evaluate your interest in Chinese medicine	1	5	3.85	1.196
	How to view the importance of healthcare	1	5	3.79	1.212
Health care needs	After experiencing the TCM healthcare project, are you willing to repeat the experience	1	4	3.09	0.923

From the above independent sample *t*-test, it can be seen that the significance of each dimension of respondents' cognition and demand for TCM health care was greater than 0.05, so there was no significant difference in health care cognition and demand between different genders. Different genders did not affect the perception and demand for TCM health care. From the above independent sample *t*-test, it can be seen that there are significant differences in the interest in traditional Chinese medicine, the importance of health care, and the willingness to repeat the experience between respondents with and without chronic diseases ($P < 0.05$), and the scores of respondents with chronic diseases in these aspects are significantly higher than those without chronic diseases. There was no significant difference in the understanding of TCM health care ($P > 0.05$). There are differences in the perception and demand for TCM health care with or without chronic diseases. People with chronic diseases pay more attention to TCM health care, attach more importance to health care, and are more willing to experience TCM health care programs repeatedly, while there is no significant difference in the degree of understanding of TCM.

3.3. The multiple linear regression analysis

The results of multiple linear regression analysis showed that the measured variables included in the regression model could explain 38% of the cognitive degree of TCM health care, the Durbin-Watson value was 2.027, which was around 2. There was no multicollinearity between the variables, and there were statistically significant differences in education, marital status, and occupation on TCM healthcare cognition ($P < 0.05$). Education, marital status, and occupation are the influencing factors of TCM healthcare cognition. Among them, marital status has the greatest impact on the cognition of TCM health care, followed by academic qualifications.

The results of multiple linear regression analysis showed that the measured variables included in the regression model could explain 19% of the demand for TCM health care, the Durbin-Watson value was 2.084, and there was no multicollinearity between the variables around 2, and there were statistically significant differences in age, education, chronic disease and source of medical expenses on the demand for TCM health care ($P < 0.05$). Age, education, chronic diseases, and sources of medical expenses are the influencing factors for the demand for TCM health care. Among them, academic qualifications have the greatest impact on the demand for TCM health care, followed by the source of medical expenses and whether they suffer from chronic diseases. Age is negatively correlated with the dependent variable, and the older the age, the lower the willingness to repeat the TCM health care program, that is, the smaller the demand for TCM health care.

4. Discussion

The awareness of the elderly in Guilin is at a medium level, indicating that the elderly have a certain cognition and understanding of traditional Chinese medicine health care, but the level of understanding is not high, and there are still some people who have a low awareness of traditional Chinese medicine health care. Among the elderly in this survey, 45.8% have a primary school education, so their education level is not high. Due to the limitation of education level, nearly half of the elderly cannot fully understand TCM health care. The survey results show that 45.42% of people prefer the combination of traditional Chinese medicine and Western medicine after illness, and nearly half of the elderly will still choose Western medicine, which is not conducive to the development of traditional Chinese medicine health care. Therefore, it is necessary to increase the publicity of traditional Chinese medicine health care and further improve the awareness of the elderly on traditional Chinese medicine health care.

The elderly in Guilin have a high degree of demand for traditional Chinese medicine healthcare programs, but they have not yet fully grasped the true value of healthcare. Since the elderly in this survey all live in nursing institutions and have experienced TCM healthcare projects, it shows that they all need TCM healthcare or disease treatment to some extent. Therefore, relevant institutions and staff must provide more in-depth and professional TCM healthcare services to meet the healthcare needs of the elderly and improve their healthcare experience.

At present, the healthcare function of traditional Chinese medicine in the treatment of diseases has gradually weakened, and traditional Chinese medicine in China is mainly used for disease treatment, which will lead to a low degree of understanding of the prevention and health management services and intervention effects of traditional Chinese medicine among the elderly, as they only understand some traditional Chinese medicine techniques, such as moxibustion, scraping, cupping, traditional Chinese medicine, and so on.

5. Conclusion

The elderly have insufficient awareness of traditional Chinese medicine health care, so it is necessary to strengthen health education and promote the concept of health. The elderly and people with chronic diseases are the groups that need to be focused on in the future development of the healthcare industry, and TCM therapy has significant advantages in the prevention and treatment of chronic diseases, which can improve the management technology of TCM chronic diseases and provide targeted diagnosis and treatment plans to meet the health care needs of the people. The sample size of this study is limited to Guilin Sunset Red Elderly Care

Center, and the research scope needs to be expanded and the sample size should be increased to strengthen the representativeness of the sample. In this study, the questionnaire was designed by the author so the reliability and validity of the questionnaire could be further strengthened to improve the reliability of the study. Due to my limited time, energy, and level, some of the analyses in the research may not be comprehensive and in-depth enough and need to be further explored and improved in future related research.

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Reference

- [1] He M, 2017, Report on the Development of China's Health Care Industry. Social Sciences Academic Press, Beijing.
- [2] Lan FX, 2019, Research on the Path of Targeted Poverty Alleviation based on the Advantages of Health Care Resources of Yao Nationality in Guangxi, thesis, Guangxi Normal University.
- [3] Yang G, 2022, Observational Study on the Evolution Characteristics of TCM Pattern Elements in Angina Pectoris Pectoris of Coronary Heart Disease under TCM Health Management Mode, thesis, Xinjiang Medical University.
- [4] Yu ZY, Tang LY, 2022, Research on the Design of Rural Tourism Landscape Facilities under the Concept of Health Care. *Industrial Design*, 194(9): 74–76.
- [5] Dunn HL, 1959, High-Level Wellness for Man and Society. *American Journal of Public Health*, 1959(49): 786–792.
- [6] Cheng Y, Sun ZM, 2021, Thinking on the New Path of “Medical Care + Health Care” based on Community from the Perspective of Supply-side Reform. *Health Soft Science*, 35(3): 42–45.
- [7] Ren XY, Yang QJ, 2022, Exploration of Health Care Theory and Practice. *Journal of Sichuan Tourism University*, 2022(5): 39–44.
- [8] Xing BZ, 2022, Research on Investment Decision-making of Health Care Projects, thesis, Shandong Jianzhu University.
- [9] Zhang TH, 2019, Research on the Construction of Health Care Industry Development Path based on Typical Cases, thesis, Chengdu University of Traditional Chinese Medicine.
- [10] Wang LL, 2021, Research on Countermeasures to Promote the Development of Health Care Industry in Baoding

under the Background of Coordinated Development of Beijing-Tianjin-Hebei region, thesis, Hebei University.

- [11] Song XY, Qiao YT, Luo J, et al., 2020, Health Care Industry with Traditional Chinese Medicine Characteristics. Great Health, 2020(35): 74.

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