Research in Health Science
ISSN 2470-6205 (Print) ISSN 2470-6213 (Online)
Vol. 9, No. 3, 2024
www.scholink.org/ojs/index.php/rhs

*Original Paper*

# The Current Status of Traditional Chinese Medicine Health Care Literacy of the Elderly and Its Influencing Factors--Based on a Survey of 460 Elderly People

Shaoyan Zhang[1] & Jing Xu[2]

[1] Henan Water Conservancy and Environment Vocational College, China

[2] Henan University of Traditional Chinese Medicine, China

E-mail: 778383558@qq.com

Received: June 19, 2024 Accepted: July 3, 2024 Online Published: July 9, 2024

doi:10.22158/rhs.v9n3p75 URL: http://dx.doi.org/10.22158/rhs.v9n3p75

***Abstract***

***Objective:*** *To understand the current status of knowledge and beliefs of Chinese medicine health care and its influencing factors among the elderly in Henan Province, and to provide reference for improving their Chinese medicine health care literacy.* ***Methods:*** *Using convenience sampling, 460 elderly people in Henan Province were selected to carry out a questionnaire survey on the current status of knowledge and beliefs of Chinese medicine and health care, and their influencing factors were analysed.* ***Results:*** *The standard score of knowledge of TCM health care for the elderly in Henan Province was (56.72±15.35), the standard score of attitude was (79.57±15.91), and the standard score of behaviour was (42.17±22.25); the residence place, education level, monthly disposable income, previous occupation, type of medical insurance, the presence of old-age insurance, the presence of chronic diseases, and the presence of relatives engaged in TCM-related occupations were statistically significant (P<0.05) in terms of the scores on the three dimensions of knowledge, attitude, and behaviour of TCM health care and the total score; senior high school/vocational high school/junior college (OR= 0.329, 95% CI: 0.137-0.791), workers (OR= 4.295, 95% CI: 1.023-18.044), and those who suffered from chronic diseases ( OR= 1.964, 95% CI: 1.171~3.294) significantly affect the knowledge score; business unit (OR= 0.135, 95% CI: 0.024~0.754), and having chronic disease (OR= 1.918, 95% CI: 1.168~3.151) significantly affect the attitude score; and 3001~5000 yuan (OR= 0.292, 95% CI: 0.105~0.812), workers (OR= 5.180, 95% CI: 1.311~20.47), others (OR= 4.698, 95% CI: 1.112~19.839), having old age insurance (OR= 1.641, 95% CI: 1.028~2.620), and suffering from chronic diseases (OR= 2.152, 95% CI: 1.280~3.617) and so on significantly influenced the behavioural*

*scores.* ***Conclusion:*** *The attitude level of TCM health care among the elderly in Henan Province is good, and the knowledge and behaviour level needs to be improved. Long-term and stable health knowledge education for the elderly population should be carried out to strengthen the elderly's knowledge of TCM health care and further strengthen their beliefs in TCM health care in order to promote the formation of their TCM health care health behaviours.*

***Keywords***

*Elderly, Traditional Chinese Medicine Health Care, Knowledge, Faith and Practice, Influencing factor*

## 1. Introduction

With the development of an aging society, the incidence of geriatric diseases has been rising year by year in recent years, and the health of the elderly population is facing great challenges. As an important part of traditional medicine, Chinese medicine health care is not only easier to be accepted by the elderly, but also helpful to enhance their awareness and ability of self-care and improve their health. It is not only easier to be accepted by the elderly, but also has obvious advantages in enhancing the awareness and ability of self-care and improving the health of the elderly (Xu, 2008). Since the National Health Commission's National Health Literacy Promotion Action Plan (2014-2020) emphasised the need to accelerate the popularisation of Chinese medicine health care knowledge and skills in 2014 (http://bgs.satcm.gov.cn/zhengcewenjian/2018-03-24/895.html), there has been no research on the knowledge, beliefs and behaviours of Chinese medicine health care for the elderly population of Henan Province. This study will propose to investigate and analyse the current situation and influencing factors of TCM health care knowledge and beliefs of the elderly in Henan Province by means of a questionnaire survey, so as to provide a reference for improving the level of TCM health care literacy of the elderly in Henan Province.

## 2. Objects and Methods

### *2.1 Subjects*

① Permanent elderly residents of Henan Province (permanent population refers to those who have continuously lived and lived in the survey area for 6 months or more within 1 year prior to the survey); ② Age ≥ 60 years old; ③ Those who are conscious and have a certain degree of comprehension; ④ Those who voluntarily accept and cooperate with the survey.

### *2.2 Methods*

2.2.1 Sample Size Calculation

Due to the large population base in Henan, when the total sample size is infinite, its sample size is calculated by the formula: $n \geq \left(\frac{k}{\alpha}\right)^2 p(1-p)$ (Rodriguez, 2014), generally set the significant level of $p$ = 0.05 ($p = \alpha$ = 0.05), interval confidence level of 95%, quartile $k$ = 1.96. Calculated n ≥ 384

people, so the sample size of this study is not less than 384 people can be. Another basis for the survey sample size should be 5 to 10 times the number of variables in the scale (Wu, 2010), and the scale in this study has a total of 48 entries. Combining the above two sample size determination methods, the final 10 times the number of scale entries issued, a total of 480 questionnaires.

2.2.2 Survey Instrument

The members of the group based on the relevant policy documents such as Chinese Citizen's Chinese Medicine Nutrition and Health Care Literacy and Basic Content of Chinese Medicine in Health Education, which were jointly released by the National Health and Family Planning Commission and the State Administration of Traditional Chinese Medicine in 2014 (http://www.satcm.gov.cn/bangongshi/gongzuodongtai/2018-03-25/5248.html, http://bgs.satcm.gov.cn/zhengcewenjian/2018-03-24/895.html, http://www.gov.cn/xinwen/2019-07/15/content_5409694.html), and designed their own structured questionnaires by reviewing the relevant literature, and formed an official questionnaire, the Questionnaire of Knowledge, Faith and Conduct of Traditional Chinese Medicine Nutritional and Health Care for the Elderly, through expert consultation and the test of credibility and validity. The Cronbach's α coefficients of the overall questionnaire and the three modules of Knowledge, Trust and Conduct were 0.959, 0.953, 0.915 and 0.903, respectively; the content validity of each item of the questionnaire was I-CVI ≥ 0.78, and the total questionnaire S-CVI/Ave was ≥ 0.90; the KMO value of the validity analysis was 0.650, and passed the Bartlett's test of significance level of 0.05. Spherical test, the reliability and validity of this questionnaire is good.

The survey was conducted by using Questionnaire Star's electronic questionnaire and paper questionnaire, and the questionnaires were distributed and collected by the surveyors on site or through Questionnaire Star's platform. The main content of the survey included: ① basic personal information: gender, age, place of residence, marital status, education level, monthly income (yuan), previous occupation, type of medical insurance, whether they have pension insurance, whether they suffer from chronic diseases, and whether they have relatives engaged in occupations related to traditional Chinese medicine. ②The knowledge and trust of TCM health care for the elderly: the questionnaire has 48 entries in 3 dimensions, and each dimension is scored on a 5-point Likert scale, with higher scores suggesting a higher level of knowledge and trust of TCM health care for the residents. There are 26 items in the knowledge dimension, with a score range of 26 to 130 points (1 being "not at all knowledgeable" and 5 being "very knowledgeable"); 7 items in the attitude dimension, with a score range of 7 to 35 points (1 being "completely disagree" and 5 being "very knowledgeable"); and 1 being "completely disagree". "completely disagree" and 5 "strongly agree"); and a behavioural dimension with 15 entries, ranging from 15 to 75 points (1 being "never", 5 being "always"). According to the calculation method and criteria of standard score (Li, 2019), a standard score less than 60 is failing, between 60 and 85 is moderate, and greater than 85 is excellent. The survey was distributed 480 copies, and a total of 460 questionnaires were returned, with a validity rate of 95.83%.

*2.3 Statistical Analysis*

SPSS25.0 software was applied to analyse the package, and the statistical methods included general descriptive analysis, t-test, F-test, correlation analysis, binary Logistic regression, and P<0.05 as the difference was statistically significant.

## 3. Results

*3.1 Scores of Knowledge, Belief and Behaviour of the Elderly in Henan Province on Chinese Medicine and Health Care*

The average score of knowledge dimension of TCM health care for the elderly is (73.73±19.95), and its standard score is (56.72±15.35); the average score of attitude dimension is (27.85±5.57); and the average score of behaviour dimension is (31.63±11.20), and its standard score is (42.17±14.93).

*3.2 Analysis of Factors Influencing the Knowledge, Beliefs and Behaviours of the Elderly in Henan Province on Chinese Medicine and Health Care*

Elderly people with different places of residence, cultural level, monthly disposable income, previous occupation, type of medical insurance, having or not having old-age insurance, having or not having chronic diseases, and having or not having relatives engaged in occupations related to traditional Chinese medicine have statistically significant scores in the three dimension scores of knowledge, attitude, and behaviour of traditional Chinese medicine health care (P<0.05). See Table 1.

**Table 1. Basic Scores of Knowledge and Belief of Chinese Medicine and Health Care for the Elderly with Different Characteristics in Henan Province [n (%), x±s]**

| **Indicators** | | **Number of people (%)** | **Knowledge score** | ***t/F*** | ***P*** | **Attitude Score** | ***t/F*** | ***P*** | **Behavioural score** | ***t/F*** | ***P*** |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Sex | Male | 187 (40.7) | 73.12±20.40 | | | 27.34±5.88 | | | 31.85±11.24 | | |
| | Female | 273 (59.3) | 74.15±19.66 | -0.540 | 0.589 | 28.21±5.33 | -1.651 | 0.099 | 31.48±11.19 | 0.348 | 0.728 |
| Age (years) | 60~64 | 110 (23.9) | 76.20±20.35 | | | 28.16±5.30 | | | 32.82±11.90 | | |
| | 65~69 | 148 (32.2) | 72.04±18.60 | | | 27.89±5.55 | | | 31.21±10.77 | | |
| | 70~74 | 116 (25.2) | 74.17±21.37 | | | 27.47±5.78 | | | 31.77±11.38 | | |
| | 75~79 | 64 (13.9) | 73.73±20.73 | 0.852 | 0.493 | 27.59±5.95 | 0.434 | 0.784 | 31.27±11.25 | 0.717 | 0.580 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | ≥80 | 22 (4.8) | 70.41±16.54 | | | 28.86±5.04 | | | 28.86±9.37 | | |
| Place of residence | Urban | 211 (45.9) | 79.02±21.79 | | | 28.82±5.73 | | | 34.00±12.58 | | |
| | Rural | 249 (54.1) | 69.24±17.05 | 5.397 | ＜0.001 | 27.03±5.31 | 3.479 | ＜0.001 | 29.63±9.45 | 4.247 | ＜0.001 |
| Marital status | Unmarried | 4 (0.9) | 62.50±10.08 | | | 26.00±1.83 | | | 32.50±7.72 | | |
| | Married | 377 (82) | 74.63±20.02 | | | 28.06±5.61 | | | 31.92±11.23 | | |
| | Divorced | 6 (1.3) | 70.83±8.13 | | | 26.83±7.22 | | | 31.17±8.01 | | |
| | Widowed | 73 (15.9) | 69.95±20.20 | 1.602 | 0.188 | 26.96±5.35 | 1.020 | 0.383 | 30.15±11.46 | 0.516 | 0.671 |
| Educational level | Primary and below | 214 (46.2) | 69.80±18.35 | | | 27.47±5.42 | | | 29.68±9.90 | | |
| | Junior High School | 148 (32.2) | 72.95±20.04 | | | 27.14±6.07 | | | 31.51±10.99 | | |
| | High school/vocational high school/secondary school | 73 (15.9) | 81.36±19.60 | | | 29.64±4.83 | | | 34.89±11.88 | | |
| | College/University and above | 25 (5.4) | 89.76±20.67 | 12.681 | ＜0.001 | 30.16±4.18 | 5.226 | ＜0.001 | 39.52±15.29 | 8.793 | ＜0.001 |
| Occupation | Civil Servants/Enterprise Units | 52 (11.3) | 84.73±19.89 | | | 28.48±5.30 | | | 37.12±14.11 | | |
| | Enterprise unit | 36 (7.8) | 76.00±20.57 | | | 30.36±5.75 | | | 34.44±12.24 | | |
| | Farmer | 255 (55.4) | 70.89±18.88 | | | 27.38±5.62 | | | 30.11±9.91 | | |
| | Worker | 55 | 73.31±22.19 | 5.679 | ＜0.001 | 28.15±5.40 | 2.563 | 0.038 | 30.36±10.99 | 5.402 | ＜0.001 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | (12) | | | | | | | | |
| | Others | 62 (13.5) | 75.24±18.92 | | | 27.58±5.35 | | | 32.77±11.50 | |
| Monthly income (yuan) | <1000 | 186 (40.4) | 68.72±17.55 | | | 26.55±5.62 | | | 29.46±9.74 | |
| | 1000~3000 | 192 (41.7) | 74.55±20.20 | | | 28.42±5.45 | | | 32.26±11.63 | |
| | 3001~5000 | 61 (13.3) | 81.92±21.65 | | | 29.48±5.53 | | | 33.34±11.18 | |
| | >5000 | 21 (4.6) | 86.86±18.96 | 11.169 | ＜0.001 | 29.48±4.02 | 6.585 | ＜0.001 | 40.19±14.13 | 7.401 | ＜0.001 |
| Pension insurance | Yes | 279 (60.7) | 75.49±18.88 | | | 28.22±5.19 | | | 32.77±11.61 | |
| | No | 181 (39.3) | 71.02±21.27 | 2.357 | 0.019 | 27.29±6.09 | 1.744 | 0.082 | 29.88±10.32 | 2.722 | 0.007 |
| Type of medical insurance | Urban | 81 (17.6) | 83.48±22.76 | | | 29.35±4.91 | | | 34.73±12.15 | |
| | Employee medical insurance | 75 (16.3) | 78.03±18.92 | | | 28.47±6.37 | | | 34.36±11.97 | |
| | Urban | 290 (63) | 69.63±18.21 | | | 27.23±5.45 | | | 29.91±10.31 | |
| | Resident Medical Insurance | 6 (1.3) | 84.33±24.82 | | | 29.50±4.97 | | | 35.33±17.51 | |
| | New Agricultural Cooperative | 8 (1.7) | 75.38±13.01 | 9.922 | ＜0.001 | 28.50±6.50 | 2.794 | 0.026 | 34.13±8.71 | 4.785 | ＜0.001 |
| Whether you suffer from chronic diseases | Commercial Insurance | 337 (73.3) | 75.47±20.22 | | | 28.35±5.37 | | | 32.50±10.74 | |
| | Self-financed | 123 (26.7) | 68.98±18.45 | 3.117 | 0.002 | 26.49±5.91 | 3.209 | 0.001 | 29.24±12.09 | 2.782 | 0.006 |
| Have relatives practising Chinese medicine and related professions | Yes | 93 (20.2) | 78.10±19.21 | | | 28.23±5.26 | | | 34.45±12.35 | |
| | No | 367 (79.8) | 72.62±20.01 | 2.375 | 0.018 | 27.76±5.65 | 0.719 | 0.472 | 30.92±10.79 | 2.740 | 0.006 |

*3.3 Correlation of Knowledge, Attitude and Behaviour of TCM Health Care for the Elderly*

The results of correlation analysis show that there is a significant positive correlation between the scores of knowledge, attitude and behaviour of Chinese medicine health care for the elderly. See Table 2.

**Table 2. Correlation Analysis Results of Knowledge, Attitude and Behaviour of TCM Health Care for the Elderly**

| Dimension (math.) | Knowledge | Attitude | Behaviour |
|---|---|---|---|
| **Knowledge** | 1.00 | .356** | .382** |
| **Attitude** | .356** | 1.00 | .208** |
| **Behaviour** | .382** | .208** | 1.00 |

*Note*. ** indicates significant correlation at the 0.01 level (two-tailed).

*3.4 Multi-factor Analysis of Knowledge, Belief and Behaviour of Chinese Medicine and Health Care for the Elderly in Henan Province*

The scores of knowledge, attitude and behaviour of TCM health care for the elderly (taking the median as the cut-off, assigning the value of 1 = low and 2 = high) were used as dependent variables, and the variables with statistically significant differences in the knowledge, attitude and behaviour of TCM health care for the elderly in the results of the one-way analysis of the factors were used as independent variables, which were assigned the values and logistic analyses were carried out at an entry level of $\alpha = 0.05$ and an exclusion level of $\beta = 0.10$. Stepwise regression analyses were conducted. The results showed that: literacy, previous occupation, and whether or not they had a chronic disease were the main influences on the knowledge score; previous occupation and whether or not they had a chronic disease were the main influences on the attitude score; and monthly income, previous occupation, whether or not they had pension insurance, and whether or not they had a chronic disease were the main influences on the behavioural score. See Table 3.

**Table 3. Results of Logistic Regression Analysis of Knowledge, Belief and Behaviour of Chinese Medicine Health Care for the Elderly**

| Norm | Factor | Category | Reference Group | *B* | P | *Exp(B)* | 95% confidence interval for EXP(B) | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | Lower limit | Upper limit |
| Know ledge | Educational level | Junior high school | Primary and below | -0.259 | 0.357 | 0.772 | 0.444 | 1.340 |
| | | High school/vocational high school/secondary school | | -1.112 | 0.013 | 0.329 | 0.137 | 0.791 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | College/University and above | | -0.850 | 0.367 | 0.427 | 0.067 | 2.712 |
| | Previous Occupation | Business unit | Civil Servant / Career | 1.296 | 0.090 | 3.654 | 0.817 | 16.33 |
| | | Farmer | | 0.980 | 0.180 | 2.665 | 0.635 | 11.19 |
| | | Workers | | 1.458 | 0.047 | 4.295 | 1.023 | 18.044 |
| | | Others | | 1.207 | 0.118 | 3.344 | 0.735 | 15.209 |
| | Chronic disease | Yes | No | 0.675 | 0.011 | 1.964 | 1.171 | 3.294 |
| Attitude | Previous Occupation | Enterprise unit | Civil Servant/Enterprise | -2.002 | 0.022 | 0.135 | 0.024 | 0.754 |
| | | Farmers | | 0.224 | 0.721 | 1.251 | 0.366 | 4.277 |
| | | Workers | | 0.102 | 0.870 | 1.108 | 0.324 | 3.787 |
| | | Others | | 0.357 | 0.589 | 1.430 | 0.391 | 5.233 |
| | Whether suffering from chronic diseases | Yes | No | 0.651 | 0.010 | 1.918 | 1.168 | 3.151 |
| Behaviour | Monthly income (yuan) | 1000~3000 | <1000 | -0.081 | 0.756 | 0.922 | 0.553 | 1.538 |
| | | 3001~5000 | | -1.229 | 0.018 | 0.292 | 0.105 | 0.812 |
| | | >5000 | | -1.239 | 0.171 | 0.290 | 0.049 | 1.705 |
| | Previous Occupation | Enterprise unit | Civil Servant/Enterprise | 1.357 | 0.061 | 3.883 | 0.942 | 16.012 |
| | | Farmer | | 1.174 | 0.092 | 3.234 | 0.827 | 12.647 |
| | | Workers | | 1.645 | 0.019 | 5.180 | 1.311 | 20.47 |
| | | Others | | 1.547 | 0.035 | 4.698 | 1.112 | 19.839 |
| | Have pension insurance | No | Yes | 0.495 | 0.038 | 1.641 | 1.028 | 2.620 |
| | Whether suffering from chronic diseases | No | Yes | 0.766 | 0.004 | 2.152 | 1.280 | 3.617 |

*Note*. P<0.05, statistically significant.

## 4. Discussion and Suggestions

### *4.1 Elderly People in Henan Province have more Positive Attitudes towards TCM Health Care, but the Level of Knowledge and Behaviour Needs to be Improved*

The results of the study show that the knowledge and behaviour scores of the elderly on Chinese medicine health care are at the failing level, while the attitude scores are at the medium level. This indicates that the elderly have a positive attitude towards TCM health care, but their knowledge and behaviour need to be further improved. The scores of the knowledge dimension varied greatly, with the highest entry: "K8. Traditional Chinese Medicine Health Care in Four Seasons" and the lowest score: "K19. Common Acupuncture Points in Traditional Chinese Medicine Health Care". This shows that the elderly have a higher level of knowledge about TCM health care in daily life, which may be related to the fact that TCM, as a part of the traditional Chinese culture, has many health care methods and knowledge in daily life, and the elderly have rich life experience, so the corresponding level of knowledge about TCM daily life health care is also higher. However, the level of knowledge about the slightly more specialised TCM acupoints is poorer, which further reflects that the level of knowledge about TCM health care among the elderly is only at the surface. Therefore, the relevant departments need to further strengthen the explanation and popularisation of professional and effective TCM health care methods for the elderly, so as to deepen the knowledge of TCM health care methods among the elderly.

The overall score of the behavioural dimension is low, and the lowest-scoring entry corresponds to the lowest-scoring entry of the knowledge dimension, which indicates that when the elderly do not have a high level of knowledge of Chinese medicine acupoint health care methods, it will have a direct impact on the level of elderly people's behaviour in adopting the Chinese medicine acupoint health care methods for their own health care, and it is also in line with the theoretical connotation of the theory of knowledge, belief and action (Huang, 2006), i.e., knowledge is the basis of behaviour, and when the knowledge of health knowledge is low, it is the foundation of the behaviour of the elderly. health knowledge is low, it will affect the health behaviour cannot be achieved.

### *4.2 Positive Correlation between Knowledge, Attitude and Behavioural Scores of TCM Health Care for the Elderly*

The results of the study show that the knowledge and attitude, attitude and behaviour, and knowledge and behaviour of TCM health care for the elderly are all two-by-two significantly positively correlated. This is consistent with the connotation of the theory of knowledge, belief and behavior (Huang, 2006), in which a full understanding of knowledge and the establishment of positive beliefs about it ultimately lead to the formation of correct behaviours. Therefore, in the future health education, the relevant departments should enhance the cognitive level of the elderly's knowledge of TCM health care based on helping the elderly to establish a firm belief in TCM health care, in order to ensure the implementation of the elderly's TCM health care behaviours, and then achieve the enhancement of the level of knowledge, belief and behaviour of the elderly's TCM health care.

*4.3 Analysis of Influencing Factors on the Knowledge and Belief of TCM Health Care Behaviour of the Elderly Living in Henan Province*

4.3.1 Educational Level, Occupation and Monthly Income

The results of the study showed that the total score of TCM health care knowledge and belief of the elderly was positively correlated with the cultural level, i.e., the higher the cultural level of the elderly, the higher the scores of the three dimensions of knowledge, attitude and behaviour of TCM health care and the total score of knowledge and belief of the elderly, which was in line with the results of the study by Ji Binbin et al. (2020). This is mainly due to the fact that elderly people with high literacy level have stronger knowledge and understanding of TCM health care knowledge, and have higher initiative in TCM health care. Therefore, it is suggested that the relevant departments should adopt simple and popular ways of publicity and explanation for the elderly with a low level of education, such as issuing publicity brochures combining illustrations and texts, and making use of the "word of mouth" method between people, so that the elderly will be able to understand and master the relevant knowledge of TCM health care.

The results of the study showed that the total score of the elderly's TCM health care and monthly disposable income were positively correlated, indicating that the higher the level of the elderly's monthly disposable income, the higher the level of their TCM health care and health care knowledge and beliefs, which is in line with the results of the study by Ji Xiaoqing et al. (2019), the economic conditions are the key to determining the quality of life, and the better the financial conditions of the elderly, the higher the demand for the quality of life, and then more willing to pay more money for the TCM health care. The better the financial condition of the elderly, the higher the demand for quality of life, and then more willing to pay more time and money for Chinese medicine health care to meet their own health care health needs.

The results of the study show that the elderly people whose previous occupations are civil servants/institutions have a higher level of education and economic income than other occupations, and not only have a high level of knowledge about TCM health care, but also have the economic strength to meet their actual needs for health care. Therefore, when carrying out health education on TCM health care for the elderly in the future, we should take into account the characteristics of the elderly in different occupations and adopt different health education methods.

4.3.2 Whether They Have Pension Insurance or not, and whether they Suffer from Chronic Diseases or not

The results of the study show that it is possible that the elderly with pension insurance have slightly better economic and cultural levels, generally have a stronger awareness of their own health management, and are more proactive in the acceptance and practice of TCM health care. Therefore, it is suggested that when carrying out health education on TCM health care for the elderly without pension insurance in the future, we should make full use of the positive attitude of the elderly towards TCM

health care, and take into account the characteristics of the elderly themselves to carry out a variety of ways to promote the formation of the elderly's daily TCM health care and health behaviours.

The results of the study showed that the total score of TCM health care knowledge and beliefs of the elderly was negatively correlated with whether they suffered from chronic diseases or not, i.e., the level of knowledge and beliefs of the elderly suffering from chronic diseases was better than that of the elderly who did not suffer from chronic diseases, which was opposite to the results of the study conducted by Zhou Liping et al. (2015) and Liang Jianfen et al. (2016). The study analyses found that this may have a strong relationship with the better level of knowledge of chronic diseases among older adults with chronic diseases. Based on the understanding of the characteristics of chronic diseases that the schedule of chronic diseases is long and impossible to eradicate, older people with chronic diseases believe that the health care advantages of TCM correspond to the characteristics of chronic diseases, so older people with chronic diseases have a higher level of cognition and behaviour towards TCM health care methods. It is suggested that in the future, when carrying out health education on the knowledge of Chinese medicine health care methods for the elderly who do not suffer from chronic diseases, we should "adopt a two-pronged approach", not only to make them understand the harmfulness of chronic diseases in the elderly, but also to make them understand how to use the Chinese medicine health care methods for the prevention and health care of chronic diseases in the elderly.

**References**

Central People's Government of the People's Republic of China. State Council Issues Healthy China Action (2019-2030) - Special Action on Health Promotion for the Elderly. (2019-07-15) [2020-10-16]. http://www.gov.cn/xinwen/2019-07/15/content_5409694.htm

Circular of the National Health and Family Planning Commission on the issuance of the National Health Literacy Promotion Action Plan (2014-2020). (2014-04-15) [2024-3-16]. http://bgs.satcm.gov.cn/ zhengcewenjian/2018-03-24/895.html

Huang Jingheng. (2006). *Health Education* (4th ed.). Fudan University Press.

Ji Binbin, Lin Xinbing, Tang Taoran, et al. (2020). Survey and analysis on the knowledge, belief, behaviour and service demand of Chinese medicine and health care of the elderly in the community. *Journal of Hunan University of Traditional Chinese Medicine*, *40*(06), 768-771.

Ji Xiaoqing, Kang Lijie, Zhao Yintao, et al. (2019). Survey on the status quo of Chinese medicine health care for the elderly in Chengde City and analysis of its influencing factors. *Psychology Monthly*, *14*(06), 3-4.

Li Yuchen. (2019). *Questionnaire preparation and current status survey of clinical nursing staff's humanistic care knowledge and belief*. Shandong University.

Liang Jianfen, Chen Wei, & Zhang Xingbo. (2016). Survey and analysis of the current situation of Chinese medicine and health care for the elderly in nursing institutions in Guangxi Zhuang Autonomous Region. *Modern Medicine and Health*, *32*(20), 3119-3121+3124.

Rodriguez, D. A. M. (2014). Gonzalez-Ramirez A. Sample size calculation. *Allergol Immunopathol(Madr)*, *42*(5), 485-492.

State Administration of Traditional Chinese Medicine. Circular of the Office of the State Administration of Traditional Chinese Medicine on the Issuance of the Basic Contents of Health Education on Traditional Chinese Medicine. (2014-03-07) [2024-3-16]. http://bgs.satcm.gov.cn/zhengcewenjian/2018-03-24/895.html

State Administration of Traditional Chinese Medicine. Office of the State Administration of Traditional Chinese Medicine on the issuance of Chinese citizens' Chinese medicine health care literacy. (2014-05-16) [2024-3-16]. http://www.satcm.gov.cn/bangongshi/gongzuodongtai/2018-03-25/5248.html

Wu, M-L. (2010). *Practice of statistical analysis of questionnaires: SPSS operation and application*. Chongqing: Chongqing University Press, 2010: 1.

Xu Houping. (2008). The status of traditional Chinese medicine in the health care of the elderly in an aging society. *Health Soft Science*, *2008*(04), 301-302.

Zhou Liping, Sun Jianping, Yang Zhilan, et al. (2015). Analysis of the current situation of Chinese medicine and health care cognition of the elderly in nursing institutions and its influencing factors. *Nursing Research*, *29*(11), 1319-1322.