

# Research on the Demand and Influencing Factors of Elderly Care Services with Traditional Chinese Medicine (TCM) Characteristics in Jiangsu Province

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## ABSTRACT

**Objective** To investigate the demand of the elderly in Jiangsu province for the combination of medical and nursing care with traditional Chinese medicine (TCM) characteristics and analyze its influencing factors, so as to provide feasible countermeasures for optimizing the service system of the combination of medical and nursing care with TCM characteristics in Jiangsu Province. **Methods** A questionnaire survey was conducted on 632 elderly people in 13 cities of Jiangsu province. Based on Andersen theory model, disordered and multi-classification Logistics regression analysis was used to analyze the influencing factors of elderly people's demand for TCM combined medical and nursing care services from the perspective of propensity factors, enabling factors and demand factors. **Results** Age, number of children, affordability of medical expenses, health status, types of chronic diseases and understanding of the combination of medical care and old-age care are significant factors affecting the different degree of demand for the combination of medical care and old-age care services. **Suggestion** It is suggested to strengthen the publicity of the combination of TCM with characteristics at the grass-roots level, promote the construction of the combination of TCM with characteristics, and enrich the service of TCM with characteristics for the elderly.

## KEYWORDS

Integration of Medical Treatment and Elderly Care; The elderly; Traditional Chinese medicine; Demand; Influencing factors

## 1. INTRODUCTION

Jiangsu, as one of the first provinces in China to enter an aging society, faces particularly significant challenges associated with population aging. According to the results of the Seventh National Population Census, by the end of 2021, Jiangsu's permanent residents aged 60 and above totaled 18.836 million, exceeding the national average by 3.25 percentage points [1]. The escalating aging-related issues impose considerable pressure on both governmental and societal resources. The "integrated medical and nursing care" model offers a promising approach by effectively combining the elderly's needs for "medical treatment" and "nursing care," thereby optimizing the allocation of social resources [2]. This approach aligns with the principles of "preventive medicine" inherent in traditional Chinese medicine (TCM). By integrating these concepts and implementing them effectively, it is possible to address the dual challenges of "emphasizing medical care over nursing care" and "prolonged life expectancy without corresponding health improvements," thereby providing a proactive response to the aging population issue.

This study adopts the Andersen model as its theoretical framework to investigate the demand for TCM-based integrated medical and nursing care services among elderly residents in 13 prefecture-level cities across rural Jiangsu. By analyzing the current situation, identifying influencing factors,

and proposing targeted strategies, this research aims to optimize the TCM-based integrated medical and nursing care service system in Jiangsu's rural areas. The ultimate goal is to deliver higher-quality services that address the diverse needs of the elderly population.

## **2. RESEARCH OBJECTIVE AND METHODS**

### **2.1. Research Objective**

This study targeted the elderly population across 13 prefecture-level cities in Jiangsu Province. Using the quota sampling method, the distribution of questionnaires was proportionally allocated based on the population of each location. A random sampling method was then employed in specific locations to conduct surveys among elderly individuals. The inclusion criteria for participants were as follows: (1) aged 60 years or older; (2) clear consciousness and ability to respond coherently; and (3) willingness to voluntarily participate in the survey. A total of 660 questionnaires were distributed, with 632 valid responses retrieved, resulting in an effective recovery rate of 95.76%.

### **2.2. Research Methods**

The Andersen model, widely utilized in health needs research [3], effectively captures individual behavioral intentions by categorizing influencing factors into three dimensions: predisposing factors, enabling factors, and need factors. Based on the Andersen model, this study designed a structured questionnaire encompassing these three dimensions:

**Predisposing factors:** This category included variables such as gender, age, education level, occupation, marital status, number of children, living arrangement, regularity and healthiness of diet and exercise, and frequency of medical check-ups.

**Enabling factors:** This dimension covered variables including type of medical insurance, monthly income, monthly healthcare expenditure, level of care received from children, ability to afford medical expenses, and the distance to healthcare facilities.

**Need factors:** These included health status, types of chronic diseases, self-care ability, current or anticipated demand for integrated medical and nursing care, preferred services, awareness of the advantages of TCM in integrated care, and interest in specific TCM-based integrated medical and elderly care services.

Data analysis was performed using SPSS 24.0 statistical software. Descriptive analyses were conducted to summarize the demographic characteristics of the elderly, their cognitive levels regarding TCM-based integrated care, and their levels of demand for such services. Additionally, multinomial logistic regression analysis was employed to identify factors influencing their needs, with the significance level set at 0.05.

**Table 1.** Basic Information of Survey Respondents

Category	n	Ratio/%	Category	n	Ratio/%
Gender			Attention to Physical Changes		
male	316	50.00%	Yes	501	79.27%
female	316	50.00%	No	131	20.73%
Age			Income		
60~69	241	38.13%	Below 1,700 CNY	227	35.92%
70~79	264	41.77%	1,700–3,700 CNY	222	35.13%
80~89	10	1.58%	3,700–5,700 CNY	128	20.25%
90 and above	20	3.16%	Above 5,700 CNY	55	8.70%
Education			Affordability of Medical Costs		
Primary or below	324	51.27%	Fully affordable	319	50.47%
middle school	167	26.42%	Mostly affordable	139	21.99%
high school	93	14.72%	Average	114	18.04%
College	28	4.43%	Mostly unaffordable	46	7.28%
Undergraduate or above	20	3.16%	Incapable	14	2.22%
Occupation (Before Retirement)			Chronic Diseases		
Farmer	316	50.00%	none	205	32.44%
Public servant	111	17.56%	one	263	41.61%
worker	97	15.35%	two	119	18.83%
Other	108	17.09%	Three or more	45	7.12%
Marital Status			Self-care Ability		
Married	397	62.82%	Fully independent	501	79.27%
Widowed	169	26.74%	Partially dependent	113	17.88%
Divorced	21	3.32%	Fully dependent	18	2.85%
Unmarried	45	7.12%			
Living Arrangement			Health Status		
Alone	128	20.25%	Excellent	154	24.37%
With spouse	229	36.23%	Good	273	43.20%
With children	89	14.08%	Fair	141	22.31%
With spouse and children	141	22.31%	Poor	53	8.39%
other	45	7.12%	Very poor	11	1.74%
Number of Children			Type of Medical Insurance		
None	52	8.23%	Medical insurance for urban and rural residents (Merger with NCMS)	418	66.14%
One	171	27.06%			
Two	223	35.28%	Employee medical insurance	109	17.25%
Three	108	17.09%	Medical insurance for employees and urban and rural residents (Merger with NCMS)	40	6.33%
More than three	78	12.34%			
			Without any medical insurance	30	4.75%
Regular Checkup			Medical insurance for employees and urban and rural residents (Merger with NCMS)	10	1.58%
Yes	439	69.46%			
No	193	30.54%	Commercial Insurance  Medical Insurance for Urban and Rural Residents (Merger with NCMS)	9	1.42%
Regular Diet/Exercise			Commercial Insurance	9	1.42%
Yes	477	75.47%	Employee medical insurance  commercial insurance	7	1.11%
No	155	24.53%			

### 3. BASIC INFORMATION OF THE ELDERLY AND THEIR COGNITION OF INTEGRATED TCM AND ELDERLY CARE SERVICES

#### 3.1. Demographic Characteristics of the Elderly

The survey included a total of 632 elderly participants, evenly distributed between genders, with 316 men and 316 women. Age distribution was as follows: 241 individuals aged 60–69, 264 aged 70–79, 107 aged 80–89, and 20 aged 90 or older. In terms of education, 324 participants had primary school education or below, and 167 had completed junior high school. Occupational distribution showed that 316 participants were farmers, and 111 were public officials. Regarding living arrangements, 229 participants lived with their spouses, while 128 lived alone. Family structure revealed that 171 participants had one child, and 409 had two or more children. In terms of medical insurance coverage, 477 participants were enrolled in urban and rural residents' medical insurance, while 30 had no medical insurance. Health conditions varied: 427 participants reported having chronic diseases, while 205 did not. Additionally, 501 participants were capable of self-care, whereas 131 required partial or full assistance with daily activities. Detailed information is provided in Table 1.

#### 3.2. Cognition of the Elderly about the Integrated TCM and Elderly Care Services

The survey reveals that over half of the elderly participants recognize the benefits of integrating TCM with elderly care services, particularly in disease prevention and health improvement. This suggests that grassroots efforts in Jiangsu Province have achieved some success in promoting TCM for disease management. However, awareness of integrated medical and elderly care services remains relatively low.

Among the 632 elderly respondents:

Only 177 individuals (28.0%) were familiar with integrated medical and nursing care services. A significant 42.56% reported being unaware of such services, highlighting a generally low level of understanding regarding these offerings. Detailed statistics on the awareness and cognition of these services are presented in Table 2.

**Table 2.** Cognition of the elderly Integrated TCM and Elderly Care Services

Category	n	Ratio/%	Item	Response		Awareness Rate/%
				n	Response Rate/%	
Awareness of Integrated medical And Elderly Care			Recognized Benefits of TCM Integrated Services			
Very aware	50	7.91%	Promote diagnosis and recovery treatment	359	25.52%	56.80%
Relatively aware	127	20.09%	Ability to prevent and control disease	379	26.94%	59.97%
Average	186	29.43%	Reduces treatment costs	338	24.02%	53.48%
Less aware	172	27.22%	Improve health and quality of life	331	23.53%	52.37%
Not aware	97	15.35%				

#### 4. DEMAND FOR ELDERLY CARE SERVICES WITH TCM CHARACTERISTICS AT THE GRASSROOTS LEVEL IN JIANGSU

Survey results indicate a substantial demand for elderly care services integrated with medical care in Jiangsu, with 95.25% of respondents expressing interest. Furthermore, 92.7% of elderly individuals demonstrated a specific preference for elderly care services featuring TCM characteristics. These findings are attributed to Jiangsu's proactive implementation of the 14th Five-Year Plan, leveraging TCM's strengths, promoting the integration of TCM into elderly care, and exploring innovative "optimal elderly care pathways" unique to the Jiangsu province [4]. See Table 3 for detailed data.

**Table 3.** Demand for Integrated TCM and Elderly Care Services at the Grassroots Level in Jiangsu Province

Item	n	Proportion/%
Demand Level for Integrated Elderly Care Services		
Very high demand	117	18.51%
Relatively high demand	183	28.96%
Moderate demand	171	27.06%
Relatively low demand	114	18.04%
No demand at all	47	7.44%
Desired Elderly Care Services		
Health check-ups	434	68.67%
Medical care	381	60.28%
Daily living assistance	373	59.02%
Cultural and recreational activities	302	47.78%
Number of Desired Elderly Care Services		
0 services	0	0.00%
1 service	30	4.75%
2 or more services	602	95.25%
Interest in Integrated TCM Elderly Care Services		
Interested in integrated TCM services	522	34.75%
TCM therapies (e.g., moxibustion, cupping)	329	21.90%
Physical exercises (e.g., Tai Chi, Baduanjin)	289	19.24%
TCM constitution identification	252	16.78%
Not interested in any services	110	7.32%

#### 5. ANALYSIS OF INFLUENCING FACTORS ON THE DEMAND FOR TCM-INTEGRATED MEDICAL AND ELDERLY CARE SERVICES AT THE GRASSROOTS LEVEL IN JIANGSU

##### 5.1. Single-Factor Analysis

###### (1) Tendency Factors

Among the tendency factors, age, education level, occupation, marital status, and the number of children showed statistically significant correlations with the demand for traditional Chinese medicine-integrated medical and elderly care services ( $P < 0.05$ ). Detailed results are presented in Table 4.

**Table 4.** Analysis of Tendency Factors Influencing the Demand for Integrated TCM and Elderly Care Services at the Grassroots Level in Jiangsu Province [n (%)]

Tendency Factors	Category	Very high demand	Relatively high demand	Moderate demand	Relatively low demand	No demand at all	X <sup>2</sup> Value	P-Value
age	60~69	41(17.0)	71(29.5)	69(28.6)	47(19.5)	13(5.4)	28.674	0.004
	70~79	47(17.8)	83(31.4)	66(25.0)	54(20.5)	14(5.3)		
	80~89	23(21.5)	22(20.6)	32(29.9)	12(11.2)	18(16.8)		
	90 and above	6(30.0)	7(35.0)	4(20.0)	1(5.0)	2(10.0)		
education	Primary or below	81(25.0)	83(25.6)	84(25.9)	49(15.1)	27(8.3)	27.465713	0.037
	Middle school	19(11.4)	53(31.7)	48(28.7)	33(19.8)	14(8.4)		
	high school	11(11.8)	31(33.3)	25(26.9)	22(23.7)	4(4.3)		
	college	4(14.3)	7(25.0)	8(28.6)	7(25.0)	2(7.1)		
	Undergraduate or above	2(10.0)	9(45.0)	6(30.0)	3(15.0)	0(0.0)		
occupation	Farmer	78(24.7)	82(25.9)	85(26.9)	48(15.2)	23(7.3)	40.160047	0.000
	Public servant	8(7.2)	49(44.1)	26(23.4)	19(17.1)	9(8.1)		
	worker	13(13.4)	20(20.6)	32(33.0)	28(28.9)	4(4.1)		
	Others	18(16.7)	32(29.6)	28(25.9)	19(17.6)	11(10.2)		
Marital Statue	Married	74(18.4)	111(28.0)	118(29.7)	63(15.9)	31(7.8)	23.987267	0.020
	Widowed	25(14.8)	50(29.6)	45(26.6)	35(20.7)	14(8.3)		
	Divorced	2(9.5)	8(38.1)	4(19.0)	7(33.3)	0(0.0)		
	Unmarried	16(35.6)	14(31.1)	4(8.9)	9(20.0)	2(4.4)		
Number of child	None	20(38.5)	18(34.6)	3(5.8)	9(17.3)	2(3.8)	45.099	0.000
	One	30(17.5)	51(29.8)	53(31.0)	29(17.0)	8(4.7)		
	Two	30(13.5)	68(30.5)	69(30.9)	43(19.3)	13(5.8)		
	Three	20(18.5)	33(30.6)	25(23.1)	19(17.6)	11(10.2)		
	More than three	17(21.8)	13(16.7)	21(26.9)	14(17.9)	13(16.7)		

## (2) Single-Factor Analysis of Enabling Factors

The enabling factors, including dispensable monthly income, the degree of concern for children, the ability to bear medical expenses, and the distance from home to medical institutions, were found to be statistically significant in influencing the demand for traditional Chinese medicine-integrated medical and elderly care services ( $P < 0.05$ ). The results are summarized in Table 5.

**Table 5.** Analysis of Enabling Factors Influencing the Demand for Integrated TCM and Elderly Care Services at the Grassroots Level in Jiangsu Province [n (%)]

Enabling Factors	Category	Very high demand	Relative ly high demand	Moderat e demand	Relativel y low demand	No demand at all	X <sup>2</sup> Value	P-Val ue
Income/C NY	Below 1700	63(27.8)	62(27.3)	48(21.1)	37(16.3)	17(7.5)	37.11 0016	0.0 00
	1700-3700	28(12.6)	68(30.6)	71(32.0)	34(15.3)	21(9.5)		
	3700-5700	21(16.4)	31(24.2)	40(31.1)	32(25.0)	4(3.1)		
	Above 5700	5(9.1)	22(40.0)	12(21.8)	11(20.0)	5(9.1)		
Children Care Level	Very attentive	46(18.8)	55(22.4)	71(29.0)	43(17.6)	30(12.2)	60.87 5717	0.0 00
	Relatively attentive	35(14.7)	78(32.8)	70(29.4)	48(20.2)	7(2.9)		
	Average	15(18.8)	23(28.7)	26(32.5)	10(12.5)	6(7.5)		
	Less	2(12.5)	8(50.0)	2(12.5)	2(12.5)	2(12.5)		
	Not at all	0(0.0)	1(25.0)	0(0.0)	3(75.0)	0(0.0)		
	No children	19(38.8)	18(36.7)	2(4.1)	8(16.3)	2(4.1)		
Affordabil ity of Costs	Fully affordable	52(16.3)	81(25.4)	89(27.9)	63(19.7)	34(10.7)	45.44 8786	0.0 00
	Mostly affordable	20(14.4)	55(39.6)	33(23.7)	23(16.5)	8(5.8)		
	Average	21(18.4)	31(27.2)	40(35.1)	18(15.8)	4(3.5)		
	Mostly unaffordabl e	18(39.1)	14(30.4)	8(17.4)	6(13.0)	0(0.0)		
	Incapable	6(42.9)	2(14.3)	1(7.1)	4(28.6)	1(7.1)		
Distance to Medical Facility	Within 5 km	57(14.3)	124(31. 1)	107(26.8 )	72(18.0)	39(9.8)	31.07 2793	0.0 02
	5–10 km	35(24.0)	36(24.7)	42(28.8)	29(19.9)	4(2.7)		
	10–15 km	18(32.7)	17(30.9)	8(14.5)	9(16.4)	3(5.5)		
	Above15 km	7(21.9)	6(18.8)	14(43.8)	4(12.5)	1(3.1)		

### (3) Single-Factor Analysis of Demand Factors

Among the demand factors, health status, self-care ability, types of chronic diseases, and the degree of understanding of the combination of medical care were found to be statistically significant in influencing the demand for TCM-integrated medical and elderly care services ( $P < 0.05$ ). The results are summarized in Table 6.

**Table 6.** Analysis of Demand Factors Influencing the Demand for Integrated TCM and Elderly Care Services at the Grassroots Level in Jiangsu Province [n (%)]

Demand Factors	Category	Very high demand	Relatively high demand	Moderate demand	Relatively low demand	No demand at all	X <sup>2</sup> Value	P-Value
Health Status	Excellent	31(20.1)	35(22.7)	34(22.1)	35(22.7)	19(12.3)	66.361336	4.29E-08
	Good	28(10.3)	89(32.6)	77(28.2)	60(22.0)	19(7.0)		
	Fair	31(22.0)	48(34.0)	44(31.2)	14(9.9)	4(2.8)		
	Poor	21(39.6)	10(18.9)	15(28.3)	3(5.7)	4(7.5)		
Chronic Diseases	Very poor	6(54.5)	1(9.1)	1(9.1)	2(18.2)	1(9.1)		
	None	20(9.8)	63(30.7)	57(27.8)	41(20.0)	24(11.7)	38.878327	0.000
	One	50(19.0)	80(30.4)	73(27.8)	44(16.7)	16(6.1)		
	Two	27(22.7)	33(27.7)	31(26.1)	22(18.5)	6(5.0)		
Self-care Ability	Three or more	20(44.4)	7(15.6)	10(22.2)	7(15.6)	1(2.2)		
	Fully independent	82(16.4)	139(27.7)	132(26.3)	106(21.2)	42(8.4)	40.812303	0.000
	Partially dependent	25(22.1)	43(38.1)	35(31.0)	5(4.4)	5(4.4)		
	Fully dependent	10(55.6)	1(5.6)	4(22.2)	3(16.7)	0(0.0)		
Awareness of Integrated medical And Elderly Care	Very aware	26(52.0)	12(24.0)	4(8.0)	4(8.0)	4(8.0)	151.803083	3.44E-24
	Relatively	12(9.4)	65(51.2)	34(26.8)	14(11.0)	2(1.6)		
	Average	29(15.6)	50(26.9)	69(37.1)	32(17.2)	6(3.2)		
	Less aware	26(15.1)	36(20.9)	46(26.7)	52(30.2)	12(7.0)		
	Not aware	24(24.7)	20(20.6)	18(18.6)	12(12.4)	23(23.7)		

## 5.2. Multi-Factor Analysis of the Demand for Elderly Care Services with TCM Characteristics at the Grassroots Level in Jiangsu

To explore the factors influencing the demand for elderly care services with TCM characteristics, a multi-class Logistic regression analysis was conducted. The dependent variable was the level of demand for these services, categorized into five levels:

0 = very necessary,

1 = relatively necessary,

2 = general need,

3 = less necessary,

4 = completely unnecessary.

Statistically significant variables from the single-factor analysis were included as independent variables (value assignments in Table 7). Since the parallelism test for ordered multi-class logistic regression failed, a disordered multi-class logistic regression analysis was performed.

**Table 7.** Assignment of Independent Variables

Variable	Assignment Method
Predisposing	
Gender	Male = 1, Female = 2
Age	60–69 years = 1, 70–79 years = 2, 80–89 years = 3, 90 years and above = 4
Education Level	Primary school or below = 1, Middle school = 2, High school = 3, Junior college = 4, Undergraduate = 5
Occupation	Farmer = 1, Government employee = 2, worker = 3, Others = 4
Marital Status	Married = 1, Widowed = 2, Divorced = 3, Unmarried = 4
Number of Children	None = 1, One = 2, Two = 3, Three = 4, More than three = 5
Living Arrangement	Living alone = 1, With spouse = 2, With children = 3, With spouse and children = 4, Others = 5
Regular Diet and Exercise	Yes = 1, No = 2
Regular Medical Check-ups	Yes = 1, No = 2
Health Awareness and Action	Yes = 1, No = 2
Enabling	
Monthly Income	Below 1,700 CNY = 1, 1,700–3,700 CNY = 2, 3,700–5,700 CNY = 3, Above 5,700 CNY = 4
Children's Care Level	Very attentive = 1, Relatively attentive = 2, Average = 3, Less attentive = 4, Not attentive = 5, No children = 6
Ability to Afford Medical Expenses	Fully capable = 1, Relatively capable = 2, Average = 3, Less capable = 4, Incapable = 5
Distance to Medical Facilities	Within 5 km = 1, 5–10 km = 2, 10–15 km = 3, Over 15 km = 4
Need	
Health Status	Very good = 1, Good = 2, Average = 3, Poor = 4, Very poor = 5
Number of Chronic Diseases	None = 1, One = 2, Two = 3, Three or more = 4
Self-care Ability	Fully independent=1, Partially dependent=2, Fully dependent=3
Awareness of Integrated Medical and Elderly Care	Very aware = 1, Relatively aware = 2, Average = 3, Less aware = 4, Not aware = 5

The results (Table 8) revealed that the degree of understanding of integrated medical and nursing services significantly influences the demand across all levels ( $P < 0.05$ ). As the elderly gain deeper knowledge of these services, their skepticism diminishes, leading to increased acceptance and willingness to utilize them. However, distinct factors were found to influence demand at varying levels:

(1) For those with a great need for medical and nursing care services:

The type and number of chronic diseases emerged as significant factors. Elderly individuals with more types of chronic conditions showed greater demand for integrated care, as these conditions often require long-term medication and regular medical visits.

(2) For those who need medical and nursing care services:

The ability to bear medical expenses was a key determinant. Elderly individuals with average financial capacity exhibited the highest demand, as they required affordable, integrated care. Those with strong financial capacity often had alternative means to address healthcare needs, leading to lower demand. Conversely, those with weak financial capacity faced limitations in affording even basic care, which also reduced their demand for integrated services.

**Table 8.** Multinomial Logistic Regression Analysis of the Demand for Integrated TCM and Elderly Care Services Among Older Adults

Demand Level			B	Wald $\chi^2$	P-value	OR	95% CI for OR	
							Lower	Upper
Very High Demand	Number of chronic diseases	None	4.066	8.373	0.004	0.017	0.001	0.269
		One	2.374	3.081	0.079	0.093	0.007	1.319
		Two	2.024	2.137	0.144	0.132	0.009	1.993
		Three Or more	0	.	.	.	.	.
	Awareness of Integrated medical And Elderly Care	Very well	4.595	23.753	0	98.961	15.595	627.981
		Relatively	3.897	9.861	0.002	49.237	4.325	560.472
		Average	2.823	13.216	0	16.83	3.673	77.108
		Barely	1.622	6.281	0.012	5.064	1.424	18.008
		Not at all	0	.	.	.	.	.
Relative ly High Demand	Ability to afford medical costs	Fully capable	2	1.45	0.229	7.386	0.285	191.366
		Relatively	2.699	2.642	0.104	14.872	0.574	385.434
		Average	3.914	5.033	0.025	50.115	1.64	1531.484
		Less capable	20.995	0	0.991	1.31E+09	0	.c
		Incapable	0	.	.	.	.	.
	Understanding of integrated care	Very well	2.908	10.24	0.001	18.313	3.086	108.683
		Relatively	4.773	16.423	0	118.285	11.759	1189.833
		Average	2.847	15.539	0	17.233	4.184	70.97
		Barely	1.401	5.714	0.017	4.06	1.287	12.809
		Not at all	0	.	.	.	.	.
Moderate demand	Children Care Level	Very well	29.918	115.939	0	9.85E+12	4.25E+10	2.28E+15
		Relatively	31.605	126.551	0	5.32E+13	2.16E+11	1.31E+16
		Average	30.434	115.312	0	1.65E+13	6.38E+10	4.26E+15
		Barely	27.511	104.708	0	8.87E+11	4.56E+09	1.72E+14
		Not at all	34.957	.	.	1.52E+15	1.52E+15	1.52E+15
	Ability to Afford Medical Expenses	No child	0	.	.	.	.	.
		Fully	1.967	1.33	0.249	7.151	0.253	202.365
		Relatively	2.195	1.65	0.199	8.982	0.315	255.916
		Average	3.776	4.471	0.034	43.653	1.318	1446.236
		Less	19.846	0	0.991	4.16E+08	0	.c
	Health Status	Incapable	0	.	.	.	.	.
		Very good	4.704	4.413	0.036	110.391	1.371	8891.171
		good	5.174	5.433	0.02	176.544	2.278	13684.74
		Average	5.879	6.874	0.009	357.321	4.411	28943.71
		Poor	3.818	2.805	0.094	45.519	0.522	3969.14
	Understanding of integrated care	Very poor	0	.	.	.	.	.
		Very well	1.563	2.503	0.114	4.773	0.688	33.097
		Relatively	4.122	12.141	0	61.679	6.07	626.74
		Average	3.34	22.13	0	28.221	7.018	113.482
		Barely	1.762	9.355	0.002	5.824	1.883	18.016
Relative ly low demand	Age	Not at all	0	.	.	.	.	.
		60-69	4.254	7.142	0.008	70.378	3.109	1593.308
		70-79	3.538	5.1	0.024	34.389	1.596	740.991
		80-89	1.345	0.782	0.376	3.836	0.195	75.471
	Children Care Level	90 and above	0	.	.	.	.	.
		Very well	30.099	494.085	0	1.18E+13	8.30E+11	1.68E+14
		Relatively	32.154	524.709	0	9.21E+13	5.88E+12	1.44E+15
		Average	30.359	433.584	0	1.53E+13	8.79E+11	2.67E+14
		Barely	29.288	.	.	5.24E+12	5.24E+12	5.24E+12
		Not at all	88.265	0	0.993	2.15E+38	0	.c
		No child	0	.	.	.	.	.
	Awareness of Integrated medical And Elderly Care	Very well	1.436	1.859	0.173	4.204	0.533	33.137
		Relatively	3.73	9.138	0.003	41.671	3.712	467.859
		Average	2.934	14.526	0	18.799	4.158	84.984
		Barely	2.476	15.445	0	11.898	3.46	40.91
		Not at all	0	.	.	.	.	.

(3) For those with general needs for medical and nursing care services:

The number of children and the health status of the elderly were significant influencing factors. A greater number of children often translated into more familial support, reducing the demand for external services. Better health status resulted in fewer health risks, further diminishing the necessity for integrated care services.

(4) For those who do not need medical and nursing care services:

Age was a significant factor. Younger elderly individuals displayed lower demand due to their relatively better health and lower prevalence of chronic conditions. With fewer health issues, their need for integrated services was minimal compared to older age groups.

## **6. COUNTERMEASURES AND SUGGESTIONS**

### **6.1. Increase Public Awareness of TCM-Integrated Elderly Care Services**

(1) Direct Publicity:

Organize lectures on TCM culture and elderly health care to highlight the advantages and practical applications of TCM in "preventive treatment." Encourage elderly individuals to adopt TCM-based health practices in their daily routines, enhancing their health literacy and promoting proactive health management for a healthier old age.

(2) Indirect Publicity:

Conduct free TCM medical check-ups to allow the elderly to experience TCM diagnostic and treatment techniques. Regularly host TCM health knowledge exchange sessions where the elderly can learn from one another and enhance their understanding of TCM practices and their integration into elderly care.

### **6.2. Gradual Integration of TCM Features into Elderly Care Services**

(1) Phased Embedding of TCM into Medical-Nursing Services:

Initial Phase: Introduce basic TCM activities, such as teaching elderly individuals TCM health exercises.

Expansion Phase:

Procurement of TCM Medicinal Materials and Drugs: Ensuring the availability of high-quality, authentic TCM materials to meet the growing demand for integrated medical and elderly care services.

Introduction of Digital Diagnostic Equipment: Investing in advanced digital tools tailored to TCM practices, improving diagnostic precision and the efficacy of treatments. [5]

Expansion of TCM Service Venues: Increasing the accessibility and capacity of facilities offering TCM-based elderly care, particularly in grassroots communities.

These initiatives will improve the technical standards and therapeutic effectiveness of TCM-integrated elderly care services at the grassroots level. They will also facilitate the gradual integration of TCM practices, such as constitution identification and medicinal diet conditioning, into elderly care. This structured approach ensures the smooth incorporation of TCM elements into medical and elderly care services, providing the elderly with holistic, culturally resonant health solutions that address their diverse needs.

## (2) Strengthen TCM-Related Talent Development:

The grassroots government should focus on enhancing the professional quality of personnel involved in TCM-integrated medical and elderly care services by providing specialized training in TCM. Concurrently, raising the minimum wage standards and basic benefits for elderly care service providers, along with offering post subsidies, can improve welfare and attract more talent to the field.[6] Grassroots communities can also collaborate with TCM colleges and universities to implement agreement-based training programs, ensuring that graduates work in designated community settings[7]. This approach will provide a robust talent pipeline, significantly enhancing the service level and effectiveness of TCM-integrated medical and elderly care services.

## 6.3. Diversify TCM-Integrated Elderly Care Services to Meet Varied Needs

### (1) Develop a Multi-Stakeholder Elderly Care System:

Establish a system involving family support, government guidance, and social participation to cater to a range of elderly care needs:

The elderly require TCM-integrated medical and elderly care services that encompass a wide range of needs, including daily life care, disease diagnosis and treatment, health examinations, rehabilitation training, cultural activities, health maintenance programs, nutrition management, and psychological counseling. While families can fulfill basic needs like daily care, grassroots governments should build upon this foundation by offering comprehensive support, including disease diagnosis, treatment, and health check-ups. Additionally, efforts should focus on attracting social capital to enhance TCM-integrated services[8], such as health maintenance activities and nutrition management, thereby addressing the multifaceted needs of the elderly population effectively.

### (2) Personalized and Differentiated TCM Elderly Care Services:

Utilize electronic health records and TCM constitution assessments to tailor services based on the elderly's physical conditions. [9] Provide personalized services according to the different physical conditions of the elderly who are not sick, want to be sick, have been sick, and are in a post-sick state. For healthy individuals: Teach TCM health exercises like Tai Chi and Ba Duan jin to prevent illness and promote wellness. For those at risk of illness: Provide therapies such as massage, acupuncture, and dietary guidance to mitigate disease onset. This personalized approach optimizes resource allocation and meets diverse health and elderly care demands effectively.

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