

Community Health Services in Hangzhou, China: A Cross-Sectional Survey on the Perceived Quality of Traditional Chinese Medicine Care

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Abstract: In China, conventional medicine does not exclude traditional Chinese medicine (TCM). Traditional Chinese Medicine (TCM) treatments must be provided by publicly funded community health centers. Perceived quality of traditional Chinese medicine (TCM) treatment at community health centers was the focus of this research. Methods. Participants in the study were 471 TCM users from four different Hangzhou community health facilities, and the research was a cross-sectional questionnaire survey. On a Likert scale, we asked participants to score the TCM services they got in terms of how tangible, reliable, responsive, assured, and empathic they felt. We used linear regression models to identify the service and sociodemographic variables linked to the ratings. Final product. With certainty receiving the greatest score and empathy receiving the lowest, the average evaluations on the five components of TCM treatment varied from 78 to 88 out of 100. When compared to Western medicine, TCM was preferred by those who had a higher opinion of its quality of treatment (apart from assurance). The attentiveness and empathy of the care were judged higher by those who reported spending more than 100 yuan on TCM treatment. When it came to dependability, certainty, and empathy, however, more frequent trips to community TCM services were linked to poorer scores. They also felt less real care for those who had two or more TCM treatments. Furthermore, women did better than males when it came to dependability and responsiveness. Reliability and responsiveness were scored higher by those with a university degree, while assurance and empathy were rated lower by those with a top education of senior high school. A decrease in both perceived tangibility and certainty was likewise linked to living in a rural area. Respondents in the service and retail industries rated assurance higher than those in the public sector, but empathy lower. In summary. Patients at Hangzhou's community health centers who used traditional Chinese medicine (TCM) reported generally good results. Still, in order to win over and keep customers who have faith in TCM, the quality of TCM services must be enhanced.

1. Background

Among the many CAM practices available today, Traditional Chinese Medicine (TCM) ranks high in popularity. To ensure the safe and effective use of complementary and alternative medicine (CAM), the World Health Organization (WHO) released the "Traditional Medicine Strategy 2002-2005" in 2002 [1]. The "Traditional Medicine Strategy 2014–2023," its most current revision, aims to advance a

conventional health systems' incorporation of CAM on a worldwide scale [2]. More and more people in industrialized nations are turning to CAM, according to the

available data. For instance, in 2012, Americans spent \$30.2 billion on complementary and alternative medicine (CAM), and 59 million individuals tried some kind of CAM. The accessibility, affordability, and availability of CAM make it a potentially life-saving option in many low- and middle-income nations. According to the World Health Organization, traditional medicines are used by as much as 80% of the African population for basic healthcare purposes [3]. There has been an effort by some developing nations to include traditional medicine into their primary care systems [3-5].

Traditional Chinese Medicine (TCM) encompasses a variety of practices that have achieved global prominence, including acu-puncture, moxibustion, herbal medicine, and therapeutic massage. More than seventy-five public health centers in the Tuscan Network of Integrative therapy, for instance, provide alternative treatments including herbal therapy and acupuncture [4]. Traditional Chinese Medicine (TCM) has been an integral part of the health care system in mainland China ever before the PRC was founded [6]. It has permeated every aspect of health care, from illness prevention to emergency room treatment, long-term care, and rehabilitation [7]. Nevertheless, traditional Chinese medicine (TCM) was put at risk during the market-driven health reform of the 1980s and 1990s in China, when allopathic medicine and hospital treatment were the norm [8]. Ever since then, the costly and disjointed nature of health care services has been the target of growing criticism. In 2006, the federal government implemented a program to promote traditional Chinese medicine (TCM) by mandating that all community health centers employ a TCM specialist [9]. Approximately 52.0% of primary care physicians [11] and 51.6% of community health centers [10] offered TCM treatments by 2009. The federal government reaffirmed traditional Chinese medicine's (TCM) significance in 2016 and established a target of providing TCM to all residents via community health programs by 2020 [12].

There are several systems that use different methods to give TCM services. A big plan to ensure that all people in mainland China have access to primary care incorporates TCM as one of its fundamental tenets. One TCM hospital should be built in each county, and TCM services should be widely available even in non-TCM health facilities [13]. There are 43 traditional Chinese medicine (TCM) universities and institutions in China, as reported by the National Administration of TCM. More than 729,000 students enrolled at these institutions in 2018, and over 48,300 academic members were employed by them [14]. Under the same legal framework, practitioners of traditional Chinese medicine (TCM) are registered as medical physicians much like their Western medical counterparts. Thirty foreign centers were also intended to be established by the Chinese government by the end of 2020 [15]. The traditional Chinese medicine (TCM) system in mainland China is marked by a high number of institutions, heavy reliance on governmental funding, and close cooperation between TCM and Western medicine. Despite a persistent attempt to modernizing the TCM workforce via higher education, these traits are substantially different from those in Hong Kong, Taiwan, and other locations where TCM services are also extensively provided [16]. Notably, social health insurance plans in mainland China support traditional Chinese medicine (TCM) services, which encompass about 1300 TCM items and 892 components [18]. Acute respiratory syndrome (SARS) and new coronavirus pneumonia (COVID-19) outbreaks have also seen the utilization of traditional Chinese medicine (TCM) products for both infection prevention and patient treatment [19]. As a result of official directives, the use of traditional Chinese medicine (TCM) in public health services is clearly

on the rise in mainland China. In Hangzhou, the location of the research, reported a 47.11% increase in traditional Chinese medicine (TCM) visits to community health services between 2012 and 2015. Among all visits to community health services in 2013, 2014, and 2015, the proportion of visits attributed to traditional Chinese medicine was 25.46%, 26.87%, and 30.64%, respectively [20]. It is unclear, however, if TCM patients are satisfied with the treatment they get. Through a cross-sectional survey of TCM users in Hangzhou's community health facilities, this research sought to address this topic. There has been a lot of push from the World Health Organization to raise the bar for complementary and alternative medicine (CAM) services [2]. We may learn more about the requirements of people who use traditional Chinese medicine (TCM) and how to improve policies in China's primary care system based on the results of this research.

2. Methods

This study adopted a cross-sectional design. The study was undertaken in Hangzhou, one of the most developed municipalities in China with over 9.8 million permanent residents. Hangzhou is divided into 13 local jurisdictions and the majority (over 77%) of its residents live in the 10 urban districts. In 2019, its per capita GDP reached 152,000 yuan (US\$22,969), much higher than the national average of 71,000 yuan (US\$10,729). Hangzhou established 129 community health centers, 100 of which have a dedicated TCM unit. The total volume of TCM visits in community health services have exceeded 10 million since 2013 [21].

Ethics approval for the study protocol was obtained from Hangzhou Normal University (Reference number 20190070). The survey was anonymous and verbal informed consent was obtained prior to proceeding of the survey.

2.1. Sampling. Participants of this study were selected using a multi-stage sampling strategy. Four urban districts (Shangcheng, Xiacheng, Jianggan and Gongshu) were purposively identified first, representing different levels of economic development and geographical locations in Hangzhou. Per capita GDP of the four districts ranged from 12,218 USD (Jianggan) to 42,728 USD (Shangcheng) in 2017 [22]. In each district, an average-sized community health center with a well-established TCM unit was selected.

About 3,200 patients visited the selected TCM units over the period of the survey (1–4 July 2017) and 500 adult patients (≥ 18 years) were conveniently approached by the trained data collectors to participate in the survey. Of those invited, 471 (94.2%) completed the survey. This sample size allowed us to make a reliable estimation of the quality ratings and perform linear regression modelling on the ratings with up to 50 independent variables [23].

2.2. Instruments. Data were collected using a self-developed questionnaire. The questionnaire comprised two sections. The first section investigated the participants' use of health care services based on Andersen's behavioral model [24]. It captured needs factors (measured by the demographic characteristics of respondents, chronic conditions, and a self-rating on overall health) and enabling factors (measured

by marital status, education, income, job, residency, and health insurance). Previous studies show that these variables are significant predictors of health and health care outcomes [25, 26]. In this study, chronic condition was identified from a list of diagnosed conditions, including hypertension, diabetes, gout, cardiovascular and cerebrovascular diseases, digestive diseases, chronic obstructive pulmonary disease, liver disease, kidney disease, and tumor. Self-rating on overall health was assessed on a five-point Likert scale, which was then recoded into three categories (good, fair and poor) in data analyses. Income was estimated as monthly household average income per capita. Residency was defined by the household registration system “Hukou.” In China, welfare entitlements are attached to local Hukou registrations. China has established almost universal health insurance coverage thanks to multiple Hukou-based funds subsidized by the government [26]. These funds can be categorized into three types: basic health insurance for urban employees, basic health insurance for urban residents, and new rural cooperative medical scheme. Overall, urban employees enjoy a higher level of entitlements than others. The questionnaire also captured the frequency, type, and cost of TCM care services, which encompassed medicine conditioning, acupuncture, massage, cupping, scraping, fumigation, acupoint injection, moxibustion, “hot ironing,” and traditional treatment for bone injuries.

The second section assessed patient perceived quality of the current TCM visit in community health services using the SERVQUAL framework proposed by Parasuraman and colleagues [27–29]. It is perhaps the most commonly used framework for measuring quality of healthcare services in both developed and developing countries [30]. The SERVQUAL framework taps into five dimensions of quality of care: tangibility, reliability, responsiveness, assurance and empathy. Tangibility measures accessibility to physical and human resources. Reliability indicates the ability to accurately and reliably complete the promised services. Responsiveness captures the adequacy of service providers to meet consumer requests. Assurance reflects trust and confidence of consumers on the competency of service providers. Empathy addresses personalized needs and context [31]. Minor modifications were made on the SERVQUAL instrument after two rounds of consultations with 15 experts and interviews with 20 TCM users for the purpose of adaptation to the context of TCM services in China. For example, responsiveness involved simplification of services procedures and disclosure of information about the practitioners. This resulted in an adapted version of SERVQUAL, comprising 23 items, with an overall Cronbach’s α coefficient of 0.936, well above 0.70 as required [32]. The final data analyses further excluded three items since deletion of these items produced a higher Cronbach’s α coefficient for their respective domains in the pilot study involving 100 participants. Three items were “Q12 The institution provides convenience services such as consultation, consultation, and triage,” “Q17 The number of Chinese medicine personnel and the allocation of professional titles are reasonable, which can meet your medical needs,” “Q21 Doctors provide you

with personalized service.” The finalized SERVQUAL-based community TCM health service evaluation questionnaire is shown in the (available (here)) appendix. The exploratory factor analysis (varimax rotation) with the final sample ($n = 471$) suggested a five-factor structure of the instrument, supporting the construct validity of the instrument confirmed by the studies in Asian populations including in China [33, 34].

2.3. Data Collection. The questionnaire was administered through face-to-face interviews in the participating community health centers. Eight interviewers were trained over a two-day workshop. They were taught about how to follow the protocol, how to initiate a conversation with the study participants appropriately considering their literacy level, and how to avoid bias and ensure completeness of data.

The trained interviewers were paired and deployed to the selected community health centers. However, they worked independently. Data were collected at the customer services area. Patients who had completed the TCM care were approached whenever one of the interviewers was available. On average, each interviewer collected 15 questionnaires per day. Each interview took about 13 minutes (ranging from 10 to 20 minutes).

The interviewers explained the purpose and procedure of the study and obtained oral informed consent from the participants prior to the survey. Participation in the survey was completely voluntary. The interviewers had no servicing relationships with the interviewees.

2.4. Data Analysis. The primary outcome of this study was perceived quality of the TCM care reflected on five domains: tangibility, reliability, responsiveness, assurance and empathy. Each quality item in the questionnaire was rated on a five-point Likert scale, with a higher score indicating a higher level of quality of care. A summed score was then calculated for each quality domain and subsequently transformed into a score ranging from 0 to 100 [35]. The score was interpreted as a continuous quality spectrum. Means and standard deviations of quality scores were presented.

The secondary outcome of this study examined variations of perceived quality of the TCM care and determinants of the variations. Student’s *t*-tests or analysis of variance (*F* tests) for independent samples were performed to examine the statistical differences in quality scores across groups of respondents with different characteristics. Multivariate linear regression models were established to identify the independent variables associated with the five domains of quality ratings. A stepwise approach was adopted in the modelling involving all the tested independent variables (section one of the questionnaire). Missing data, if any, were handled through listwise deletion.

Data were double entered into EpiData 3.1 to ensure accuracy. Statistical analyses were performed using SPSS 21.0. A *p* value at 0.05 (two sides) was set for statistical significance.

3. Results

3.1. Respondent Personality Traits. Of those who took part in the poll, 67.7% were female, 66.5% were 45 and over, and 83.7% were married. A local household registration was held by the majority of respondents (17.8%), while 17.8% were not. Similarly, the two urban insurance schemes covered the majority of the respondents. Respondents' distribution across educational attainment was very consistent. With an average salary of 5,389 yuan in Hangzhou in 2018, more than 42% of respondents reported a monthly family income of less than 5,000 yuan. The majority of respondents (36.5%) reported having at least one chronic illness, and almost one-seventh (17%) evaluated their health as bad. A mere 32% of those who took the survey really lived within the designated walking distance of a community health center, which is a goal set by the government. People rated secondary hospitals as the worst option for medical treatment. While only 18.7% of those who took the survey specifically indicated a preference for TCM, 41.2% said they would rather have a combination of TCM and Western treatment. The community health centers were the initial point of contact for about 28.5% of respondents seeking TCM treatments. More than two-thirds of the patients (64%), often at a cost of less than 100 yuan (about \$15 USD) (Table 1), received several TCM modalities.

3.2. How Great TCM Care Is Seen. On average, the respondents rated tangibility at 82.52 (SD = 12.05), dependability at 83.14 (SD = 10.96), responsiveness at 79.63 (SD = 11.77), assurance at 87.64 (SD = 11.84), and empathy at 78.27 (SD = 13.12). Reliability, education, job, health insurance, chronic conditions, preferred health providers, frequency of visits to community health services, TCM modalities, and TCM cost were the factors that affected the ratings. Table 2 shows that there was an association between the five dimensions of care quality and factors such as preferred care, number of visits, and frequency of traditional Chinese medicine (TCM) treatment in community health facilities.

After accounting for variations in other variables, the multivariate linear regression models confirmed that gender, education, job, health insurance, preferred care, frequency of TCM care received in community health services, TCM modalities, and care cost were significant predictors of quality ratings (Table 3). When compared to Western medicine, TCM was preferred by those who had a higher opinion of its quality of treatment (apart from assurance). The attentiveness and empathy of the care were judged higher by those who reported spending more than 100 yuan on TCM treatment. However, dependability, certainty, and empathy scores were lower among those who visited community TCM services more often. They also felt less real care for those who had two or more TCM treatments. Additionally, women scored better on the responsiveness and dependability measures. Respondents with a bachelor's degree or above rated dependability and responsiveness higher; in contrast,

Those who had completed senior high school scored lower on the measures of certainty and empathy. Residency in rural areas was similarly linked to lower levels of perceived tangibility and certainty. Respondents in the service and retail industries rated assurance higher than those in the public sector, but empathy lower.

4. Discussion

Results showed that traditional Chinese medicine (TCM) treatment in community health services was well-received by participants, who gave it good marks across all five quality characteristics (76–88 out of 100). Consistent with previous research [36, 37], this study found that assurance received the highest rating, whereas empathy received the lowest. A number of initiatives and investments have been made by the Chinese government in recent years to support the growth of traditional Chinese medicine (TCM) in community health services. It is possible that the increasing competence and skill of the TCM staff is the only explanation for the comparatively higher assurance rating. The comparatively low score on empathy, however, suggests that TCM's strengths in holistic and individualized approaches were not fully operational. Patients' perceptions of the efficacy of TCM treatment did not correlate with their actual health requirements, as assessed using contemporary notions of illness and wellness, according to this research. However, community health services in China and other contemporary healthcare institutions are often shaped to meet the demands of healthcare providers rather than patients [38]. When traditional Chinese medicine (TCM) becomes more embedded in the allopathic-dominated mainstream, it runs the risk of departing from its traditional practices [39]. Crowded, fragmented, and episodic TCM services are possible outcomes [40].

Women with higher levels of education are more likely to take CAM, according to studies conducted in other nations [41, 42]. Findings from this study are in line with previous research showing that female TCM users in community health services had better ratings of the responsiveness and dependability of TCM services compared to male users [43]. However, correlations between education and how well people feel their TCM therapy was delivered do not follow a predictable pattern. Consistent with Zun's results [44], we discovered that individuals with a university degree ranked better on dependability and accountability. This seems to go against the grain of what these users may have greater expectations of [45]. But we also discovered that TCM users with a high school diploma or equivalent scored worse on measures of confidence and empathy than those with lesser levels of education.

Retail and service industry employees had a lower empathy rating and a higher assurance rating, which is an intriguing discovery. It stresses the need of looking at quality evaluation from many angles. The likelihood of having one's unique requirements addressed is hampered by the lesser credentials held by retail and service personnel on a global scale [46].

Urban-rural disparities in perceived tangibility and assurance of TCM care deserves further investigations. Urban-rural inequalities in health care and health outcomes have been a major policy concern in China [6]. This study was

TABLE 1: Characteristics of respondents and TCM services.

Characteristics		Number (%)* of respondents				
		Shangcheng	Xiacheng	Gongshu	Jiangan	Total
Gender	Male	32 (30.5)	39 (31.5)	42 (37.8)	39 (29.8)	152 (32.3)
	Female	73 (69.5)	85 (68.5)	69 (62.2)	92 (70.2)	319 (67.7)
Age (years)	18–25	0 (0.0)	11 (8.9)	6 (5.4)	3 (2.3)	20 (4.2)
	26–45	7 (6.7)	56 (45.2)	47 (42.3)	28 (21.4)	138 (29.3)
	46–65	60 (57.1)	51 (41.1)	41 (36.9)	73 (55.7)	225 (47.8)
	>65	38 (36.2)	6 (4.8)	17 (15.3)	27 (20.6)	88 (18.7)
Residency	Local	94 (89.5)	83 (66.9)	97 (87.4)	113 (86.3)	387 (82.2)
	Non-local	11 (10.5)	41 (33.1)	14 (12.6)	18 (13.7)	84 (17.8)
Education	≤ Primary school	32 (30.5)	11 (8.9)	15 (13.5)	41 (31.3)	99 (21.0)
	Junior high school	32 (30.5)	28 (22.6)	24 (21.6)	32 (24.4)	116 (24.6)
	Senior high school	21 (20.0)	34 (27.4)	31 (27.9)	34 (26.0)	120 (25.5)
	University	20 (19.0)	51 (41.1)	41 (36.9)	24 (18.3)	136 (28.9)
Marital status	Single	1 (1.0)	23 (18.5)	15 (13.5)	5 (3.8)	44 (9.3)
	Married	93 (88.6)	97 (78.2)	86 (77.5)	118 (90.1)	394 (83.7)
	Divorced/Widowed	11 (10.5)	4 (3.2)	10 (9.0)	8 (6.1)	33 (7.0)
Monthly household income per capita (¥)	<5000	61 (58.1)	38 (30.6)	37 (33.3)	64 (48.9)	200 (42.5)
	5000–9999	36 (34.3)	50 (40.3)	62 (55.9)	55 (42.0)	203 (43.1)
	≥10000	8 (7.6)	36 (29.0)	12 (10.8)	12 (9.2)	68 (14.4)
Job	Public institution	5 (4.8)	13 (10.5)	12 (10.8)	10 (7.6)	40 (8.5)
	Corporate company	6 (5.7)	36 (29.0)	26 (23.4)	15 (11.5)	83 (17.6)
	Retail and services	9 (8.6)	19 (15.3)	20 (18.0)	13 (9.9)	61 (13.0)
	Retired	72 (68.6)	26 (21.0)	36 (32.4)	66 (50.4)	200 (42.5)
	Self-employed	10 (9.5)	19 (15.3)	10 (9.0)	21 (16.0)	60 (12.7)
	Others	3 (2.9)	11 (8.9)	7 (6.3)	6 (4.6)	27 (5.7)
Health insurance	Urban employee	74 (70.5)	86 (69.4)	79 (71.2)	100 (76.3)	339(72.0)
	Urban residents	22 (21.0)	26 (21.0)	29 (26.1)	20(15.3)	97 (20.6)
	Rural residents	9 (8.6)	12 (9.7)	3 (2.7)	11 (8.4)	35 (7.4)
Chronic condition	Yes	57 (54.3)	29 (23.4)	37 (33.3)	49 (37.4)	172 (36.5)
	No	48 (45.7)	95 (76.6)	74 (66.7)	82 (62.6)	299 (63.5)
Perceived health	Poor	20 (19.0)	17 (13.7)	13 (11.7)	30 (22.9)	80 (17.0)
	Fair	41 (39.0)	68 (54.8)	62 (55.9)	74 (56.5)	245 (52.0)
	Good	44 (41.9)	39 (31.5)	36 (32.4)	27 (20.6)	146 (31.0)
Distance to nearest community health center (minutes)	≤15	36 (34.3)	38 (30.6)	36 (32.4)	41 (31.3)	151 (32.1)
	16–30	30 (28.6)	38 (30.6)	44 (39.6)	47 (35.9)	159 (33.8)
	>30	39 (37.1)	48 (38.7)	31 (27.9)	43 (32.8)	161 (34.2)
Preferred health provider	Community facility	67 (63.8)	78 (62.9)	90 (81.1)	97 (74.0)	332 (70.5)
	Secondary hospital	10 (9.5)	12 (9.7)	0 (0.0)	12 (9.2)	34 (7.2)
	Tertiary hospital	28 (26.7)	34 (27.4)	21 (18.9)	22 (16.8)	105 (22.3)
Preferred health care	TCM	17 (16.2)	26 (21.0)	8 (7.2)	37 (28.2)	88 (18.7)
	Western medicine	36 (34.3)	49 (39.5)	50 (45.0)	54 (41.2)	189 (40.1)
	Integrated	52 (49.5)	49 (39.5)	53 (47.7)	40 (30.5)	194 (41.2)
First visit to the TCM unit	Yes	28 (26.7)	37 (29.8)	36 (32.4)	33 (25.2)	134 (28.5)
	No	77 (73.3)	87 (70.2)	75 (67.6)	98 (74.8)	337 (71.5)
Visits to community health institutions over the past month	<5	23 (21.9)	71 (57.3)	48 (43.2)	39 (29.8)	181 (38.4)
	5–9	67 (63.8)	50 (40.3)	60 (54.1)	55 (42.0)	232 (49.3)
	≥10	15 (14.3)	3 (2.4)	3 (2.7)	37 (28.2)	58 (12.3)
Visits to community TCM over the past month	<5	27 (25.7)	74 (59.7)	54 (48.6)	42 (32.1)	197 (41.8)
	5–9	63 (60.0)	48 (38.7)	54 (48.6)	55 (42.0)	220 (46.7)
	≥10	15 (14.3)	2 (1.6)	3 (2.7)	34 (26.0)	54 (11.5)
Average TCM cost per visit (¥)	<50	28 (26.7)	41 (33.1)	26 (23.4)	47 (35.9)	142 (30.1)
	50–99	68 (64.8)	59 (47.6)	82 (73.9)	74 (56.5)	283 (60.1)
	≥100	9 (8.6)	24 (19.4)	3 (2.7)	10 (7.6)	46 (9.8)
TCM modalities received in the current visit	<2	17 (16.2)	42 (33.9)	36 (32.4)	73 (55.7)	168 (35.7)
	2	25 (23.8)	37 (29.8)	36 (32.4)	26 (19.8)	124 (26.3)
	>2	63 (60.0)	45 (36.3)	39 (35.1)	32 (24.4)	179 (38.0)
Purpose of the current visit	Disease treatment	68 (64.8)	64 (51.6)	56 (50.5)	77 (58.8)	265 (56.3)
	Preventive care	9 (8.6)	35 (28.2)	35 (31.5)	14 (10.7)	93 (19.7)
	Rehabilitation	28 (26.7)	25 (20.2)	20 (18.0)	40 (30.5)	113 (24.0)

Note. *Missing values were not included in the statistics; TCM—traditional Chinese medicine.

TABLE 2: Quality ratings (Mean ± SD) on TCM care by characteristics of respondents.

Characteristics of respondents	Tangibility	Reliability	Responsiveness	Assurance	Empathy
Gender					
Male	81.41 ± 12.01	81.50 ± 12.01	78.46 ± 11.43	87.63 ± 13.21	75.99 ± 14.29
Female	83.14 ± 12.06	83.97 ± 10.37	80.56 ± 12.16	89.30 ± 11.20	77.36 ± 14.69
Group comparison (<i>p</i>)	0.154	0.022	0.074	0.153	0.340
Age (years)					
18–25	84.40 ± 14.15	84.00 ± 14.57	83.00 ± 15.78	86.75 ± 15.50	79.67 ± 17.64
26–45	82.52 ± 12.08	83.65 ± 11.70	80.54 ± 12.14	87.78 ± 12.75	75.65 ± 14.99
46–65	82.98 ± 12.06	83.08 ± 10.69	79.84 ± 11.92	89.07 ± 11.30	76.92 ± 14.94
>65	80.91 ± 11.52	82.27 ± 9.57	78.01 ± 10.55	89.92 ± 10.98	78.51 ± 11.16
Group comparison (<i>p</i>)	0.498	0.808	0.336	0.882	0.817
Residency					
Local	82.82 ± 12.16	83.27 ± 11.04	79.99 ± 11.72	89.16 ± 11.91	77.51 ± 14.65
Non-local	81.33 ± 11.61	82.70 ± 10.75	79.40 ± 11.77	86.90 ± 11.77	74.17 ± 13.90
Group comparison (<i>p</i>)	0.306	0.664	0.686	0.116	0.056
Education					
≤ Primary school	82.46 ± 12.71	81.78 ± 10.26	78.59 ± 11.35	87.88 ± 12.27	78.65 ± 12.27
Junior high school	82.97 ± 12.07	84.62 ± 10.30	79.42 ± 11.01	88.42 ± 10.08	79.17 ± 12.62
Senior high school	80.93 ± 10.73	80.44 ± 11.04	77.13 ± 11.49	85.33 ± 12.67	74.28 ± 12.23
University	83.69 ± 12.64	85.34 ± 11.31	82.94 ± 12.40	88.93 ± 11.994	80.91 ± 14.25
Group comparison (<i>p</i>)	0.318	0.001	0.001	0.081	0.001
Monthly household income per capita (¥)					
<5000	83.24 ± 13.29	82.85 ± 11.65	79.20 ± 12.23	86.35 ± 12.60	79.43 ± 13.30
5000–9999	82.63 ± 11.52	82.66 ± 10.53	79.47 ± 11.21	88.55 ± 11.08	77.03 ± 13.08
≥10000	83.25 ± 9.76	85.60 ± 10.04	81.68 ± 12.14	88.91 ± 11.50	78.89 ± 12.74
Group comparison (<i>p</i>)	0.831	0.135	0.304	0.113	0.172
Marital status					
Single	83.73 ± 13.44	84.81 ± 13.00	82.04 ± 13.72	87.44 ± 13.43	78.22 ± 15.00
Married	82.69 ± 11.77	82.93 ± 10.79	79.26 ± 11.50	87.42 ± 11.69	78.38 ± 13.13
Divorced/Widowed	79.39 ± 13.42	83.84 ± 10.38	81.45 ± 12.28	90.91 ± 11.14	77.78 ± 10.76
Group comparison (<i>p</i>)	0.254	0.516	0.217	0.265	0.968
Jobs					
Public institution	86.60 ± 13.24	87.08 ± 12.18	84.20 ± 11.63	89.25 ± 11.85	84.83 ± 13.50
Corporate company	82.80 ± 12.94	83.37 ± 11.52	80.77 ± 12.36	86.02 ± 13.99	77.27 ± 13.93
Retail services	82.69 ± 10.60	81.31 ± 11.81	79.21 ± 12.02	89.26 ± 10.60	73.22 ± 12.02
Retired	81.73 ± 12.08	83.25 ± 10.13	78.94 ± 11.02	88.45 ± 10.76	79.17 ± 11.85
Self-employed	82.33 ± 11.13	82.44 ± 10.49	78.64 ± 12.03	85.42 ± 12.43	78.33 ± 14.91
Other	82.14 ± 12.24	82.02 ± 12.08	78.43 ± 13.87	86.07 ± 13.08	77.14 ± 13.750
Group comparison (<i>p</i>)	0.356	0.190	0.143	0.222	0.001
Health insurance					
Urban employees	83.33 ± 12.06	83.63 ± 10.56	79.99 ± 11.59	87.89 ± 11.75	78.50 ± 12.88
Urban residents	82.20 ± 11.82	82.72 ± 11.98	79.88 ± 12.45	88.88 ± 11.94	78.74 ± 13.97
Rural residents	76.00 ± 10.93	80.00 ± 11.77	76.11 ± 11.66	82.14 ± 11.20	75.43 ± 13.41
Group comparison (<i>p</i>)	0.003	0.159	0.177	0.012	0.397
Chronic condition					
Yes	82.58 ± 11.98	83.30 ± 11.48	80.32 ± 12.22	88.56 ± 12.19	75.87 ± 15.07
No	82.51 ± 12.23	82.95 ± 10.07	79.13 ± 11.49	89.09 ± 11.41	78.72 ± 13.49
Group comparison (<i>p</i>)	0.949	0.729	0.300	0.640	0.041
Perceived health					
Poor	81.75 ± 12.71	82.17 ± 10.91	79.90 ± 11.47	88.75 ± 12.26	78.92 ± 12.25
Fair	83.57 ± 12.18	83.25 ± 10.47	79.80 ± 11.86	87.65 ± 11.64	77.76 ± 13.43
Good	81.31 ± 11.42	83.58 ± 11.81	79.35 ± 11.93	87.11 ± 11.96	78.93 ± 13.19
Group comparison (<i>p</i>)	0.161	0.642	0.918	0.608	0.627
Distance to nearest community health center (minutes)					
≤15	82.41 ± 13.12	83.05 ± 11.14	78.68 ± 12.08	88.21 ± 11.89	77.53 ± 13.61
15–30	82.94 ± 11.68	83.17 ± 10.59	80.57 ± 11.10	89.11 ± 12.33	76.33 ± 14.20
>30	82.31 ± 12.33	83.29 ± 11.26	80.90 ± 12.53	88.93 ± 11.54	76.91 ± 15.77
Group comparison (<i>p</i>)	0.881	0.981	0.077	0.787	0.769

TABLE 2: Continued.

Characteristics of respondents	Tangibility	Reliability	Responsiveness	Assurance	Empathy
Preferred health provider					
Community facility	82.74 ± 12.20	83.0 ± 11.09	80.18 ± 11.69	85.69 ± 9.30	80.29 ± 13.37
Secondary hospital	81.41 ± 11.98	85.00 ± 9.22	78.97 ± 11.47	89.23 ± 12.10	77.05 ± 14.61
Tertiary hospital	82.32 ± 11.74	82.2 ± 11.18	79.24 ± 12.99	88.25 ± 11.97	76.53 ± 14.66
Group comparison (<i>p</i>)	0.809	0.592	0.702	0.012	0.001
Preferred care					
TCM	85.18 ± 12.88	86.40 ± 10.02	82.09 ± 12.53	88.75 ± 12.85	80.83 ± 12.90
Western medicine	80.40 ± 11.09	80.37 ± 11.23	76.08 ± 10.85	85.40 ± 12.05	74.59 ± 12.24
Integrated	83.46 ± 12.29	84.43 ± 10.55	82.07 ± 11.49	89.38 ± 10.81	80.80 ± 13.31
Group comparison (<i>p</i>)	0.003	0.000	0.000	0.003	0.000
First visit to the TCM unit					
Yes	79.73 ± 11.69	79.9 ± 11.35	77.20 ± 12.15	85.22 ± 12.22	73.13 ± 13.82
No	83.67 ± 12.04	84.4 ± 10.57	80.95 ± 11.73	90.16 ± 11.50	78.42 ± 14.59
Group comparison (<i>p</i>)	0.001	0.000	0.000	0.000	0.000
Visits to community health services over the past month					
<5	83.89 ± 12.18	85.46 ± 10.27	82.07 ± 11.7	89.34 ± 11.66	79.74 ± 12.52
5–9	81.68 ± 12.00	81.67 ± 11.42	78.40 ± 12.2	87.00 ± 11.56	77.95 ± 13.85
≥10	81.86 ± 11.78	82.01 ± 10.26	77.31 ± 9.00	85.09 ± 12.89	75.34 ± 11.68
Group comparison (<i>p</i>)	0.162	0.001	0.002	0.028	0.071
TCM visits community health services over the past month					
<5	84.18 ± 12.21	85.74 ± 10.10	82.22 ± 11.52	89.42 ± 11.56	80.56 ± 12.51
5–9	81.52 ± 11.94	81.36 ± 11.53	78.18 ± 12.31	86.89 ± 11.59	77.15 ± 13.83
≥10	80.81 ± 11.48	81.11 ± 9.99	76.44 ± 8.47	84.44 ± 13.02	74.88 ± 11.30
Group comparison (<i>p</i>)	0.041	0.000	0.000	0.009	0.004
Average TCM cost over the past month (¥)					
<50	83.66 ± 11.98	84.17 ± 10.74	80.70 ± 10.71	89.02 ± 11.45	79.65 ± 12.95
50–99	82.37 ± 11.95	82.20 ± 10.74	78.59 ± 12.03	86.91 ± 11.63	77.09 ± 13.08
≥100	80.26 ± 12.88	86.01 ± 12.68	83.22 ± 12.78	88.15 ± 13.96	81.74 ± 13.44
Group comparison (<i>p</i>)	0.230	0.039	0.022	0.211	0.029
TCM modalities received in the current visit					
<2	85.70 ± 11.74	84.62 ± 10.82	81.68 ± 11.81	89.08 ± 11.58	78.30 ± 13.99
2	81.48 ± 11.27	82.20 ± 10.35	78.19 ± 10.78	86.98 ± 12.36	76.56 ± 11.95
>2	80.32 ± 12.32	82.48 ± 11.46	78.82 ± 12.25	86.82 ± 11.64	79.55 ± 13.05
Group comparison (<i>p</i>)	0.000	0.100	0.020	0.152	0.150
Purpose of the current visit					
Disease treatment	81.57 ± 12.10	82.5 ± 10.67	79.06 ± 11.47	88.70 ± 11.57	76.11 ± 13.55
Preventive care	83.44 ± 11.69	83.9 ± 12.00	80.97 ± 13.26	87.67 ± 12.81	75.98 ± 16.71
Rehabilitation	84.14 ± 12.15	83.9 ± 10.83	80.93 ± 11.93	89.79 ± 11.92	79.56 ± 14.78
Group comparison (<i>p</i>)	0.121	0.416	0.236	0.442	0.086

conducted in urban community health settings. Rural respondents are likely to feel less engaged than their urban counterparts [47].

Trust is a strong enabler of TCM use [48]. Indeed, a choice of western medicine in preference to TCM was found in this study to be a significant predictor of lower quality ratings on TCM care. Higher quality ratings of TCM care were also found to be associated higher spending on TCM. It is important to note that the price of TCM care is overwhelmingly low in China [49]. The relatively higher spending is perhaps an indicator of higher willingness to accept TCM care.

It is a great challenge to maintain trust. This study found lower ratings on assurance and empathy in those who most frequently received TCM care (≥10) in community health services. The results are consistent with the findings of a study conducted elsewhere [44]. Accumulated visits may increase the expectation of consumers, leading to deflated

ratings on quality of care [50]. We also found that receiving two or more TCM modalities is associated with lower ratings on tangibility. Health consumers nowadays hold very high expectations on modern technologies. TCM care usually requires long term compliance. Adding up more TCM modalities may not help but jeopardizing the confidence of consumers [51]. A study in Hong Kong showed that a belief of TCM efficacy is not enough to translate into preferred care [48]. Consumer trust in TCM needs to be strengthened through its whole-person approach and high levels of empathy. Unfortunately, empathy attracted the lowest score among the five dimensions of quality assessed in this study.

This study has several limitations. Firstly, it adopted a cross-sectional design and no causal inferences can be drawn. The study did not investigate how and why respondents chose TCM care in community health services. Secondly, the quality ratings on TCM care may be biased by its users. The study was conducted in Hangzhou, one of the

TABLE 3: Predictors of perceived quality of care in traditional Chinese medicine (TCM)—results (standardized β coefficient) of linear regression models.

Variable	Tangibility		Reliability		Responsiveness		Assurance		Empathy	
	β	<i>p</i>	β	<i>p</i>	β	<i>p</i>	β	<i>p</i>	β	<i>p</i>
Gender										
Male (reference)	—	—	—	—	—	—	—	—	—	—
Female	—	—	0.130	0.004	0.119	0.007	—	—	—	—
Education										
≤ Primary school (reference)	—	—	—	—	—	—	—	—	—	—
Junior high school	—	—	0.123	0.010	—	—	—	—	—	—
Senior high school	—	—	—	—	—	—	-0.118	0.010	-0.133	0.003
University	—	—	0.192	<0.001	0.208	<0.001	—	—	—	—
Job										
Public institution (reference)	—	—	—	—	—	—	—	—	—	—
Retail and services	—	—	—	—	—	—	0.099	0.032	-0.104	0.023
Health insurance										
Urban employees (reference)	—	—	—	—	—	—	—	—	—	—
Urban residents	—	—	—	—	—	—	—	—	—	—
Rural residents	-0.157	<0.001	—	—	—	—	-0.128	0.004	—	—
Preferred health service										
TCM (reference)	—	—	—	—	—	—	—	—	—	—
Western medicine	-0.129	0.004	-0.181	<0.001	-0.261	<0.001	—	—	-0.196	<0.001
First visit to the TCM unit										
Yes (reference)	—	—	—	—	—	—	—	—	—	—
No	—	—	—	—	—	—	0.193	<0.001	-	-
Visits to community TCM										
<5 (reference)	—	—	—	—	—	—	—	—	—	—
5-9	—	—	-0.105	0.020	—	—	—	—	—	—
≥10	—	—	—	—	—	—	-0.122	0.008	-0.097	0.028
TCM cost (¥ yuan)										
<50 (reference)	—	—	—	—	—	—	—	—	—	—
≥100	—	—	—	—	0.108	0.013	—	—	0.104	0.018
TCM modalities received										
<2 (reference)	—	—	—	—	—	—	—	—	—	—
□ 2	-0.149	0.003	—	—	—	—	—	—	—	—
>2	-0.214	<0.001	—	—	—	—	—	—	—	—

most developed regions in China. The study sample is not representative of China. In addition, the study was conducted in urban settings. Rural residents are under-represented. Given the large urban-rural differences, further studies are needed to examine the views of rural TCM users in rural settings. A study conducted in Singapore shows that low-income residents are more likely to choose community CAM services than their richer counterparts [50]. Thirdly, the SERVQUAL instrument does not measure service outcomes. As a result, we are currently exploring the use of Goal Attainment Scale to measure TCM service outcomes, which are highly personalized [52].

5. Conclusions

Overall, the quality of TCM care is well recognized by its users in community health services in Hangzhou, in particular among women and those who have a choice of TCM in preference to western medicine. Enhancing TCM care can bring benefits to the growth of community health services. However, there is a need to further improve TCM care from

all quality perspectives in order to attract and maintain consumer trust in TCM.

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References

- [1] World Health Organization, “WHO Traditional Medicine Strategy 2002–2005,” 2019, https://apps.who.int/iris/bitstream/10665/67163/1/WHO_EDM_TRM_2002.1_eng.pdf.
- [2] World Health Organization, “WHO Traditional Medicine Strategy 2014–2023,” 2019, <https://apps.who.int/iris/bitstream/10665/92455/1/9789241506090-eng.pdf>.
- [3] W. Wong, C. L. K. Lam, X. Z. Bian, Z. J. Zhang, S. T. Ng, and S. Tung, “Morbidity pattern of traditional Chinese medicine primary care in the Hong Kong population,” *Scientific Reports*, vol. 7, no. 1, p. 7513, 2017.
- [4] E. Rossi, M. Di Stefano, S. Baccetti et al., “International cooperation in support of homeopathy and complementary medicine in developing countries: the Tuscan experience,” *Homeopathy*, vol. 99, no. 4, pp. 278–283, 2010.
- [5] E. Krah, J. de Kruijf, and L. Ragno, “Integrating traditional healers into the health care system: challenges and opportunities in rural northern Ghana,” *Journal of Community Health*, vol. 43, no. 1, pp. 157–163, 2018.
- [6] P. Zhang and Y. Liang, “China’s national health guiding principles: a perspective worthy of healthcare reform,” *Primary Health Care Research and Development*, vol. 19, no. 01, pp. 99–104, 2018.
- [7] Y. Ouyang, *Research on the Influencing Factors of Community Chinese Medicine Service Development in Beijing Based on BP Neural Network*, Beijing University of Chinese Medicine, Beijing, China, 2017.
- [8] V. C. H. Chung, P. H. X. Ma, H. H. X. Wang et al., “Integrating traditional Chinese medicine services in community health centers: insights into utilization patterns in the pearl river region of China,” *Evidence-based Complementary and Alternative Medicine*, vol. 2013, Article ID 426360, 8 pages, 2013.
- [9] State Administration of TCM of People’s Republic of China, “The status of TCM in the Chinese health system in 2009,” *China Health Human Resource*, vol. 11, pp. 29–30, 2011.
- [10] O. Bhattacharyya, Y. Delu, S. T. Wong, and C. Bowen, “Evolution of primary care in China 1997–2009,” *Health Policy*, vol. 100, pp. 174–180, 2011.
- [11] T. Sun, X. Y. Ding, and W. Zhou, “Current situation of service ability of traditional Chinese medicine in community health service centers,” *Chinese General Practice*, vol. 19, pp. 3756–3761, 2016.
- [12] S. S. Lien, R. O. Kosik, A. P. Fan et al., “10-year trends in the production and attrition of Chinese medical graduates: an analysis of nationwide data,” *The Lancet*, vol. 388, no. 1, p. 11, 2016.
- [13] D. Zhu, X. Shi, S. Nicholas, and P. He, “Regional disparities in health care resources in traditional Chinese medicine county hospitals in China,” *PLoS One*, vol. 15, no. 1, Article ID e0227956, 2020.
- [14] National Administration of Traditional Chinese Medicine, “China statistical yearbook of Chinese medicine,” 2018, <https://www.satcm.gov.cn/2018tjzb/others/2018html.htm>.
- [15] J. Li and D. Graham, “The importance of regulating the education and training of traditional Chinese medicine practitioners and a potential role for ISO/TC 249,” *Pharmacological Research*, vol. 161, Article ID 105217, 2020.
- [16] Y. L. Park and R. Canaway, “Integrating traditional and complementary medicine with national healthcare systems for universal health coverage in Asia and the western pacific,” *Health Systems and Reform*, vol. 5, no. 1, pp. 24–31, 2019.
- [17] National Administration of Traditional Chinese Medicine, “Traditional Chinese medicine hospitals designated by the national medical insurance system,” 2020, <https://www.satcm.gov.cn/hudongjiaoliu/guanfangweixin/2019-12-24/12266.html>.
- [18] National Healthcare Security Administration, “List of medicines covered by national basic medical insurance, work-related injury insurance and maternity insurance,” 2020, https://www.nhsa.gov.cn/art/2019/8/20/art_37_1666.html.
- [19] P. C. Leung, “The efficacy of Chinese medicine for SARS: a review of Chinese publications after the crisis,” *The American Journal of Chinese Medicine*, vol. 35, pp. 575–581, 2007.
- [20] China Net of Traditional Chinese Medicine, “Hangzhou—traditional Chinese medicine in primary care,” 2020, https://www.cntcm.com.cn/2016-11/30/content_23636.htm.
- [21] Health Commission of Zhejiang Province, “Enhancing TCM capacity in primary care in Hangzhou,” 2020, https://wsjkw.zj.gov.cn/art/2013/1/22/art_1202100_849716.html.
- [22] Municipal Bureau of Statistics, “Hangzhou annual statistics reports,” 2019, <https://tjj.hangzhou.gov.cn/col/col1229279688/index.html>.
- [23] D. G. Bonett and T. A. Wright, “Sample size requirements for multiple regression interval estimation,” *Journal of Organizational Behavior*, vol. 32, no. 6, pp. 822–830, 2011.
- [24] B. Babitsch, D. Gohl, and T. von Lengerke, “Re-revisiting Andersen’s behavioral model of health services use: a systematic review of studies from 1998–2011,” *Psycho-Social-Medicine*, vol. 9, pp. 1–15, 2012.
- [25] F. Afridi, S. X. Li, and Y. Ren, “Social identity and inequality: the impact of China’s hukou system,” *Journal of Public Economics*, vol. 123, pp. 17–29, 2015.
- [26] Q. Song and J. P. Smith, “Hukou system, mechanisms, and health stratification across the life course in rural and urban China,” *Health & Place*, vol. 58, pp. 1–10, 2019.
- [27] A. Parasuraman, V. A. Zeithaml, and L. L. Berry, “A conceptual model of service quality and its implications for future research,” *Journal of Marketing*, vol. 49, no. 4, 1985.

- [28] A. Parasuraman, V. A. Zeithaml, and L. L. Berry, "SERVQUAL: a multiple-item scale for measuring consumer perceptions of service quality," *Journal of Retailing*, vol. 64, pp. 12–40, 1988.
- [29] A. Parasuraman, V. A. Zeithaml, and L. L. Berry, "Alternative scales for measuring service quality: a comparative assessment based on psychometric and diagnostic criteria," *Gabler Verlag*, vol. 70, pp. 201–230, 1998.
- [30] I. Fatima, A. Humayun, U. Iqbal, and M. Shafiq, "Dimensions of service quality in healthcare: a systematic review of literature," *International Journal for Quality in Health Care*, vol. 31, no. 1, pp. 11–29, 2019.
- [31] A. Chakravarty, "Evaluation of service quality of hospital outpatient department services," *Medical Journal Armed Forces India*, vol. 67, no. 3, pp. 221–224, 2011.
- [32] B. Yakob and B. P. Ncama, "Measuring health system responsiveness at facility level in Ethiopia: performance, correlates and implications," *BMC Health Services Research*, vol. 17, no. 1, p. 263, 2017.
- [33] L. Sun, *Research on the Evaluation of Community Traditional Chinese Medicine Health Service Quality Based on SERVQUAL Theory*, Hangzhou Normal University, Hangzhou, China, 2018.
- [34] M. A. Aljaberi, M. H. Juni, R. A. Al-Maqtari et al., "Relationships among perceived quality of healthcare services, satisfaction and behavioural intentions of international students in Kuala Lumpur, Malaysia: a cross-sectional study," *BMJ Open*, vol. 8, no. 9, Article ID e021180, 2018.
- [35] T. Zhang, C. Liu, J. Ren, S. Wang, X. Huang, and Q. Guo, "Perceived impacts of the national essential medicines system: a cross-sectional survey of health workers in urban community health services in China," *BMJ Open*, vol. 7, Article ID e014621, 2017.
- [36] L. H. Fan, L. Gao, X. Liu et al., "Patients' perceptions of service quality in China: an investigation using the SERVQUAL model," *PLoS One*, vol. 12, Article ID e0190123, 2017.
- [37] A. Y. Fan, D. D. Wang, H. Ouyang et al., "Acupuncture price in forty-one metropolitan regions in the United States: an out-of-pocket cost analysis based on OkCoplay.com," *Journal of Integrative Medicine*, vol. 17, no. 5, pp. 315–320, 2019.
- [38] W. Huang, H. Long, J. Li et al., "Delivery of public health services by community health workers (CHWs) in primary health care settings in China: a systematic review (1996–2016)," *Global Health Research and Policy*, vol. 3, no. 1, 2018.
- [39] D. Caskey, J. F. Chen, and C. A. Warden, "Service expectations of patients across traditional Chinese and western medicine paradigms," *Journal of Alternative and Complementary Medicine*, vol. 25, no. 12, pp. 1206–1214, 2019.
- [40] H. Tang, W. Huang, J. Ma, and L. Liu, "SWOT analysis and revelation in traditional Chinese medicine internationalization," *Chinese Medicine*, vol. 13, no. 1, 2018.
- [41] J. Xu and Y. Yang, "Traditional Chinese medicine in the Chinese health care system," *Health Policy*, vol. 90, pp. 133–139, 2009.
- [42] S. M. Wassie, L. L. Aragie, B. W. Taye, and L. B. Mekonnen, "Knowledge, attitude, and utilization of traditional medicine among the communities of Merawi town, northwest Ethiopia: a cross-sectional study," *Evidence-Based Complementary and Alternative Medicine: eCAM*, vol. 2015, Article ID 138073, 7 pages, 2015.
- [43] E. Ben-Arye, K. Karkabi, S. Karkabi, Y. Keshet, M. Haddad, and M. Frenkel, "Attitudes of Arab and Jewish patients toward integration of complementary medicine in primary care clinics in Israel: a cross-cultural study," *Social Science & Medicine*, vol. 68, no. 1, pp. 177–182, 2009.
- [44] A. B. Zun, M. I. Ibrahim, and A. A. Hamid, "Level of satisfaction on service quality dimensions based on SERVQUAL model among patients attending 1 Malaysia clinic in Kota Bharu, Malaysia," *Oman Medical Journal*, vol. 33, no. 5, pp. 416–422, 2018.
- [45] V. Papanikolaou and S. Zygiaris, "Service quality perceptions in primary health care centres in Greece," *Health Expectations*, vol. 17, no. 2, pp. 197–207, 2014.
- [46] A. K. Rowe, S. Y. Rowe, D. H. Peters, K. A. Holloway, J. Chalker, and D. Ross-Degnan, "Effectiveness of strategies to improve health-care provider practices in low-income and middle-income countries: a systematic review," *Lancet Global Health*, vol. 6, no. 11, pp. e1163–e1175, 2018.
- [47] K. M. Gunn, N. M. Berry, X. Meng et al., "Differences in the health, mental health and health-promoting behaviours of rural versus urban cancer survivors in Australia," *Supportive Care in Cancer*, vol. 28, no. 2, pp. 633–643, 2019.
- [48] K. Chan and L. Tsang, "Public attitudes toward traditional Chinese medicine and how they affect medical treatment choices in Hong Kong," *International Journal of Pharmaceutical and Healthcare Marketing*, vol. 12, no. 2, pp. 113–125, 2018.
- [49] B. K. Matin, S. Rezaei, M. Moradinazar, M. Mahboubi, and M. Ataee, "Measurement of quality of primary health services by SERVQUAL model: evidence from urban health centers in west of Iran," *Research Journal of Medical Sciences*, vol. 10, no. 5, pp. 154–159, 2016.
- [50] L. E. Wee, L. Y. Lim, T. Shen et al., "Choice of primary health care source in an urbanized low-income community in Singapore: a mixed-methods study," *Family Practice*, vol. 31, no. 1, pp. 81–91, 2014.
- [51] H. Li, L. Wang, X. Xia, and H. Liu, "Perceived service quality's effect on patient loyalty through patient attitude within the context of traditional Chinese medicine," *Journal of Combinatorial Optimization*, vol. 42, no. 4, pp. 1030–1041, 2020.
- [52] X. Zhang, J. Ren, C. Liu, M. He, L. Ren, and Z. Lv, "Evaluating traditional Chinese medicine interventions on chronic low back pain using goal attainment scaling," *Evidence-Based Complementary and Alternative Medicine*, vol. 2020, Article ID 8854927, 10 pages, 2020.