

Analysis of the Innovation of Zhuang Medical Culture from the Perspective of a Comprehensive Well-Off Society: Insights from Social Research and Public Engagement

Jinya Chen, Bingbing Wang, Xuanman Yi, Wenshuang Zuo*

Bowen School of Management, Guilin University of Technology, Yanshan District, Guilin 503000, Guangxi Province, China

*Corresponding author: Wenshuang Zuo, 15676064182@163.com

Copyright: © 2024 Author(s). This is an open-access article distributed under the terms of the Creative Commons Attribution License (CC BY 4.0), permitting distribution and reproduction in any medium, provided the original work is cited.

Abstract: Based on the inheritance and development of Zhuang medicine culture from the perspective of a comprehensive well-off society, traditional Chinese medicine is a treasure of Chinese civilization. The inheritance, innovation, and development of traditional Chinese medicine are crucial to the cause of socialism with Chinese characteristics in the new era. By engaging young people, reducing the aging of the medical team, and understanding the views and suggestions of various groups on Zhuang medicine culture, questionnaire surveys, field interviews, literature searches, and other methods were employed to gather and analyze public opinions and suggestions on Zhuang medicine. Additionally, online consultations were conducted to assess the popularity of Zhuang medicine and identify existing problems. Based on these findings, recommendations and strategies for improvement were formulated. Furthermore, the design of an online consultation app is proposed to enhance the role and effectiveness of Zhuang medicine's inheritance and development.

Keywords: Zhuang medicine; Views and suggestions; Inheritance

Online publication: September 4, 2024

1. Purpose of research

With the steady development of the pharmaceutical market, it is crucial to promote and publicize the intangible cultural heritage of Zhuang medicine^[1]. This initiative aims to transform traditional Chinese medicine therapy from “vague” to “precise,” enabling more young people to learn about Zhuang medicine's knowledge and culture, conduct in-depth social investigations, and join the Zhuang medicine team. This approach addresses the challenges of an aging medical workforce and the low cultural and professional standards within the medical field. The “Healthy China 2030” Plan outlines the need to innovate the supply mode of medical and health services, build a health information service system, and promote the application of big data in health and medical care. By analyzing the context of policy developments and summarizing the factors influencing

China's telemedicine, this research identifies deep-rooted problems and suggests improvements in areas such as Internet technology, supporting policies and regulations, and public awareness^[2]. Additionally, the study aims to help the elderly better understand Zhuang medicine culture, offering them more choices in medical treatment. Finally, it seeks to gather public opinions and suggestions on online consultation platforms to further refine the functional settings and application scenarios of Qingjiao.

2. Research methods

2.1. Literature analysis

Utilizing the Internet in the era of big data, literature journals were consulted, and materials related to this project were retrieved and analyzed. The current state of Zhuang medicine in the Guangxi Zhuang Autonomous Region was examined, its treatment methods analyzed, and the existing characteristics of Zhuang medicine herbs were reasonably summarized. This helped to formulate the direction of the preliminary research and outline the expected results.

2.2. Field visits and investigations

Field visits and investigations were conducted to understand the actual situation, gather real data and information, learn from practical investigations, and observe the types of medical and herbal medicines available in Nanning's urban area during the visits.

2.3. Questionnaires and interviews

Outlines for questionnaires and interviews were designed^[3], with questionnaires distributed both online and offline to assess the public's awareness of traditional Chinese medicine culture and its core values. These questionnaires aimed to understand the current state of traditional Chinese medicine and gauge different groups' knowledge and suggestions regarding Zhuang medicine. Interviews were also conducted to explore public attitudes and support for Zhuang medicine as it develops^[4].

3. Discussion and analysis

The development of Zhuang medicine is analyzed by focusing on several key aspects: general perceptions of Chinese medicine's effectiveness; the choice between traditional Chinese medicine (TCM) and Western medicine when unwell; the clarity and acceptance of TCM theories such as Yin and Yang, the five elements, and diagnostic methods; the inclination to inherit and innovate TCM; the disadvantages in the development of Zhuang medicine; and effective strategies for propagating and passing on Zhuang medicine. The specific discussion and analysis are as follows:

- (1) Perceptions of disease treatment using TCM: The overall perceptions of the effectiveness of TCM are illustrated in **Figure 1**. Among the respondents, 82 individuals (45.56%) believe that TCM causes minimal damage or side effects and is effective. Another 78 individuals (43.33%) consider TCM expensive but still see it as having minimal side effects. A smaller group, 11 respondents (6.11%), think TCM is costly with minor benefits, and 9 respondents (5%) feel that TCM has significant side effects with poor efficacy. Most people perceive TCM as having minimal side effects, largely due to its foundation in Yin and Yang theory, the five elements, and the use of Chinese herbs, acupuncture, and moxibustion to treat complex diseases and promote overall health. However, some believe TCM has significant side effects due to consultations with irregular hospitals and doctors. The high cost of TCM

is attributed to stricter inspection standards for medicinal materials, increased middlemen, and the challenges of cultivating and transporting Chinese herbal medicine.

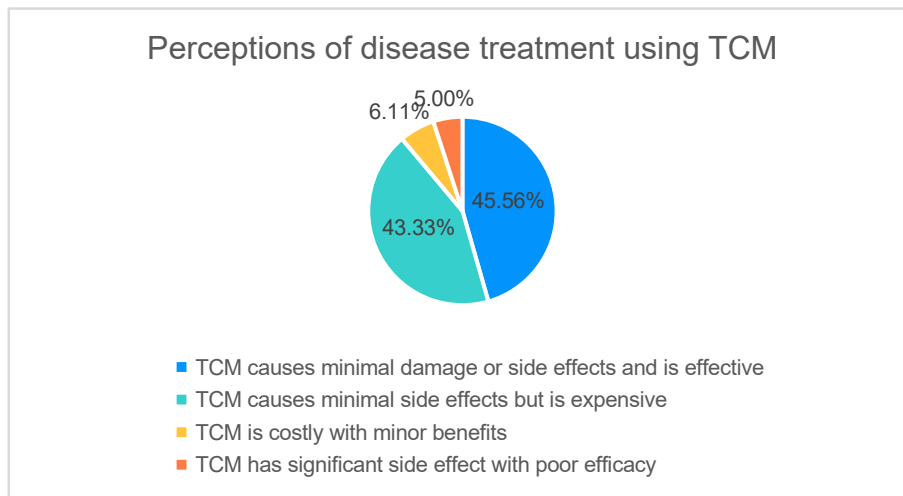


Figure 1. Perceptions of disease treatment using traditional Chinese medicine

(2) Preference for traditional Chinese medicine or Western medicine: As shown in **Figure 2**, among the 180 valid respondents, 45.56% opted for TCM when unwell, while 54.44% chose Western medicine. This suggests a relatively balanced preference, though Western medicine holds a slight advantage. The preference for Western medicine, especially among young people, is often due to the desire for immediate treatment, as TCM typically requires longer prescriptions and treatment periods. Conversely, the elderly may prefer TCM for its regulatory effects on the body and its potential to reduce the occurrence of other diseases.

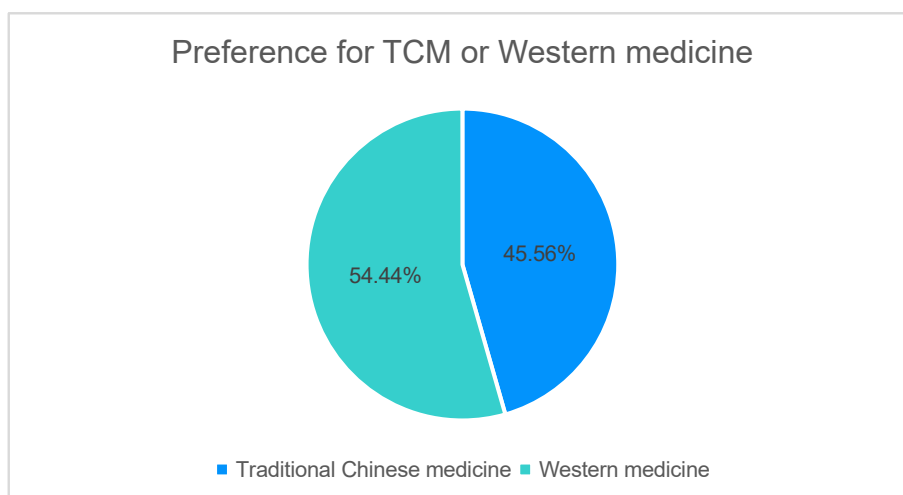


Figure 2. Preference for traditional Chinese medicine or Western medicine

(3) Clarity and acceptance of traditional Chinese medicine theories: **Figure 3** shows that out of 180 respondents, 71.67% clearly understand and recognize TCM theories, 8.89% understand but do not recognize them, and 19.44% neither understand nor recognize them. The high level of recognition for the theories of Yin and Yang, the five elements, and the diagnostic methods (observation, listening, questioning, and pulse-taking) reflects their importance in TCM. These diagnostic methods are complementary and essential for accurate syndrome differentiation and effective treatment. The theories

of Yin and Yang and the five elements are integral to TCM's understanding of human health, guiding disease prevention and treatment. The growing popularity of TCM health education on the Internet has also contributed to public awareness. However, some people, influenced by modern science and technology, prefer hospital-based diagnostics and do not recognize traditional TCM practices.

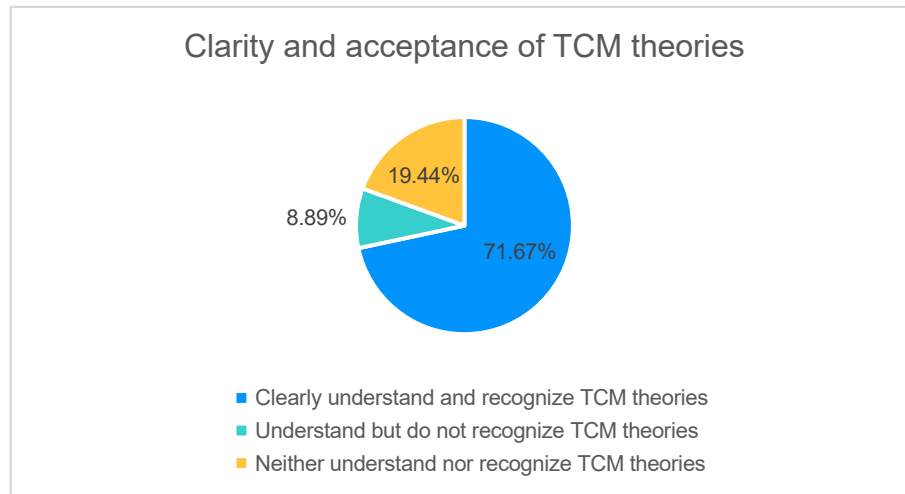


Figure 3. Clarity and acceptance of traditional Chinese medicine theories

(4) Interest in inheriting and innovating traditional Chinese medicine: As shown in **Figure 4**, 113 respondents (62.78%) expressed an interest in inheriting and innovating Zhuang medicine, while 67 respondents (37.22%) did not. The public's enthusiasm for the inheritance and innovation of Zhuang medicine aligns with the "14th Five-Year Plan" for the Development of Traditional Chinese Medicine, which emphasizes expanding the coverage of TCM culture and improving public health literacy ^[5]. Most respondents value Zhuang medicine as a unique and profound science developed by Chinese practitioners over centuries. They believe that the state's recognition and support for Zhuang medicine enhance cultural confidence and hope for its continued development. Those who did not express interest cited a lack of consideration of this issue or the lack of relevance to their professional fields, noting that Zhuang medicine still faces significant challenges in its development ^[6].

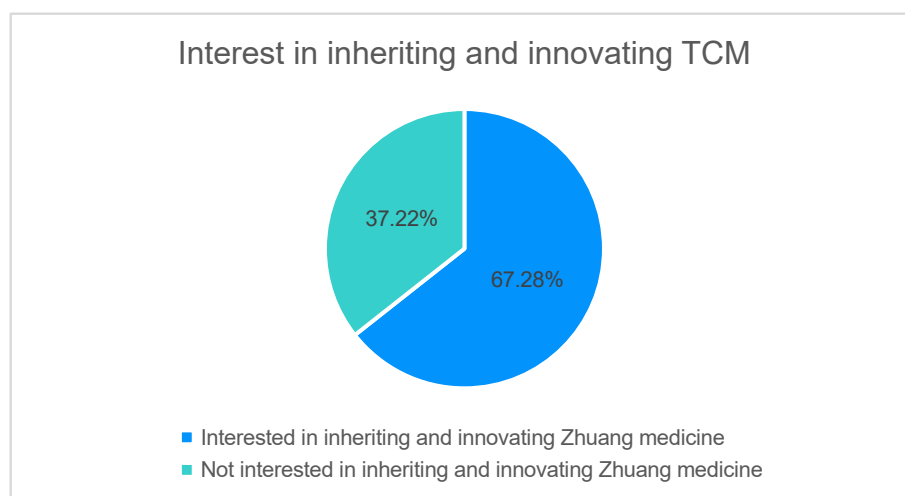


Figure 4. Interest in inheriting and innovating traditional Chinese medicine

(5) Disadvantages in the development of Zhuang medicine: The traditional "oral and example teaching"

mode has severely restricted the inheritance and innovation of Zhuang medicine. Modern technology poses further challenges to its development ^[7]. Zhuang medical treatment often includes lifestyle requirements, such as light desires, early sleep, and exercise, which conflict with modern living habits. In contrast, Western medicine is simpler and more aligned with contemporary lifestyles, leading to higher compliance.

- (6) Effective dissemination and inheritance of Zhuang medicine: With increasing international exchanges, promoting the external communication of Zhuang medicine is of great practical significance. It supports the internationalization of Zhuang medicine and enhances the influence of ethnic medicine in China ^[8]. Many online platforms now promote TCM culture, reflecting a growing willingness among Chinese families to choose and trust Chinese medicine. Efforts should be made to build a platform highlighting Zhuang medicine's characteristics and eventually bring Chinese medicine to the global stage ^[9]. Inheritance efforts should focus on exposing more young people to Zhuang medicine, encouraging them to learn its culture and spirit. The state should support initiatives to train more talents in Zhuang medicine, ensuring its continued transmission and development.

4. Survey results

4.1. Western influence on traditional Chinese medicine

Respondents believe that the greatest challenge facing Chinese herbal medicine is the Westernization of its management and supervision. Chinese herbal medicine corrects imbalances in the body using its medicinal properties, specifically the four Qi and five flavors (sour, bitter, sweet, spicy, and salty), rather than focusing solely on its chemical composition. However, evaluating Chinese medicine based on its active ingredients using Western medical concepts has become common. For example, ginseng leaves are often cited as containing more ginsenosides than ginseng itself, leading to the mismanagement of Chinese medicine according to Western standards, which poses a significant obstacle to its development. It has been demonstrated that China's traditional culture is the "root" and "soul" of the Chinese nation, embodying its deepest spiritual pursuits and unique cultural identity ^[10].

4.2. Complementary strengths of traditional Chinese medicine (Zhuang medicine) and Western medicine

Traditional Chinese medicine primarily uses diagnostic methods such as observation, listening, questioning, and pulse-taking, which generally have minimal side effects but may produce slower treatment results, targeting the root cause of diseases. Western medicine, on the other hand, employs pharmaceuticals, surgery, laser treatments, and chemotherapy to directly combat diseases, providing quicker results but often with side effects. The combination of Chinese and Western medicine in the diagnosis and treatment of diseases can result in more effective and faster outcomes ^[11]. Traditional Chinese medicine, including Zhuang medicine, is a cultural treasure of the Chinese nation and plays a vital role in public health. It must be protected, developed, and passed on. Zhuang medicine, as a key component of traditional Chinese medicine, has a long history and encapsulates the Zhuang people's extensive experience in combating diseases. It has unique theories and rich content and is essential in preserving and promoting the culture of traditional Chinese medicine ^[12].

4.3. Aging of the Zhuang medical staff

The Zhuang medical workforce has been aging rapidly, partly because Zhuang medicine has not been widely

popularized in recent years. As a result, many young people have opted to study Western medicine or traditional Chinese medicine instead, leading to a shortage of new practitioners in Zhuang medicine. To ensure the inheritance and development of Zhuang medicine, it is crucial that the government strengthens the promotion of Zhuang medicine and encourages young people to study it.

4.4. High costs of traditional Chinese medicine

The increasing cost of Chinese herbal medicine is primarily due to the government’s stringent inspection standards, which have reduced issues such as adulteration and shoddy products. However, this has also driven up costs. Additionally, the presence of numerous intermediaries in the supply chain has contributed to rising drug prices. The difficulties associated with cultivating medicinal plants, as well as the high costs and losses incurred during transportation, further exacerbate the price increase. If the government were to implement supportive policies and provide financial subsidies, it would significantly benefit the development of traditional Chinese medicine and Chinese herbal medicine.

4.5. Support for the youth in the Zhuang medical workforce

As shown in **Figure 5** and **Table 1** below, data from the rural revitalization period (2016–2020) indicates that the local grassroots medical team is becoming younger and more professional. However, there remains a pressing need for more young people to join the workforce and invigorate the culture of Zhuang medicine.

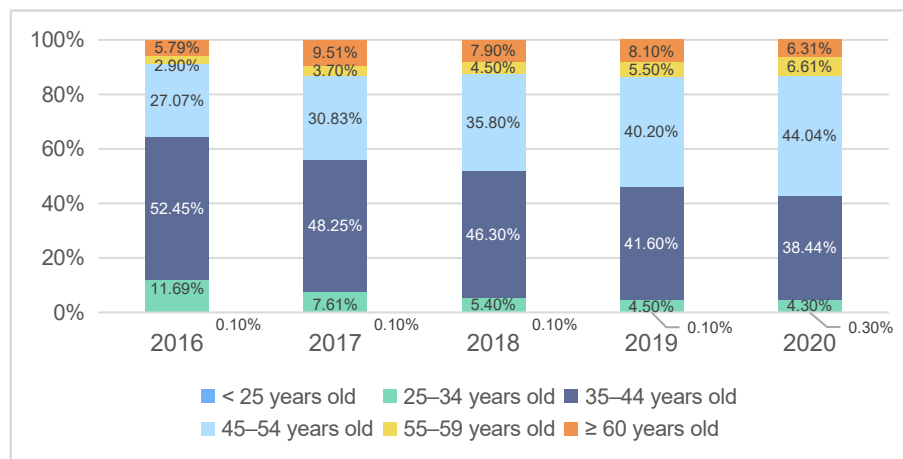


Figure 5. Age of practicing (assistant) physicians in village clinics from 2016 to 2020

Table 1. Education background of practicing (assistant) physicians in village clinics from 2016 to 2020

	Below secondary (%)	Technical secondary (%)	Junior college (%)	Undergraduate (%)	Postgraduate (%)
2016	5.30%	20.40%	52.00%	20.30%	2.00%
2017	5.10%	20.20%	51.60%	20.80%	2.30%
2018	2.80%	15.70%	54.60%	23.90%	3.10%
2019	2.20%	1.90%	54.50%	16.20%	25.30%
2020	1.60%	1.60%	54.60%	19.70%	22.50%

Practicing (assistant) physicians at the technical secondary level fell by about 18 percentage points. Data source: National Health Commission

4.6. Vigorous promotion of traditional Chinese medicine culture

“Upholding integrity” is central to innovation in traditional Chinese medicine (TCM). The key to TCM

innovation lies in strengthening confidence in its cultural and theoretical foundations, which are characterized by openness and a focus on practical innovation goals^[13]. Greater efforts are needed to meet the public's health and spiritual needs regarding traditional Chinese medicine. Ensuring that people have timely and accurate information about the efficacy and use of TCM is essential for addressing their health needs. Initiatives such as establishing dedicated TCM libraries, apps, and activities can provide the public with comprehensive and accurate knowledge of TCM. The further deepening of medical system reforms, which aim to build bridges of understanding between doctors and patients, will not only facilitate the development of TCM but also contribute to the overall safeguarding of human health^[14].

5. Conclusion

This research analysis and reflection aim to increase public awareness of Zhuang medicine culture and knowledge. By integrating Zhuang medicine treatments with knowledge dissemination, it seeks to address the fragmented state of Zhuang medicine culture and the public's distrust and misunderstanding of it. The goal is to incorporate Zhuang medicine into daily life and healthcare practices through the use of mobile applications, providing patients with high-quality and convenient medical services. This approach will further promote the coordinated development of Zhuang medicine with other aspects of Zhuang culture. Additionally, more advanced cloud platforms can offer patients pre-consultation, online consultation, and other services, providing a more convenient and comfortable end-to-end medical experience^[15]. By inheriting the intangible cultural heritage of Zhuang medicine and leveraging technologies such as artificial intelligence and the Internet, we can continuously update knowledge, enhance skills, preserve the essence of traditional practices, and innovate. This approach addresses the challenges of modernizing traditional Chinese medicine and aims to bring forth more skilled doctors and effective treatments. The ongoing development of traditional Chinese medicine will make new and significant contributions to the maintenance of human health.

Funding

College Students' Innovation and Entrepreneurship Training Program Project "Innovation of Zhuang Medical Culture in An All-Round Well-Off Perspective – Cloud Platform to Help Medical Treatment and Publicity" (Project No. 202313645016)

Disclosure statement

The authors declare no conflict of interest.

References

- [1] Duan Y, Tang L, Fu F, 2022, A Questionnaire Survey on Medical Marketing Students' Study Preference and Its Results Analysis. *China Higher Medical Education*, 2022(7): 43–44.
- [2] Jiang Y, Wang R, Zhang Z, et al., Analysis of the Development Drivers and Current Status of Telemedicine in China Based on "Internet + Healthcare". *China Market*, 2023(9): 15–17+34.
- [3] Huang X, Xu S, Cao Q, 2023, Analysis and Reflection on the Application of Multimedia Classroom in Colleges and Universities Based on Questionnaire. *China Modern Educational Equipment*, 2023(13): 181–183 + 187.

- [4] Tang L, Zhang Q, 2020, Questionnaire Report on Social Cognition of Chinese Medicine Culture. *Acta Chinese Medicine*, 35(10): 2153–2160.
- [5] Wu J, Wang S, 2023, Exploration on the Integration of the Core Values of Traditional Chinese Medicine Culture and Moral Education. *Health Vocational Education*, 41(24): 62–65.
- [6] Lu L, Yu P, Geng H, et al., 2014, Patients Satisfaction Questionnaires Survey in Outpatient Department after the Pilot Reform of “Separated Management between Medicine and Pharmacy”. *Chinese Medical Records*, 15(10): 48–50.
- [7] Zou D, 2020, The Inheritance and Innovation of Guangxi Zhuang and Yao Medicine. *Journal of Guangxi University for Nationalities (Natural Science Edition)*, 26(2): 42–46.
- [8] Pan G, 2023, Research on the English Translation Strategies of Zhuang Medicine Dietotherapy Under the Cultural Schema Theory. *Overseas English*, 2023(21): 29–31.
- [9] Peng D, Chen X, Lu H, 2010, Analysis and Innovative Exploration of Social Practice Teaching for Zhuang Medicine Majors. *Chinese Journal of Ethnomedicine and Ethnopharmacy*, 16(9): 16–17.
- [10] Han D, 2021, Drawing Essence from Tradition and Strengthening Through Innovation: Research and Reflections on the Inheritance and Innovation of Traditional Chinese Medicine Culture by Guangzhou Pharmaceutical Group, and the Strengthening and Improvement of Ideological and Political Work. *Chinese & Foreign Corporate Culture*, 2021(11): 29–32.
- [11] Jiang J, 2019, Research on the Market Development of Zhuang Medicine Based on Cultural Cognition and Acceptance. *Marketing Circles*, 2019(29): 122–124.
- [12] Li J, 2024, Promoting Traditional Medicine Culture, Upholding Integrity and Innovation to Benefit the People. *Nanning Daily*, 2024-01-11(006).
- [13] Kong A, Chen Y, Wu Y, 2023, From Mao Zedong to Xi Jinping: Integrity and Innovation in the Development of Traditional Chinese Medicine Thoughts. *Journal of Nanjing University of Traditional Chinese Medicine (Social Science Edition)*, 24(5): 281–287.
- [14] “China Medical Guide” Feedback on Patient Medical Choice Questionnaire (Part 1), n.d., 2007. *China Medical Guide*, 2007(4): 1.
- [15] Wang H, Wu J, 2018, Exploration of the Construction of Big Data Cloud Platforms in Medicine. *Proceedings of the 2018 Annual Meeting and Academic Seminar of the Pharmaceutical Management Professional Committee of the Chinese Pharmaceutical Association*, 2018: 8.

Publisher’s note

Bio-Byword Scientific Publishing remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.