## ORIGINAL RESEARCH

# A Preliminary Survey Report on the Use of Acupuncture Methods by Chinese Acupuncturists Worldwide

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#### **ABSTRACT**

**Objective** • This survey aims to investigate the global utilization of acupuncture among Chinese acupuncturists and gather data on the prevalence and specific practices of acupuncture to provide insights into its adoption across diverse geographical regions.

**Methods** • We designed a 10-question survey questionnaire and distributed it anonymously to Chinese acupuncturists via academic WeChat groups and acupuncture conferences. Responses were collected using the WJX online platform. Data was analyzed using Excel.

**Results •** In 6 months, 493 valid responses were received: 202 from China, 34 from other Asian countries, 184 from North America, 51 from Europe, and 22 from Oceania. Key findings include that 61.26% (302/493) of practitioners

use fine needles, 60.85% (300/493) employ painless needle insertion, while 44.22% (218/493) emphasize the Deqi reactions, and 32.25% (159/493) utilize needle manipulation. However, these practices varied widely. Chinese acupuncturists in China reported lower usage (46.04%, 93/202) of gentle needling compared to those outside China (71.13%, 207/291),  $\chi^2 = 7.94$ , P = .005. Furthermore, 82.73% of acupuncturists reported the absence of pain or discomfort during acupuncture treatments, with most patients expressing satisfaction.

**Conclusion** • Pleasant acupuncture emerges as the predominant method among Chinese acupuncturists globally. (*Altern Ther Health Med.* 2025;31(5):14-19).

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#### INTRODUCTION

Acupuncture has become an integral component of healthcare systems worldwide. 1,2,3 As a nonpharmacological therapy, it is employed in over 113 countries among 170 World Health Organization member states. The 2022 National Health Interview Survey highlighted that 2.2% of adults (5.74 million) in the United States utilized acupuncture for pain management in the preceding 12 months, in contrast to 11% (28.70 million) opting for chiropractic services, a noninvasive alternative. However, despite its increasing use, acupuncture is associated with pain concerns, as indicated by a systematic review revealing that 11.79% of patients reported discomfort during treatment. This issue is particularly pronounced outside of China and may impact treatment adherence and the broader acceptance of acupuncture as a therapeutic option.

In response to these challenges, acupuncture practitioners have explored methods to minimize discomfort and enhance patient satisfaction. In 2017, Shaobai Wang named this kind of acupuncture "Pleasant Acupuncture" (also known as "Sweet Acupuncture" or "Tang Zhen" in Chinese),<sup>5</sup> which mainly uses shallow needle insertion and gentle needling techniques. It emphasizes the importance of comfort during acupuncture treatment, maintaining therapeutic effectiveness while promoting better patient compliance.

This survey explores the global utilization of the acupuncture method among Chinese acupuncturists. It aims to gather valid data on the prevalence and specific acupuncture practices, providing insights into its adoption across diverse geographical regions.

#### **METHODS**

The study was reviewed and approved by the institution review board, Acupuncture Institute, China Academy of China Medical Sciences (number is 2023-03-26-1).

The survey was conducted over six months (July 15, 2023, to January 15, 2024). The questionnaire (in Chinese) is detailed in Table 1 and the Appendix. It addressed various aspects of acupuncture practices, including techniques used, patient responses, and practitioner demographics.

A carefully designed questionnaire consisting of ten relevant questions was developed through collaborative team discussions. To ensure comprehensive coverage and minimize biases such as the Hawthorne effect,<sup>6</sup> three questions focused on exploring patient experiences during needle retention from different perspectives.

**Distribution and Data Collection.** The questionnaire was distributed to formal Chinese acupuncture practitioners worldwide through academic discussion WeChat groups and the academic conferences of the American TCM Society in New York in 2023 and 2024. This approach ensured a broad and representative sample of respondents across different countries and regions.

Responses were collected anonymously using the online platform WJX (Changsha Ranxing Information Technology Co., Ltd., China). This platform is noted for its functionality, like Amazon Mechanical Turk, and facilitates efficient data collection in a secure and structured manner.<sup>7</sup>

**Data Analysis.** Upon completion of the survey period, responses were meticulously compiled and exported to an Excel file for detailed analysis. Statistical methods such as percentage and  $\chi^2$  were employed to analyze trends, frequencies, and correlations among the data points gathered from the survey.

**Summary.** The survey methodology aimed to provide a comprehensive understanding of acupuncture practices among Chinese acupuncturists globally. Utilizing a well-structured questionnaire, leveraging academic networks for distribution, and employing a robust online platform for data collection ensured the study's reliable and representative results. The subsequent data analysis aimed to uncover insights into the prevalence, patterns, and variations in acupuncture practices across diverse geographical contexts.

Table 1. Demographic Data

		Number of	Percentage of all
Region		responders	responders
	Mainland	185	91.58
China	Hong Kong	15	7.43
(202)	Macao	1	0.50
	Taiwan	1	0.50
Other	North America	184	63.23
Countries	Europe	51	17.53
(291)	Aisa	34	11.68
(291)	Oceania	22	7.56
Years of p	ractice		
≤ 10 yr		171	34.69
10-20 yr		110	22.31
20-30 yr		116	23.53
30-40 yr		82	16.63
40-50 yr		14	2.84

**Table 2.** Needle Insertion, Manipulations And Patient Response

		Number of	Percentage of
		responders	all responders
	≤ 0.16mm	15	3.04
	0.18-0.25mm	287	58.22
Needle diameter	0.30-0.35mm	162	32.86
	0.40mm	16	3.25
	≥0.45mm	13	2.64
	10%	58	11.76
	25%	63	12.78
Deqi reactions	50%	154	31.24
	75%	177	35.90
	100%	41	8.32
	10%	30	6.09
Painless needle	25%	42	8.52
insertion	50%	121	24.54
msertion	75%	240	48.68
	100%	60	12.17
Patients' response	Relaxed	186	37.73
during needle	Comfortable	251	50.91
retention	Falling asleep	56	11.36
	0	33	6.69
Needle	25%	143	29.01
manipulation	50%	158	32.05
татриацоп	75%	106	21.50
	100%	53	10.75
	0	217	44.02
Discomfort in	25%	269	54.56
patients during	50%	7	1.42
needle retention	75%	0	0.00
	100%	0	0.00
	0	438	88.84
Extreme discomfort	25%	52	10.55
in patients during	50%	2	0.41
needle retention	75%	1	0.20
	100%	0	0.00

## **RESULTS**

Participant Statistics. A total of 493 valid questionnaires were collected for analysis. The respondents were distributed as follows: 202 from China (185 from mainland China, 15 from Hong Kong, one each from Macau and Taiwan), 34 from other Asian countries, and 257 from countries outside Asia, including 184 from North America, 51 from Europe, and 22 from Oceania. A significant portion of the acupuncturists surveyed (171/493, 34.7%) reported practicing for 20 years or more. For details of geographic and practice experience, refer to Table 1.

## Needle Insertion, Manipulation, and Patient Response

**Needle Size.** A detailed analysis of needle sizes revealed that among the respondents, 15 acupuncturists (3.04%) primarily used needles with a diameter of less than 0.16 mm (traditionally Gauge #40). In contrast, a large majority, 287 acupuncturists (58.22%), favored needles with a diameter ranging from 0.18 mm to 0.25 mm (Gauge #38-32). When

considering needles with a diameter of 0.25 mm or less (Gauge #32-#44) as fine or thin needles, it was found that fine needles were utilized by 61.26% (302/493) of all survey participants.

This data indicates a predominant preference among the surveyed acupuncturists for fine needles, which are typically associated with less discomfort during insertion and are widely used to achieve specific acupuncture techniques and desired outcomes.

**Further Analysis.** Additional aspects of needle insertion techniques, manipulations employed, and patient responses are detailed in Table 2, providing insights into the practices and outcomes reported by the participating acupuncturists. The results contribute to a broader understanding of the adoption and application of acupuncture techniques across different regions and demographics.

Painless Needle Insertion (PNI). Painless needle insertion (PNI) techniques, often utilizing tube-guiding needling, were widely adopted among the surveyed acupuncturists. Specifically, 240 acupuncturists (48.68%) reported using PNI 75% or more of the time, while 60 acupuncturists (12.17%) always use PNI. These groups accounted for 60.85% (300/493) of all participants. The high prevalence of PNI underscores its significance in minimizing needle insertion discomfort, thus contributing to patient comfort during acupuncture treatments.

**Deqi Reaction(s).** Deqi, or "arrival of qi", refers to a composite of unique sensations experienced by both the patient and acupuncturist, considered essential for the therapeutic effect of acupuncture. Patients often describe Deqi sensations as soreness (*suan*), numbness/tingling (*ma*), distension/fullness (*zhang*), or pressure/heaviness (*zhong*). Acupuncturists may feel a sense of tension, tightness, or fullness under the needle, or muscle twitching. It is considered a critical aspect of acupuncture treatment traditionally associated with therapeutic efficacy, and was reported by 177 acupuncturists (35.90%) who reached the Deqi reaction 75% or more of the time. Reportedly, 41 acupuncturists (8.32%) achieved Deqi every time. Together, these groups constituted 44.22% (218/493) of all participants.

This indicates that most acupuncturists surveyed actively sought to elicit Deqi reactions during treatments, aligning with traditional Chinese medicine principles.<sup>7</sup>

**Needle Manipulations.** Regarding needle manipulations post-insertion, 106 acupuncturists (21.5%) used needle manipulations at least 75% of the time. 53 acupuncturists (10.75%) always employed needle manipulations. Together, these groups accounted for 32.25% (159/493) of all respondents.

Thus, while a substantial proportion of acupuncturists utilized needle manipulations, a notable majority (67.76%) did not employ this technique regularly.

Comparison Between China and Overseas. A comparison between acupuncturists based in China and those outside China revealed significant differences in practice. 46.04% (93/202) of acupuncturists in China utilized gentle needling techniques (including fine needles, PNI, no

Deqi, and no needle manipulations). In contrast, 71.13% (207/291) of acupuncturists outside China employed these gentle needling techniques.

This difference was statistically significant ( $\chi^2 = 7.94$ , P = .005), indicating a higher prevalence of gentle needling practices among overseas practitioners than in China.

**Patient State During Needle Retention.** Patients reported different states during needle retention. 86 participants (37.73%) noted that their patients were relaxed, 251 (50.91%) indicated their patients were comfortable, while 56 (11.36%) reported that their patients were asleep.

However, a small percentage of patients experienced discomfort. 269 participants (54.56%) reported that 25% of their patients experienced discomfort, while 7 participants (1.42%) reported that 50% of their patients experienced discomfort. Notably, 52 participants (10.55%) noted severe discomfort in 25% of patients. Extreme discomfort was reported by only a few participants: 2 (0.4%) reported 50% and 1 (0.2%) reported 75% of patients experiencing extreme discomfort.

Overall, discomfort during acupuncture treatments was reported by only a minority of patients (14.35%), with extreme discomfort being highly infrequent (2.92%). Most of them were related to the manipulation of needles or using bigger-sized needles.

These findings highlight the generally positive patient experiences during acupuncture treatments, with efforts to minimize discomfort effectively reflected in the survey results.

#### **DISCUSSION**

#### Reliability

The reliability of this survey was ensured through several key methodological choices and considerations:

Questionnaire Design. The questionnaire was meticulously designed through collaborative discussions among the research team, focusing on pertinent aspects of acupuncture practice. To minimize bias and the Hawthorne effect, explicit terms like "gentle acupuncture", "Pleasant acupuncture", or "sweet acupuncture (Tang Zhen)" were intentionally avoided in comfort-related questions. Instead, neutral terms such as "comfort", "relaxation", "falling asleep", "discomfort", and "extreme discomfort" were used. This approach aimed to elicit genuine responses from participants without leading them towards specific responses related to comfort techniques.

Participant Selection. Participants in the survey were Chinese acupuncturists practicing across different countries and regions worldwide. This diverse participant pool helped capture a broad spectrum of acupuncture practices and experiences beyond regional boundaries. This ensured that participants had sufficient clinical experience, with practice years ranging from 10 to 50 years. Notably, 65.31% of participants reported practicing acupuncture for 20 to 50 years, indicating a robust sample of experienced practitioners.

**Survey Duration and Platform.** The survey spanned 6 months, allowing ample time for distributing and collecting responses from a wide geographical spread. The use of WJX

ensured efficient data collection and management. This choice of platform added to the reliability and credibility of the survey results.

**Data Analysis.** Responses were meticulously analyzed by exporting data into an Excel file, enabling a detailed examination of patterns and trends in acupuncture practices among the surveyed acupuncturists. This systematic data analysis approach further bolstered the reliability and accuracy of the findings.

Overall, the methodological rigor employed in designing, distributing, and analyzing the questionnaire, coupled with the diverse and experienced participant base, underscores the reliability of this survey in capturing meaningful insights into the utilization of acupuncture techniques and patient experiences globally. The deliberate avoidance of suggestive language in the questionnaire design and the comprehensive data collection process further enhanced the credibility of the survey findings. These factors collectively contributed to the reliability and accuracy of the study in portraying current acupuncture practices among Chinese acupuncturists worldwide.

## The Existence of Patient Comfort During Acupuncture Treatment

The process of acupuncture treatments for patients outside China differs significantly from that in China. Most acupuncturists outside China use gentle needling techniques. Since thinner needles are used, the penetration is shallower, and there may be minimal or no experience of Deqi, even if acupuncturists aim to elicit it. Additionally, there is a reduced reliance on acupuncture manipulations. Most patients prefer minimal or no discomfort after needle insertion. If any discomfort occurs, adjustments are made until it subsides or becomes acceptable. Subsequent operations, such as lifting, inserting, twisting, and other manipulations, are avoided.

Patients seek acupuncture treatments not only for their medical issues but also to feel calm and relaxed or sleep peacefully during acupuncture treatment, with some even snoring loudly. Despite the absence of traditional discomfort, positive results are consistently achieved. This acupuncture approach, also called "Pleasant acupuncture", was initially embraced and endorsed by most Chinese licensed acupuncturists outside China, especially in the United States. It has gradually influenced practices within China.

The survey results on patients' comfort during acupuncture confirmed the facts and acceptance of the pleasant acupuncture technique. It also reflects the widespread adoption of this acupuncture practice, considering factors such as needle size, painless needle insertion, needle manipulation, and Deqi reactions.

The concept of "comfort" during acupuncture dates back over 2000 years. In the "Yellow Emperor's Inner Classics" (Huangdi Neijing), acupuncture points are associated with the induction of pleasant sensations when pressure is applied. Similarly, "Collection of Gems of Acupuncture and Moxibustion" emphasizes the importance of allowing the acupuncture needle to remain stationary post-insertion,

**Table 3.** Parameters Associated With Pain Sensation During Acupuncture

		Number of	Percentage of
Region		responders	all responders
China	Pain	109	53.96
Cnina	Painless	93	46.04
Other	Pain	84	28.87
Countries	Painless	207	71.13
Total	Pain	193	39.15
Iotai	Painless	300	60.85
Deqi reaction	18		
China	Pain	43	42.57
Cnina	Painless	58	57.43
Other	Pain	25	21.37
Countries	Painless	92	78.63
Total	Pain	68	31.19
Iotai	Painless	150	68.81
Needle mani	pulation		
China	Pain	37	51.39
Cnina	Painless	35	48.61
Other	Pain	23	26.44
Countries	Painless	64	73.56
Total	Pain	60	37.74
Iotai	Painless	99	62.26
Fine needle			
China	Pain	51	49.51
China	Painless	52	50.49
Other	Pain	53	26.63
Countries	Painless	146	73.37
Total	Pain	104	34.44
Total	Painless	198	65.56
Thick needle			
China	Pain	58	58.59
Ciillia	Painless	41	41.41
Other	Pain	31	33.7
Countries	Painless	61	66.3
Tatal	Pain	89	47.34
Total	Painless	102	54.26

enabling the flow of Qi to reconnect the body's upper and lower parts, resulting in a sense of comfort and the alleviation of discomfort.<sup>11</sup> However, these descriptions were often overlooked or disregarded by practitioners.

Earlier acupuncture needles, whether made of bamboo, bone, copper, gold, silver, etc., were incomparable to modern filiform needles due to historical limitations in materials and techniques. Bigger needles may produce more pain during acupuncture. This perhaps explains why, among the Nine Needles mentioned in the Huangdi Neijing, only the filiform acupuncture needle remains commonly used today, and the needle was retained for only about a minute in ancient times.<sup>12</sup>

## **Factors Influencing Comfort During Acupuncture Treatments**

The data presented in Table 3 reveals notable disparities in the proportion of painless needle insertions between China and other regions. Specifically, the rate of using painless needle insertion stands at 46.04% in China, compared to 71.13% outside China, a difference of 25.09%. This discrepancy underscores a lesser use of painless needle insertion in China than in other regions. Several factors may contribute to the sensation of comfort during acupuncture treatments, including the experience of Deqi (68.81%, 150/218), the implementation of needle manipulation techniques (66.00%, 99/150), the use of fine needles (65.56%, 198/302), or thicker needles (54.26%, 102/188). Notably, most patients (82.73%) report feeling comfortable during acupuncture sessions, with a higher level of comfort associated with using fine needles than thicker ones. Further, Chinese acupuncturists outside of China report a higher proportion of comfortable

acupuncture procedures, suggesting adaptations to local culture and patient preferences. These variations may stem from differences in cultural traditions and perceptions of acupuncture. The findings further support the trend of localized acupuncture practices overseas.<sup>5</sup>

## The Significance of Comfort During Acupuncture

Some modern acupuncture methods prioritize painless needle insertion and may not involve manipulation or emphasize the reactions of Deqi. 13,14 Some have even proposed painless acupuncture or non-invasive painless acupoint therapy. 16 However, such works of literature did not specifically emphasize the importance of ensuring patient comfort during the whole acupuncture treatment period and failed to recognize its impact on therapeutic outcomes. "Pleasant acupuncture", on the other hand, enhances therapeutic efficacy and also improves patient compliance with acupuncture therapy. It promotes acupuncture and enhances its acceptance, thus fostering its continued development and growth.

#### **Limitations and Issues**

This survey has several limitations. Firstly, it focused solely on investigating acupuncturists rather than patients. Hence, a survey on patients' feelings during acupuncture treatment and the outcomes is warranted. Secondly, patient responses were obtained through acupuncturists, which may introduce bias. Thirdly, all participants in the study were Chinese, potentially overlooking differences in backgrounds among other ethnicities. Finally, some participants noted that the range of options for the last four questions (0, 25%, 50%, 75%, and 100%) was too broad, particularly for the 10th question, utilizing a range of 0, 5%, 10%, 20%, 40%, and 60% may provide better accuracy and precision.

### CONCLUSION

Our preliminary global survey of Chinese acupuncture practitioners indicated that pleasant acupuncture is widely adopted as the primary treatment method, even though it was not our original intention for this survey. Most patients do not have discomfort when the needles are inserted but rather experience comfort during needle retention, highlighting the importance of this approach in current acupuncture practices. This can help to prioritize comfort alongside therapeutic efficacy, reflecting the trajectory of medical development. Pleasant acupuncture aligns with this developmental direction, positioning it as the mainstream approach in acupuncture.

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## **AUTHORS' CONTRIBUTIONS**

This was a collaboration project of the American TCM Society (ATCMS), the American TCM Association (ATCMA), the Institute of Acupuncture and Moxibustion, the China Academy of Chinese Medical Sciences, and nine other professional societies and institutions globally. SBW initiated this project, he designed and oversaw the study. TH, YXL, XYG, DYT, CLX, LF, LQZ, and YXW conducted the survey. TH and ZBY collected the data and drafted the first manuscript. AYF conducted the statistics work. AYF, GHY, and SBW were involved in further discussing, drafting, editing, and finalizing the manuscript.

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#### **DECLARATION OF COMPETING INTEREST**

The authors declare that they have no competing interests. Due to the limited personal experience and perspective of the authors, this article may have some omissions and errors; comments or corrections are welcomed and appreciated.

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#### Appendix.

Survey answers and results from WJX and Questionnaire on the Use of Acupuncture by Chinese Acupuncturists Worldwide

### Fill in the blank part in Question

Please download detailed data for the answers to fill-in-the-blank part in questions.

2) The number of years you have been practicing acupuncture, or close to, is ( ) Single-choice question

Options	Subtotal	Proportion
A. 10 Years	171	34.69%
B. 20 Years	110	22.31%
C. 30 Years	116	23.53%
D. 40 Years	82	16.63%
E. 50 Years	14	2.84%
The number of valid responses to	493	

3) The most commonly used diameter of your acupuncture needles is ( ) Single-choice question

Options	Subtotal	Proportion
A. 0.16mm or finer	15	3.04%
B. 0.18-0.25mm	287	58.22%
C. 0.30-0.35mm	162	32.86%
D. 0.40mm	16	3.25%
E. 0.45mm or thicker	13	2.64%
The number of valid responses to this question	493	

4. Proportion of painless needle insertion is ( question

3.04%	A.
58.22%	B.
32.86%	C.
3.25%	D.
2.64%	E.
	The n
	this q

techniques is (

) Single-choice

Options	Subtotal	Proportion
A. 0	33	6.69%
B. 25%	143	29.01%
C. 50%	158	32.05%
D. 75%	106	21.5%
E. 100%	53	10.75%
The number of valid responses to this question	493	

8. The proportion of your acupuncture treatment involving manual

) Single-choice question

9. The proportion of patients feeling discomfort during your retention needle treatment is ( ) Single-choice question

Options	Subtotal	Proportion
A. 0	217	44.02%
B. 25%	269	54.56%
C. 50%	7	1.42%
D. 75%	0	0%
E. 100%	0	0%
The number of valid responses to this question	493	

10. The proportion of patients who feel extreme discomfort during your retention needle treatment is ( ) Single-choice question

Options	Subtotal	Proportion
A. 0	438	88.84%
B. 25%	52	10.55%
C. 50%	2	0.41%
D. 75%	1	0.2%
E. 100%	0	0%
The number of valid responses to this question	493	

Options Subtotal Proportion A. 10% 6.09% B. 25% 42 8.52% 121 C. 50% 24.54% 240 D. 75% 48.68% E. 100% 60 12.17% The number of valid responses to this question

5. The proportion of patients experiencing strong sensations or Deqi during acupuncture treatment is ( ) Single-choice question

Options	Subtotal	Proportion
A. 10%	58	11.76%
B. 25%	63	12.78%
C. 50%	154	31.24%
D. 75%	177	35.9%
E. 100%	41	8.32%
The number of valid responses to this question	493	

6. The general state of patients during your retention needle treatment is mostly ( ) Single-choice question

Options	Subtotal	Proportion
A. Relaxed	186	37.73%
B. Comfortable	251	50.91%
C. Asleep	56	11.36%
D. Discomfort	0	0%
E. Extreme Discomfort	0	0%
The number of valid responses to this question	493	

7. The proportion of your patients entering a relaxed or asleep state after the start of acupuncture treatment is ( ) Single-choice question

Options	Subtotal	Proportion
A. 0	3	0.61%
B. 25%	63	12.78%
C. 50%	129	26.17%
D. 75%	251	50.91%
E. 100%	47	9.53%
The number of valid responses to this question	493	