TECHNICAL REPORT
2025

KNOWLEDGE AND ATTITUDE OF MINISTRY OF HEALTH PERSONNEL TOWARDS TRADITIONAL AND COMPLEMENTARY MEDICINE SERVICES IN MALAYSIA

TRADITIONAL AND COMPLEMENTARY MEDICINE DIVISION

MINISTRY OF HEALTH MALAYSIA

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2025

Published by:

Traditional and Complementary Medicine Division

Ministry of Health Malaysia

Blok E, Jalan Cenderasari

50590, Kuala Lumpur

Malaysia

Conflict of interest statement:

The authors have no affiliations with or involvement in any organisation or entity with any financial interest or non-financial interest in the subject matter or materials discussed in this manuscript.

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RESEARCH TEAM

Editors:

Dr. Tajul Iqmal bin Tajul Arus
Traditional and Complementary
Medicine Division
Ministry of Health Malaysia

Dr. Ng Angeline
Traditional and Complementary
Medicine Division
Ministry of Health Malaysia

Principal Investigator:

Mohd Ridzuan bin Ali
Traditional and Complementary Medicine Division
Ministry of Health Malaysia

Co-investigators:

Wong Meng Xian
Traditional and Complementary
Medicine Division
Ministry of Health Malaysia

Catherine Benedict
Traditional and Complementary
Medicine Division
Ministry of Health Malaysia

Mohd Firdaus bin Sanusi
Traditional and Complementary
Medicine Division
Ministry of Health Malaysia

Kamarul Azhar bin Kamarudin
Traditional and Complementary
Medicine Division
Ministry of Health Malaysia

Dr. Adilla Nur binti Halim
Traditional and Complementary
Medicine Division
Ministry of Health Malaysia

Suraya Hani binti Sharon
Traditional and Complementary
Medicine Division
Ministry of Health Malaysia

Dr. Mohd Naufal bin Ridzuan
Traditional and Complementary
Medicine Division
Ministry of Health Malaysia

Lin Hui Szu
Traditional and Complementary
Medicine Division
Ministry of Health Malaysia

ACKNOWLEDGEMENT

We would like to express our sincere gratitude to the Director General of Health Malaysia for his support and permission to publish this research. We are also deeply indebted to the Director of the Traditional and Complementary Medicine Division (T&CMD), Ministry of Health (MOH) Malaysia, for her guidance and support throughout the study.

We extend our heartfelt thanks to the co-investigators and data collectors from the Inspectorate and Enforcement Section, T&CMD, as well as the study participants for their cooperation and support, which were instrumental in the successful completion of this research.

Finally, we would like to acknowledge the invaluable contributions of all those who were involved in the data collection process, either directly or indirectly. Their efforts have made this research possible.

KNOWLEDGE AND ATTITUDE OF MINISTRY OF HEALTH PERSONNEL TOWARDS TRADITIONAL AND COMPLEMENTARY MEDICINE SERVICES IN MALAYSIA

EXECUTIVE SUMMARY

Traditional and complementary medicine (T&CM) plays an important role in managing the health care needs of Malaysians. Despite the increasing demand for T&CM services, studies that assess the attitudes and knowledge of the Malaysian population towards T&CM services are limited. This study gap prevails among employees of the Ministry of Health (MOH) who oversee the national health care system. This quantitative study aims to determine the attitudes and knowledge of MOH personnel towards T&CM services in Malaysia using self-administered questionnaires. Data was collected from 930 participants over the period of 3 months using convenience-based sampling. Overall, the results indicate that MOH personnel generally have good attitudes (n=903; 97%) and knowledge (n=808; 86.9%) towards T&CM services in Malaysia. There was a significant association between respondents with good attitudes towards T&CM services and their likelihood to have used T&CM services. The results indicate that public education initiatives implemented by the Traditional and Complementary Medicine Division (T&CMD) of the MOH have been effective in raising awareness and interest in T&CM services among the Malaysian population. The findings suggest that while public awareness of T&CM is encouraging, there's still room for improvement in specific areas. Future information campaigns should prioritise clarity on recognized practice areas under the T&CM Act 2016, emphasise the regulatory focus on practitioner licensing and registration, and provide detailed information about available T&CM services in MOH health facilities.

1. INTRODUCTION

Traditional and Complementary Medicine (T&CM) is deeply ingrained in Malaysia's cultural heritage, with practices like Traditional Chinese Medicine (TCM), Traditional Malay Medicine (TMM), Traditional Indian Medicine (TIM), and others (Ganasegeran et al., 2014). These practices, passed down through generations, are integral to the socio-cultural identity of Malaysia's diverse ethnic groups (Farooqui, 2013).

The T&CM Act 2016 [*Act 775*] defined T&CM as a form of health-related practice designed to prevent, treat or manage ailment or illness or preserve the mental and physical well-being of an individual. T&CM includes practices such as Traditional Malay Medicine, Traditional Chinese Medicine, Traditional Indian Medicine, Islamic Medical Practice, Homeopathy and Complementary Therapies, but excludes medical and dental practices used by a medical or dental practitioner respectively (Traditional and Complementary Medicine Division, 2016).

T&CM plays a significant role in Malaysian healthcare. Studies have shown that a substantial portion of the population has used T&CM. The Institute for Health Behavioural Research (2022) reported 54.68% of respondents have used T&CM services. Siti et al. (2009) also reported that 69.4% used T&CM services at least once in their lifetime and 55.6% within the past year (Siti et al., 2009). According to the 2015 National Health and Morbidity Survey (NHMS), 29.5% of Malaysians had consulted T&CM practitioners and used T&CM (Institute of Public Health, 2015).

Despite increasing usage and demand for T&CM, there are only a handful of studies that determined the knowledge and attitudes of the Malaysian public towards T&CM services. For example, the study of Othman and Farooqui (2015) and Mohiuddin et al. (2020) showed that the Malaysian population had high

preferences for T&CM but still lacked in knowledge and awareness on T&CM in Malaysia. The findings may differ among civil servants in Malaysia, specifically Ministry of Health (MOH) personnel who are the caretakers of the national health care system. As such, this cross-sectional study aims to determine the knowledge and attitude of MOH personnel towards T&CM services in Malaysia using self-administered questionnaire. The conduct of the study was approved by the Medical Research and Ethics Committee, National Institutes of Health, MOH Malaysia (NMRR-19-3904-52388).

The outcome of the study can assist policymakers in developing appropriate strategies to effectively disseminate information on T&CM services to the public. This area of T&CM research is also important to address issues such as perceived benefit, service delivery and purpose of use of T&CM services (World Health Organization, 2014).

2. METHODOLODY

The target respondents are civil servants serving the MOH. The population of MOH personnel was estimated at 250,123 (Traditional and Complementary Medicine Division, 2019). Using an online sample size calculator (Raosoft Inc., 2020), the minimum sample size was determined at 384 based on 5% margin of error and 95% confidence interval. After factoring an additional 20% (i.e., 77 respondents) to the sample size of 384 to compensate for non-response and dropouts, the study aims to achieve the minimum sample size of 461 respondents.

This study employed convenience sampling, a non-probability sampling technique, to select participants from the target population (Sekaran & Bougie, 2016). This approach was suitable due to the unavailability of a complete sampling frame consisting of all MOH employees, which precluded the use of probability sampling methods like simple random sampling (Memon et al., 2017). Given the research objective of determining the attitudes and knowledge of MOH personnel towards T&CM services in Malaysia, a non-probability sample was more appropriate. This approach prioritised theoretical generalisation, aiming to develop broader theories, rather than statistical generalisation (i.e., probability sampling methods), which seeks to represent the entire population. Furthermore, convenience sampling aligns with the positivist research paradigm, particularly in survey and exploratory studies (Cooksey & McDonald, 2019). By selecting accessible participants, this method enabled the collection of valid and meaningful data while maintaining research quality (Memon et al., 2017).

Data was collected from target respondents using electronic questionnaires (i.e., Google Form). Electronic survey offered advantages of reduced social desirability effect (Tan et al., 2021) while offering wider geographical coverage. The

questionnaires were disseminated to target respondents using official information channels within the MOH such as the MOH website, T&CMD website and MOH Postmaster. This ensures that only civil servants currently employed by the MOH and in active service are included in the survey, thus meeting the study's inclusion criteria.

The questionnaire is accompanied with an information sheet which provided details of the study and an informed consent form for participation. The questionnaire has three sections. The first section requested the socio-demographic information of the respondent such as gender, age, race, grade, level of education, monthly income, T&CM service previously used, T&CM services currently used and reasons for using T&CM.

The second section evaluates respondents' attitudes towards T&CM services in Malaysia. Target respondents are required to evaluate 14 statements using the 4-point Likert scale whereby 1 represents "Strongly Disagree" and 4 "Strongly Agree". The maximum score that can be achieved for this section is 56 if the respondent strongly agrees with all 14 statements (i.e., 14 statements x 4 points = 56 points). Since the midpoint score is 28, the score range of 0-28 is considered poor attitude, and the score range of 29-56 is considered good attitude.

The third section evaluates respondents' knowledge of T&CM services in Malaysia using 26 questions. The questions are grouped into two knowledge assessment domains. The first knowledge assessment domain covers the general knowledge of T&CM in Malaysia. This domain consists of six primary questions. In one of the questions, respondents are required to answer 10 secondary questions about T&CM practices regulated in Malaysia. Hence, the total number of questions in the first domain is 15. The second knowledge assessment domain consist of questions

pertaining to the provision of T&CM services at selected MOH health care facilities. This domain has two primary questions. In one of the questions, respondents are required to answer 10 secondary questions about the types of T&CM services provided in selected MOH health facilities. Hence, the total number of questions in the second domain is 11. For all 26 questions, respondents are asked to provide a "Yes" or "No" response. Correct responses are given 1 point and incorrect responses are given zero points. The maximum score that can be achieved for this section is 26 points if the respondent provides correct responses for all 26 questions. Since the midpoint score is 13, the score range of 0-13 is considered poor knowledge, and the score range of 14-26 is considered good knowledge.

Data collection was conducted for 3 months and the study recorded 1,019 participants. However, only 930 respondents provided informed consent and completed the questionnaire entirely. The rate of completion was 91.3%.

Data was managed and analysed using Microsoft Excel and SPSS Version 25.0. Descriptive statistics such as mean, standard deviation and frequency were used to analyse continuous and categorical data which includes respondents' demographic profile, levels of attitude and knowledge. Chi-squared test was used to determine the association between categorical data. Statistical significance is represented by a p value of less than 0.05.

3. RESULTS AND DISCUSSION

Demographic profile of respondents

Table 1 shows the demographic characteristics of the participants. The majority of the subjects were female (72.2%) and belonged to the Malay ethnic group (74.4%). Most of the respondents belonged to the management and professional group (70.1%) and had received tertiary education (76.1%). In terms of income, 48.2% of the respondents earned a salary between RM 5,001 and RM 10,000.

Table 1: Demographic data of participants in the study (n=930)

Demography	Variables	Frequency	Percentage (%)
Gender	Male	259	27.8
	Female	671	72.2
Age	18 – 30	103	11.1
	31 – 50	714	76.7
	51 – 60	113	12.2
Ethnic group	Malay	692	74.4
	Chinese	122	13.1
	Indian	35	3.8
	Others	81	8.7
Education level	Secondary	32	3.4
	Certificate/ Diploma	190	20.4
	Degree/ Masters/ PhD	708	76.2

Table 1: Demographic data of participants in the study (n=930)			
Demography	**Variables**	**Frequency**	**Percentage (%)**
Grade	*Jawatan Utama Sektor Awam* (JUSA)	15	1.6
	Management and Professional (P&P)	652	70.1
	Support Staff	263	28.3
Place of Service	Ministry of Health Headquarters	132	14.2
	State Health Department	175	18.7
	Hospital	344	37.0
	District Health Office	120	12.9
	Ministry of Health Training Institutes	23	2.5
	National Institute of Health	33	3.5
	Others	103	11.2
Income	<RM 3,000	125	13.4
	RM 3,001 – RM 5,000	286	30.8
	RM 5,001 – RM 10,000	448	48.2
	>RM 10,000	71	7.6

Table 2 showed that 94.5% of respondents had used T&CM services. This is followed by **Figure 1** which showed that the percentage of respondents who received at least one or two T&CM treatments was 34.2% and 31.5% respectively. 14.9% had received 3 T&CM treatments while 13.9% of respondents had received more than 3 T&CM treatments.

Table 2: Number of respondents who have used T&CM services (n=930)

	Variables	Frequency	Percentage (%)
Ever used T&CM services	Yes	879	94.5
	No	51	5.5

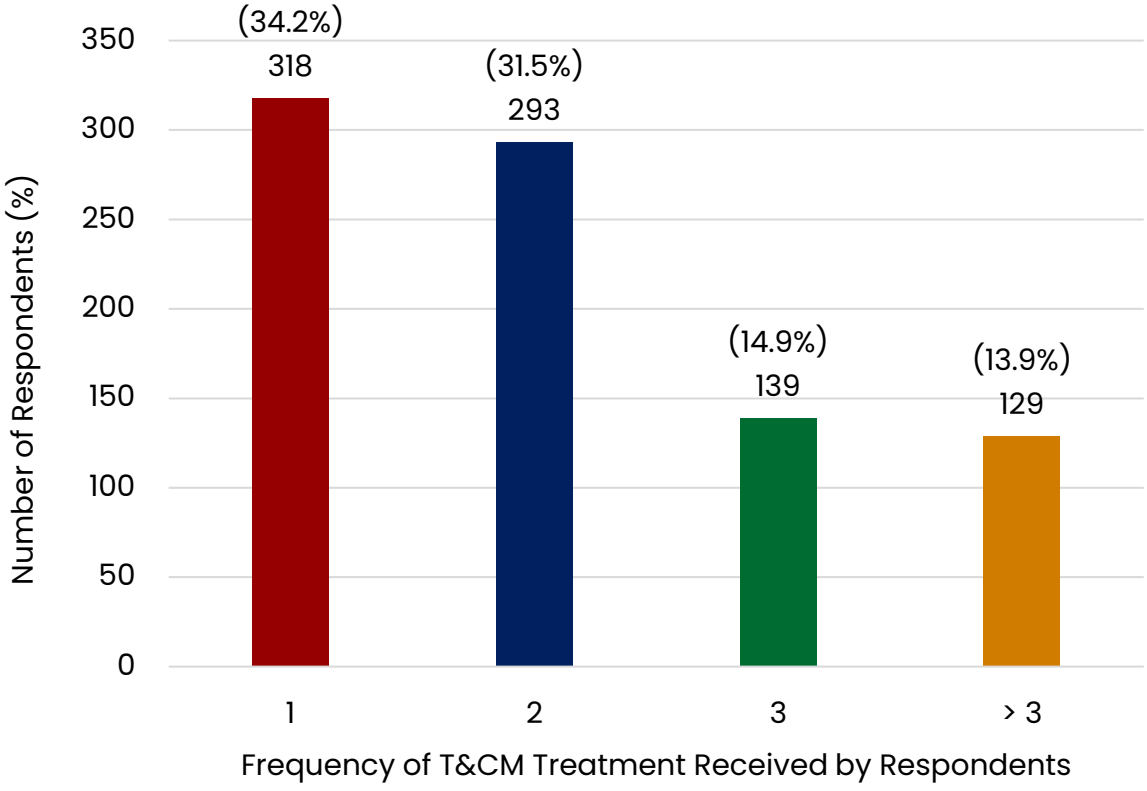

Figure 1: Frequency of T&CM treatments received by respondents

Figure 2 showed that there are single or combination of reasons that influenced respondents to choose T&CM services. 48.5% of respondents chose to receive T&CM services to help maintain their health and fitness. 11.2% chose T&CM services for the treatment of disease and 3.9% for palliative care. 0.5% of respondents chose T&CM services for disease prevention. 30.4% of respondents indicated that their choice to receive T&CM services could be influenced by a combination of 2 or more factors.

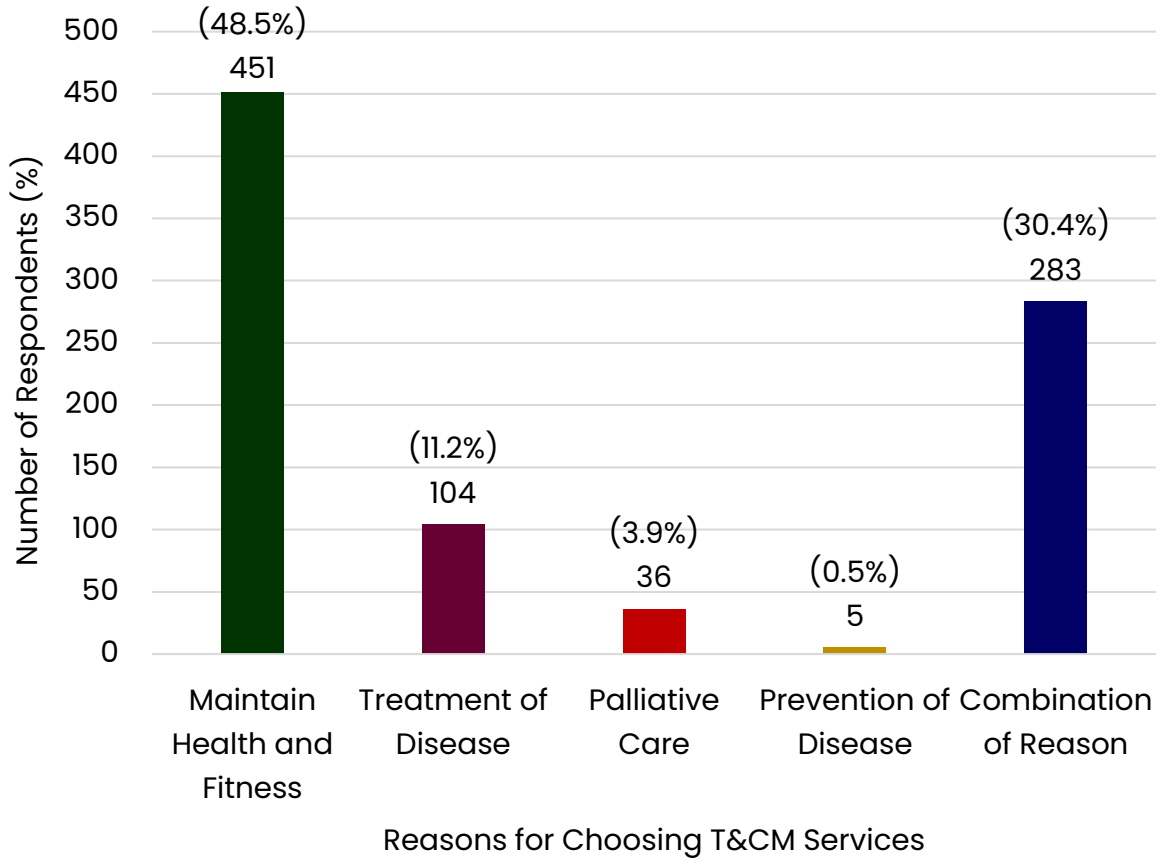

Figure 2: Reasons for choosing T&CM services

Attitude towards T&CM services

Respondents' attitudes towards T&CM services in Malaysia was assessed using 14 statements on a 4-point Likert scale (1: Strongly Disagree to 4: Strongly Agree). Scores below 28 indicate a poor attitude and scores above 28 indicate a good attitude. **Table 3** summarises the scores representing respondents' attitudes towards T&CM services in Malaysia.

Table 3: Score summary of respondents' attitudes towards T&CM services in Malaysia

Score	Interpretation	Number of Respondents	Percentage
0 – 28	Poor attitude	27	3.0%
29 – 56	Good attitude	903	97.0%

Based on Table 3, a significant majority of respondents (97%) scored between 29 and 56, indicating positive attitudes toward T&CM services among MOH personnel in Malaysia. This positive sentiment can be attributed to several factors, including strong beliefs in the effectiveness of T&CM services, satisfaction from previous T&CM experiences, and a willingness to explore T&CM due to personal or cultural interest. These factors are cited from the findings of the T&CM Consumer Survey 2018, conducted in conjunction with the development of the National T&CM Blueprint (Economic and Socio-cultural) 2018-2027. The survey revealed that a substantial portion of Malaysians hold positive views on T&CM: 100% believe in its effectiveness in preventing illness or disease, while 73% believe in its efficacy in treating illness or disease. Furthermore, the survey indicated that 67% of Malaysians

have an open attitude toward T&CM services. Among those with prior T&CM experience, 35% are willing to continue using them, while 32% of consumers without previous T&CM experience express a willingness to try these services (Traditional and Complementary Medicine Division, 2017b). The Institute for Health Behavioural Research (2022) also reported public perceptions of T&CM were largely positive at 97.2%.

3% of respondents scored between 0 and 28, indicating poor attitudes toward T&CM services in Malaysia. To understand the underlying reasons for these negative perceptions in this group of respondents, we can examine the findings of the T&CM Consumer Report 2018. This survey revealed that a minority of Malaysians (32%) were reluctant to use T&CM services. This group consisted of two main categories: non-users who have never used T&CM services and are unlikely to do so in the future, and former users who have previously used T&CM services but are not likely to use them again. Across both groups, the top three concerns centered around treatment quality and safety, treatment efficacy, and regulatory gaps in practitioner oversight (Traditional and Complementary Medicine, 2017b). Similar concerns may, therefore, drive poor attitudes towards T&CM services in Malaysia in this small group of respondents.

Table 4 presents the mean scores of respondents' attitudes towards T&CM services in Malaysia by statement. Higher mean scores indicate stronger agreement to a particular statement. The highest and lowest mean scores were noted from the results.

Table 4: Mean scores of respondents' attitudes towards T&CM services in Malaysia				
	Min	**Max**	**Mean**	**Standard Deviation**
Pengamal PT&K perlulah berkelayakan dalam bidang amalan yang ditawarkan	1	4	3.67 (highest)	0.551
Perkhidmatan PT&K boleh digunakan untuk meningkatkan atau mengekalkan kesihatan dan kesejahteraan	1	4	3.28	0.590
PT&K bukan ancaman kepada kesihatan awam dan memudaratkan orang awam	1	4	3.25	0.698
Saya akan memaklumkan kepada pegawai perubatan jika ada menggunakan perkhidmatan PT&K ketika menerima rawatan di Hospital atau Klinik	1	4	3.21	0.656
Saya berpendapat bahawa rawatan PT&K mempunyai kesan positif terhadap kesihatan	1	4	3.06	0.529
Saya akan mempertimbangkan untuk mendapatkan perkhidmatan PT&K lagi	1	4	3.05	0.570
Perkhidmatan PT&K boleh digunakan sebagai rawatan alternatif kepada rawatan moden	1	4	3.04	0.801
Saya berpendapat bahawa perkhidmatan PT&K selamat untuk digunakan	1	4	3.03	0.573

Table 4: Mean scores of respondents' attitudes towards T&CM services in Malaysia				
	Min	**Max**	**Mean**	**Standard Deviation**
Saya rasa bayaran yang dikenakan terhadap perkhidmatan PT&K yang diterima adalah berpatutan	1	4	2.97	0.640
Saya akan mengesyorkan perkhidmatan PT&K yang digunakan kepada keluarga dan rakan-rakan	1	4	2.92	0.641
Perkhidmatan PT&K boleh digunakan untuk merawat penyakit	1	4	2.85	0.758
Perkhidmatan PT&K boleh digunakan untuk mencegah penyakit	1	4	2.82	0.771
Perkhidmatan PT&K merupakan pilihan utama saya berbanding rawatan moden	1	4	1.70	0.704
Saya rasa tidak perlu mendapatkan rawatan perubatan moden sekiranya telah mendapatkan rawatan PT&K	1	4	1.48 (lowest)	0.640

The statement "Pengamal PT&K perlulah berkelayakan dalam bidang amalan yang ditawarkan" received the highest mean score of 3.67 ± 0.551, indicating strong agreement that T&CM practitioners should be qualified in their respective practice areas that are offered as services to the general public. This aligns with the MOH's mandate to ensure only registered T&CM practitioners can practice the recognized practice areas in Malaysia. The criteria for registration is set by the T&CM Council

which include formal qualification, relevant work experience, attendance to the briefing on the T&CM Act 2016, and et cetera.

The lowest mean score was recorded for the statement “Saya rasa tidak perlu mendapatkan rawatan perubatan moden sekiranya telah mendapatkan rawatan PT&K” (1.48 ± 0.640). This means that respondents disagreed that one can forgo seeking conventional medicine treatment after receiving T&CM services. The respondents’ general response to this statement is in alignment with the MOH’s positioning that T&CM acts as a complement to conventional medicine treatment and diagnosis, not as an alternative.

Results of chi-squared tests revealed that there is a significant relationship between respondents’ attitude towards T&CM services and usage of T&CM services, X^2 (1, N=930) = 4.67, $p < .05$. Respondents with good attitudes towards T&CM services were more likely to have used T&CM services than those with poor attitudes towards T&CM services (97.4% to 2.6%).

Knowledge towards T&CM services

Respondents' knowledge of T&CM services in Malaysia was assessed using 26 binary-choice questions (yes or no) divided into two domains: general knowledge about T&CM in Malaysia and knowledge on T&CM service delivery in selected MOH health facilities. Each correct response is awarded 1 point, with a maximum score of 26. Scores between 0 and 13 indicate poor knowledge, while scores between 14 and 26 suggest good knowledge. **Table 5** summarises the scores representing respondents' knowledge about T&CM services in Malaysia.

Table 5: Score summary of respondents' knowledge towards T&CM services in Malaysia

Score	Interpretation	Number of Respondents	Percentage (%)
0 – 13	Poor knowledge	122	13.1%
14 – 26	Good knowledge	808	86.9%

Table 5 reveals that a significant majority (86.9%) of respondents demonstrated good knowledge of T&CM services in Malaysia, scoring between 14 and 26. This suggests that MOH personnel have a generally strong awareness of the Traditional and Complementary Medicine Division (T&CMD) under the MOH, the regulation of the practice and practitioners of T&CM under the T&CM Act 2016, and the provision of T&CM services in selected MOH health facilities. However, a smaller proportion (13.1%) scored poorly, indicating a potential lack of understanding regarding these aspects of T&CM in Malaysia.

Knowledge Assessment Domain 1: General Knowledge About T&CM in Malaysia

Table 6 shows the results of respondents' knowledge of T&CM services in Malaysia by question.

Table 6: Knowledge score of respondents towards T&CM services in Malaysia according to the questions asked

	Correct Response		Incorrect Response	
	n	%	n	%
Adakah anda pernah dengar tentang PT&K?	894	96%	36	4%
Adakah anda tahu terdapat Bahagian Perubatan Tradisional dan Komplementari di dalam KKM?	829	89%	101	11%
Adakah anda tahu bahawa PT&K dikawal selia oleh Akta PT&K di Malaysia?	660	71%	270	29%
Adakah amalan PT&K berikut dikawal selia di Malaysia?				
Perubatan Tradisional Melayu	722	78%	208	22%
Perubatan Elektronik	470	51%	460	49%
Perubatan Tradisional Cina	738	79%	192	21%
Perubatan Tradisional India	647	70%	283	30%
Homeopati	721	78%	209	22%
Hipnoterapi	455	49%	475	51%
Kiropraktik	652	70%	278	30%
Osteopati	524	56%	406	44%
Bedah Batin	749	81%	181	19%
Pengubatan Islam	513	55%	417	45%
Adakah pengamal PT&K perlu berdaftar dengan Majlis PT&K?	669	72%	261	28%
Adakah produk PT&K dikawal di bawah Akta PT&K 2016?	471	51%	459	49%

96% of respondents indicated that they have heard about T&CM. This is expected as MOH personnel may have a greater awareness of the regulatory and service delivery aspects of T&CM by the MOH. Their awareness is also likely influenced by the widespread use of T&CM among Malaysians. Studies have shown that a significant portion of the population has used T&CM, with some studies reporting usage rates as high as 69.4% over a lifetime (Siti et al., 2009) and 41% being active users (Traditional and Complementary Medicine Division, 2017b). Additionally, cultural factors, personal experiences, and word-of-mouth recommendations can contribute to T&CM awareness.

89% of respondents know that the T&CMD is part of the MOH. The T&CMD was established in December 2004 under the Research and Technical Support Programme. In 2013, the T&CMD was restructured and placed under the Medical Programme. The restructuring aimed to enhance T&CM services in MOH health facilities and align T&CMD's direction with the overall Medical Program objectives. However, the history of T&CMD can be traced back to 1996 when it existed as a unit established under the Family Health Development Division, MOH (Traditional and Complementary Medicine Division, 2024).

71% of respondents are aware that the T&CM Act 2016 regulates T&CM practice and practitioners in Malaysia. Enacted in 2016, this Act established the T&CM Council to oversee T&CM services in the country. The T&CMD serves as the secretariat for the Council. Any person practising in the recognized practice areas who is not registered with the T&CM Council will be in violation of the Act and legal action may be taken against the individual. Currently, there are seven recognized practice areas regulated under the T&CM Act 2016 namely Traditional Malay Medicine (TMM), Traditional Chinese Medicine (TCM), Traditional Indian Medicine (TIM),

Islamic Medical Practice, Homeopathy, Chiropractic, and Osteopathy (Traditional and Complementary Medicine Division, 2017).

Respondents were questioned about T&CM practices regulated in Malaysia. The statement "Adakah amalan PT&K berikut dikawal selia di Malaysia?" was used followed by the list of T&CM practices at the end of the statement. Majority of respondents (an average of 70%) were able to provide correct responses across the seven recognized practice areas. It is interesting to note that among the recognized practice areas listed under the statement, "Perubatan Tradisional Cina" (79%) had the highest number of correct responses while "Pengubatan Islam" (55%) had the lowest. Most Malaysians may be aware that Traditional Chinese Medicine is regulated under the T&CM Act 2016 due to its widespread popularity and usage. The opposite may be observed for Islamic Medical Practice as it is religious-based practice that is exclusive to Muslim communities. Hence, the general population may not be aware that it is a recognized practice area regulated under the T&CM Act 2016. On the other hand, a good proportion of respondents (an average of 60%) were able to correctly identify “Perubatan Elektronik”, “Hipnoterapi” and “Bedah Batin” as practice areas that are not currently recognized under the T&CM Act 2016. “Bedah Batin” (81%) had the highest number of correct responses. “Hipnoterapi” (49%) had the lowest number of correct responses. The strong awareness that "Bedah Batin" is not a recognized practice area may be attributed to the public attention generated by prohibitions from various medical and religious organisations in Malaysia (Harian Metro, 2015).

72% of respondents correctly acknowledged the requirement for T&CM practitioners to be registered with the T&CM Council. This indicates a strong understanding of the regulatory framework for T&CM in Malaysia. According to the T&CM Act 2016, T&CM practitioners are authorised to practice in the recognized

practice areas. Any individual who practices T&CM without registration or in an unrecognized practice area is liable to legal penalties, including fines up to RM50,000 and imprisonment up to three years. These regulations are implemented to safeguard public health and maintain the quality standards of T&CM services (Traditional and Complementary Medicine Division, 2016).

Finally, respondents were asked if T&CM products in Malaysia are regulated by the T&CM Act 2016, with the statement "Adakah produk PT&K dikawal di bawah Akta PT&K 2016?". While over half of the respondents (51%) correctly identified that T&CM products are not regulated under the T&CM Act 2016, it's important to note that T&CM products in Malaysia are subject to specific regulations. Since 1992, T&CM products have been required to undergo safety and quality testing before being registered. Relevant laws such as the Sales of Drugs Act 1952, Poison Act 1952, Dangerous Drugs Act 1952, and Control of Drugs and Cosmetics Regulations 1984 regulate these products. The Drug Control Authority (DCA), through the National Pharmaceutical Regulatory Agency (NPRA), oversees the regulatory control of pharmaceutical products, including T&CM products. Additionally, Good Manufacturing Practices (GMP) are implemented for T&CM manufacturers to ensure product quality and safety (Traditional and Complementary Medicine Division, 2017a).

Knowledge Assessment Domain 2: Knowledge of T&CM Service Delivery in Selected MOH Health Facilities

Table 7 shows the results of respondents' knowledge of T&CM service delivery in selected MOH health facilities by question.

Table 7: Knowledge score of respondents towards T&CM services in Malaysia according to the questions asked

	Correct Response		Incorrect Response	
	n	%	n	%
Adakah anda tahu bahawa perkhidmatan PT&K dapat diakses di fasiliti kesihatan KKM terpilih di seluruh Malaysia?	602	65%	328	35%
Apakah perkhidmatan yang ditawarkan di fasiliti KKM terpilih?				
Perubatan Tradisional Melayu	670	72%	260	28%
Perubatan Elektronik	591	64%	339	36%
Perubatan Tradisional Cina	655	70%	275	30%
Perubatan Tradisional India	476	51%	454	49%
Homeopati	547	59%	383	41%
Hipnoterapi	648	70%	282	30%
Kiropraktik	536	58%	394	42%
Osteopati	657	71%	273	29%
Bedah Batin	866	93%	64	7%
Pengubatan Islam	661	71%	269	29%

65% of respondents correctly identified that T&CM services are accessible at selected MOH health facilities nationwide. As of now, T&CM units have been established in fifteen MOH hospitals across Malaysia and are also available at the primary healthcare level in selected MOH health clinics, as detailed in **Table 8**.

Table 8: List of MOH health facilities offering T&CM services

T&CM Services	MOH Health Facilities
Traditional Massage	Kepala Batas Hospital
	Putrajaya Hospital
	Sultan Ismail Hospital
	Sultanah Nur Zahirah Hospital
	Duchess of Kent Hospital
	Sultanah Bahiyah Hospital
	Port Dickson Hospital
	Sarawak General Hospital
	Raja Perempuan Zainab II Hospital
	Cheras Rehabilitation Hospital
	Sabah Women and Children Hospital
	Jasin Hospital
Acupuncture	Hospital Kepala Batas
	Hospital Putrajaya
	Hospital Sultan Ismail
	Hospital Sultanah Nur Zahirah
	Hospital Duchess of Kent
	Hospital Sultanah Bahiyah
	Hospital Port Dickson

Table 8: List of MOH health facilities offering T&CM services	
T&CM Services	**MOH Health Facilities**
	Sarawak General Hospital
	Hospital Selayang
	Hospital Raja Perempuan Zainab II
	Hospital Rehabilitasi Cheras
	Sabah Women and Children Hospital
	National Cancer Institute
	Hospital Jasin
Herbal Therapy	National Cancer Institute
	Sultan Ismail Hospital
	Kepala Batas Hospital
	Sabah Women and Children Hospital
Shirodhara and External Basti Therapy	Port Dickson Hospital
	Cheras Rehabilitation Hospital
Varmam Therapy	Sungai Buloh Hospital
Traditional Postnatal Care	Available at primary health care level only in selected MOH health clinics

The statement "Apakah perkhidmatan yang ditawarkan di fasiliti KKM terpilih?" asked respondents to identify the T&CM services offered at selected MOH health facilities. To correctly answer this question, one would need to know that seven modalities of T&CM are currently available in MOH health facilities for specific indications, as listed in **Table 9** (Traditional and Complementary Medicine Division, 2022). These seven modalities are categorised into three practice areas: Traditional Malay Medicine, Traditional Chinese Medicine, and Traditional Indian Medicine.

Table 9:	List of T&CM services offered in MOH health facilities	
No.	**T&CM Services**	**Practice Area**
i	Traditional Massage	Traditional Malay Medicine
ii	Traditional Postnatal Care	
iii	Acupuncture	Traditional Chinese Medicine
iv	Herbal Therapy	
v	Shirodhara	Traditional Indian Medicine
vi	External Basti Therapy	
vii	Varmam Therapy	

The majority of respondents, averaging 64%, correctly identified the three practice areas of T&CM services offered in MOH health facilities. Traditional Malay Medicine (72%) had the highest percentage of correct responses, likely due to the prominence of Traditional Massage as a widely offered service in selected MOH hospitals. Conversely, Traditional Indian Medicine (51%) had the lowest percentage of correct responses, suggesting a potential lack of awareness regarding services like Shirodhara and Varmam Therapy provided at selected MOH hospitals such as Cheras Rehabilitation Hospital, Sungai Buloh Hospital, and Port Dickson Hospital. The limited number of MOH hospitals providing Traditional Indian Medicine services may explain the lower level of public awareness. Furthermore, 93% of respondents accurately identified "Bedah Batin" as a service not offered in MOH health facilities. This accurate response aligns with the controversial nature of this practice and its incompatibility with MOH's standards and guidelines.

4. CONCLUSION

This quantitative study explored the attitudes and knowledge of MOH personnel towards T&CM services in Malaysia using self-administered questionnaires. 930 MOH personnel participated and contributed data. 97% of respondents (n=903) recorded good attitudes towards T&CM services in Malaysia by scoring between 29 – 56 across 14 attitude statements. Statistical analyses revealed that respondents with good attitudes towards T&CM services were more likely to have used T&CM services. On the other hand, 86.9% of respondents (n=808) recorded good knowledge towards T&CM services in Malaysia by scoring between 14 – 26 across 26 questions. The results indicate that MOH personnel generally have good attitudes and knowledge towards T&CM services in Malaysia.

5. IMPLICATION

The survey results indicate that T&CMD's ongoing efforts to raise public awareness and understanding of T&CM in Malaysia since its inception have yielded positive outcomes. T&CMD's three-pronged approach, targeting T&CM practitioners, health professionals, and consumers, has been instrumental in this regard. Key initiatives undertaken by T&CMD include:

T&CM Practitioner Education. T&CMD has conducted briefings on the T&CM Act 2016 to inform practitioners about their legal obligations and responsibilities. Continuous Professional Development activities are also undertaken to ensure T&CM practitioners stay abreast with the latest information and developments in the industry. Educational enforcement activities are ongoing to ensure compliance with MOH standards for safety and quality.

Health Professional Education. Continuous professional development programmes have been organised to enhance health professionals' understanding of T&CM's potential as a complement to modern medicine treatments, the T&CM services offered in MOH facilities, and the referral mechanisms for patients seeking T&CM care. These programmes aim to foster understanding and collaboration between T&CM and modern medicine practitioners.

Consumer Education. Various consumer education campaigns, such as roadshows and exhibitions, have been conducted to raise awareness about the T&CM Act 2016 and empower consumers to make informed decisions when seeking T&CM services.

While the survey results are encouraging, there is still room for improvement in certain areas. Future information dissemination efforts should focus on:

- Clearly communicating the recognized practice areas under the T&CM Act 2016;
- Emphasising the extent of regulation under the T&CM Act 2016, which is the licensing and registration of T&CM practitioners and not products; and
- Providing detailed information about the range of T&CM services offered in selected MOH hospitals and health clinics.

By addressing these areas, T&CMD can further enhance public knowledge and understanding of T&CM services in Malaysia while promoting the safe and effective use of these services.

6. LIMITATIONS

This study presents two primary limitations. Firstly, the cross-sectional design limits the ability to assess changes in employees' attitudes and knowledge over time. A longitudinal study, which involves repeated measurements from the same respondents, could provide valuable insights into the evolution of these constructs as MOH's T&CM initiatives progress.

Secondly, social desirability bias, where respondents may provide answers that they perceive as socially acceptable, could potentially influence the results. While online surveys can mitigate this bias to some extent (Tan et al., 2021), incorporating a social desirability scale in future studies could further enhance the accuracy of the data.

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