

ORIGINAL ARTICLE

PREFERENCES FOR TRADITIONAL & COMPLEMENTARY MEDICINE AMONG MALAYSIAN HOSPITALISED PATIENTS IN UKM MEDICAL CENTRE 2012

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ABSTRACT

The uprising needs of traditional & complementary medicine (T&CM) despite the availability of conventional medical (CVM) treatments has gained a serious concern to the authorities in hospital care delivery systems. It was about suffices the supply and demand for T&CM and its absence may interfere the quality of patient care. Malaysia was not exempted of this phenomenon. Moreover, its rich tropical biodiversity and multi-ethnicity medical systems promoted T&CM usage. This research was aimed to determine the overall T&CM preferences, the preferred future patient care services (FPCS) and its socio-demographic and warding characteristics. Using a self-administered standardised questionnaire, instrumented by cross sectional study, a total 132 warded patients in a UKM Medical Center (UKMMC) were interviewed. T&CM preferences were the composite of seven domains. The finding revealed that the T&CM preference was 64.4%, dominated by older age (66.2%), women (68.2%), low education (66.0%), employed (66.7%), high income (67.5%) and married (66.0%). Oncology (81.3%) and orthopaedic (75.7%) ward patients were more in preference compared to other wards. When asked about the FPCS preference, about 80.3% expected integrative medicine services to be provided, whereas the remaining were still exclusively preferred modern medicine (15.2%) and alternative medicine (4.5%) respectively. As conclusion, this study has affirmed that there is a great need towards T&CM among hospitalized patients who are accessible to modern CVM.

Keywords: Traditional & Complementary Medicine (T&CM), Complementary & Alternative Medicine (CAM), Preferences, Prevalence, Future Patient Care Services (FPCS), UKMMC

INTRODUCTION

Application of traditional and complementary medicine (T&CM) into daily life was getting popular nowadays, even among peoples who practise modern or conventional medicine (CVM). It was not only accessible, but affordable compared to CVM which was known costly. When alternative medicine was incorporated with biomedical approaches, the term 'complementary' was used. Through evolution it was known as complementary and alternative medicine (CAM). The merging concept of self-management between CAM treatments together with CVM was termed as integrative medicine¹.

In Malaysia, the term T&CM was widely used to replace CAM. It was well documented in the Malaysia's T&CM National Policy. It comprises of practises such as traditional Malay medicine, traditional Chinese medicine, traditional Indian medicine, homeopathy, Islamic medical practice, biological based practice, manipulative-based practices, energy medicine, and mind body soul therapy. However, all dental and medical that were practiced by the related registered practitioners were excluded².

T&CM was well practiced in many developed countries, particularly USA. Patients presented with symptoms of illness were usually given choices whether to get medical care conducted by CVM practitioner, by T&CM which comprises of self managed treatment, medication prescribed by a practitioner or even self-

medication via over-the-counter (OTC). However, the same levels of optional treatments have yet to be available in Malaysia³.

Although concept of T&CM in the form of integrative medicine was already piloted in some hospitals in Malaysia since 2007, its progress was relatively slow compared to other countries.² There were not many researches and studies were done on T&CM despite the reasons Malaysia has potential T&CM sources which was abundance in nature, rich in ancestral knowledge and possessed a unique mix cultural and multi-ethnically tradition medication systems⁴.

Studies on preference, however, were not exclusively done. Majority of the studies which used the keyword "preference" were based on the frequency of certain therapy used, and among a specific target population only (i.e. cancer or diabetic patients).^{1,4,5-12} Unlike our study, which emphasized a whole perspective of T&CM preference regardless of T&CM type and its target group. Did patients prefer to use T&CM despite various other treatments available for their current disease? Did patients strongly perceive that T&CM benefits equivalent to CVM? How about their future preference and consideration with regard to T&CM? These were some of the area we would like to explore.

This study aimed to access the T&CM needs and preferences, particularly among hospitalised patients. This study will examine the current T&

CM preferences as well as preference towards future patient care services (FPCS).

MATERIALS AND METHODS

A cross sectional study was conducted between October 2012 to November 2012. The sampling frame involved were all in-patients that were hospitalised in selected UKMMC wards, namely Orthopaedic, Medical, Surgery, Obstetric and Oncology. A total of 132 in-patients were identified using Fleiss JL formula. The proportion of TCM compliance among employed was 35.1% and unemployed was 64.9%⁴, power of 80 %, confidence interval of 95 % and $\alpha = 0.05$, with inclusion of the extra 20% drop out and rejection rate. Data were tabulated using STATCALC and PS (Power and Sample Size Calculation) software.

Purposive sampling was utilised to ease and promote the success of this study because the literacy level and willingness for patients to participate were rather low as experienced during pre-testing process. These study patients were approached personally by the researcher, and invited to complete the questionnaires, face-to-face. This procedure was considered to be more effective, eradicated the unneeded selection biases, and 100% response rate of the invited respondents.

The inclusion criteria were those with age 18 years old and above, local, registered at the respective five wards, and agree to take part in the study and not terminally ill. Meanwhile, the exclusion criteria covered the respondents who were foreigners (non-Malaysian), inability to communicate in spoken or written English and Malaysian language, listening disability or active psychiatric diseases.

A four pages guided survey instrument with referral to the previous studies was used and a direct face to face approach was instituted. The guided questionnaire was given to the patients

during face-to-face interview (one person at a time) and their consent was obtained via a patient written permission form during the visit. The content and languages were thoroughly reviewed by the respective panel and was piloted among 40 respondents in the similar setting.

The definition for T&CM preference was a composite of seven items as shown in Table 1. It was based on Yes or No response when the patients are asked. Those who answered “Yes” for at least 50% of the given total seven items were said to be in the ‘Prefer T&CM’. Whilst, for FPCS, it was excreted from two (item no iii and iv) of the seven items (Table I) From here, it then furthered classified into integrative/T&CM, modern and alternative medicine.

Descriptive and analytical statistic data analyses were done using ‘Statistical Package for Social Sciences’ (SPSS) Version 19.0.

RESULTS

Socio-demographic and Warding Characteristics of Respondents

A total of 132 respondents have completed this research. The mean age for our study population was 47 years (SD \pm 16.32) and dominated by the older patient, which was about 1.4 times compared to the younger group (range 18-83 years old) (Table 2). Majority of the respondents were Malay, Muslim and married. There was a big proportion which indicated the respondents were from lower education background (almost three times than patients who have higher education) and the gap between employment status among respondents was not wide, with only six respondents more for the unemployed group. Majority of the subjects studied were in a lower total household income. Most patients originated from Orthopaedic wards (28.0%) and the least resided in Obstetric wards (10.6%).

Table 1 T&CM Preference and Its Associated Items

Items
i Do you believe T&CM can help current disease?
ii Do you perceive T&CM more effective than modern medicine for current disease?
iii Would you consider using both T&CM & modern medicine for your current disease?
iv Will you continue or consider using T&CM after discharge from hospital?
v Do you want T&CM facilities to be available in hospital?
vi Will you recommend other people to use T&CM?
vii Did you practice T&CM for current disease?

T&CM Preference According to Respondents Characteristics

Of 132 patients asked, a total 85 (64.4%) of patients said to prefer T&CM. Although there

were not statically significant between groups, some socio-demographic characteristics and type of ward did shown an obvious rate difference (Table 2). Most noticeable preferences were among the older age group (66.2%), followed by

female (68.2%), lower education (66.0%), employed (66.7%), higher total monthly household income (67.5%), and married (66.0%) patients. However, there were not any obvious preferences difference between the religion and ethnic groups. With regards to the type of wards,

oncology resides demonstrated the highest preferences (81.3%), followed by orthopaedic (75.7%), obstetric (64.3%) and surgery (56.3%), meanwhile medical ward patients displayed the least liking towards T&CM (51.6%) compared to the rest.

Table 2 The Socio-demographic and Warding Characteristic of Respondents

	Total N(%)	Prefer T&CM N(%)	Not prefer T&CM N(%)	x2 (d.f)	p value
1.Age Group				0.273(1)	0.601
Younger (18-39)	55(41.7)	34(61.8)	21(38.2)		
Older (40 & above)	77(58.3)	51(66.2)	26(33.8)		
2.Gender				0.826(1)	0.363
Male	66(50.0)	40(60.6)	26(39.4)		
Female	66(50.0)	45(68.2)	21(31.8)		
3.Education background				0.401(1)	0.527
Lower	97(73.5)	64(66.0)	33(34.0)		
Higher	35(26.5)	21(60.0)	14(40.0)		
4.Employment status				0.272(1)	0.602
Unemployed	69(52.3)	43(62.3)	26(37.7)		
Employed	63(47.7)	42(66.7)	21(33.3)		
5.Total Monthly Household Income group (N=132)				0.241(1)	0.623
Lower (<RM 5000)	92(69.7)	58(63.0)	34(37.0)		
Higher (≥RM 5000)	40(30.3)	27(67.5)	13(32.5)		
6.Marital status				0.464(1)	0.496
Married	100(75.8)	66(66.0)	34(34.0)		
Unmarried	32(24.2)	19(59.4)	13(40.6)		
7.Religion				0.014(1)	0.906
Muslim	106(80.3)	68(64.2)	38(35.8)		
Non Muslim	28(19.7)	17(65.4)	9(34.6)		
8.Ethnic groups				0(1)	0.989
Malay	104(78.8))	67(64.4)	37(35.6)		
Non Malay	28(21.2)	18(64.3)	10(35.7)		
9. Type of ward				7.350(4)	0.119
Oncology	16(12.2)	13(81.3)	3(18.8)		
Orthopaedic	37(28.0)	28(75.7)	9(24.3)		
Obstetric	14(10.6)	9(64.3)	5(35.7)		
Surgery	32(24.2)	18(56.3)	14(43.8)		
Medical	33(25.0)	17(51.5)	16(48.5)		

T&CM Preference According to Items

Each item was responded differently by respondents. As shown in Table 3, five out of seven items were responded favourably, whereas

the remaining two were not. Those unfavourable items were “perception that T&CM was less effective than modern medicine” (78.0%) and “reluctant to recommend others to use T&CM” (65.9%).

Table 3 T&CM Preferences by Items

	Total	%
1. Believe T&CM can help current disease		
Yes	90	68.2
No	42	31.8
2. Perceive T&CM more effective than modern medicine for current disease		
Yes	29	22.0
No	103	78.0
3. Consider to use both T&CM & modern medicine for current disease*		
Yes	106	80.3
No	26	19.7
4. Continue/Consider to use T&CM after discharge from hospital*		
Yes	104	78.8
No	28	21.2
5. Wish for availability of T&CM facilities in hospital		
Yes	107	81.1
No	25	18.9
6. Recommend others to use T&CM		
Yes	45	34.1
No	87	65.9
7. Used T&CM for current disease		
Yes	67	50.8
No	65	49.2

* These two questions are used to derive the variable preferred FPCS

About 68.2% of respondents believed that T&CM could help to ease the current disease, and 80.3% would consider using both even after discharged from hospital (78.8%). In terms of T&CM services, majority (81.1%) preferred that the T&CM facility and service be provided in the hospital. This was proven when almost half (50.8%) of respondents were using T&CM for the current illness prior to admission to hospital.

The Preferred Future Patient Care Services (FPCS)

When asked about the future services, our study unveiled that majority of the patients preferred both services, which is T&CM/Integrative medicine (80.3%) compared to only CVM (15.2%) and only alternative medicine (4.5%) (Table 4). This denoted that FPCS for T&CM/Integrative medicine was almost five times more than modern medicine (CVM) and about 18 times higher when compared to alternative medicine.

Table 4 Preferred Future Patient Care Services (N=132)

	N	%
Integrative Medicine/T&CM	106	80.3
Modern Medicine	20	15.2
Alternative Medicine	6	4.5

DISCUSSIONS

Prevalence of T&CM Preferences

The prevalence of T&CM preferences was 64.4% which was almost comparable to other local studies with prevalence ranging between 49-68%

^{4,10,14}. Similar picture was also seen in eastern countries like Japan and Taiwan with prevalence of 76% and 60% respectively, indicating that the preference obtained in this study was relatively good^{15,16}. This was probably due to nation's historical background and strategic geography that was long rooted from the Far East nations¹⁴. Moreover, the rich tropical biodiversity of Malaysia continued to provide abundance and reliable source of natural commodities enabled the residents, which composed of multi ethnic groups, each with its own distinct and unique indigenous traditional medications system and also in modern medical practices.

Elsewhere in other countries, the prevalence was variable and it depended on the illnesses suffered. Its reference rate was quite diverse, particularly in western countries with the range from 9% - 69%^{17,18}. The preference was noted to be higher for certain illnesses, notably joint diseases (86%)¹⁹ and cancer where it could be reached almost 80%.^{11,12}. In Japan for instance, majority (89.1%) of the cancer patients used dietary supplements as their alternative medication beside CVM²⁰.

While detailing the findings, many patients were quite sceptical about superiority of T&CM and preferred not to recommend it to others. However, its perceived benefits were still favourably demanded. This was obvious where about 80.0% of patients have a feeling that T&CM should be available alongside with CVM or even at time of discharged. Many patients (68.2%) believed that T&CM could help to ease the current disease, and 80.3% would consider using both even after discharged from hospital (78.8%). In terms of T&CM services, majority (81.1%)

preferred that the T&CM facility and services be provided in the hospital. This was proven when almost half (50.8%) of respondents were actually using T&CM for the current illness prior to admission to hospital.

T&CM Preferences from Socio-demographic Perspective

Despite there were no statistically significant in term of socio-demographic characteristics, the rate of preference was considerably differed between them. T&CM preferences were quite obvious among the older patients, women, lower education, those with employment, higher income and those who were already married. We believed the difference could be more justifiable if the sample size were larger and involve several hospitals. This findings were almost concordance to the previous studies which stated that older age, female gender, poor physical health (hospitalized patients), stable financial resources (high household income), and knowledge on available CAM showed higher T&CM usages²¹⁻²⁵.

With regards to age, other research revealed that over 90% of elderly people have used T&CM in their lifetime and it was probably related to paranormal belief on its benefits and effects^{26,27}. It was also perceived as a holistic approach to remedy the illness²⁸.

Our study has also found that women were the main users of T&CM. This is true as women were more health conscious than male subjects. They were also the maker for most of the health decisions and were more willing to sacrifice for health matters⁶. Higher probability for T&CM preferences was correlated so much on cultural belief that Asian women should looked thinner, whereas male should be in opposite to indicate prosperity and wealth²⁹⁻³². Psychologically, women tend to report a greater tendency to leave CVM due to dissatisfaction towards the conventional physician care, which possibly contributed to the higher preferences to T&CM than men³³.

On the educational level, our study indicated that those who with low educational level showed stronger preferences than higher educated party which was contrasted from other studies^{24,34,35}. Studies have demonstrated that those with lower education level elicited a stronger paranormal belief and thus, allowed the acceptance of T&CM concept to take root into daily living more easily^{24,26}. This resulted in a higher compliance to T&CM.

T&CM practice was no longer rooted in the poor, as revealed by this study. Stable income population which was related to employment tended to prefer T&CM more compared to the poor. This was corresponded with many studies which indicated that high income was linked with

T&CM practise^{21-23,27,35,36}. Probably, those who were employed often lead to higher income and were attributed with more resources to utilize³⁶. Such favourable condition raises affordability and a bigger chance for them to try on T&CM which was not usually provided by government hospitals and to value its qualities for their own health conditions³⁷. Eventually, T&CM gained a place in their heart.

Meanwhile, the relationship between marriage and T&CM preferences was unknown as our intense literature search did not return any result on it, but the high rate of preference among the married couple has strengthened the previous features. Marriage which ended up by having both husband and wife employed, strengthened the total monthly household income and resulted in a better opportunity to integrate T&CM practices into daily living³⁶.

Married respondents have readily family supports to console and to gain more knowledge about T&CM^{3,26}. These conveniences led them to make better medical decision.

With regards to the religion and ethnicity, the rates however, were almost the same, indicating that the spirit of one nation was already established regardless of their faith and race. This finding was very pleasing as it would deny the fact that T&CM was culturally and traditionally rooted, as mentioned by others. In fact, many studies also did not found any connection between these variables with T&CM preferences^{37,38}. From feedback of the interviews, we noticed that the interest towards T&CM was not only confined to the people, but also towards its types, disregard of the origin of those alternative medications and its cultural sentiments, as long as those T&CM were found and believed to be effective³⁹. For Malaysia, it was a plus as it would facilitate Malaysian to appreciate towards multi traditional medications.

T&CM Preferences and Warding Perspective

Unlike other studies on T&CM, whether done in Malaysia or other countries which were focused on certain diseases and ethnicity^{4,8-12,40}, our study has emphasized on the responses of hospitalised patients from a wide range of diseases which was reflected from five different types of wards chosen. Although there was no statistically different between type of ward and T&CM preferences, however, we did get a hold onto the data which indicated that patients in oncology ward which basically the cancer sufferers, showed the highest preferences among all (81.3%) and followed closely by patients in orthopaedic ward (75.7%). The lowest was the patients in medical ward (51.5%). This finding was similar to the finding of other studies where

cancer patients were tended to prefer T&CM compared to others group of patients^{1,8,9,11,12,34}.

Preferred Future Patient Care Services (FPCS)

The need for concept of integrative medicine services were well reflected from this study, where about 80.3% of patients opted to have both (CVM and alternative medicine) in the future. Other studies have also recorded almost similar findings (84-93%)^{1,41,42}. Furthermore, our findings recorded more than 80% of respondents shall consider to use T&CM together with CVM, over 78% mentioned would continue to use T&CM or would consider to use it (for those who have never used it before) and 107 of them (81.1%) wish T&CM facilities to be available in hospital. In a recent study done in Malaysia, about 88.7% of patients declared their interest in the providence some form of T&CM in hospital⁷. Our findings coincide to a latest study, which displayed patients' urging needs and preferences for general practitioners who informed and communicated about CAM (92%), referred to CAM (70%) and capable to provide consultation on it or collaborated with CAM practitioners (42%)¹⁹.

Interest towards integrative medicine was well known, not only by patients but also the health authorities. World Health Organization (WHO) for example, has reported that almost 80% of the world's health care system have been incorporated with integrative medicine, and suggested that it should be continually grown and become the phenomena in the future⁴³. In United State alone, there were already 50 hospitals which applied integrative medicine approach as well as the related programmes⁴⁴. In addition, its influence was also observed in the education system for nursing and medical curriculum, as recommended by National Institutes of Health from this country⁴⁵. Similar occurrence happened to Malaysia, where a division of complementary and traditional medicine was established to look into this matter together with the seeding of integrative medicine concept into several hospitals².

The limitations of our study are it was conducted in a single institution, comprises of a generally defined population of inpatients from the five chosen wards. A future study focus with a fixed numbers of randomized to minimize selection biases. Throughout our study, we have encountered some other setbacks in the form of lacking expert input on T&CM. Respondents may be under reporting (*Hawthorne* effect) as they might be fear to be real honest and share everything related to the questionnaire while dealing with the interviewer who dressed in white, and have to recall (recall bias) certain event in the past during the guided interview.

CONCLUSIONS

The present study clearly demonstrated that there was an appreciable prevalence of T&CM preferences among hospitalised patients. Preference rate towards T&CM was reasonably higher among the older patient, women, low education, employed, high income and the married couple. Although high, the faith and ethnicity did not show any difference. Patients from oncology and orthopaedic wards were highly preferred compared to other wards. The integrative medicine care service was dominated in preference compared to the solitary services.

COMPETING INTERESTS

None declared. The authors declare they have no conflict of interests. None of the authors of this paper has a financial or personal relationship with other people or organisations that could inappropriately influence or bias the content of the paper.

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