

## Perceptions, attitudes, knowledge and practice of traditional medicine among Bruneians – a pilot study

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### Abstract

The use of Traditional Medicine (TM) has become very popular especially in the Asian regions however published comprehensive data on use of TM not available for Brunei. The aims of the study were: to investigate the extent of TM use in Brunei; to study Bruneians' perceptions of, attitudes to, and use of TM; to compare use of TM with that of prescription medicines; and to support future studies. The questionnaire was designed and was pre-tested. The study sample was selected using the snow balling method. Two hundred and fifty self-administered questionnaires were distributed to patients at Raja Isteri Pengiran Anak Saleha (RIPAS) Hospital, university staff, friends and families. The SPSS package was used for data management and analysis. The response rate was 60%. The proportion of Bruneians who had used some form of TM in their life was 68.5%. The use of Traditional Chinese Medicine (TCM) was significantly higher among the Chinese ethnic group compared to other ethnicities, 88.2%  $p < 0.05$ . The proportions among Malays were 40% for local herbs and 38.8% for TCM. The use of TM was highest in the 31-45 years age group ( $p < 0.05$ ). There was no significant difference in TM use by gender. Seventy percent of the respondents indicated that TM was readily available. Fourteen percent of users of prescribed medicines (common cold remedies, antipyretics and antibiotics) reported using TM as well. More than 70% of respondents did not report their use of TM to their doctors. Seventy seven percent of the respondents claimed that there were no adverse effects accompanying use of TM; 30% reported minor side effects such as weight loss, weight gain, abdominal pain, nausea and vomiting. We concluded that TM is widely used among Bruneians due to its availability and belief in its efficacy. More than 50% of users did not know the effectiveness and safety of TM. The perception was that TM was safe because it had been used for generations and because it is from natural sources.

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### Introduction

The World Health Organisation<sup>1</sup> (WHO) defines traditional medicine as including diverse health practices, approaches, knowledge and beliefs incorporating plant, animal, and/or mineral based medicines, spiritual therapies, manual techniques and exercises applied singularly or in combination to maintain well-being, as well as to treat, diagnose or prevent illness. Traditional Medicine (TM) is a comprehensive term used to refer both to Traditional

Medicine systems such as Traditional Chinese Medicine, Indian Ayurveda and Arabic Unani medicine, and to various forms of indigenous medicine. The use of traditional medicine (including local and Indonesian herbal remedies (Jamu), Traditional Chinese Medicines, Indian Traditional Medicines (Ayurveda), and others) has become very popular especially in the Asian regions.<sup>2,3</sup> Use of TM in Brunei is also likely to be high but data is not available. Currently TM is not regulated and can be freely purchased from outlets ranging from health and local food stores to internet sites. This has led to concerns about their safety and quality. There is also the potential for interactions with conventional drugs.<sup>4</sup>

This preliminary questionnaire study investigated the extent, perceptions of, attitudes to and practices of traditional medicine usage in Brunei Darussalam. This study had several aims: (i) to investigate the extent of traditional medi-

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cine usage in Brunei; (ii) to study Bruneian's perception, attitude and practices on the use of traditional medicine; (iii) to quantify the usage of traditional medicine against prescriptive medicines; and (iv) to support future study in this area.

## Methods

The questionnaire was designed by the researchers and was available in English and in Malay. Questionnaire items required a yes/no/not sure response. It consists of 28 item-structured questions comprising demographic data (gender, age, races, identity card (i/c) number, occupation), history of use of traditional medicine, sources and expenditure of traditional medicines per month, and concurrent use with prescribed medicines and safety of TM. Bruneians were defined as local respondents who possess a yellow i/c (98%) and permanent residents with a red i/c (2%). As a result of the pre-test, modifications were made to produce a final version. The study was conducted over a period of 3 months, i.e. from December 2006 until February 2007. The snow balling method was used. Two hundred and fifty survey forms were distributed to patients at a tertiary referral hospital (RIPAS Hospital) located in Bandar Seri Begawan, University staff members and students, friends and families. Participants received an information sheet about the aims of the study.

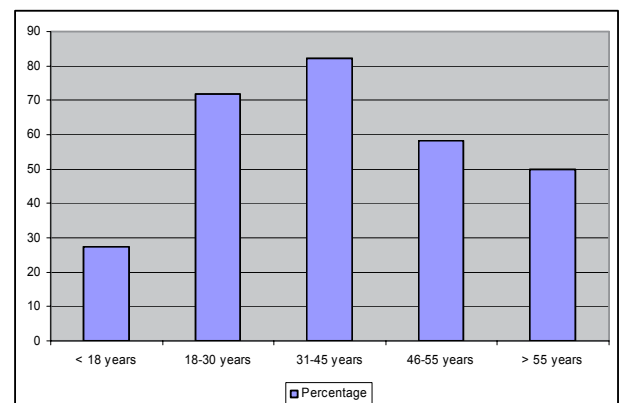
The questionnaire included a definition of traditional medicine used in ASEAN as 'any medicinal product for human use consisting of active ingredients derived from natural sources (plants, animals and/or minerals) used in the system of traditional practice'. This definition covered botanical and herbal medicines used traditionally for therapeutic purposes over an undefined period of time. It also covered any remedies prepared using traditional recipes or purchased as commercialised products from dispensaries, supermarkets or others. Specific enquiries were made into the types of the traditional medicines used, duration of use, frequency of use, period and reasons of use. Opinions about traditional medicine were also asked from the respondents. Questions were also included about minor adverse effects such as weight loss, weight gain, abdominal pain, nausea

and vomiting. In order to compare the use of traditional medicine with prescription medicines, participants were asked the names of prescribed medications taken together with the traditional medicine.

The data were coded and analyzed using the SPSS (version 15.0 software). Univariate and bivariate analyses were carried out using a significance level of  $\alpha=0.05$ .

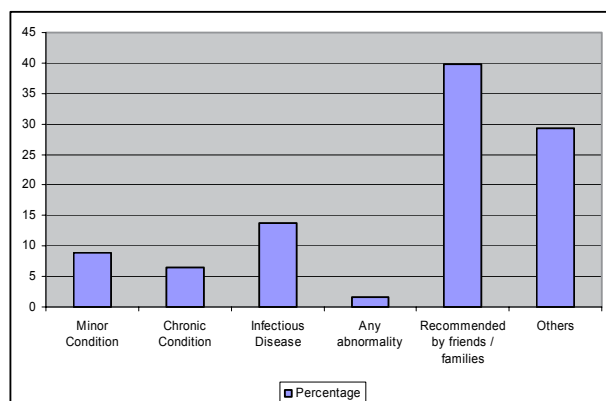
## Results

Overall, the response rate was 60%. The data showed that 68.5% of Bruneians had used some form of traditional medicine in their life. By ethnicity, 88.2% of the Chinese had used Traditional Chinese Medicine (TCM); 40% of the Malay had used local herbs and 38.8% had used TCM. Other ethnic groups (Dusun, Iban, Murut and Kedayan) although selected in the sampling were too few in number for a meaningful analysis. Figure 1 shows that use of traditional medicines was highest among the 31-45 years age group (82%,  $p < 0.05$ ). The ratio of male to female users was 1:1. The majority, 90%, of the users were either working with the government or were students.



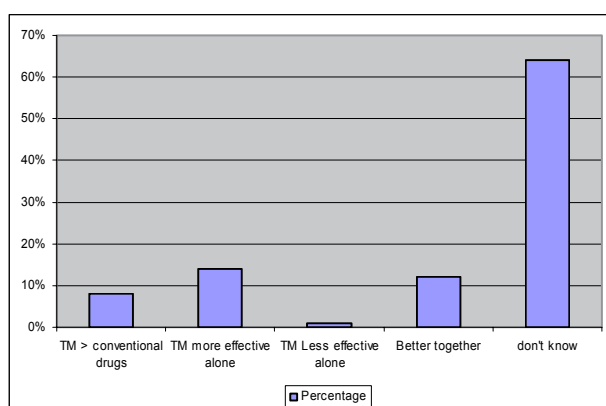
**Figure 1.** Self reported TM use by respondents by age group.

A majority of the respondents stated that they used multiple types of traditional medicine. Figure 2 shows reasons for using TM. Most respondents agreed that they used TM as recommended by friends and families. Other reasons reported were minor conditions, chronic conditions, infectious diseases, and any abnormality.



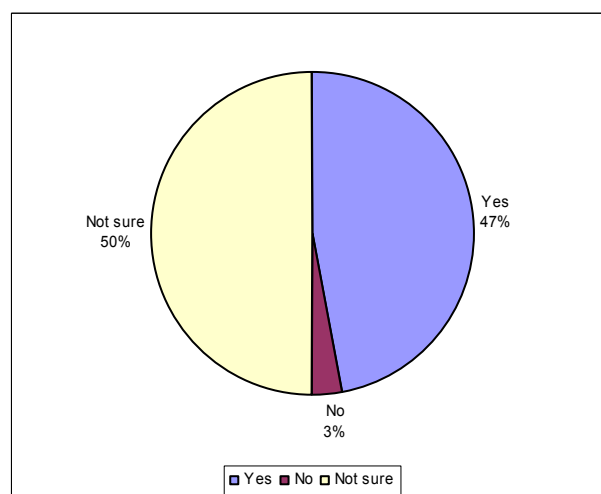
**Figure 2.** The reasons of taking traditional medicines among Bruneians.

It was found that 14% of those using prescribed medicine also used TM. The types of prescribed medicines used with TM were common cold remedies, antipyretics, and antibiotics. More than 70% of respondents mentioned that they would not inform their doctors about use of TM. Regarding adverse effects, 77% reported no adverse effects with TM while 23% reported that TM use was associated with minor side effects such as weight loss, weight gain, abdominal pain, nausea and vomiting. Figure 3 shows that more than 60% of respondents were unsure of the efficacy of TM when compared to the conventional medicines.



**Figure 3.** Opinion regarding the effectiveness of traditional medicine versus conventional medicines.

Figure 4 shows that most respondents were still unsure of the safety of TM. Respondents who were sure that TM was safe based their opinion on 3 reasons: lack of adverse effects, natural origin of TM, and cultural beliefs.



**Figure 4.** Opinion on the safety of traditional medicines.

Seventy percent of the respondents indicated that TM was readily available from Chinese dispensaries, local supermarkets, family and friends.

## Discussions and conclusions

This study showed that TM use is common among the Bruneian community with nearly 70% reported ever using traditional medicine in their lifetime. This figure is comparable to other studies done in other communities within the Asian countries. TM is widely practiced among Bruneian Chinese communities due to the availability and beliefs that family and friends have used them before. Another local study of the prevalence and predictive factors for complementary and alternative medicines (CAM) use among patients and relatives at RIPAS Hospital ( $n=568$ ) has documented similar findings where Chinese communities are the highest users of CAM with the highest prevalence of CAM user being in the 30-39 year age group. Besides TM, that study included health supplements such as vitamins and minerals.<sup>5</sup>

Fourteen percent of users of TM reported also using prescription medicines concurrently. This could result into adverse side effects due to interaction between conven-

tional medicine and herbal products. Most of the conventional medications reported were common cold remedies, antipyretics and antibiotics which are used for minor ailments. Many respondents could not remember the names of the prescription medicines that they took. This is an alarming observation because it could indicate that they are not well informed about the interactions between conventional medicines and TM or that they perceive that the interaction is safe. More than 50% of the users did not know how effective and safe TM products were.

In conclusion, the data from this study will benefit a larger ongoing study. We will also need to extend this study to rural areas and the elderly. In all these studies, clarification to the respondents of what is meant by traditional medicine will be essential.

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