Author's response to reviews

Title: Prayer-for-health and complementary alternative medicine use among Malaysian breast cancer patients during chemotherapy

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Author's response to reviews: see over
Response to reviewer comments
(Manuscript Number 1575895514130171)

Comment 1: The study itself and analysis is well conducted. The changes that have been made has addressed my previous comments. My only remaining concern is that structure of the manuscript itself, particularly the introduction and discussion, could use some revision. In its current state, it is somewhat difficult to follow and some sections could be either shortened or revised.

Response: Authors are grateful to the reviewer for his positive and encouraging comments. We have revised the structure of the manuscript, re-written parts of the introduction and discussion, and added a paragraph of “Implication for practices”. We hope our revision has improved the paper to a level of your satisfaction.

<table>
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<th>Previous Introduction</th>
<th>Revised Introduction</th>
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| Traditional medicine (TM) includes diverse health practices, approaches, and knowledge and beliefs that incorporate plant-, animal- and/or mineral-based medicines, spiritual therapies, manual techniques and exercises applied singularly or in combination to maintain well-being, and to treat, diagnose or prevent illness [1]. Complementary and alternative medicine (CAM) refers to a broad set of healthcare practices that are not part of a country’s own medical tradition, and that are not integrated into the dominant healthcare system [1]. The term CAM is used inter-changeably with the term TM. In Malaysia, the term traditional and complementary medicine (T&CAM) is used to denote health-related practices that are not provided by registered conventional medical practitioners to prevent, treat and/or manage illness, and/or preserve the mental and physical well-being of individuals [2]. CAM use has become increasingly popular [3], particularly among cancer patients [4] [5]. The average prevalence of CAM use among cancer patients in Western countries is 40% [6]. The prevalence of CAM use among cancer patients in Asia is 55.0% [7] and 56.0% [8] in Singapore, 60.9% [9] in Thailand, 36.0% [10] and 71.5% [11] in Turkey, 97.0% [12] in China, 57.4% [13] in Korea, 57.4% [14] in India, 59.0% [15] in Brunei Darussalam. The prevalence of CAM use by cancer patients varies by population, study design and by different study definitions of CAM [16]. In Malaysia, the term traditional and complementary alternative medicine (TM&CAM) is used to denote health-related practices that are not provided by registered conventional medical practitioners to prevent, treat and/or manage illness, and/or preserve the mental and physical well-being of individuals [17]. In general, the term TM&CAM is used inter-changeably with the term CAM. Siti et al. reported that the prevalence of TM&CAM ever used in a lifetime among Malaysians was 69.4% (67.6–71.2%) and in the last 12-month period was 55.6% (53.8–57.4%) [18]. The prevalence of CAM use by breast cancer patients ranges from 51.0 to 88.3% [19, 20, 21]. The CAM practised in Malaysia reflects the diverse population of Malay, Chinese, Indian and indigenous cultures. Ethnic Malays represent the majority of the population (67.4%), followed by Chinese (24.6%), Indian (7.3%) and other local (0.7%) ethnic populations. Approximately 61.3% of the population practices Islam, 19.8% Buddhism, 9.2% Christianity, 6.3% Hinduism, and 2.6% practice Confucianism and other traditional Chinese religions [22]. The religion practiced by 1.0% of the population is unknown, 0.7% practice no religion and 0.4% practice an “other” religion. Traditional Malay/indigenous medical practices include healing techniques using natural resources, wafak (written...
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In addition to TM, other commonly used CAM can be broadly categorised into mind-body practices (MBPs) and natural products (NPs) [24]. The NPs include all supplements ingested by participants. MBPs refer to all non-pharmacological modalities and include a large and diverse group of procedures or techniques administered, or taught, by a trained practitioner. In Malaysia, prayer for health (PFH) is included as an MBP because it is often used as a CAM therapy to aid in healing the body’s inner strength and reduce stress [26,27,19,20,18]. However, inclusion of PFH as a CAM therapy potentially inflates the number of reported CAM users [28,29]. Therefore, PFH was examined separately from other MBPs to effectively address CAM use among the diverse populations in Malaysia. The objective of this study was to assess PFH and CAM use among breast cancer patients undergoing chemotherapy. Specifically, we investigated the characteristics associated with CAM use, patterns of CAM use, and users’ perceptions of the usefulness of, and reasons to use, CAM.
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Response to reviewer’s report version 2: Trine Stub

Comment 1: Abstract: Conclusion: Please add: many patients perceived MBP to be beneficial for improving well-being during chemotherapy.

Response: Added in the conclusion (please refer to the underlined sentence).

<table>
<thead>
<tr>
<th>Conclusion</th>
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<tbody>
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<td>CAM use was prevalent among breast cancer patients. Excluding PFH from the definition of CAM reduced the prevalence of overall CAM use. Overall, CAM use was associated with higher education levels and household incomes, advanced cancer and lower chemotherapy schedule compliance. Many patients perceived MBP to be beneficial for improving overall well-being during chemotherapy. These findings, while preliminary, clearly indicate the differences in CAM use when PFH is included in, and excluded from, the definition of CAM.</td>
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</table>

Comment 2: Introduction: Please correct T&CAM and T&CM to TM&CAM throughout the manuscript.

Response: The term has been corrected (please refer to manuscript page 5).

Comment 3: Method: Please remove power calculation from Population and sampling to Statistical methods.

Response: It is true that power calculation should be added under “statistical methods, but in this study power calculation was used to calculate the sample size for the study, therefore it was under the subheading of population and sampling. Under the subheading of statistical methods, we described how the data were summarized and analyzed. (E.g. types of statistical analyses used to answer each question and to determine statistical significance).

<table>
<thead>
<tr>
<th>Population and sampling</th>
<th>Statistical methods</th>
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<td>The average annual population of new breast cancer patients in both chemotherapy day-care centres is 605 patients per year. Hence, for an accuracy level of 0.95 with a margin of error ± 2.0% and an expected prevalence of CAM use of 50%, the estimated sample size was 512 patients. An additional 10% of the calculated sample size was added to anticipate loss as a result of non-response and missing values. The final sample size was 563 participants.</td>
<td>The data were analysed using the Statistical Package for the Social Sciences (SPSS Ver. 18; IBM Corporation, Armonk, NY, USA). The dataset was examined to detect and correct inaccurate entries. Participants were classified as CAM users if they had used at least one type of CAM during the course of chemotherapy. PFH was examined separately from the CAM to better characterise the pattern of CAM and PFH used during chemotherapy. Descriptive statistics.</td>
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frequencies and percentages were used to summarise the data. Associations that were significant in the univariate analysis were included in a multivariate logistic regression model to examine the associated characteristics that contributed to CAM use. A p-value <0.05 was considered statistically significant.

Comment 4: Discussion: This section needs to be improved. Please start the discussion with a few sentences to sum up the study findings.

Response: We revised the discussion as suggested. It was started with a few sentences to sum up the study findings (highlighted in “Discussion”).

Comment 5: The paragraph starting with: “The findings from other studies indicating that the potential risk” should be disposed, due to the fact that this present study does not investigate risk associated with CAM during cancer treatment.

Response: Deleted the paragraph related to risk associated with CAM as mentioned above.

Comment 6: The paragraph staring with: “It is logical that most of the patients performed MBP to improve emotional and physical well-being”, should be removed and added to the abstract (conclusion).

Response: As suggested, it was removed and added to the abstract.

Comment 7: The sentence starting with: “NPs are often presented to be safer than conventional medicine approaches, but this is not necessarily true”, and ending with: “and to discern between complementary and alternative therapies” should be removed to a new paragraph named: Implication for practice. The paragraph should be added before the Conclusion in the manuscript.

Response: Added a new subheading “Implication for practice”

**Implication for practice**

NPs are often presented to be safer than conventional medicine approaches, but this is not necessarily correct. It is vital for nurses to guide patients in distinguishing between quackery and evidenced-based NPs, and to discern between complementary and alternative therapies. The findings that patients reported using NPs and TM to cure their cancer should be interpreted with caution. The results of a study performed by Al-Naggar et al. [26] indicate that 16.4% of cancer patients in Malaysia stop standard treatment while using CAM. This finding has serious implications because treatment choices can affect patient outcome.
Patients should receive information about misconceptions about the use of traditional healers, which has not been shown to cure cancer. The practice guidelines of the Society for Integrative Oncology [56] recommend that unproven CAMs should not be used in place of conventional treatment, because delayed cancer treatment reduces the likelihood of remission or cure. It is imperative for nurses to familiarise themselves with the various CAMs that are most often used by patients during chemotherapy. They will then be able to answer patients’ questions about CAM use and be able to guide their patients as they seek additional information about, or referrals for, a particular therapy.

Comment 8: Conclusion: The paragraph starting with “Patients should be informed about misconception....” Should be removed to “implication for practice”

Response: Please refer to the underlined sentence under Implication for practice.

Comment 9: Figure 2: It would be helpful if the numbers of participants in the figure were written like this: (n=13), (n=7), (n=110).

Response: Added.
**Comment 10:** Figure 3: First column, line 6, please add: side-effect

**Response:** Added.

**Comment 11:** Table 4: Is it possible to merge some of the columns? Particularly the different juices/extract columns. Please explain the meaning of this † symbol.

**Response:** It is true that Table 4 seems a little lengthy, but I am concerned that the presentation may not be as clear as it was when I grouped the juices / extracts together. I have inserted †( symbol) to indicate additional NPs (juices, extracts, etc.) used by the patients via open-ended question.