Complementary and Alternative Medicine (CAM) Usage in Local Ambulatory Lung Cancer Patients

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ABSTRACT

Objective: To identify the commonly used forms of CAM in lung cancer patients, their acquisition costs and clinical characteristics influencing patients’ decision on CAM use.

Methods: An interviewer-administered questionnaire survey in the Ambulatory Treatment Unit (ATU) at National Cancer Centre (NCC). This paper presents findings from adult lung cancer patients forming part of a larger study.

Results: The prevalence of CAM use in patients at the time of the survey was 53.0%, and that in patients before being diagnosed was 33.3%. Majority attributed the main reason for taking CAM to boosting immunity (57.1%). The most common type of CAM used was TCM (57.1%). 37.1% of these patients verified the information about CAM. 51.4% had discussed with their oncologist about their CAM usage. No positive predictor was indicated as P > 0.05 for all the predictors.

Conclusion: This study reflected the high prevalence rate of CAM use in adult lung cancer patients in Singapore and this is parallel to the general trend worldwide. The results from such prevalence studies may assist oncologists in enhancing patient counseling in cancer care setting.

INTRODUCTION

For the period 2001-2005 in Singapore, lung cancers were the second most common (17.8%) and third most common (8.1%) cancers respectively among the male and female resident population (National Registry of Diseases Office, 2007). In view of the high prevalence associated with lung cancer, this paper seeks to examine the use of complementary and alternative medicine (CAM) in this specific group of cancer patients.

The use of CAM in cancer patients is prevalent worldwide. As defined by the National Centre for Complementary and Alternative Medicine (NCCAM), CAM refers to “a group of diverse medical and healthcare systems, practices, and products that are not presently considered to be part of conventional medicine”.

In 1998, a systematic review from 13 countries indicated that the CAM use in adult population with cancer ranged from 7-64%, while the average prevalence across all adult studies was 31.4% (Ernst, 1998). In another study, the prevalence of CAM use in lung cancer patients across eight European countries was reported as 23.6% (Molassiotis, 2006). Currently, there is no prevalence data of CAM use in adult lung cancer patients in Singapore.

The aim of this study is to establish the prevalence of CAM use in lung cancer patients in Singapore, to identify the commonly used forms and acquisition costs and to predict patients’

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demographics and clinical characteristics influencing patients’ decision on CAM usage.

**METHODOLOGY**

This is a single-centre, cross-sectional, prospective study carried out at the ATU of NCC. Cancer patients were assessed for study eligibility from October 2007 through March 2008. An interviewer-administered questionnaire in either English or Mandarin was used. This study focuses on oral CAM use only, as oral CAM-anticancer drug interactions contribute significantly to the clinical problems of toxicities and undertreatment in cancer patients (Merijerman, 2006). Using the domains under NCCAM classification system, only “Whole Medical Systems” and “Biologically Based Therapies” were included. All participating patients received a patient information sheet explaining to them about the study and written informed consent was obtained prior to the start of the survey.

Data collected was analyzed using the Statistical Package for Social Sciences (SPSS) programme (version 15.0 for Windows). Chi-square tests or fisher’s exact tests were applied to assess the predictors of CAM use. The level of statistical significance was set at P < 0.05.

**RESULTS**

A total of 65 adult lung cancer patients were selected from a sample of 400 adult patients with mixed cancer diagnosis forming part of a larger study.

The predictors of CAM use investigated were gender, age, race, marital status, highest educational level and household monthly gross income. No positive predictor was indicated as P > 0.05 for all the predictors.

The prevalence of CAM use in patients at the time of the survey was 53.0%, and that in patients before being diagnosed was 33.3%. For patients who were not on CAM use at the time of survey, majority (22.6%) cited the reason of not wanting CAM to interfere with their current chemotherapy. For patients who were on CAM, majority attributed the main reason for taking CAM to boosting immunity (57.1%). Other reasons were: to reduce side effects caused by chemotherapy and/or radiotherapy (8.6%), for general health (14.3%) and to boost energy (5.7%). None cited the reason of hoping to cure cancer.

Regarding the duration of CAM use, 3.0% used for less than 30 days, 43.9% used for 1 to 12 months and 6.1% used for 1 year or more. Majority (28.6%) spent an average of more than $500 on CAM per month. 22.9% spent less than $50 per month. In terms of the effectiveness of CAM, 71.4% felt that CAM usage was effective for the purpose they were taking it for, while 28.6% were unsure of the effects.

The most common type of CAM used was TCM (57.1%), followed by bird’s nest (40.0%), vitamins (25.7%), essence of chicken (25.7%), organics vegetables and fruits (20.0%) and minerals (11.4%).

Most of the patients (42.9%) found out about the CAM they were on through recommendations by friends. Other sources of information about CAM were other cancer patients (14.3%) and relatives and/or family members (17.1%).

Only 37.1% of the patients verified the information about CAM before deciding to use them. Majority (38.5%) verified through magazine or print media. Other modes of verification included friends or other cancer patients (23.1%) and the Internet (30.8%). None of the patients verified with their physicians or pharmacists before starting the use of CAM.
51.4% had informed their oncologist about their CAM usage. The oncologist was agreeable to CAM use in 55.6% of these patients, neutral in 27.8% and disagreed in 16.7%. For the remaining 48.6% of CAM users who did not inform the oncologist, majority (41.2%) cited the reason that the oncologist did not ask, 17.6% thought that CAM was not a drug or medication while 11.8% felt that it was not necessary as the oncologist would not be able to advise.

DISCUSSION

This study showed that more than half of the adult lung cancer patients used CAM after diagnosis. This is a relatively higher prevalence rate compared to those reported in literature in lung cancer patients (Molassiotis, 2006) or samples with mixed cancer diagnoses (Hyodo, 2005; Molassiotis, 2005; Pud, 2005). The high rate of CAM use could generally be attributed to the fact that Singapore is part of Asia where the two oldest systems of medicine, namely TCM and Ayurveda, are originated and continued to be endorsed (Lim, 2005). This is in line with the fact that the most common type of CAM used in this study was TCM. The predominantly Chinese population (75%) may also account for TCM being the dominant form of CAM used. The high frequent use of TCM in cancer patients seek attention as at least 27% of a patient population taking chemotherapeutic drugs were at risk for developing oral CAM-drug interactions (McCune, 2004). Oncologists could take on the role of introducing such awareness in patients taking TCM by highlighting possible drug interactions and adverse effects.

It is noteworthy that the number of patients on CAM increased after diagnosis. Most cited the reason for using CAM as for boosting the immunity. None of the patients cited to reason of hoping to cure cancer. It is evident that most patients used CAM as an adjunct “complementary” therapy after diagnosis to provide support for their chemotherapy treatment, rather than as an “alternative” or substitute for conventional treatment or as a mean to cure the disease.

Less than half of patients verified the information about CAM before deciding to use them. For those who did verify, none of these patients verified with their physicians or pharmacists. In addition, a substantial proportion of patients (48.6%) did not inform their oncologist about their CAM usage. Most cited the reason that the oncologist did not ask. These results suggested that patients might be receiving insufficient or inaccurate information about their CAM usage. The lack of physician-patient communication might be a barrier in improving the outcome of the patient’s anticancer treatment. Therefore, physicians and other healthcare professionals are advised to consult published information sources about CAM in order to increase their knowledge about CAM and respond to patients’ inquiries (Molassiotis, 2006).

In terms of the effectiveness of CAM, majority felt that CAM usage was effective for the purpose they were taking it for. Satisfaction with CAM use was of a higher degree than that in other studies (Hyodo, 2005; Molassiotis, 2005, Pud 2005). However, all the patients were treated with conventional chemotherapy concurrently, hence the effects might not be directly related to the use of any specific CAM product. However, the effectiveness of CAM as perceived in these patients might not be unfounded, as it has been demonstrated through systematic reviews that a number of CAM can control certain symptoms equally or better than medication (Ernst, 2000). Therefore, selective integration of CAM into a patient’s current pharmacological therapy may help to optimize the treatment outcome.

Western studies characterized the profile of CAM users as younger people, female and with higher educational level (Paltiel, 2001; Molassiotis, 2005). However, we failed to find any
positive predictors of CAM users in our study. The absence of positive predictors may be attributed to the limitations of this study.

Our results should be evaluated in light of several limitations. Firstly, the study population might not represent the adult lung cancer patients in Singapore as the surveys were administered at only a single centre. Secondly, the sample size was relatively small and insufficient for detailed subgroup analysis of the minority ethnic groups.

Nevertheless, this study reflected the high prevalence rate of CAM use in adult lung cancer patients in Singapore, with an increase in the number of users after diagnosis. The ubiquitous use of CAM in Singapore is parallel to the general trend worldwide. The results of this study will guide healthcare professionals on potential lung cancer patients who may require advice on CAM and to provide appropriate counseling for them. This will help patients to make safer, more informed and evidence-based decisions on CAM use.

REFERENCES


