

COMPLEMENTARY AND ALTERNATIVE MEDICINE USE AMONG CANCER PATIENTS

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Abstract

Although studies have shown that the use of complementary and alternative medicine (CAM) is common among cancer patients, there were limited data regarding to CAM use among cancer patients in Indonesia. The aim of this study was to identify CAM use among cancer patients. This was a descriptive study with cross-sectional approach conducted from July to August 2019 on 65 consenting cancer patients that selected purposively. Data were collected by sociodemographic questionnaires including question about their CAM use. Data were analyzed using descriptive statistic. Overall, 29.2% reported that they had used or were using CAM. Herbal and vitamin supplement was the most commonly used in CAM (63.16%). Because there were still very few of CAM user among cancer patients, it is important that health care professionals provide information about the CAM to the patients and aware of the extent to which cancer patients are using CAM.

Keywords: Cancer; Complementary and Alternative Medicine; Palliative Care

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1. Introduction

The prevalence of cancer in Indonesia especially in Yogyakarta is escalating from 4.1% to 4.9% per 1000 population for all ages from 2013 to 2018. It is also higher than cancer national incident that only 1.8% per 1000 population (Ministry of Health of the Republic of Indonesia, 2018). A preliminary study result showed that the number of cancer patients in RSUD Panembahan Senopati Yogyakarta from January to February 2019 was 58 patients. Interview was conducted with 3 cancer patients. They said that they had never received counseling about complementary and alternative medicine. Two patients had use herbal medicine and they know about it from relatives and neighbors.

Cancer patients experience more than one symptoms. These can be physical and/or psychological (Dy et al., 2010; Effendy et al., 2014). The physical symptoms faced by cancer patients are fatigue, pain, sleeping problems, nausea, vomiting, and decrease in immunity function. On the other hand, the psychological symptoms are anxiety, depression, fear of treatment and disease progression, fear of having repeated relapse of the illness, and death (American Cancer Society, 2017; Effendy et al., 2014).

Complementary and Alternative Medicine (CAM) has gained enormous popularity among cancer patient (Shin et al., 2012). CAM is a

various system, practice, and medical and health product which are commonly understood as non-conventional treatment (NCCAM, 2011). The CAM user population is widely spread in the world and continues to escalate from year to year. More than one-third of cancer patients (35.9%) worldwide were reported using CAM to address persistent symptoms, including physical and/or psychological symptoms (Hyodo et al., 2005; Sohl et al., 2013; Black et al., 2015). The types of CAM were herbal 92.72%; supplement 16.36%; "jamu" 5.45%; praying 3.64%; meditation 1.82%; acupuncture 1.82%, Chines medicine 3.64% (Almasdy et al., 2018).

The use of CAM, whether being used with or without the accompaniment of conventional medical treatment, becomes significant to be identified because there has been minimal research to date with focusing on CAM use on cancer patients. This issue need to be explored because cancer patients are often faced complex situation (Shin et al., 2012). Nurse also has an important role as educator to improve the cancer patient's understanding of CAM, its procedure, and the reason why cancer patients use CAM. This present study aimed to identify CAM use among cancer patients.

2. Method

We used a quantitative design with descriptive survey and cross-sectional approach.

Patients were recruited purposively from oncological and surgical outpatient wards at RSUD Panembahan Senopati Bantul D.I. Yogyakarta between July and August 2019. They were adults (older than 18 years old) with all types of cancer both who have had surgery and/or who were undergoing chemotherapy or radiotherapy treatment. They also had to be willing to take part in the study. The study excluded patients who suddenly experienced the emergency status. The total sampling for this study were 65 patients.

We utilized a questionnaire to collect data about CAM use and sociodemographic characteristics (age, gender, education, health insurance, marital status, the number of symptoms, stage of cancer, metastasis, and the experience of getting information about CAM). The definition of CAM was "diverse medical and health care systems, practices and products that are not generally considered a part of conventional medicine" (NCCAM, 2011) such as herbal and vitamins supplements; spiritual healing or therapy; massage; relaxation technique, imagery, or yoga; lifestyle diets, music therapy; acupuncture or acupressure; hypnosis; and also open question about the other kinds of CAM. The patients that use CAM can make a check sign in one or more the kinds of CAM and we call them as a user. But if there were no check sign in the list of CAM, we call them as a nonuser. The symptoms was measured using Edmonton Symptom Assessment System (ESAS). Statistical analysis was performed using The Statistical Package for the Social Sciences (SPSS) (version 16, SPSS, Inc., Chicago, IL, USA). We determined prevalence of sociodemographic characteristics and CAM use using descriptive analysis.

This study was granted approval by The Health Research Ethics Committee, Faculty of Health Science, Universitas Jenderal Achmad Yani Yogyakarta, Indonesia (Number: Skep/068/KEPK/V/2019). All the eligible patients received comprehensive information about this study procedures, followed by written consent. They were also informed that they could withdraw at any time during this study.

3. Results and Discussion

Demographic and clinical characteristics of cancer patients

A total of 65 cancer patients were included in this study. The characteristics of cancer patients are summarized in Table 1.

Table 1 showed that the majority of the respondents were between 40 to 60 years old (53.8%), women (81.5%), married (84.7%), education background differences between Elementary School and Senior High School level only 1.4% and 98.5% of them own health insurance. Meanwhile, based on clinical characteristic, from 65 cancer patients, most of them experienced less than 5 symptoms (55.4%),

categorized into stage III of cancer (41.5%), had no metastasis (55.4%), and had never received any information about CAM (95.4%).

Table 1. Demographic and clinical characteristics of cancer patients (N=65)

| Characteristics | n(%) |
|---|----------|
| Ages | |
| <40 years old | 7(10.8) |
| 40-60 years old | 35(53.8) |
| >60 years old | 23(35.4) |
| Gender | |
| Female | 53(81.5) |
| Male | 12(18.5) |
| Marital status | |
| Single | 1(1.5) |
| Widow/widower | 9(13.8) |
| Married | 55(84.7) |
| Education | |
| Illiterate | 3(4.6) |
| Elementary school | 22(33.8) |
| Junior high school | 9(13.8) |
| Senior high school | 21(32.4) |
| College | 10(15.4) |
| Health insurance | |
| No | 1(1.5) |
| Yes | 64(98.5) |
| The number of symptoms | |
| <5 symptoms | 36(55.4) |
| >=5 symptoms | 29(44.6) |
| Cancer stage | |
| Stage I | 15(23.1) |
| Stage II | 19(29.2) |
| Stage III | 27(41.5) |
| Stage IV | 4(6.2) |
| Metastasis | |
| No | 36(55.4) |
| Yes | 29(44.6) |
| The experience of getting information about CAM | |
| No | 62(95.4) |
| Yes | 3(4.6) |

CAM use

The CAM use among cancer patients are summarized in Table 2.

Table 2. CAM use among cancer patients (N=75)

| Characteristics | n(%) |
|-----------------|----------|
| CAM use | |
| Non users | 46(70.8) |
| CAM users | 19(29.2) |

Most of the respondents do not use CAM (70.8%). This is due to the lack of knowledge on CAM from health care providers. Surprisingly, from 29.2% CAM users, only three patients had experience of getting information about CAM from health care providers. Mostly obtain the information from friends, neighbors, or relatives.

This result is in line with Almasdy et al. (2018) that states the information about CAM is not from health care providers but from friends or family (70.91%). Meanwhile, the patients who obtained information from health care provider only 5.45% (Almasdy et al., 2018).

There were enormous number of researches that have suggested the use of CAM as accompanying therapy (Berretta et al., 2017; Shin et al. 2012; Klafke et al., 2012; Pihlak et al., 2014; John et al., 2016). Interestingly, only 19 cancer patients (29.2%) that using CAM in this study. This is consistent with Shin et al (2012) that conducted on 2661 cancer patients in Korea, in which 25.5 % respondents use CAM. The low use of CAM is also seen in Israel in a study conducted by Ben-Arye et al. (2014), in which from 313 cancer patients 39.6% of them use CAM. In contrast, this number is still considered low compared to the use of CAM in Australia (61.5%) (Klafke et al., 2012) and the United States (79%) (John et al., 2016).

As seen in Table 2, 46 respondents (70.8%) do not use CAM. The types of CAM that used by 19 respondents was listed in Figure 1

As seen in Figure 1 the patients mostly using herbal and vitamin supplements (12 patients), followed by acupuncture/acupressure (6 patients). The remaining were massage, spiritual healing or therapy, relaxation technique, imagery, or yoga, physiotherapy, music therapy, and lifestyle diets.

The most commonly used CAM is herbal and vitamin supplement. This finding is consistent with Field et al. (2009). From 892 number of women with breast cancer in Australia and New Zealand, 54.4% of them use supplement or vitamin. A study by John et al. (2016) also presents similar result, in which from 2.997 adults with cancer diagnosis in US, 74.8% of them use CAM in a form of vitamins and minerals products. The use of herbal is also confirmed as the most used CAM (92.72%) in a study by Almasdy et al. (2018) in Padang, Indonesia, which was conducted on 85 breast cancer patients.

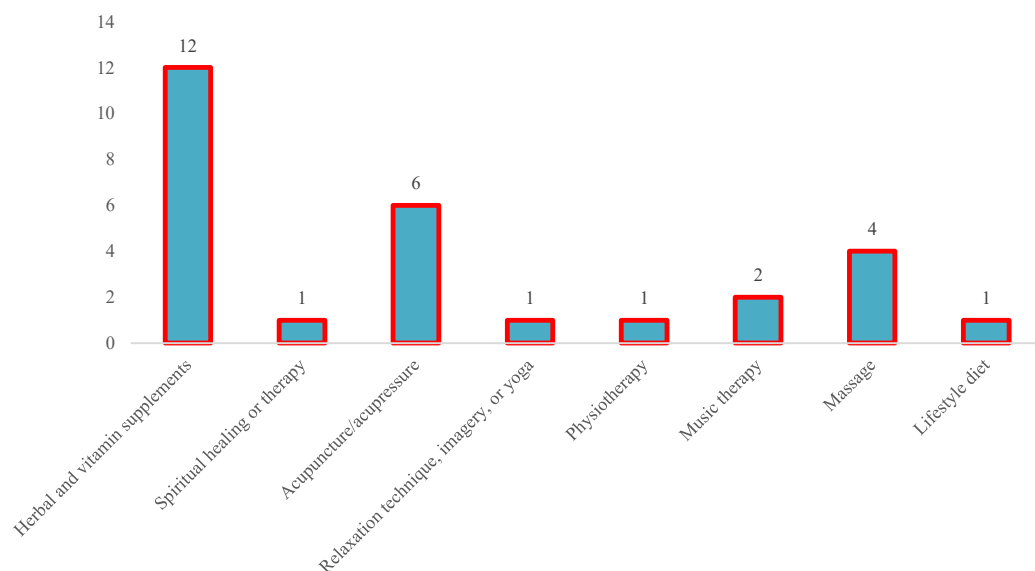


Figure 1. The types of CAM

The reasons why herbal and vitamin supplement becomes the most used because it is cheap, widely available in the market, and easily access in obtaining it for both in the rural as well as in the city (Frenkel et al., 2013; Almasdy et al., 2018). Herbal has escalated in number because it is popular and categorized as natural product that safe for the body (Almasdy et al., 2018). Cancer patients used herbal and vitamin supplement in order to reduce the side effects of chemotherapy or organ toxicity, improve the immune system, prevent further growth and relapse of the cancer (Frenkel et al., 2013).

The use of herbal and vitamin supplement need to be supervised by health care professionals. So that misunderstanding also unreliable treatment

related to the use of herbal and vitamin supplement between health care professionals and patient could be eliminated (Frenkel et al., 2013). When the use of herbal and vitamin supplement is not communicated with the health care provider, it is feared that interaction with medicine, which is currently consumed, in the process of chemotherapy or hormonal therapy occurs (Chang et al., 2011; Almasdy et al., 2018).

The second most used CAM use by cancer patients is acupuncture or acupressure, which reaches 6 patients (31.58%). The use of acupuncture involves the stimulation at anatomic location in the skin using a particular technique, which is penetrating a thin needle into the skin (National Institute of Health, 2015). Meanwhile, acupressure is a technique in a

treatment that employs pressure created by using thumbs, fingers, or elbow on specific points in the muscles that stimulate the ability for natural healing. Acupressure is believed to be capable of reducing tension in the muscles and enhance oxygenation and nutrition in various parts of the body. Based on a study by Bokmand & Flyger (2013), acupuncture has the ability to reduce disturbance in sleeping pattern experienced by breast cancer patients. It is also stated that this therapy is considered good and safe to do. Acupuncture and acupressure is also effective to reduce the symptoms of nausea and vomiting due to chemotherapy (Almasdy et al., 2018).

4. Conclusions

This study demonstrates that CAM use among cancer patients was still limited. Herbal and vitamin supplement become the most favorite types of CAM that used by cancer patient due to its inexpensive price and its easy access in obtaining it.

5. Recommendations

Based on the results of this study, it is important that health care professionals provide information about the CAM to the patients and aware of the extent to which cancer patients are using CAM. In the other hand, if the patients use herbal and vitamin supplements to complement their conventional treatment, they have to report about the CAM use to health care professionals to prevent complications or side effects.

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7. Competing Interest

None.

8. References

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