

Knowledge and Attitude of Oncology Practitioners towards Complementary and Alternative Medicine for Cancer Care in Qatar

Azza Adel Hassan^{1,2,3*}

¹Weill Cornell Medical College, Qatar

²National Center for Cancer Care and Research, Hamad Medical Corporation, Doha, Qatar

³Cancer Management & Research, Medical Research Institute, Alexandria University, Egypt

*Corresponding author: Azza Adel Hassan, Program Director, Palliative Care, National Center for Cancer Care and Research, Hamad Medical Corporation, Doha, Qatar, Tel: 0097466578952; E-mail: newazza@gmail.com

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Abstract

Objective: The purpose of this study is to investigate the knowledge and attitude of oncology practitioners at NCCCR towards complementary and alternative medicine in cancer treatment.

Background: Complementary and alternative medicine (CAM) refers to a set of healthcare practices that are not conventionally used in the country's hospitals. CAM is widely used by patients who suffer from cancer (from 10%-80%) and authorities call for improving knowledge and experience of oncology practitioners about CAM, so that they can guide their patients about its safe use.

Design: Descriptive cross-sectional study.

Methods: An anonymous survey of a sample of 75 random practitioners (physicians, nutritionists, psychologists, social workers, pharmacist, physiotherapists, and dieticians excluding nurses) was conducted at the National center for cancer care and research in Doha, Qatar. A semi-structured novel of a 17-item questionnaire was distributed to the staff at NCCCR. The survey collected data regarding benefits, risks, safety, efficacy, and interest in CAM education among NCCCR staff. The Total numbers of questions were 80.

Results: Our study showed that 7% of the respondents never heard about CAM. However, 90% of HCP were interested in CAM education opportunities. Herbal medicine was the most familiar type of CAM among HCP (83%), followed by vitamins and minerals (67%), Acupuncture (60%), Massage (57%) and Nutritional Therapy (56%).

Some types of CAM therapy were less familiar such as Aromatherapy (28%), Reflexology (27%), Hypnosis (24%) and Art therapies (23%).

The majority of HCP thought that CAM therapy improves patient's psychological and emotional well-being (87%), Quality of life (61%), helps to relieve symptoms of disease (35%) and cure their disease (7%). Concerning safety of CAM usage, 67% of the respondents thought it is safe to use, while 21% thought it is not safe.

Conclusion: There is a need of integrating an educational and training program regarding CAM practices and usages in order to enhance cancer patients' management and ensure a more holistic and efficient cancer treatment for patients in Qatar.

Keywords: Complementary medicine; Alternative medicine; Palliative care; Oncology physicians; Oncology therapists

Introduction

The terms "complementary medicine" or "alternative medicine" are used inter-changeably with traditional medicine in some countries. They refer to a broad set of health care practices that are not part of that country's own tradition and are not integrated into the dominant health care system [1]. CAM therapies are grouped into 5 types: body based (chiropractic, massage), mind-body based (meditation, relaxation), energy based (acupuncture), biological products (herbs, vitamin), and whole systems (naturopathy, traditional Chinese

medicine) [2,3]. Reports indicate that CAM use is substantially increasing worldwide [4] and more frequently among patients with advanced cancer [5].

Different authors report that 10-80% of cancer patients use CAM [6]. Research shows that cancer patients are motivated to use CAM to alleviate the pain caused by conventional medical treatment [7], for emotional support and humanistic care that conventional medicine lacks, and to enhance quality of life [8]. CAM also allows for patients to become actively involved in their treatment and take care of themselves [9,10]. Moreover, patients with poor prognosis resort to CAM more frequently to improve chances for a cure, to extend their survival time and to prevent cancer recurrence [11,12]. They also

perceive CAM as a safer, non-toxic route of treatment in contrast to conventional medicine [10,11]. However, complementary vitamins and herbs may interact with prescribed drugs [13-17]. Additionally, in a palliative setting, patients may focus only on alternative treatment and omit conventional treatments [18].

Patients often refer to their family members, friends, magazines and the internet to learn about CAM, and they rarely refer to their physicians [14,19] or even inform them about their CAM usage [20,21]. In fact, up to 60% of cancer patients do not disclose their CAM if they are not asked by their oncologist [10,22]. These patients believe that their clinicians might deject CAM use, or think that they don't need to know, or have already tried to discuss CAM but did not receive a respectful answer [21,23]. Therefore patients prefer that their physicians initiate the talk about CAM and they wish an open-minded, non-judgmental discussion style to consider CAM with respect to their quality of life [21].

Western countries publish a bulk of reports on CAM use and its increased popularity among cancer patients, in contrast to Eastern countries. Nonetheless, few recent studies on Saudi, Bangladesh and Jordanian populations have shown that CAM usage is highly prevalent among Muslim cancer patients [24-26]. Religious practices (prayer, reciting the Quran), Zamzam water and other remedies were used [24,27-34]. Furthermore, patient discussion on CAM was more frequent with their religious clergy-people (sheikhs) rather than their physicians [26]. Given the high prevalence of CAM use among cancer patients, information on CAM and communication between patients and oncologists must be expanded further to reach Qatar's National center for cancer care and research (NCCCR).

The aim of this study was to conduct a survey on CAM among NCCCR's healthcare professionals. This survey investigates NCCCR's healthcare professionals' knowledge of and attitudes towards CAM in general and in oncology. These insights will present important clues to promote the integration of CAM in NCCCR, improve access to CAM counseling for patients, and enhance the quality of cancer care in Qatar.

Methods

A descriptive cross-sectional survey of a random sample of healthcare professionals in Qatar was carried out between January and April 2014.

Setting

This study was conducted at the National center for cancer care and research (NCCCR) in Doha, Qatar. The institution is part of Hamad medical corporation (HMC) which is the leading corporation in medical care in Qatar. The NCCCR facility was established in 2004 and it is the only cancer care center in Qatar that includes fifty-two combined beds for oncology and hematology as well as a 10-bed palliative care unit.

Data collection

A 17- item questionnaire was assembled in order to investigate the knowledge, attitude and interest of healthcare professionals at NCCCR toward CAM therapy in cancer care. The first section of the survey focused on demographics of the participants such as gender, profession, origin, etc. The second section explored participants' knowledge of CAM, safety risks of CAM, and interest in encouraging

CAM implementation and education. The items of the survey were developed from discussions and clinical experience of local experts in oncology and palliative care. Some questions were adapted from literature review. Most of the questions were close-ended.

Population sample

The questionnaire was distributed to healthcare professionals at NCCCR (n=75). It must be noted that the survey was distributed to physicians, pharmacists, psychologists, dieticians, physiotherapists and social workers and nurses were not included in this study. Another study assessing the attitudes and knowledge of CAM among nurses at NCCCR was separately conducted.

Ethics

The institutional Review board of Hamad Medical Research Center approved the survey used in the study proposal. The surveys were completed anonymously with respondents' informed consent to participate in the study. Completed surveys were de-identified and entered into a secure data collection program

Data analysis

Descriptive statistics were applied to the collected data. Survey responses were aggregated in frequencies and percentages.

Results

Healthcare professionals' responses regarding complementary and alternative medicine, its benefits and health risks, CAM discussion and recommendation to patients, interests in CAM promotion and demographics were compared.

Demographics

A total of 75 responses were collected between January and April 2014. Most responders were physicians (60%) and others ranged between pharmacists (7%) physical therapists (3%), psychologists (3%), and nutritionists (3%). The majority of these professionals were from the Middle East and North Africa (MENA) (69%) with years of practice ranging almost equally between 0-5, 6-10, 11-20 and above 20 years (29%, 21%, 28% and 21% respectively). Ninety-five per cent of the responders believed in a single religion with Islam being the most common religion (80%). The most predominant culture was the Arabic Culture (57%) followed by Western (20%), Asian (15%) and American (14%) as shown in Table 1.

Healthcare providers' attitude toward CAM was assessed through questions that focused on their 1) general opinion of CAM, 2) perceived risks and benefits to the patients, and 3) interest in CAM educational opportunities and implementation at NCCCR.

A large proportion of participants (76%) believed that complementary therapy would help the patients' condition by: improving patients' emotional and psychological wellbeing and giving them hope for survival (87%), improving quality of life (61%), and relieve their symptoms of the disease (35%). However, only 60% of the participants have advised patients to use CAM, 15% of whom often recommended it (Table 2).

In terms of CAM safety, 67% of respondents judged CAM to be safe.

Lastly, the vast majority (91%) of participants were keen to learn more about CAM in oncology and cancer patient care. Moreover, 66% advised in favor of the introduction of CAM as an essential component for cancer care (Table 2).

Parameter (no. of responses)	Characteristics	Frequency N (%)
Gender (n=75)	Male	37 (49.3%)
	Female	35 (46.6%)
	No responses	3 (4.1%)
Staff Category (n=75)	Physician	45 (60%)
	Clinical pharmacist	5 (7%)
	Physical therapist	2 (3%)
	Psychologist	2 (3%)
	Nutritionist	2 (3%)
	Other	19 (25%)
Years of practice (n=75)	0-5 years	22 (29%)
	6-10 years	16 (21%)
	11-20 years	21 (28%)
	>20 years	16 (21%)
Country of Origin (n=75)	MENA	52 (69%)
	India/Pakistan/Nepal	10 (13%)
	Philippines	2 (3%)
	Others (Canada/Ireland)	11 (15%)
Religious influences (n=75)	Single religion	71 (95%)
	Two or more religions	4 (5%)
	Islam	60 (80%)
	Christianity	4 (5%)
	Hinduism	2 (3%)
	Not specified	3 (4%)
	Others	7 (9.33%)
culture choice (n=75)	Single culture choice	45 (60%)
	Two or more culture choices	28 (37%)
	No Choice	2 (3%)

Table 1: Demographics of the responders (MENA: Middle East and South Africa).

CAM knowledge, attitude and interest

Participants were asked if they have heard about complementary therapy and were directed to a list of therapies to select which they were familiar with and to add therapies they are aware of. Out of the 75 respondents, 88% reported that they are familiar with CAM, 89% of which knew about two or more complementary therapies. The most common complementary therapy was found to be herbal medicine (83%), followed by vitamins and minerals (67%), acupuncture (60%), nutritional therapy (56%), massage (57%) and yoga (47%) (Table 2).

Discussion

The increased utilization of CAM has created a growing interest toward CAMs that have been researched in UAE, Saudi Arabia, Turkey, Palestine, Jordan, Lebanon and Bahrain [24-26,28-33]. With CAM's popularity increasing in the Gulf and the Middle East regions, it was imperative to investigate healthcare providers' thoughts about CAM in Qatar.

Parameter (no. of responses)	Response	Frequency N (%)
Have you heard about complementary therapy?	Yes	66 (88%)
	No	5 (7%)
	No response	4 (5%)
Which complementary therapy are you familiar with?	Herbal Medicine	62 (83%)
	Vitamins and minerals	50 (67%)
	Nutritional therapy	42 (56%)
	Massage	43 (57%)
	Reflexology	20 (27%)
	Aromatherapy	21 (28%)
	Hypnosis	18 (24%)
	Acupuncture	45 (60%)
Have you advised your patients to use complementary therapy?	Homeopathy	22 (29%)
	Meditations	25 (33%)
	Yoga	35 (47%)
	Art therapies	17 (23%)
	Music therapies	27 (36%)
	Spiritual healing	33 (44%)
	Other	4 (5%)
	Yes	45 (60%)
How often do you recommend complementary therapy to patients?	No	28 (37%)
	No response	2 (3%)
	Often	11 (15%)
	Sometimes	18 (24%)
	Occasionally	19 (25%)
Would you think complementary therapy would help the patient's condition?	Never	19 (25%)
	No response	8 (11%)
	Yes	57 (76%)
	No	11 (15%)
How do you think complementary therapy would help patients with diseases?	No response	7 (9%)
	Cure their disease	5 (7%)
	Improve patients quality of life	46 (61%)
	Improve patients psychological / emotional wellbeing and give patients hope	65 (87%)
	Relieve symptoms of disease	26 (35%)
No response	6 (8%)	

Do you think complementary therapy is safe?	Yes	50 (67%)
	No	16 (21%)
	No response	9 (12%)
How would you rate your interest in education and training in CAM use?	Very interested	23 (31%)
	Interested	31 (41%)
	Equivocal	14 (19%)
	Uninterested	5 (7%)
	No response	2 (2%)
Do you advise that leaders in your institute introduce complementary therapy as an essential component for cancer care?	Yes	50 (66%)
	No	16 (21%)
	No response	9 (13%)

Table 2: Results of the survey questions returned by responders.

By assessing healthcare professionals' knowledge and interest in CAM implementation in Qatar, proper programs at the NCCCR institution can be established. These programs' objective will be to encourage staff to incorporate CAM into their practice, to improve clinicians and patients' knowledge about CAM [34], promote CAM use and thus enhance the quality of cancer care in Qatar.

To our knowledge, this is the first survey concerning CAM in professionals working in oncology in the gulf region. As this study shows, a large section of participants (87%) advised in favor of CAM as an essential component for cancer care. Furthermore, 76% of all participants believed that CAM is beneficial for the patients. This is in line with data collected by Conrad et al. [18] where 80% of participants strongly believed CAM to be beneficial for the patients. Moreover, in our study the high interest in CAM was combined with a relatively high recommendation to use it (60%) as well as a high awareness level on the topic (88%). In a similar study recently conducted at NCCCR regarding the knowledge and attitudes of nurses towards CAM in Qatar, 89% of the nurses also reported of having heard of CAM, and often recommended it to their patients (24%) [35].

Benefits and risks of CAM should not be overlooked when discussing this information with patients. Ethically speaking, impartial and complete information on any treatment is mandatory, and this includes CAM [36].

CAM therapy might have a positive impact on physiologic and psychologic status of cancer patients. In our study, 87% of participants accept CAM as a way to improve patients' psychological and emotional wellbeing, while only 44% of the nurses believe so [35]. Also, 61% of our respondents believe CAM can enhance patients' quality of life and 78% of nurses agree to that benefit of CAM [35]. Additionally, 35% of the participants think CAM can relieve the symptoms of disease. The results are in accordance to other studies where 66-80% of participants believed that it helps cope with disease and 54% believed that CAM alleviates side effects [6,18].

In terms of safety, over two-thirds of this study's responders (67%) think that CAM is harmless. Oncology nurses at NCCCR also strongly believe CAM is safe (86%). This agreement among the medical staff at NCCCR shows a general recognition and approval of CAM use in Qatar. Although systematic assessments regarding CAM safety are

lacking, this does not exclude the fact that CAM might counteract with and/or reduce the effects of conventional medicine [6,13-16,18,37]. Case studies report that biological-based complementary treatments have side-effects that are similar to conventional treatments, like hepatotoxicity or nephrotoxicity that may go unnoticed by the physician [18]. In addition, a study found that certain herbs such as garlic, ginkgo, kava can potentially participate in pharmacokinetic interactions with anticancer drugs and modulate the activity of drug-metabolizing enzymes which consequently reduces the effects of conventional drugs [38]. Acupuncture is another effective therapeutic treatment which relieves nausea, cancer-related neuropathic pain, hot flashes, chemotherapy-induced neuropathy, etc. However minor complications such as bruising, bleeding and exacerbation of existing symptoms might occur [39]. Likewise, intensive massage may harm patients with bleeding disorders or receiving anticoagulation therapy [39]. However, other therapies such as meditation and honey have no side effects at all [39,40].

According to the literature, the majority of physicians are not informed by their patients who are using CAM [20,21,41,42]. In fact, up to 60% of cancer patients do not disclose their CAM preference if they are not asked by their oncologists [10,22]. Even more so, most physicians do not even ask their patients about the alternative measures they are taking. A study by Parker et al [43] found that only 9% of physicians and 12% of nurses asked patients about their use of CAM at an oncology visit. Even the few patients who initiated a discussion about CAM to their healthcare providers were only either encouraged to continue (21%) or were given a neutral response (7%). Authors of another study found that the rate of non-disclosure of patients using CAM is as high as 77%, and that the main reasons for this were: concerns about practitioners rejecting CAM, beliefs that the practitioners don't need to know about their CAM use, and lack of professionals' inquiry about CAM [23]. Our study supports this data in terms of CAM discussion with patients. In fact, just 15% of healthcare providers and 24 % of the nurses [35] often advise their patients about CAM [Table 2].

Since healthcare providers are generally reluctant to initiate the subject of CAM to their patients, and since patients feel uncomfortable discussing the subject as well, this communication barrier between professionals and cancer patients hinders efficient cancer treatment and care. Moreover, given the possible outcomes of unsupervised CAM use, it is imperative that oncologists and clinicians take an active role in assessing and counseling patients about CAM. Integrating a framework of Complementary and Alternative therapies in cancer care will improve patient access and knowledge about CAM, reduce the communication barrier between physicians and patients, and enhance the quality of cancer care in Qatar [14].

In order to effectively introduce CAM into NCCCR, the first step is to establish a campaign to sensitize different caregivers at NCCCR (Oncology physicians, pharmacists, nurses, dieticians and other Health care provider) about complementary and alternative therapies, their benefits and their risks [18]. This campaign should be conducted by international professionals in CAM and palliative care. This campaign must also derive, classify and teach the different complementary therapies, especially those that are most popular in the Middle East and Arab Gulf regions. In fact, Qatar is characterized by diverse ethnic and cultural groups. Hence, there is a need to identify the most preferred and culturally acceptable CAM treatments in the region. This campaign should also cover the patterns of CAM use among patients and the reasons why locals use them, so that researchers and

professionals are made aware of patients' behavior and counsel them accordingly [44].

The second step of CAM integration should be setting an awareness program to educate patients about benefits and harms of CAM and how they should communicate their concerns and questions to their healthcare providers. This awareness is important especially for patients who often rely on Internet resources to reach information regarding their condition and alternative treatments. In fact, profit-seeking online websites use marketing and advertising tools such as catchphrases and special promotions that mislead patients [45]. Healthcare providers may also seek additional information from untrusted websites on the Internet regarding unconventional cancer remedies [45]. This is further argument to educate both patients as well as their healthcare providers about alternative therapies that are in concordance with various cultures in Qatar.

The third and final step is to open a specialized center for CAM in oncology. The task of this center will be to support physicians, counsel individuals with complex needs, train healthcare professionals about protocols and CAM administration, manage and continuously update the CAM program [14]. We must not take for granted the costs and time expenditures of CAM services. However, in order to achieve a higher cancer care quality, we should rely on our existing institution, (NCCCR) and propose the integration of a system of support and training within this facility itself.

With regards to physicians at NCCCR, the majority of our survey responders expressed interest in education and training in CAM use (31% are very interested, 41% are interested), and the vast majority of the nurses at NCCCR (96%) also expressed interest in learning more about CAM [35]. However, the involvement of the patients currently being treated at NCCCR should be considered before launching such a program. Therefore, a study on cancer patients' knowledge and their use of CAM in Qatar should be conducted before taking any other measure that involves the introduction of CAM in the healthcare system at NCCCR.

Conclusion

In conclusion, this study displays the high interest in acquiring more knowledge of complementary and alternative medicine in cancer care among healthcare professionals at the National Center for Cancer Care and Research (NCCCR) in Doha, Qatar. Although CAM can be beneficial for cancer patients, there are still minor risks that must be considered when using CAM. Therefore healthcare professionals at NCCCR must be further educated about CAM usage and why cancer patients might use CAM without discussing them with healthcare practitioners. The authors of this study recommend that complementary and alternative therapies be incorporated into the healthcare system at NCCCR in order to continuously ensure the safety of the patients and to provide holistic cancer care.

Future Research Directions

Given the significance of CAM to nurses and practitioners at NCCCR, we hope to explore the CAM knowledge and usage among cancer patients (both discharged and currently receiving treatment) at NCCCR in order to establish the proposed program of education and awareness of CAM in cancer care in Qatar.

Declaration of Special Interest

The authors have no special or conflicting interests.

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