RESEARCH ARTICLES

Complementary and alternative medicine (CAM) in Mexican patients with cancer

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Background. Cancer is the second cause of death in Mexico, most cases are detected at advanced stages and the use of chemotherapy is frequent. At present, more than 500 types of complementary and/or alternative medicine (CAM) treatments are known that offer different therapeutic objectives. Many patients use this type of treatments.

Objective. To determine the characteristics of the patients that use CAM, to identify the aim of these treatments, the source of information and the potential benefits obtained by the patient.

Patients and methods. A questionnaire was applied from February 20 to March 5, 2004 to non-selected patients with cancer in private consultation to determine age, sex, education level, work, use of CAM, type and number of used therapies, potential benefits and monthly cost. Two groups were formed, A for users and B for non-users of CAM. Results between groups were compared and the mentioned variables were correlated with the use of alternative medicine.

Results. Group A included 37 patients and group B included 38, with no difference regarding age, education level, work and oncological diagnosis, p > 0.05; a significant trend was found as regards the feminine sex, p = 0.07, neoplasm different from breast cancer, p = 0.08 and evident association with neoplasm advanced stages, p = 0.02. Most patients used between 1 and 5 types of therapies, 97.2%. The most common types of therapies were nutritional and spiritual, 54% and 48.6%, respectively. The source was the patient's family in 56.4% and the physician in 24.5%. Complementary and alternative therapy was considered a success in 57.1%; most of the users mentioned benefits (78.6%) deemed as tranquility (46.4%) or improvement of the physical condition (46.4%). The average monthly cost was $545.5 dollars, with a range of $13.6 to $2,545.5 dollars.

Conclusions. The use of complementary and/or alternative therapy is frequent among young women with advanced cancer and high level of education. The family participates in the decision of using these methods; most users noticed a benefit in their general condition and reported tranquility; these patients may be prone to higher incidence of depression and anxiety. The effectiveness and safety of this type of treatments remain to be determined, as well as the possible interactions with conventional therapy.

Key words: cancer, complementary and alternative medicine.

INTRODUCTION

In Mexico, during 2001, the Histopathological Registry of Malignant Neoplasms identified 102,657 new cases of cancer—a rate of 101.6 cases per 100,000 inhabitants, mainly in women (65.2%). The most common cancers in the feminine population were cervical (56%), breast (17%), and skin cancer (11%); while in men, they were skin (20%), prostate (17%) and stomach cancer (6%). During the same year, 56,215 deaths due to cancer were registered, which represents a rate of 55.7 cases per 100,000 inhabitants. At present, cancer is the second cause of death in Mexico, only preceded by cardiovascular diseases.

Once cancer diagnosis is established, there is a wide range of therapeutic options including surgery, chemotherapy and radiotherapy, biological therapy or hormone therapy; the selection of one or more of these strategies depends on the anatomical site of origin of the primary disease, the clinical stage, and the presence or absence of various prognostic factors specific for each malignancy. Frequently, the cancer
patient is frightened and anxious because of the uncertainty of life prognosis, the possible recurrence of the malignancy, the substantial modifications in his/her life habits, work, diet and, frequently, because of the familiar, social and economical consequences. In addition to these fears, when the patient accepts the proposed treatment option, he/she will face possible physical (large or small), functional or esthetical defects due to surgical procedures, and local or systemic toxic effects associated to radiotherapy or chemotherapy, which may jeopardize his/her life or reduce life quality.

The patient’s fear is mainly focused on the adverse effects of chemotherapy or radiotherapy including nausea and vomiting, diarrhea, constipation, alopecia, myelosuppression or neurological, cardiac, pulmonary and renal toxicity; the frequency and intensity of these effects depends on multiple factors including those related to the functional condition of the organs in charge of drug metabolism, drug type, dose and combination used, time of exposure to the antitumor agent, in-hospital and out-of-hospital care, interaction with non-oncological drugs and diets. Progress in the understanding of the biological functions of malignant cells has led to the development of sophisticated technology for identification of the disease and its recurrence sites, of antitumor drugs designed to modify the altered expression of oncoproteins related to cell growth and proliferation, and of treatments to limit adverse effects, reduce organic loss due to surgery, and modulate and optimize radiotherapy effects. The benefits and safety of the oncological treatments must be evaluated based on their capacity to increase the disease-free survival time, the therapeutic response rate, response duration, time to progression and the frequency or intensity of the observed toxic effects.

Therapies that lack confirmed scientific bases, designated as non-conventional treatments, are offered for the treatment of cancer and many other diseases; however, there is little firm knowledge regarding their benefits and side effects. Financial, methodological and ethical issues may restrict the investigation of these treatment modalities to prove their potential benefits and adverse effects. Non-conventional therapies (CAM) are divided in complementary therapy [which intends to supplement allopathic medicine to provide palliation with non-invasive treatments] and alternative therapy [which intends to compete in ontological treatment].

Upon analysis of the CAM use patterns of 1,559 adults in the United States of America in 1990, Eisenberg et al found that 34% used some form of non-conventional therapy, which represents an economical expense of 13.7 billion dollars. Astin et al studied a population of 1,035 individuals, detecting 40% of CAM users, and reported that higher education level, poor health condition, holistic orientation, anxiety and presence of chronic pain are factors that can predict the use of non-conventional therapies. In recent years, CAM has become more popular among cancer patients both in developed and underdeveloped countries; generally, CAM is used simultaneously with oncological therapy and the oncologist is not notified of this practice. Downer et al detected that 16% of 415 patients with different neoplasms used complementary therapy simultaneously with conventional oncological therapy and the most frequent types of treatment were healing, relaxation, visualization, diets, homeopathy, vitamins and herbs. Paltiel et al detected that 51.2% of 1,027 patients with hematological diseases resorted to CAM during the year previous to the interview and 54.8% used it in the previous 3 months; feminine gender and high education level were, among others, predictor factors of CAM use and the most commonly used methods were homeopathy (18.4%), relaxation (18.9%) and reflexology (15.5%). Similar data have been described in pediatric patients with cancer. Another report states the use of CAM with pharmacological methods in up to 88.2% of cancer patients recruited for clinical trials, which can modify the therapeutic effects and toxicity of the evaluated oncological schemes.

The objectives of the present work were to determine the frequency of use of the complementary and/or alternative therapy in a cancer heterogeneous population, to find out the factors that favor its use and to consider the patient’s opinion. The assessment of the efficacy or safety of this type of treatment was not an objective of this study.

PATIENTS AND METHODS

The present transversal study was performed in a private general hospital between February 20 and March 5, 2004; patients were non-selected, older than 10 years of age with confirmed diagnosis of solid or hematological cancer indistinct of clinical stage. Patients attended to a follow-up visit or to receive oncological treatment and provided oral consent to complete a specific questionnaire.

Definition of CAM

CAM was defined as any non-conventional therapy used alone or simultaneously with the conventional oncological treatment. The CAM was categorized ac-