

Effective Communication About the Use of Complementary and Integrative Medicine in Cancer Care

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Abstract

Complementary and integrative medicine (CIM) is becoming an increasingly popular and visible component of oncology care. Many patients affected by cancer and their family members are looking for informed advice and desire communication with their physicians about CIM use. Patients affected by cancer come to discuss CIM use with intense emotions and are experiencing an existential crisis that cannot be ignored. Effective communication is crucial in establishing trust with these patients and their families. Communication is now recognized as a core clinical skill in medicine, including cancer care, and is important to the delivery of high-quality care. The quality of communication affects patient satisfaction, decision-making, patient distress and well-being, compliance, and even malpractice litigation. The communication process about CIM use requires a very sensitive approach that depends on effective communication skills, such as experience in listening, encouraging hope, and ability to convey empathy and compassion. This process can be divided into two parts: the “how” and the “what”. The “how” relates to the change in clinician attitude, the process of gathering information, addressing patients’ unmet needs and emotions, and dealing with uncertainty. The “what” relates to the process of information exchange while assisting patients in decisions about CIM use by using reliable information sources, leading to informed decision-making.

Introduction

PATIENT-CENTERED MEDICAL CARE is now synonymous with good-quality care and has become accepted as a preferred model of care, or at least a model that one strives to achieve.¹ Effective clinician-patient communication, the cornerstone of patient-centered care, can influence health outcomes in different ways. Proximal outcomes of the interaction include patient understanding, trust, and clinician-patient agreement. These factors influence intermediate outcomes (e.g., increased adherence, better self-care skills) which, in turn, affect health and well-being.² Clinician behaviors associated with patient-centered care, such as respecting patients’ preferences, should be justified on moral grounds alone, independent of their relationship to health outcomes.³ Communication is crucial in establishing trust with patients, gathering information, addressing patient emotions, and assisting patients in decisions about care.^{4–6} The quality of communication in cancer care has been shown to affect patient satisfaction, decision-making, patient distress and well-being, compliance, and even malpractice litigation.^{7,8} Communication is now recognized as a core clinical skill in medicine, including cancer care, and is important to the delivery of high-quality care.

A patient’s interest and use of complementary and integrative medicine (CIM) falls into this definition of respecting patients’ preferences and providing patient-centered care. Effective communication about CIM will ultimately improve quality of life, reduce distress, mitigate unwanted adverse events that could result from the use of inappropriate treatments, and possibly improve clinical outcomes.⁹ CIM is becoming an increasingly popular and visible component in oncology care. Although applying the concept of integrative medicine to cancer care is still in its infancy, a few comprehensive cancer centers in the United States understand this need and are trying to put these concepts into practice.^{9–11}

Two important questions arise in addressing communication issues with patients about CIM use. The first one relates to “how.” How can clinicians actually facilitate, encourage, and integrate the use of safe, evidenced-based, personalized complementary therapies for patients with cancer? The second question relates to “what.” What should a physician evaluate and discuss to address patients’ concerns and needs? This paper will discuss these questions and suggest answers, as well as discuss other important aspects of effective clinician-patient communication about CIM use in cancer care.

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The “How”

Attitude

The clinicians' attitude is the first and the most essential part in the success of effective communication about CIM. Clinicians should be open, receptive, and nonjudgmental of patients when discussing CIM use. Communication between clinicians and patients is an interactive process, not a concise, focused dialogue of questions and answers. The patient-clinician dialogue involves not just words; it also involves the “voice.” The ways in which one expresses himself or herself—using a soft or loud voice, slow or fast speech, and verbal and nonverbal cues—are all connected and are part of communication between two people. Communication can relate to previous visits, family and caregiver involvement, other health care providers, and personal and professional experiences of the clinician and the patient. Family, employment, emotions, desires and wants, hidden wishes and concerns, where one finds meaning in life, health beliefs, social, religious, and spiritual issues are all part of effective communication.¹²

Communication is crucial in establishing trust with the patient, gathering information, addressing patient emotions and needs, and assisting patients in decisions about care.¹³ Patients of physicians who involve them in treatment decisions during office visits have better health outcomes and decreased psychological distress than physicians who do not.⁵

Effective communication by health care professionals improves patient health by positively influencing emotional health, symptom resolution, physical functioning, and pain control.¹⁴ The clinician's health can also be influenced by effective communication. For example, cancer clinicians who feel inadequately trained to respond to patients' emotional needs are at an increased risk of burnout.^{15,16}

Clinicians react to patients in multiple ways that can inhibit or enhance the relationship. Clinicians may become overly distant, leading to both clinician and patient dissatisfaction, or they can become overly involved emotionally, which can have serious psychological and clinical consequences.¹⁷ Both extremes can lead to clinician burnout.

A communication gap in the clinician-patient relationship may erode effective communication and patient-centered care based on the way the health care providers perceive their role regarding patients who use CIM. In Australia, Broom and Adams examined a series of in-depth interviews with oncology consultants and oncology nurses and found that clinicians frame CIM use only in the context of risk: describing patients' “irrationality,” “seeking control,” and “desperation”.¹⁸ In a study of 291 oncology health care professionals in the United States, most agreed that good communication enhances patient satisfaction (76%) and treatment compliance (88%). However, only 34% of respondents felt comfortable discussing CIM, and approximately half of all respondents felt they lacked the skills needed to communicate and help patients maintain hope.¹⁹

When clinicians fail to communicate with patients about possibly effective CIM treatments, a loss of trust within the therapeutic relationship may result. Poor communication may also lead to diminished patient autonomy and control over treatment, thereby interfering with the self-healing process.^{20,21} A physician's failure to recognize this interferes

with the physician's ability to address the unspoken needs of the patient. Psychological, social, and spiritual dimensions of care may be ignored if physicians cannot adapt to the individual needs of the patient or if they provide care without sensitivity. However, one of the challenges is that when physicians are faced with unfamiliar information about CIM therapies, they may feel “de-skilled” by being forced outside their zone of comfort and competence. This in turn can lead to defensiveness and a breakdown in communication with the patient. In contrast, the physician who is receptive to patient inquiries and aware of subtle, nonverbal messages can create an environment in which the patient feels protected^{21,22} and can openly discuss potential CIM choices.

Most patients expect their physicians to know something about the use of CIM specific for their situation so they can obtain educated advice and collaborate in decision-making.^{23,24} If their physician is not responsive and is not a reliable source of information, patients will obtain and collect information about CIM from a variety of other sources of questionable veracity, such as friends and relatives, non-professional literature, popular magazines, journals, daily newspapers, the Internet, advertisements, and health food stores. At times, the information gathered from nonphysician sources is inaccurate, and occasionally, it can lead a patient to use therapies that are dangerous.^{25,26}

While discussions about CIM are relatively rare and most likely to be initiated by patients, when the topic is discussed, both patients and doctors say it usually enhances their relationship.²⁷ The initiative for this discussion should come from the physician. Physicians have both an ethical and a legal obligation to discuss CIM use in cancer care with their patients.²⁸ CIM use in cancer care needs to be addressed with all patients and discussed in an open, evidence-based, and patient-centered manner.^{29,30}

Learning the skill

When physicians pay particular attention to incongruencies, in which the verbal and nonverbal aspects of communication are not aligned, it can yield valuable information about the underlying concerns, beliefs, emotions, and expectations of patients. This kind of information allows the physician to get to the root of problems and facilitate their resolution. Unfortunately, although such skills are easily learned, they are generally either not taught or only superficially addressed in the medical curriculum.³¹ But when students are exposed to education on this topic, it leads to improved communication. A study in Israel revealed that emphasizing effective communication caused students to be more open and able to talk about CIM with their patients and to feel more prepared to treat patients with cancer.³² It is clear that it is possible to train health care professionals in more effective communication skills, and this can be specifically applied to the area of CIM.

One of the most challenging tasks in cancer care is determining how to best communicate with patients and provide adequate emotional support.^{33,34} An approach that incorporates empathy, friendliness, listening, and humor; that encourages questions; and that checks a patient's understanding of the answers can be helpful.⁷ Patients seem to expect their physicians to be supportive, caring, accepting, and nonjudgmental regarding CIM use and to reinforce a

sense of hope.³⁵ In a Canadian study of patients with breast cancer who used CIM, patients rated their CIM practitioners higher than their physicians in listening and providing emotional support; at the same time, they trusted their conventional doctors more with regard to telling the truth and having up-to-date knowledge.³⁶ Patients frequently see CIM as a means of taking control of their health and increasing their quality of life.^{23,24,37,38} Learning the skill of effective communication and approaching the topic of CIM use in cancer care with the right attitude will increase the probability that the consultation will be patient centered.

Addressing unmet needs

Despite advances in cancer care, patients continue to experience a substantial level of unmet physical, social, employment, financial, emotional, and spiritual needs.^{39,40} The most common emotional reactions during and after treatment include anxiety, depression, anger, and fear.⁴¹ Untreated mood disorders can negatively affect patient quality of life, pain, and response to chemotherapy.^{42,43} Many patients continue to experience pain, fatigue, sleep disorder, cognitive dysfunction, and other symptoms long after cancer treatment.⁴⁴

Patients tend to have strong emotions related to the use of CIM, and emotional issues can surface at any stage of the discussion. Patients with unmet needs, both emotional and physical, tend to use CIM more often than patients who are satisfied with their care.⁴⁵ A significant body of research shows that psychological and social factors, such as depression and anxiety and inadequate social support, are associated with increased morbidity and mortality and decreased functional status in patients with cancer.^{46,47}

During the CIM consultation process, physicians can appropriately and directly address patients' emotional distress by using verbal expressions of understanding, empathy, compassion, and support, which in turn can lead to improvements in physical symptoms, alleviate the negative effects of inadequate social support, foster a perception of being understood, and improve the patient's well-being.^{8,48-50}

Even though CIM is not emphasized in this report, CIM is an important option for addressing the unmet needs of patients with cancer.⁸ A recent study of cancer survivors found that respondents who experienced unmet needs within the existing cancer care system were more likely to have used CIM.⁴⁵ It is not clear whether appropriate CIM use can decrease unmet needs among patients affected by cancer. But one point is clear: With the increased publicity about and availability of multiple CIM modalities, more patients are looking for informed advice and communication from their doctors about CIM.^{11,35}

Several studies have concluded that disappointment or dissatisfaction with conventional medicine does not cause patients to use CIM.⁵¹ Most patients who use CIM for cancer treatment view it as complementary rather than alternative.⁵² Even though most patients indicate that they would prefer to get a physician's referral to use CIM,³⁸ the majority do not actually consult their physician before deciding to use CIM.^{53,54} This is because many patients believe that their physician has limited knowledge of CIM and has no interest in discussing its use. Some believe that physicians' emphasis on scientific studies and evidence-based medicine, rather

than patient preferences, is a barrier to openly discussing CIM.^{20,21} This of course can result in patients engaging in practices that may be unsafe and could diminish the efficacy of conventional treatments they may be taking for curative intent.

Dealing with uncertainty

For patients, uncertainty in illness occurs when there is a perception that certain aspects of the disease, treatment, and recovery are considered unpredictable or inconsistent. In a survey among 623 cancer survivors in California, 54% reported a suboptimal decision-making style for their physician. The researchers identified two significant factors where the physician's communication style could influence the process. The first one was to increase survivors' participation self-efficacy and thereby enhance their perceptions of personal control. The second was to enhance survivors' level of trust and thereby reduce their perceptions of uncertainty. They concluded that a participatory physician style may improve survivors' mental health by improving survivors' communication.⁵⁵

Uncertainty about the use of CIM therapies in cancer care is profound, especially when it comes to the use of botanicals and other natural products. In addition, there appears to be considerable confusion among patients and oncologists regarding what to discuss and how to manage disagreements and individual levels of comfort with the level of uncertainty for certain products.⁵⁰ In the United States, more than 20,000 different types of nutritional supplements are sold. If a patient believes strongly in the use of a specific supplement or other CIM therapy, the physician needs to make an effort to explore the use of this treatment. Even if initially a particular treatment seems bizarre or to have no scientific justification, the physician should not dismiss its use without making a sincere effort to obtain information that can be useful to the patient. A physician's simple dismissal of the use of a specific CIM therapy, especially when the patient has a very strong belief in the treatment's value, could lead to mistrust; in addition, the patient may end up using a treatment that he or she should not use, and it could even lead to a lack of compliance with conventional care.⁵⁶

In many situations, patients appreciate when the physician can acknowledge that uncertainty is unavoidable and can frame information in terms of what is known and what is unknown. When limited scientific data in the medical literature support the use of a particular CIM therapy, these data cannot be considered proof of efficacy, but they do offer clinical clues that support the use or avoidance of specific CIM therapies. Such clues can provide a basis for honest and open discussion with the patient. When physicians use a patient-centered approach, they can promote informed decision-making by the patient in collaboration with the physician. This combined effort can provide a basis for improving the patient-physician relationship and can empower the patient in his or her own health care.^{14,56} In fact, an informed open communication about the uncertainty of the benefits and safety of a particular CIM modality will often be well received by the patient and the patient will be more likely to heed the physician advice to not use a certain CIM than if their approach to the communication is uninformed and paternalistic.

Addressing uncertainty of the disease outcome may have a protective value by allowing space for hope. Extensive research and clinical experience suggests that maintaining hope significantly assists individuals in adjusting to life-threatening illnesses, reduces psychological distress, and enhances psychosocial well-being and quality of life.⁵⁷⁻⁶⁸

The “What”

Adequate information exchange

Effective information exchange in the area of CIM is a difficult process. This process involves much more than simply providing reliable information about the proper use of CIM therapies to alleviate symptoms. Some key factors are necessary to allow for a successful consultation for patients and their families and caregivers: Clinicians must have some knowledge of CIM and cancer care or the willingness to seek out the information; as mentioned in the “How” section, they must use a sensitive approach in communication with patients that relies on effective communication skills and experience in listening; and they must have the ability to convey empathy and compassion. A communication ap-

proach that fosters a collaborative relationship that includes adequate information exchange, responds to emotional needs, and manages uncertainty can lead to informed decisions about CIM use.

Only after opening this route of effective communication can the clinician move to the next steps of actually delivering information and addressing patients’ concerns. Because some CIM therapies negatively interact with conventional care, physicians need to be aware of the therapies patients are using and provide a reliable response concerning this use.^{56,66}

In addition, clinicians need to understand why patients with cancer use CIM therapies in the first place. Patients tend to use these therapies in anticipation of psychological support and because they want to do everything possible to feel hopeful, get more control in decision-making, enhance the immune system, use less toxic treatments, or reduce adverse effects and possible toxicity of conventional treatments. In fact, most patients choose to use CIM to improve their quality of life rather than seeking a cure for their disease.^{20,38,51}

Exchange of information is bilateral. It involves the physician obtaining information from the patient and, after properly assessing the specific patient’s needs, sharing

TABLE 1. RELIABLE ONLINE RESOURCES

<i>Institution</i>	<i>Web site</i>	<i>Comment</i>
Society for Integrative Oncology	http://www.integrativeonc.org/	Site for researchers and practitioners of integrative oncology as well as for patients and patients advocates interested in this topic
National Center for Complementary and Alternative Medicine	http://nccam.nih.gov	Information site about complementary medicine supported by the U.S. National Institutes of Health
Natural Standard	http://www.naturalstandard.com/	Database for a wide range of nutritional supplements; requires paid subscription
Natural Medicines Comprehensive Database	http://naturaldatabase.therapeuticresearch.com/home.aspx?cs=&s=ND	Database for a wide range of nutritional supplements; requires paid subscription
Office of Cancer Complementary and Alternative Medicine (OCCAM)	http://www.cancer.gov/cam/index.html	Information on research supported by National Cancer Institute related to CAM and cancer care
Memorial Sloan-Kettering Cancer Center	http://www.mskcc.org/mskcc/html/1979.cfm	Database of information supported by an integrative oncology program within a major cancer center
M.D. Anderson Cancer Center	http://www.mdanderson.org/departments/cimer/	Database of information supported by an integrative oncology program within a major cancer center
Penny Brohn Cancer Care	http://www.pennybrohncancercare.org/	United Kingdom-based institution that provides integrative oncology consultations, therapies, and information to patients and families
Integrative Oncology Consultants	http://www.moshefrenkelmd.com/	International site that provides practical and useful information to patients, families, and healthcare providers related to integrative oncology
Cancer Support Community	http://www.thewellnesscommunity.org/Default.aspx	International nonprofit organization dedicated to providing support, education, and hope to people affected by cancer
National Information Center for Complementary and Alternative Medicine (NIFAB)	http://www.cam-cancer.org/CAM-Summaries	CAM-Cancer hosted by NIFAB at the University of Tromsø, Norway

information about the physician's knowledge, experience, and beliefs. Attending to information needs is important, not just to gain knowledge about the illness but also to develop a strong patient-clinician relationship, help in the decision-making process, and reduce uncertainty.

To help patients with cancer be truly informed about the entire range of care options and be autonomous in their care decisions and to provide a sense of control, clinicians need to explore the following:^{8,69,70}

- What conventional treatments have been tried, have failed, or have been avoided because of safety, quality-of-life concerns, cost, or other issues;
- The patient's understanding of prognostic factors associated with his or her disease stage and the potential risks and benefits of conventional therapy;
- The patient's spiritual and religious values and beliefs;
- Views about quality of life;
- Views about end-of-life issues;
- What levels of support the patient relies on from family, community, faith, and friends;
- The patient's beliefs, fears, hopes, expectations, and experience with CIM; and
- The patient's main concerns about integrating CIM to his or her care.⁷

After exploring these issues with the patient and his or her family, one can actually examine possible solutions and answers derived from multiple resources, such as reliable Web sites (Table 1) and online information or print.^{7,8,11,66,71}

Informed decision-making

A high-quality decision is achieved after consideration of a patient's values combined with a clear understanding of the evidence and rationale for the decision. By creating a trusting relationship that is based on good patient-clinician communication, and by taking into account a patient's needs, values, and preferences, misunderstandings can be avoided.^{72,73} The optimal approach to discussing CIM use is meeting uncertainty with facts about safety, efficacy, and expectations; then, a mutually informed decision can be made about the patient's care.^{7,8,12,56,74}

Patients must be given appropriate information from the reliable sources about CIM listed in Table 1 or use peer-reviewed documents, such as the current guidelines of the Society of Integrative Oncology.⁶⁶ Information is readily available for many CIM therapies but not others, such as botanicals and other natural products. In fact, some CIM therapies must be extensively investigated so that adequate information that will help patients make informed decisions can be obtained. This can pose a challenge because of time constraints, and this is the point where other members of the treatment team, such as nurses, pharmacists, and dieticians, who might have interest in exploring these options of care further, can help improve service to patients and families.

Conclusions and Practice Implication

Most patients with cancer come to discuss CIM use with intense emotions and are experiencing an existential crisis that cannot be ignored. Effective communication is an essential ingredient in the process of integrating safe and reliable CIM therapies into patients' care. The communication

process about these issues requires a very sensitive approach that depends on effective communication skills, experience in listening, encouraging hope, and the ability to convey empathy and compassion. This process is coupled with the use of reliable information sources that can be shared with the patient and his or her family in making decisions about this use.

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References

1. Epstein RM, Street RL Jr. The values and value of patient-centered care. *Ann Fam Med* 2011;9:100-103.
2. Street RL Jr, Makoul G, Arora NK, Epstein RM. How does communication heal? Pathways linking clinician-patient communication to health outcomes. *Patient Educ Couns* 2009;74:295-301.
3. Arora NK, Weaver KE, Clayman ML, Oakley-Girvan I, Potosky AL. Physicians' decision-making style and psychosocial outcomes among cancer survivors. *Patient Educ Couns* 2009;77:404-412.
4. Epstein RM, Street RL Jr. Patient-centered communication in cancer care: promoting healing and reducing suffering. Bethesda, MD: National Cancer Institute; 2007. NIH publication no. 07-6225.
5. Institute of Medicine. *Cancer Care for the Whole Patient: Meeting Psychosocial Health Needs*. Washington, DC: National Academies Press; 2007.
6. Pincus HA, Patel SR. Barriers to the delivery of psychosocial care for cancer patients: bridging mind and body. *J Clin Oncol* 2009;27:661-662.
7. Frenkel M, Ben Arye E, Cohen L. Communication in cancer care: discussing complementary and alternative medicine. *Integr Cancer Ther* 2010;9:177-185.
8. Frenkel M. Components of a successful integrative medicine clinical consultation. *J Soc Integr Oncol* 2008;6:129-133.
9. Frenkel M, Cohen L, Peterson N, Swint K, Palmer L, Bruera E. Integrative medicine consultation service in a comprehensive cancer center: findings and outcomes. *Integr Cancer Ther* 2010;9:276-283.
10. Frenkel M, Cohen L. Preface. Editorial to an issue dedicated to integrative oncology: complementary and integrative medicine and cancer care. *Hematol Oncol Clin North Am* 2008;22:xv-xx.
11. Frenkel M, Cohen L. Integration of complementary and integrative medicine in a major cancer center. *Hematol Oncol Clin North Am* 2008;22:727-736.
12. Frenkel M, Ben Arye E. Communicating with patients about the use of complementary and integrative medicine in cancer care. In: Cohen L, Markman M, eds. *Integrative Oncology: Incorporating Complementary Medicine into Conventional Care*. Totowa, NJ: Humana Press; 2008.
13. Baile WF, Aaron J. Patient-physician communication in oncology: past, present, and future. *Curr Opin Oncol* 2005;17:331-335.
14. Stewart MA. Effective physician-patient communication and health outcomes: a review. *CMAJ* 1995;152:1423-1433.
15. Ramirez AJ, Graham J, Richards MA, et al. Burnout and psychiatric disorder among cancer clinicians. *Br J Cancer* 1995;71:1263-1269.
16. Ramirez AJ, Graham J, Richards MA, Cull A, Gregory WM. Mental health of hospital consultants: the effects of stress and satisfaction at work. *Lancet*. 1996;347:724-728.

17. Farber NJ, Novack DH, O'Brien MK. Love, boundaries, and the patient-physician relationship. *Arch Intern Med* 1997; 157:2291–2294.
18. Broom A, Adams J. Oncology clinicians' accounts of discussing complementary and alternative medicine with their patients. *Health (London)* 2009;13:317–336.
19. Roberts C, Benjamin H, Chen L, et al. Assessing communication between oncology professionals and their patients. *J Cancer Educ* 2005;20:113–118.
20. Wyatt GK, Friedman LL, Given CW, Given BA, Beckrow KC. Complementary therapy use among older cancer patients. *Cancer Pract* 1999;7:136–144.
21. Tasaki K, Maskarinec G, Shumay DM, Tatsumura Y, Kakai H. Communication between physicians and cancer patients about complementary and alternative medicine: exploring patients' perspectives. *Psychooncology* 2002;11:212–220.
22. Kao GD, Devine P. Use of complementary health practices by prostate carcinoma patients undergoing radiation therapy. *Cancer* 2000;88:615–619.
23. Crocetti E, Crotti N, Feltrin A, Ponton P, Geddes M, Buiatti E. The use of complementary therapies by breast cancer patients attending conventional treatment. *Eur J Cancer* 1998;34:324–328.
24. Eliason BC, Huebner J, Marchand L. What physicians can learn from consumers of dietary supplements. *J Fam Pract* 1999;48:459–463.
25. Rees RW, Feigel I, Vickers A, Zollman C, McGurk R, Smith C. Prevalence of complementary therapy use by women with breast cancer. A population-based survey. *Eur J Cancer* 2000;36:1359–1364.
26. Gotay CC, Dumitriu D. Health food store recommendations for breast cancer patients. *Arch Fam Med* 2000;9:692–699.
27. Roberts CS, Baker F, Hann D, et al. Patient-physician communication regarding use of complementary therapies during cancer treatment. *J Psychosoc Oncol* 2005;23:35–60.
28. Verhoef MJ, Boon HS, Page SA. Talking to cancer patients about complementary therapies: is it the physician's responsibility? *Curr Oncol* 2008;15:s88–93.
29. Schofield P, Diggins J, Charleson C, Marigliani R, Jefford M. Effectively discussing complementary and alternative medicine in a conventional oncology setting: communication recommendations for clinicians. *Patient Educ Couns.* 2010;79: 143–151.
30. Deng GE, Frenkel M, Cohen L, et al. Evidence-based clinical practice guidelines for integrative oncology: complementary therapies and botanicals. *J Soc Integr Oncol* 2009;7:85–120.
31. Walker L. Non-verbal communication. *BMJ* July 6, 1998. [homepage on Internet]. Online document at: <http://www.bmj.com/rapid-response/2011/10/30/verbal-and-non-verbal-communication> Accessed August 14, 2009.
32. Ben-Arye E, Frenkel M. An approach to teaching physicians about complementary medicine in the treatment of cancer. *Integr Cancer Ther.* 2004;3:208–213.
33. Buckman R. Communications and emotions. *BMJ* 2002; 325:672.
34. Tattersall MH, Gattellari M, Voigt K, Butow PN. When the treatment goal is not cure: are patients informed adequately? *Support Care Cancer* 2002;10:314–321.
35. Verhoef MJ, White MA, Doll R. Cancer patients' expectations of the role of family physicians in communication about complementary therapies. *Cancer Prev Control* 1999; 3:181–187.
36. Boon H, Stewart M, Kennard MA, et al. Use of complementary/alternative medicine by breast cancer survivors in Ontario: prevalence and perceptions. *J Clin Oncol* 2000;18: 2515–2521.
37. Stevensen C. Assessing needs of people with cancer. *Contemp Nurse* 1996;5:36–39.
38. Morant R, Jungi WF, Koehli C, Senn HJ. [Why do cancer patients use alternative medicine?]. *Schweiz Med Wochenschr* 1991;121:1029–1034.
39. Barg FK, Cronholm PF, Straton JB, et al. Unmet psychosocial needs of Pennsylvanians with cancer: 1986–2005. *Cancer* 2007; 110:631–639.
40. Houts PS, Yasko JM, Harvey HA, et al. Unmet needs of persons with cancer in Pennsylvania during the period of terminal care. *Cancer* 1988;62:627–634.
41. Holland JC. *Psycho-Oncology*. 2nd ed. New York: Oxford University Press;2010.
42. Giese-Davis J, Collie K, Rancourt KM, Neri E, Kraemer HC, Spiegel D. Decrease in depression symptoms is associated with longer survival in patients with metastatic breast cancer: a secondary analysis. *J Clin Oncol* 2011;29:413–420.
43. Spiegel D. Mind matters in cancer survival. *JAMA* 2011; 305:502–503.
44. Mitchell GK. The role of general practice in cancer care. *Aust Fam Physician* 2008;37:698–702.
45. Mao JJ, Palmer SC, Straton JB, et al. Cancer survivors with unmet needs were more likely to use complementary and alternative medicine. *J Cancer Surviv* 2008;2:116–124.
46. Pinquart M, Duberstein PR. Depression and cancer mortality: a meta-analysis. *Psychol Med* 2010;40:1797–1810.
47. Satin JR, Linden W, Phillips MJ. Depression as a predictor of disease progression and mortality in cancer patients: a meta-analysis. *Cancer* 2009;115:5349–5361.
48. Tatrow K, Montgomery GH. Cognitive behavioral therapy techniques for distress and pain in breast cancer patients: a meta-analysis. *J Behav Med* 2006;29:17–27.
49. Mishel MH, Germino BB, Gil KM, et al. Benefits from an uncertainty management intervention for African-American and Caucasian older long-term breast cancer survivors. *Psychooncology* 2005;14:962–978.
50. Richardson MA, Mâsse LC, Nanny K, Sanders C. Discrepant views of oncologists and cancer patients on complementary/alternative medicine. *Support Care Cancer* 2004;12:797–804.
51. Kappauf H, Leykauf-Ammon D, Bruntsch U, et al. Use of and attitudes held towards unconventional medicine by patients in a department of internal medicine/oncology and haematology. *Support Care Cancer* 2000;8:314–322.
52. Richardson MA, Sanders T, Palmer JL, Greisinger A, Singletary SE. Complementary/alternative medicine use in a comprehensive cancer center and the implications for oncology. *J Clin Oncol* 2000;18:2505–2514.
53. Von Gruenigen VE, White LJ, Kirven MS, Showalter AL, Hopkins MP, Jenison EL. A comparison of complementary and alternative medicine use by gynecology and gynecologic oncology patients. *Int J Gynecol Cancer* 2001;11:205–209.
54. Eliason BC, Myszkowski J, Marbella A, Rasmann DN. Use of dietary supplements by patients in a family practice clinic. *J Am Board Fam Pract* 1996;9:249–253.
55. Mishel MH, Germino BB, Gil KM, et al. Benefits from an uncertainty management intervention for African-American and Caucasian older long-term breast cancer survivors. *Psychooncology* 2005;14:962–978.
56. Frenkel M, Ben-Arye E, Baldwin CD, Sierpina V. Approach to communicating with patients about the use of nutritional supplements in cancer care. *South Med J* 2005;98:289–294.

57. Herth KA. The relationship between level of hope and level of coping response and other variables in patients with cancer. *Oncol Nurs Forum* 1989;16:67–72.
58. Felder BE. Hope and coping in patients with cancer diagnoses. *Cancer Nurs* 2004;27:320–324.
59. McClement SE, Chochinov HM. Hope in advanced cancer patients. *Eur J Cancer* 2008;44:1169–1174.
60. Francis PA. Surprised by hope. *J Clin Oncol* 2008;26:6001–6002.
61. Servan-Schreiber D. *Anticancer —A New Way of Life*. 2nd ed. New York: Viking Adult Press; 2010.
62. Andersen BL, Yang HC, Farrar WB, et al. Psychologic intervention improves survival for breast cancer patients: a randomized clinical trial. *Cancer* 2008;113:3450–3458.
63. Goel A, Aggarwal BB. Curcumin, the golden spice from Indian saffron, is a chemosensitizer and radiosensitizer for tumors and chemoprotector and radioprotector for normal organs. *Nutr Cancer* 2010;62:919–930.
64. Frattaroli J, Weidner G, Dnistrian AM, et al. Clinical events in prostate cancer lifestyle trial: results from two years of follow-up. *Urology* 2008;72:1319–1323.
65. Holmes MD, Chen WY, Feskanich D, Kroenke CH, Colditz GA. Physical activity and survival after breast cancer diagnosis. *JAMA* 2005;293:2479–2486.
66. Deng GE, Frenkel M, Cohen L, et al. Evidence-based clinical practice guidelines for integrative oncology: complementary therapies and botanicals. *J Soc Integr Oncol*. 2009;7:85–120.
67. Chida Y, Hamer M, Wardle J, Steptoe A. Do stress-related psychosocial factors contribute to cancer incidence and survival? *Nat Clin Pract Oncol* 2008;5:466–475.
68. Andersen BL, Thornton LM, Shapiro CL, et al. Biobehavioral, immune, and health benefits following recurrence for psychological intervention participants. *Clin Cancer Res* 2010;16:3270–3278.
69. Oneschuk D, Fennell L, Hanson J, et al. The use of complementary medications by cancer patients attending an out-patient pain and symptom clinic. *J Palliat Care* 1998;14:21–26.
70. Lee AH, Ingraham SE, Kopp M, et al. The incidence of potential interactions between dietary supplements and prescription medications in cancer patients at a Veterans Administration hospital. *Am J Clin Oncol* 2006;29:178–182.
71. Boddy K, Ernst E. Review of reliable information sources related to integrative oncology. *Hematol Oncol Clin North Am* 2008;22:619–630.
72. Sollner W, Maislinger S, DeVries A, et al. Use of complementary and alternative medicine by cancer patients is not associated with perceived distress or poor compliance with standard treatment but with active coping behavior: a survey. *Cancer* 2000;89:873–880.
73. Sierpina V. Treatment choice is ultimately the patient's. *American Medical News*. October 4, 2004. [homepage on Internet]. Online document at: <http://www.amednews.com/article/20041004/profession/310049967/5/> Accessed January 15, 2012.
74. Ben-Arye E, Frenkel M, Margalit RS. Approaching complementary and alternative medicine use in patients with cancer: questions and challenges. *J Ambul Care Manage* 2004;27:53–62.

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