When complementary and alternative medicine intervenes in the conventional treatment of cancer patients: ethical analysis of a clinical case

Mahboobeh Saber
Assistant Professor, Department of Medical Ethics, School of Medicine, Shiraz University of Medical Sciences, Shiraz, Iran.

Keywords: Neoplasm; Complementary therapies; Treatment refusal.

Introduction
The use of complementary and alternative medicine (CAM) is prevalent among cancer patients as they are known to use at least one type of CAM (1, 2). In most cases, patients use CAM treatments during the conventional treatment course to reduce the side effects of chemotherapy and improve their quality of life. However, in some cases, CAM treatments replace conventional therapy immediately following the cancer diagnosis and after multiple conventional treatment stages and relapses (3). Cancer patients visit traditional medicine practitioners despite the presence of conventional treatment options due to reasons such as fear, denial of illness, or death of close relatives following cancer (4). In the current study, two patients who chose to undergo traditional treatment after the cancer diagnosis was made are introduced. An ethical analysis of these cases will determine the existing ethical challenges in this area.

Case one
Miss S., a single woman of 38 years of age, felt pain in the area between her breasts and her armpit. As the ultrasound revealed a tumor in her right breast, the radiologist referred the patient to a surgeon. However, the patient decided to visit a traditional medicine practitioner (Dr. A.). Dr. A. started a warm conversation with Miss S. and confidently convinced her that her disease can be treated with various medications and treatments such as leech or cupping therapy. After a few weeks of therapy under the supervision of Dr. A., Miss S. underwent another ultrasound that indicated tumor growth.
She worriedly informed Dr. A. about the results, but was again convinced that the tumor cells have opened to get destroyed. After a few months of treatment, Miss S. started to suffer from shortness of breath, making her unable to sleep without an oxygen tank. Then, a lesion was found in her lung x-ray during a physician visit. Once again, Dr. A. stated that "they (the physicians) are trying to scare you. It is not a big deal, do not worry, I will cure you." Meanwhile, the tumor had grown considerably and the patient started to experience daily bleedings from her wounded breast. Nonetheless, Dr. A. was still hopeful about the positive course of the treatment with great certainty. This traditional medicine practitioner explained all the symptoms as signs of recovery and prevented the patient from undergoing conventional treatments or visiting a surgeon.

Eventually, after 11 months when breasts were both wounded and the patient was experiencing secretion and bleeding, malodor, and shortness of breath, Dr. A. finally told Miss S. to go and visit a surgeon.

**Case two**

Miss F., a married woman of 42 years of age, visited a gynecologist with complaints about a burning sensation in her breasts. After physical examination, mammography was prescribed. After mammography and ultrasound, the radiologist detected a seemingly malignant tumor in the patient's breast; so, the patient was referred to a surgeon. After describing the situation, the surgeon explained the necessity of taking a tissue sample for an accurate diagnosis. The patient used her fear of the procedure and the fact that she was living alone as an excuse to refuse the doctor's diagnostic suggestion.

The patient told none of her family members about her illness and did not visit the surgeon anymore. Later, Miss F. began traditional treatment and started taking the herbal medication. After 18 months, she started coughing and experiencing shortness of breath. The family doctor prescribed antibiotics, and as the symptoms persist, the patient was referred to a specialist. At this stage, cancer had spread to the lungs and other vital organs. This was two years after the first manifestation of the signs of disease. During this time, Miss F. had only received herbal medicines from a traditional medicine practitioner. When the patient had not recovered after each treatment course, the practitioner had repeated the treatment and insisted on their efficacy in other patients.

Miss F. believed faith had guided her towards using traditional medicine and that the reason for failing to defeat the disease was herself, not having not enough serenity. She trusted that traditional medicine could cure and heal any patient.

**Discussion**

Cancer patients are often interested in complementary and alternative medicine; they, therefore, visit the CAM providers. Any interaction between practitioners and patients must be carried out by conventional methods and needs informed consent. While discussing the treatment goals, various types of available or alternative treatments, the benefits or effectiveness of the treatment, and
possible side effects must be explained. During this conversation, the type of treatment ought to be determined.

Patients talk to physicians when proper interaction for achieving shared decision-making is hardly possible due to the reasons such as fear of cancer, cancer in close relatives, and denial of illness, (5). Often, patients expect the physician to talk about curative treatments with traditional medicine before getting engaged in conventional therapy. However, ethics must be concerned in another way. The best and most challenging approach is to reinforce the patient autonomy in determining the treatment goals and explaining the effectiveness of the recommended treatments realistically. In this way, the patient can freely decide based on a clear image of the possible future events and his or her preferences and concerns without any manipulation (6).

Traditional medicine practitioners promised to cure the illnesses of Miss F. and Miss S. using traditional treatment. The treatment methods, their side effects, and alternative options were not mentioned; besides the practitioner only referred to the successful results of the treatments. In this situation, not only the patient was not well informed but also her freedom in decision making was tempered by manipulation. Miss F. and Miss S. spoke of a lengthy hope-inspiring conversation with the traditional medicine practitioner that was desirable and calming; this conversation was the reason for their trust. Such conversations repeatedly prevented the patients from visiting a surgeon; such interactions, therefore, are not considered professional behavior. Manipulating a patient to make a confident decision while they are not well-informed is a clear example of impairing the patient's autonomy. In addition, providing the patient with a clear and unbiased explanation of the strengths and weaknesses of the treatments as well as their advantages and side-effects in accordance with ethical codes for the Iranian medical professionals is the responsibility of the traditional medicine practitioners that has been violated in these cases. (7)

The clinical procedure must be carried out based on professional standards. Concerning her physical condition in the course of treatment, Miss S. stated, "both of my breasts were wounded, they put leeches on them, and I was bleeding so much that I fainted and needed a serum infusion. This happened numerous times." The repetition of this event during a treatment that failed to meet the minimum criteria for therapeutic effectiveness is a confirmation of causing harm to the patient. At later stages, the wounds became malodorous, and hence prolonged mental suffering was added to the pain and suffering without gaining any results.

When performing diagnostic and therapeutic interventions, healthcare providers are obliged to adhere to the principles of non-maleficence. If a procedure causes pain and tissue damage, there should be a clear and approved benefit (6). Meanwhile, no evidence of benefit existed in this case. CAM
When complementary and alternative medicine intervenes …

approaches causing prolonged pain and suffering for the patient do not have any therapeutic effects such as increasing the lifespan or the quality of life (8). In the conventional treatment, the patient would receive chemotherapy and radiotherapy that are complex processes; they, however, recover to a definitive degree that lasts up to months or even years. For the reasons mentioned above, it can be stated that this type of treatment (traditional medicine) is in contradiction with the principle of non-maleficence, as traditional treatment has led to increased pain and suffering in both patients. Furthermore, the provision of health interventions outside the framework of clinical guidelines is also in contradiction with the Iranian ethical codes. The treatments carried out by the traditional medicine practitioners were self-styled non-scientific therapies that violate the codes of professional ethics (7).

Cancer, or breast cancer in specific, was a known disease to Ibn Sina and al-Razi, who used and recommended surgery and even a special drug with effects close to chemotherapy as the treatment (9, 10). However, the interventions performed for these two patients had no similarity to the approaches taken by these two Persian scientists. Nowadays, the traditional treatments offered to cancer patients result in reduced lifespan and quality of life (11). The professional behavior in such situations is to refer the patient who is interested in complementary medicine to an oncologist and prescribe the complementary treatments alongside chemotherapy and radiotherapy.

Agreeing to treat these two patients under such conditions contradicted the principle of beneficence and professional ethics, as these patients were not benefiting from the complementary medicine.

There is a myth about traditional and complementary medicine which is adherence to such treatments is a sign of faith and even the idea that the patient's recovery is also connected to their beliefs. The impact of spirituality on an individual's health is a subject verified by substantial evidence. When a traditional medicine practitioner seduces the patient by the idea that specific treatments such as cupping or herbal medicine have more advantages than their known benefits, the desperate cancer patient and her religious beliefs in the effectiveness of such treatments are challenged. Miss F. considered this type of treatment effective and associated the poor progress of her disease with not having enough serenity.

Traditional medical services are provided in a limited number of centers and through individualistic methods. Therefore, if a patient starts doubting the quality of the services, there is no possibility of continuing the treatment elsewhere. This creates a barrier against supervising and developing care standards for CAM practices. On the other hand, prescribing and providing therapeutic procedures and traditional products in the exact location is a clear example of a conflict of interest that is witnessed in most centers providing CAM services. This often increases the cost of complementary medicine, and it is not possible to benefit from insurance services either. The use of
religious beliefs for attracting customers, the existence of individualistic styles, lack of professional standards, and the existing conflicts of interest present challenges to CAM service provision concerning justice principle.

The spread of CAM services in the country increases the urgency of paying attention to the principles of professional ethics governing patient and physician interactions. Although it is still a challenge to cite valid scientific evidence about adherence to the ethical rules governing the medical profession in traditional or modern medicine, the four principles of medical ethics, and the two medical approaches agreed (12).

Implementing the four ethical principles in CAM can be achieved by paying attention to the seven-step framework known as the "Risk-Benefit Analysis" (13).

**Conclusion**

The inclination of the patients toward traditional treatment is accepted in the healthcare system. Traditional medicine practitioners must display more sensitivity in providing traditional treatment to individuals with serious and acute illnesses. Patient autonomy and collaborative decision-making are possible when the patient has valid and accurate information. All treatments applied by traditional medicine practitioners must meet the effectiveness criteria. In the case of acute and serious illnesses, traditional medicine should be used alongside the conventional treatments after investigating the drug interactions and not as an alternative to conventional treatments. Paying attention to the faith and beliefs of the patients is essential for improving their spiritual health and their search for meaning although this should not be used as a method to advertise traditional medicine. Adherence to the four principles of medical ethics and the ethical code of medical professionals is the proper route of interactions between the conventional and the traditional medical approaches to promote health in society.

**Ethical consideration**

This article is a part of a qualitative study on cancer patients that has been approved by the research ethics board at Shiraz University of Medical Sciences (IR. SUMS. REC. 1396. S1063).

**Acknowledgments**

The authors are grateful and appreciate the two patients who participated in the interviews.
References

1. Bernstein BJ, Grasso T. Prevalence of complementary and alternative medicine use in cancer patients. Oncology (Williston Park). 2001; 15(10): 1267-72; discussion 72-8, 83.
2. Yates JS, Mustian KM, Morrow GR, et al. Prevalence of complementary and alternative medicine use in cancer patients during treatment. Support Care Cancer. 2005; 13(10): 806-11.
3. Trinidad A, Shackle M, Hurman D, Hussain A. Traditional and complementary and alternative medicines make for unwilling bedfellows in the management of cancer: a case report with a tragic outcome. J Laryngol Otol. 2011; 125(11): 1193-5.
4. Saber M, Khankeh HR, Vojdani R, Imanieh MH. Patients’ experiences with the degenerative process of cancer: a content-analysis study in Iran. Middle East Journal of Cancer. 2019; 10(3) (39): 221-30.
5. Tenner L, Hlubicky FJ, Blanke CD, et al. Let's talk about those herbs you are taking: ethical considerations for communication with patients with cancer about complementary and alternative medicine. J Oncol Pract. 2019; 15(1): 44-9.
6. Beauchamp TL, Childress JF. Principles of Biomedical Ethics, 8th ed. USA: Oxford University Press; 2019.
7. Shamsi-Gooshki E, Parsapoor A, Asghari F, et al. Developing “code of ethics for medical professionals, medical council of Islamic Republic of Iran”. Arch Iran Med. 2020; 23(10): 658-64.
8. Sanford NN, Sher DJ, Ahn C, Aizer AA, Mahal BA. Prevalence and nondisclosure of complementary and alternative medicine use in patients with cancer and cancer survivors in the United States. JAMA Oncol. 2019; 5(5): 735-7.
9. Riddle JM. Ancient and medieval chemotherapy for cancer. Isis. 1985;76(3):319-30. doi:10.1086/353876
10. Zarshenas MM, Mohammadi-Bardbori A. A medieval description of metastatic breast cancer; from Avicenna's view point. Breast. 2017; 31: 20-1.
11. Johnson SB, Park HS, Gross CP, Yu JB. Complementary medicine, refusal of conventional cancer therapy, and survival among patients with curable cancers. JAMA Oncol. 2018; 4(10): 1375-81.
12. Stone J. Ethical issues in complementary and alternative medicine. Complement Ther Med. 2000; 8(3): 207-13.
13. Cohen MH, Eisenberg DM. Potential physician malpractice liability associated with complementary and integrative medical therapies. Ann Intern Med. 2002; 136(8): 596-603.