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Complementary Medicine Use among Cancer Patients Undergoing Palliative Radiation Therapy

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Abstract

Background: Radiation therapy is the use of ionizing radiation to treat cancer patients with radical or palliative intent. Almost two-third of all cancer patients will receive radiation therapy. Palliative radiation therapy is delivered over a shorter period of time and all the dose may be given in a single fraction. About 40% to 50% of patients referred to oncology clinics are managed with palliative radiation therapy.

There is vast increase in the use of complementary among cancer patients. Most cancer patients use complementary medicine with the hope to boost the immune system, control side effects related to the disease and conventional treatment, and relieve pain.

The study examines whether or not cancer patients undergoing palliative radiation therapy use complementary medicine and their main sources of information.

Method: A cross-sectional study using questionnaires which were administered to cancer patients undergoing palliative radiation therapy was used.

Results: Twenty-one patients participated in the study. 66.7% of the participants were females. The mean age of the participants was 68.8 years (standard deviation of 12 years). 85.7% of the participants were using complementary medicine. The five commonest complementary medicine used by the participants were prayer (94.4%), massage (88.8%), herbal (83.3%), high dose/mega vitamins (61.1%), and Chinese medicine (55.6%). Participants' sources of information were mainly radio and television advertisement (44.4%), family and friends (27.7%), healthcare providers (16.7%), religious leaders (5.6%) and complementary medicine practitioners (5.6%).

Conclusion: There is vast increase in the use of complementary medicine among cancer patients undergoing palliative radiation therapy. There is also multiple usage of complementary medicine with radio and television serving as the main source of information to complementary medicine users.

Keywords: Cancer; Palliative radiation therapy; Complementary medicine

Background

Almost two-third of all cancer patients will receive radiation therapy [1]. Radiation therapy is the use of ionizing radiation to treat cancer patients [2] with radical or palliative intent [3]. Radical radiation therapy is delivered with the intent to produce a high rate of local tumour control with acceptable normal tissue complications [4]. It could be given as a single modality or combined with other treatment modalities [5]. Palliative radiation therapy is delivered over a shorter period of time and all the dose may be given in a single fraction [4]. It is used to improved the survival rate or improve the quality of life of cancer patients with advanced disease [6]. About 40% to 50% of patients referred to oncology clinics are managed with palliative radiation therapy [7]. Indications for palliative radiation therapy include brain metastases, bone metastases, superior vena cava syndrome, spinal cord compression and bleeding associated with cervical cancer, head and neck, stomach and bladder [8]. Complementary medicine use among cancer patients varies according to geographical areas, disease diagnosis and gender [9]. Complementary medicine is a group of diverse medical and health care systems, practices and products that are used together with conventional practices [10]. Most cancer patients use complementary medicine with the hope to boost the immune system, control side effects related to the disease and conventional treatment, and relieve pain [11]. Patients report decrease in pain intensity two months after using acupuncture [12]. Also, therapeutic touch is reported to be beneficial to cancer patients suffering from anxiety [13]. The study sought to determine whether or not cancer patients undergoing palliative radiation therapy use complementary medicine and their main sources of information.

Method

A cross-sectional descriptive study design with a convenient sampling method was used. The questionnaire was administered within three months (May to June 2010) after pretesting among five randomly selected patients from the outpatient department of Korle Bu Teaching Hospital. The participants were undergoing radiotherapy. Participants were waiting to be treated by radiation therapists. Consent was obtained from each participant prior to administration of the questionnaire. The questions were read out to illiterate patients.

The following inclusion criteria were used; participants were to be eighteen years of age and above, diagnosed of cancer and referred to Korle-Bu Teaching Hospital for palliative radiotherapy. Mentally retarded patients and patients with very poor performance status were excluded. Those who contributed in the pilot study were also excluded.

Ethical approval was obtained from the Ethical Review Committee of the School of Allied Health Sciences, College of Health Sciences, and University of Ghana. Confidentiality of the information that the patients provided was ensured.

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Received April 22, 2013; Accepted May 09, 2013; Published May 11, 2013

Citation: Donkor A, Opoku SY (2013) Complementary Medicine Use among Cancer Patients Undergoing Palliative Radiation Therapy. J Palliative Care Med S3: 005. doi:10.4172/2165-7386.S3-005

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The data was analyzed using statistical package for social sciences. Descriptive statistics of frequencies and percentages were used to describe the categorical variables.

Results

Twenty-one patients participated in the study. 33.3% of the participants were males and 66.7% were females. The mean age of the participants was 68.8 years (standard deviation of 12 years). The minimum and maximum age was 48 years and 89 years respectively. Most of the participants were females (66.7%) and single (54.2%) (Table 1).

The study revealed 85.7% of the cancer patients undergoing radiation therapy were using complementary medicine. There was multiple usage of complementary medicine among the participants. Table 3 shows the types of complementary medicines used by the participants.

Discussion

Complementary medicine use for chronic conditions is increasing worldwide [14] and this study investigated whether or not cancer patients undergoing palliative radiation therapy use complementary

Characteristics	Frequency		
	n (%)		
Age			
<60	4(19.0)		
≥ 60	17(81.0)		
Gender			
Male	7(33.3)		
Female	14(66.7)		
Marital status			
Married	10(47.6)		
Single	11(52.4)		
Educational status			
Uneducated	6(28.6)		
Basic	10(47.6)		
Secondary	2(9.5)		
Tertiary	3(14.3)		

 Table 1: Characteristics profile of the participants (n=21).

	Complementary usage		
Indications	Non-users of CM	Users of CM	Total
Control of vaginal bleeding (metastases cervical cancer)	1	8	9
Fungating or ulcerative breast cancer	1	4	5
Spinal cord compression	1	3	4
Whole brain (brain metastases)	0	3	3

Table 2: Indications for the use of palliative radiation therapy.

	Indications for palliative radiation therapy					
Complementary medicine used	Vaginal bleeding	Fungating/ulcerative breast cancer	Spinal cord compression		Whole brain	Total
Chinese medicine	3	4		2	1	10
Indian medicine	0	2		1	0	3
Acupuncture	0	0		3	0	3
High dose/mega vitamins	6	2		2	1	11
Herbal	8	4		2	1	15

 Table 3: Types of complementary medicine used by patients receiving palliative radiation therapy.

medicine. It also investigated participants' source of complementary medicine information.

Complementary medicine use was reported by 85.7% of the participants. It was not surprising vast majority of the participants were users of complementary medicine perhaps they were informed by their radiation oncologist that their cancer cannot be cured. Like other studies [15] there was multiple usage of complementary medicine by the participants. The five commonest complementary medicine used by the participants were prayer (94.4%), massage (88.8%), herbal (83.3%), high dose/mega vitamins (61.1%), and Chinese medicine (55.6%). This finding was similar to the outcome of Barnes et al. [7,16]. There is a belief that cancer is a spiritual disease hence it was not surprising the study revealed prayer to be the commonest complementary medicine and also 50% resorting to rituals to complement radiation therapy.

From the study, indications for palliative radiation therapy were control of vaginal bleeding as a result of metastases cervical cancer (42.9%), fungating or ulcerative breast cancer (23.8%), spinal cord compression (19.0%) and brain metastases (14.3%) (Table 2).

Complementary medicine users were asked reasons for using it. Majority of the participants used it to treat the cancer (50%), relieve them from the pains they were going through (27.8%), perceived lack of side effects from complementary medicine (11.1%), and boost their immune system to fight the cancer (11.1%). Chronic pains from cancer are mostly inadequately treated by medical practitioners; therefore patients are more likely to use complementary medicine [17].

Participants' sources of information were mainly radio and television advertisement (44.4%), family and friends (27.7%), healthcare providers (16.7%), religious leaders (5.6%) and complementary medicine practitioners (5.6%). There is vast increased in the radio and television industry in Ghana. Complementary medicine practitioners have therefore taken advantage in the proliferation of the radio and television stations to advertise their products and services. The information these practitioners announce on air are not monitored by a regulatory body contributing to the easiest and fastest source of complementary medicine information to participants. Cancer patients receiving palliative care are mostly supported by their families and friends [18] therefore influencing their use of complementary medicine.

The main limitation of the study was the low number of participants yet it provides important information about cancer patients receiving palliative radiation therapy and complementary medicine use in a country in which there is less information accessible.

Conclusion

There is vast increase in the use of complementary medicine among cancer patients undergoing palliative radiation therapy. Also, there are multiple usages of complementary medicines. Oncologists, radiation therapists, oncology nurses and other health professionals who care for cancer patients have the responsibility to counsel and advice patients and families on safe and effective health care services regardless of whether they are considered conventional or complementary. Also, continuing professional development among clinicians should be prioritized to ensure updated knowledge about treatment options available to patients including conventional and complementary therapies. Patients are more interested in quality of life hence will try anything to improve their health.

References

1. ASTRO. Targeting Cancer Care: Fast facts about radiation therapy.

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- Halperin EC, Perez CA, Brady LW (2008) Discipline of Radiation Oncology. In: Perez and Brady's Principles and Practice of Radiation Oncology, (5thedn) USA: Lippincott Williams and Wilkins 29: 5-8.
- International Atomic Energy Agency (IAEA), (2010) Radiation Biology: A Handbook for Teachers and Students. Training Course Series No. 42, Austria: IAEA 9: 57-114.
- Kirkbride P, Bezjak A (1998) Therapies with palliative intent. Principles and Practice of Palliative Care and Supportive Oncology. Philadelphia: Lippincott Williams & Wilkins; 685-697.
- LaRue SM, Vujaskovic Z (1995) Combining radiation therapy with other treatment modalities. Semin Vet Med Surg (Small Anim) 10: 197-204.
- International Atomic Energy Agency (IAEA) (2012) Human Health Reports No.
 Radiotherapy in palliative cancer: Development and Implementation, 1-44.
- Barnes EA, Palmer JL, Bruera E (2002) Prevalence of symptom control and palliative care abstracts presented at the Annual Meeting of the American Society for Therapeutic Radiology and Oncology. Int J Radiat Oncol Biol Phys 54: 211-214.
- Rutter C, Weissman DE (2004) Radiation for palliation--part 1. J Palliat Med 7: 865-866.
- 9. Ernst E, Cassileth BR (1998) The prevalence of complementary/alternative medicine in cancer: a systematic review. Cancer 83: 777-782.
- Ernst E, Resch KL, Mills S, et al. (1995) Complimentary medicine- a definition. Br J Gen Pract 45: 506.

- Molassiotis A, Fernadez-Ortega P, Pud D, Ozden G, Scott JA, et al. (2005) Use of complementary and alternative medicine in cancer patients: a European survey. Ann Oncol 16: 655-663.
- Alimi D, Rubino C, Pichard-Léandri E, Fermand-Brulé S, Dubreuil-Lemaire ML, et al. (2003) Analgesic effect of auricular acupuncture for cancer pain: a randomized, blinded, controlled trial. J Clin Oncol 21: 4120-4126.
- Spence JE, Olson MA (1997) Quantitative research on therapeutic touch. An integrative review of the literature 1985-1995. Scand J Caring Sci 11: 183-190.
- Thomas K, Coleman P (2004) Use of complementary or alternative medicine in a general population in Great Britain. Results from the National Omnibus survey. J Public Health (Oxf) 26: 152-157.
- Tindle HA, Davis RB, Phillips RS, Eisenberg DM (2005) Trends in use of complementary and alternative medicine by US adults: 1997-2002. Altern Ther Health Med 11: 42-49.
- Clegg-Lamptey J, Dakubo J, Attobra YN (2009) Why do breast cancer patients report late or abscond during treatment in ghana? A pilot study. Ghana Med J 43: 127-131.
- Fleming S, Rabago DP, Mundt MP, Fleming MF (2007) CAM therapies among primary care patients using opioid therapy for chronic pain. BMC Complement Altern Med 7: 15.
- 18. World Health Organization (2007) Cancer Control Knowledge into Action: Palliative Care 1-47.

This article was originally published in a special issue, **Impact of Palliative Care on Cancer Patients** handled by Editor. Dr. Denise Stahl, UPMC Palliative and Supportive Institute (PSI), USA