

Factors contributing to the use of complementary therapies among patients attending selected cancer outpatient clinics in Trinidad



Nursing

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ABSTRACT

Aims/ Objectives: The main aim of the study was to explore the use of complementary therapies among patients who are diagnosed with cancer in Trinidad.

Methods: A quantitative, exploratory, descriptive research design was used. Twenty participants each were selected from two Cancer Treatment centres in Trinidad (Brian Lara Cancer Centre and Sangre Grande Oncology Clinic). Data were collected through a 23 item questionnaire over a period of two weeks. A convenience sample of twenty participants over the age of eighteen years were selected from each site. Analysis of the data was done using Statistical Program for Social Science (SPSS) version 22.

Results: The study showed that 24 (60%) of the respondents used complementary therapies. Among users, the most common complimentary therapy was food/vitamin supplements (16 or 67%) followed by dietary adjustments (13 or 54%, .995, p.01) while there was little use of the more traditional therapies like yoga and meditation among. The major reasons for their use were to assist with cancer therapy and to boost the immune system (11 or 46%) respectively as well as improve emotional well-being (.585, p.01). While 17 (71%) respondents believed that the use of complementary therapy was effective 7 (29%) were uncertain of its effects. However, discussions between health care providers and patients about their use of complimentary therapies were dependent on staff attitude to the practice or an opportunity to gain professional information.

Conclusions: While the use of complementary therapies were common among respondents they were more traditional with little use of complementary therapies like meditation or yoga. However, there was some level of ambivalence in their perception of its effectiveness. This study provides a framework for further exploration of complementary therapies within the context of the Caribbean.

Introduction

With the growing incidence of cancer, patients are not just depending on medical management but are also utilizing complimentary therapies as an adjunct to the overall management of their illness. Research studies show that the use of complementary therapy has increased worldwide and may be attributed to medical literature coverage and research (Kim et al., 2007; Molassioti et al. 2005; Hung et al 2016). Many patients with cancer use some form of complementary therapies to assist with coping or improve their wellbeing (Deng et al., 2002; Cassileth, Heitzer, & Gubili, 2008; Salaverry, 2013) as well as alleviate symptoms including pain, anxiety, distress, sleep disturbances, fatigue, stress, anorexia, nausea, diarrhoea and constipation (Deng, Cassileth, & Yeung, 2004). These treatments used by the clients can be very beneficial in circumstances when modern medicine and its associated side effects fail to offer desired relief for various health conditions.

The use of complementary therapies as effective modalities in cancer care is not a new phenomenon since their use have been dated over 2000 years as it has developed along modern medicine in treating a range of symptoms associated with cancer (Hung et al. 2016; Molassiotis et al. 2005). Molassiotis et al. (2005) in an European study found that it's use increased with diagnosis with cancer. According to Hung (2016) the positive results associated with the combination of complementary therapies with conventional medicine could provide an opportunity for improved communication among patients and their physicians; although this is not common.

Previous researchers have found that there is a positive impact of mind-body complimentary therapies on client outcomes among patients with cancer (Devine 2003, Smith and Pukall 2010, Buffart et al., 2012, Cassileth, Heitzer, & Gubili, 2008). It is associated with additional improvements on quality of life including social and emotional well-being (Buffart et al., 2012, Smith and Pukall 2010, Moadel 2007) as well as the capacity of patients to better cope with anxiety, stress, pain, fatigue, sleep problems and depression (Smith and Pukall 2010).

While meditation offered relief in stress and mood disturbances among outpatients' undergoing cancer treatments (Carlson et al., 2001) as well as improved sleep, decreased fatigue (Carlson, & Garland, 2005) similar effects have been observed among patients using hypnosis (Cassileth, Heitzer, & Gubili, 2008) as well as children who are diagnosed with cancer and suffering with anticipatory nausea, pain and anxiety (Deng et al., 2002; Cassileth, Heitzer, & Gubili, 2008). Cassileth, Heitzer, & Gubili (2008) also found that art and music therapy offers relaxation, expression of emotions and improvement of pain and mood.

Physical complementary therapy which has been in use in Chinese medicine for thousands of years and arguments have been advanced for its integration into western medicine as its combination could result in an improvement in patient outcomes, although more research is needed to determine their pharmacokinetic interactions (Hung et al. 2016). Doyle et al. (2006) argued that since nutritional needs change as the stage of cancer advances patients will need to make lifestyle changes especially as it relates to nutrition as this is supportive to their recovery and quality of life experiences. Dietary supplements such as vitamins and minerals are known to be beneficial for patients with cancer since they reduce radiation and chemotherapy associated side effects (Cassileth, Heitzer, & Gubili, 2008). Further, the use of antioxidants has been shown to not interfere with conventional cancer treatments as they increase survival through their therapeutic effects (Simone et al. 2007).

A range of clinical studies found that herbal medicines provide anticancer effects as its use has been shown to increase the therapeutic benefits as well as reduce side effects of anticancer therapies (Yin, Wei, Jian, & Yang, 2013, Qi et al., 2010, Gerber, Scholz, Reimer, Briese, & Janni, 2006, Chen, Stacewicz-Sapuntzakis, Duncan et al., 2001). A systematic review of Chinese herbal medicines done by Qi et al. (2010) reported herbal remedies reduced complications and side effects of chemoradiation. Although the benefits of complimentary therapies use with conventional medicine have been

studied extensively, there is still much to learn about their pharmacologic interactions with chemotherapy drugs and this would require greater willingness of health professionals to advise patients appropriately (Deng et al., 2004; Hung et al 2016).

While research has been done on the use of complementary therapy among patients with asthma (Clement et al. 2005) and cardiac problems (Bahall and Edwards 2015) in Trinidad and Tobago as well as its effects on diabetes type 2 among patients in Jamaica (Gordon et al. 2008) as far as we are aware, there is no study regarding its actual use and perceived benefits among patients with cancer. It is within this context that understanding complementary therapy use would be beneficial in identifying treatment modalities which patients utilize during their illness continuum to cope and relieve symptoms with a view to improving their quality of life.

Significance of the study

With the paucity of literature on the use of complementary therapies among patients with cancer from a Caribbean perspective, this study would be beneficial in exploring factors that contribute to complementary therapy among patients with cancer in Trinidad and Tobago. In so doing, it can provide a framework for assisting health professionals to better respond to patients' needs for complimentary therapy as in cancer management. Further, it would add to the growing body of literature on complementary therapy use with specific reference to patients diagnosed with cancer from a Caribbean perspective in general and Trinidad and Tobago in particular.

Research Questions

- Are complementary therapies used in Trinidad by patients with cancer?
- Which complementary therapy is most frequently used among cancer patients in Trinidad?
- Why do patients attending oncology clinics use complementary therapy?
- How does the use of complementary therapy affect the doctor/patient relationship?

Methodology

An exploratory research was conducted in two specific hospitals throughout Trinidad using a quantitative, non-experimental research design. This approach was used to collect and analyse data to ascertain whether patients with cancer use complementary therapies concurrently with their conventional treatments to relieve symptoms and whether they perceived these therapies as beneficial in improving symptoms and enhancing their quality of life.

Research Setting

The study was conducted in two Oncology clinics, in the private and public sectors namely Sangre Grande Oncology Clinic (SGOC) and Brian Lara Cancer Centre (BLCC). These clinics were chosen because they provide active conventional therapies such as chemotherapy and radiotherapy to patients with cancer. These clinics are in different regions of Trinidad and cater for patients from a wide geographical section of the country.

Sampling

The sample consisted of twenty (20) patients with cancer over the age of eighteen (18) who are currently receiving treatment in each of the Oncology clinics. A simple random sampling of ten percent of the population of patients from each clinic was used to select the sample. The inclusion criteria included being diagnosed with cancer for at least one year and currently attending out patients' clinic. Persons who were under the age of eighteen years old and individuals who are mentally challenged were excluded from the study.

Data collection

The data gathering instrument was a 23 question questionnaire with open and close ended questions. The questionnaire was adapted from Eng et al.(2003) and Puataweepong, Sutheechet, & Ratana-mongkol (2012) to be context specific for Trinidad and Tobago. It consisted of demographic data such as age, sex, race, religion, union status, occupational status, income status and educational achievement. Complementary therapy use was explored based on type and stage of cancer; current or past use; reason for utilizing or discontinuing complementary therapy as well as perception of the effects of complementary therapy and willingness to recommend its use to other cancer patients.

The questionnaires were distributed by the researchers among participants at each health care facility who met the inclusion criteria. After written consent was received, participants were offered the questionnaire and after completion, they were collected the same time in order to prevent any loss of data. The researcher also stayed close by to facilitate any questions that were asked as well as to clarify any concerns among the respondents.

Data Analysis

Data were analysed using Statistical Program of Social Science (SPSS) software and interpreted using graphs, tables and narrative. To determine whether any relationship existed between variables, Pearson's Correlation was conducted using a 95% Confidence Interval. However, due to the small sample size higher levels of inferential statistics were not used in this study.

Data Presentation

Demographics

The age of respondents ranged from 30 to over 80 years with the age group 60-69 years accounting for 15 (37.5%) of all respondents. Most of the sample was female twenty three (57.5%), married 18 (45%) and the most frequent monthly income was between \$4,000.00 and \$5,999.00 (TT). At least 20 (50% of participants were retired and 31 (77%) were Christian. Complimentary therapy was used by 24 (60%) of respondents and 15 (37.5%) were diagnosed with stage 4 cancer. The most frequent stage of cancer as identified by participants was stage 4 among 15 (37.5%) and 24 (60%) indicated that they either used or use complementary therapies. Table 1 summarises the demographic data.

Table 1: Demographic characteristics of sample

	SGOC	BLCC
Age group		
30-39 years	-	1
40-49 years	2	4
50-59 years	6	4
60-69 years	8	7
70-79 years	3	4
80 years and over	1	-
Gender		
Male	9	8
Female	11	12
Monthly income		
< \$2000.00	2	0
\$2,000.00 - \$3,999.00	5	5
\$4,000.00 - \$5,999.00	8	6
\$6,000.00 - \$7,999.00	1	3
\$8,000.00 and over	3	5
Missing	1	1
Union status		
Single	3	4
Married	10	8
Divorced	1	3
Widowed	5	2
Common law	1	3
Religion		
Christian	16	15
Hindu	4	3

Muslim	0	1
Buddhist	1	0
Occupational status		
Unemployed	7	0
Employed full-time	1	6
Employed part-time	1	1
Self employed	1	3
Retired	10	10
Use of complementary therapy		
Yes	15	9
No	5	11
Stage of cancer		
Stage 1	1	4
Stage 2	2	4
Stage 3	1	2
Stage 4	10	5
Don't know	6	5

Complementary therapies used in Trinidad by patients with cancer

Although the pattern of complementary therapy use was consistent among both groups of participants; food /vitamin supplements were the most dominant and this was followed by dietary supplements and herbal remedies. This is summarised in Figure 1.

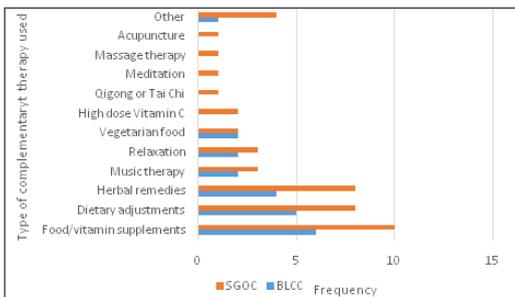


Figure 1: Most frequently used complementary therapy among patients with cancer

Dietary supplements had a strong to moderate correlation to use of complementary therapies ($r .995, p 0.01$), massage therapy ($r .677, p 0.01$) and monthly income ($r .517, p 0.05$). Further, use of complementary therapies was also correlated to monthly income ($r .515, p 0.05$) and massage therapy ($r .687, p 0.01$). Religion was also negatively correlated with acupuncture ($r -.867, p 0.01$), meditation ($r -.0867, p 0.01$) but positively correlated to ethnicity ($r .544, p 0.05$).

Participants shared a number of reasons for commencing the use of complementary therapy with the most frequent reason among users being 'to boost your immune system' and 'to assist with cancer therapy' 11 (46%) respectively. However, the major responses varied depending on the institution from which they accessed care. Those attending the SGOC did so to assist with cancer therapy while those attending the BLCC did so to boost their immune system or improve physical well-being. The data showed further that although the reason for starting complementary therapy varied the improvement of their emotional well-being was correlated to fighting the disease ($r .583, p 0.01$) and the source of media information ($r .499, p 0.05$). Figure 2 summarizes the reasons for commencing complementary therapies.

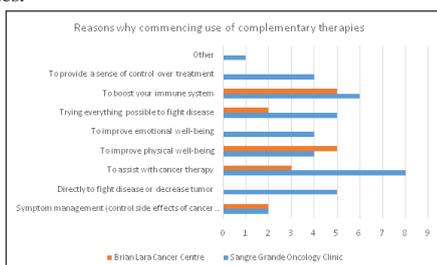


Figure 2: Reasons for commencing use of complementary therapy

Although respondents indicated that complementary therapies were used to alleviate various symptoms the data showed that there was some level of ambivalence with respondent's perception of their effect. A total of 17 (71%) respondents indicated that these had either a good or moderate effect on them. However, the rest of the respondents were either unsure or did not respond to this question. The data showed further that more patients (10) attending SGOC informed their health professionals about their use of complementary therapies than those attending BLCC (2). Among those who informed their doctors the rationale for doing so was to gather knowledge from their health personnel. Some did not do so due to their belief that the health care providers may have negative attitudes towards the use of complementary therapies or that they did not think it was necessary to inform them.

Among respondents who used complementary therapies the majority 20 (83%) indicated that they would recommend complementary therapies to others. While they were willing to share their recommendations they still had some level of ambivalence about the effect of these complementary therapies.

Discussion

The use of complementary therapies are not new but with the growing expansion of the industry it has the potential to continue to be a researchable issue for a long time. In spite of its increasing use globally as well as agreement that it has beneficial effects for patients with cancer, its pharmacokinetic interactions with conventional medicine remains an issue for further exploration. There are varied reasons for complementary therapies and the rationale for their use varies widely in different contexts (Deng et al., 2004; Stern, 2014). In the Caribbean, as well as in Trinidad and Tobago, using complementary therapies have been a common practice as its traditional value has been substantiated by generations of use which is often exacerbated by positive perceptions of its effects on resolving symptoms of illness. While research has been done previously from a Caribbean perspective, the emphasis has been focused on its use in chronic diseases since no reference to cancer therapy has been found.

Herbal remedies have been noted around the Caribbean for many years as its use and benefits have been transferred through generations (Caribbean Herbal Medicine Research Institute, 2009; Clement et al., 2010; Salaverry, 2013). This study aimed at identifying the specific types of complementary therapy used by individuals, the results were inconsistent with findings of the study by Eng et al (2003) who found that herbal remedies were most dominant. From a Caribbean perspective with strong traditions in the use of herbs for a number of health related problems, the use of herbs was not as common as nutritional or dietary supplements among participants in this study. The fact that it was not statistically significant to any variable is a finding that is inconsistent with the study conducted by Bahall and Edwards (2015) among cardiac patients in Trinidad who, in their study, found that patients had high utilization rates of herbal therapies for their cardiac problems. It is possible that with a larger sample, this finding may be different.

A significant finding in this study was the relationship between monthly income and complementary therapy as well as dietary supplements. It can be inferred that the more complementary therapy that is used by a patient would result in greater levels of expenditure that could be facilitated by economic wherewithal. When compared with the study done by Clement et al (2005) among asthmatic patients, this finding was different since they found that there was no statistical difference in complementary therapy use among patients based on income levels. However, this finding may need further exploration using a larger sample in the future as there is a gap in studies on complementary therapy use among patients with cancer from a Caribbean perspective.

Research has shown that complementary therapies are commonly used to treat a number of symptoms associated with illness with

emphasis on cancer (Cancer Research UK 2015; Smith and Puckall 2010 and Hunget al 2016)and findings from this study showed that complementary therapies were used among most participants. Previous studies have also shown that complementary therapy has been positively correlated with emotional well-being (Buffart et al 2012; Molassiotis et al2005) a finding which is consistent with this study. In this study participants had a moderate correlation between emotional well-being and fighting the disease; a factor that may have contributed to their feelings of empowerment to expend more income on its use. The findings from this study were also consistent with Eng et al. (2003) who found that among men newly diagnosed with prostate cancer the major reason for using complementary therapy was to boost their immune system.

While the positive benefits associated with the use of complementary therapies in relieving symptoms have been well established this was supported by findings from this study to some extent. It should be noted that the mind-body therapies were least used among participants in this study. It is possible that the highly Christian religious nature of Caribbean people, as reflected in the sample, may have influenced their reaching out in faith rather than a dependence on traditional mind-body therapies which may conflict with their religious beliefs. However, this could not be substantiated from the respondents since even 'faith healing' was not identified as a complementary therapy used by respondents. While findings from a national study about the use of faith healing as a complementary therapy among Americans showed that this was used by many patients as a quest for spiritual transcendence in response to a desire for spirituality and wholeness (Levin, Taylor and Chatters 2011) the use of faith healers by respondents in this study was very small. It is possible that respondents in this study may have had similar views, in that; spirituality may not have been seen as a complementary therapy hence limited emphasis on its inclusion as a complementary therapy.

In general, participants reported unwillingness to inform their health care providers about the use of these therapies. Within the context of the Caribbean health care professionals, especially Medical Doctors are afforded high levels of respect for their practice. This may be associated with the perception that their training and experience makes them knowledgeable in prescribing what is best for patients. Hence, to use complementary therapies with the knowledge of their health care personnel knowledge may be associated with distrust of the Medical Doctor; an experience that may be likely to produce fear of disappointing them or feelings of guilt for mistrusting them. However, it reinforces the importance of recommendations from previous studies that health professionals must be willing to engage patients in discussions about complementary therapy since its use will continue to increase (Hung et al 2016; Deng et al 2004 and Bahall and Edwards 2015).

There is agreement among researchers that there is potential for possible harmful interactions when using some complementary therapy with conventional therapies, as a consequence, withholding information can lead to a decrease in the effectiveness from either treatment method (Deng et al., 2004; Hung et al 2016). This suggests that there must be openness in relationships between the health care provider and the patient who uses complementary therapies as this could influence benefits to patients in the long run. This position is supported by the view that integrating different methods of treatment should be encouraged and incorporated in order to create a safe environment where patients' concerns can be openly discussed, promote wellbeing and quality of life, and decrease suffering (Molassiotis et al 2005; Hung et al 2016).

Conclusion

The increase in use of complementary therapies among patients continues to be a worldwide phenomenon. This is influenced by findings that show its benefits in the management of cancers as it aids in the relief of cancer-related symptoms and improve quality of life. While there is a range of complementary therapies used by patients generally, food/nutritional supplements and dietary

adjustments were most dominant among participants. Although the effectiveness of complementary therapies in cancer management has been well established in the literature, the benefits were moderately supported by the findings from this study.

While all therapeutic relationships are based on trust, even when patients used complementary therapies findings from this study showed that patients were generally unwilling to share their experience with the health care providers. This study presents an opportunity for further exploration of this culturally sensitive issue that could affect patient outcomes in an environment where individuals are dependent on health care providers while at the same time gravitate to increase use of complementary therapies. Therefore awareness of complementary therapeutic uses are needed and encouragement to update current knowledge and evidence-based practice.

Limitations

Notwithstanding the value of this study to understanding complementary therapy use there were some limitations. Only two of the four oncology centres provided approval as a result the findings cannot be generalizable to all clients. This was also exacerbated by the limited sample size which may not be representative of the number of patients accessing cancer treatment in Trinidad and Tobago. Data may have also been affected by recall bias in that some clients may not have been open to discuss their use of complementary therapies and may have responded based on their perception of what the researcher wanted to hear. However, this study provides an opportunity for exploring complementary therapy use among patients with cancer using a wider population.

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