

## **Preferences on The Spiritual Care and Needs of Cancer Patients: A Conjoint Analysis**

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### **Abstract**

**Background:** Cancer is a medical condition with a rapid incidence growth that alters the normal lives of any individual, inducing fear and anxiety. Cancer diagnosis, along with its prolonged and invasive treatments, eliminates a person's ability to enjoy life's offerings, also seizing the opportunity to enhance their spiritual needs. Spiritual care, a nursing responsibility rendered to patients to prevent poor health and treat illness. Thus, a need to determine the importance and value of different levels of attributes of cancer patients' preference on spiritual care and needs specifically, therapeutic communication, caring involvement, responsive caring environment, support groups, religious and spiritual resources, and spiritual perspective.

**Objective:** The study aims to identify the importance of each attribute and the utility values of the levels from these attributes regarding spiritual care and needs of cancer patients.

**Methods:** Conjoint analysis was conducted through a survey of two hundred (200) Filipino cancer patients 18-65 years old from August 2015 to November 2015 in selected tertiary level government hospitals and cancer support groups in Metro Manila. Twenty-two (22) orthogonal choice sets were randomly chosen from the 486 possible descriptions including four hold outs generated by Statistical Package for the Social Sciences (SPSS) version 21. Respondents were asked to assess, categorize and rank the cards based on their importance and part-worth utility. Approval from the Ethics Review Board of the selected loci was obtained and informed consent was secured. Gathered data was again analyzed using SPSS 21.

**Results:** "Spiritual perspective" was rated high in the importance value by the respondents while the attribute "communication" was ranked last. As for the part-worth of levels of the spiritual care and needs preferences of cancer patients, it is identified as follows: based on their spiritual perspective, searching for hope and strength have the highest utility while in involvement in care, the collaborative role was prioritized by cancer patients. Regarding spiritual resources, cancer patients prefer to use religious materials since they consider this to be of great help for them. Particularly, cancer patients still strongly depend on their family as their support group and found to prioritize the place of care consistent with their choice. Lastly, affective communication is more likely their means of optimal nurse-patient communication.

**Conclusion:** Considering the results of the preferences of cancer patients in the spiritual care and needs they want to receive, a more holistic approach, emphasizing in the spiritual aspect of the patient, should be pursued by nurses to help in improving their quality of life.

## Introduction

Human existence has its beginning and also an inevitable end where confirmation of a life-threatening illness and fear of declining health status as a signal of imminent death may bring about negative emotions such as anxiety and distress in any individual (Hales et al, 2010; Tang et al, 2011). Most people associate their fear of death and dying with feelings of loss and or an impending threat to an individual's dignity, such concepts contribute to a person's desire for hastened death. Retaining one's dignity and protection against death anxiety are the priorities for patients receiving end-of-life care (Chochinov, 2006; Shim & Hahm, 2011).

Cancer is one of the diseases with a growing incidence, which alters the normal life of patients and creates a sense of fear and anxiety in them. According to Cancer Research UK, last 2012 there was an estimated 8.2 million deaths from cancer worldwide. Revealing a mortality rate of 4.7 million (57%) in males and 3.5 million (43%) in females, indicating that there are 126 cancer deaths for every 100,000 men in the world, and 83 for every 100,000 females.

In the Philippines, cancer ranks third in leading causes of morbidity and mortality. Cancer diagnosis and its prolonged and invasive treatments take the ability away from the patients to enjoy life and increase their spiritual needs (Rassouli, Zamanzadeh, Ghahramanian, Abbaszadeh, Alavi-Majd, Nikanfar 2015). Florence Nightingale defined spirituality in her philosophy of care as an integral part of humans and is considered as the strongest source of healing. Thus, one of the nurses' responsibilities is the consideration of spiritual dimensions of care and providing a healing ambiance for patients. (Hatamipour, 2015).

According to Rushton (2014), spiritual care is said to be a vital component of care that is given to patients by health care professionals to prevent poor health and treat illness. Furthermore, since among the healthcare professionals, nurses are the ones who mostly spend time with their patients in the ward, it says that as much as spiritual care is fundamental to patients' wellbeing, it is also an essential factor to nurses' integrity so that nurses may carry out their care in a holistic manner and meet patients' spiritual needs. However, although nurses acknowledge that spiritual care is part of their role as a practitioner, in reality, it is performed to a lesser extent (Rassouli et al., 2015). It is important to identify the attributes and the utility values on spiritual care and needs of cancer patients to deliver holistic care, importantly, the patient's spiritual needs which are vital in the aspect of care for patients experiencing life-threatening illnesses, such as cancer; hence, the purpose of the study. The different levels of attributes of cancer patients' preference on spiritual care and needs include therapeutic communication, caring involvement, responsive caring environment, support groups, religious and spiritual resources, and spiritual perspective.

Penny Richardson (2012) defined spiritual need as a free-flowing and intangible necessity that requires time and continuity. Recognizing the spiritual needs of the patient is critical to find alternatives in achieving patient satisfaction (Skalla & McCoy 2006; Richardson, 2012). According to the National Quality Forum and the Joint Commission when assessing the quality of care provided throughout all stages of cancer, it is imperative to recognize the spiritual needs of the patient (Astrow et al., 2007; Richardson, 2012).

## The Six Attributes of Spiritual Care and Needs of Cancer Patients

In achieving and recognizing the spiritual needs of cancer patients, it is necessary to identify and determine the preference of cancer patients among the different attributes.

### *Therapeutic Communication*

Informing interpersonal relationships communication is a key ingredient, as it has been described as a mutual process between two or more people in which messages are sent and received (Balzer-Riley, 2008) and that it requires the use of verbal and/or non-verbal techniques, especially in the medical field, communication is needed in establishing medical care and patient outcomes. Instrumental or task-related behaviors are actions limited to providing the client with information on their current health status or prognosis, treatment, daily routines in the ward, technical interventions and incoming procedures. As a result of forming a trustful and caring environment, patients disclose vital information and concerns with their current health status as they confront with a life-threatening disease (Wouda & van de Wiel 1996). Unfortunately, some research indicates that nurses' communication skills exhibit more negative or blocking features than positive facilitative abilities during interactions with patients with cancer (Kruijver et al., 2000). An indication was present that an imbalance between the nurses' use of both types of communication techniques exist, which is often characterized by an overwhelming medical concern (Dennisson, 1995; Webster, 1981; Bond, 1983), as well as the disregard of the emotional component (Webster, 1981; Degner et al., 1991; Heaven & Maguire, 1996) which, in turn are viewed as unsupported behaviors by the patients (Krishnamy, 1996), that often leads to patient dissatisfaction (Suominen et al.,1995). Therefore, we hypothesize:  $H_1$ : Affective communication behavior is vital in cancer care.

### *Caring Involvement*

Hubbard, Kidd, & Donaghy (2008) has identified three involvements in decision making: (1) *active*, where the patient themselves decide on which would be the most appropriate treatment option for them; (2) *collaborative* or sometimes described as *shared*, where the patient and the doctor jointly decide on the most appropriate treatment option; (3) *passive*, where the patient leaves the decision on the most appropriate treatment option to the doctor. In a study conducted by Heyland et al., (2000), they found that patients who attained their role preference experienced a significant decrease in anxiety from pre-consultation to immediate post-consultation when compared with those whose involvement was less than anticipated. One team of researchers (Degner et al., 1997) identified that those women who had perceived that they had achieved their role preference were those who had preferred a passive role; whereas, in another study (Bilodeau & Degner, 1996), the researchers found that agreement was most evident between women who preferred an active role and who perceived that they had indeed achieved this role. Additionally, a small-scale pilot study (Barry & Henderson, 1996) of palliative patients found that discrepancies between role preferences and role attainment increased with the progress of the disease with patients perceiving that they had played a less active role than preferred. Therefore, we hypothesize:  $H_1$ : Active caring involvement is much preferred by cancer patients.

### *Responsive Caring Environment*

Patients preferred care environments that were responsive to their preferences about the atmosphere, fellow patients and place of care (Sandsdalen et al., 2015). They expressed preferences for a care environment that they perceived as safe, comfortable, friendly, and relaxed (Cawley et al., 2011; Goodwin et al., 2002; Heyland et al., 2010; Heyland et al., 2006; Laakkonen et al., 2004; Johnston et al., 2006; Kernohan et al., 2006; Yeung et al., 1999). Hopkinson and Hallett (2001) found out in their study that perceptions of important aspects of daycare included feeling comfortable (welcome, accepted, understood, time to talk, receiving genuine concern and interest), feeling good about oneself/feeling valued (enhancing self-worth by making choices, escaping sick role) and feeling less isolated (surrounded by staff and other patients who understand). Moreover, an atmosphere to be relaxed, warm, intimated or neutral is preferred by most patients and the least liked atmosphere was lively and distracting (Miccinesi G, Bianchi E, Brunelli C, et al., 2012). Other patients wanted to be cared for in an environment of their choice (Miccinesi et al., 2012; Heyland et al., 2010) expressing various preferences about where to be cared for and where to die. The findings of Edvardsson D., Sandman P.O. & Rasmussen B. (2006) suggest that a balance should be found between involvement and privacy, offering patients freedom of choice. Some patients preferred interaction with others in a similar situation and so likely to understand them (Cawley et al., 2011; Kernohan et al., 2006). Andersen, Larsen, and Birkelund (2015), stated that the information from fellow patients was complementary to the information given by healthcare professionals. Hence, they concluded that learning from exchanges of experiences with fellow patients provided a better understanding of the disease and was valued because it was first-hand knowledge. Thus, we hypothesize:  $H_1$ : Cancer patients prefer to be cared for with fellow patients.

### *Support groups*

In the article written by Ussher et al., (2005), although family members can provide many kinds of social support such as emotional, informational and appraisal support, and instrumental support such as observable actions that make it possible or easier for an individual to perform healthy behaviors; it has been most strongly associated in adherence to self-care behaviors with chronic disease. Grande, Arnott, Brundle, and Piling (2014), stated that members of the support group say that they get a sense of belonging from being in the group and a feeling that they are not alone. These members describe the group as a supportive and caring environment where individuals feel accepted for themselves, and where they feel safe to express their true feelings without having to protect family or close friends. Grande et al. (2014) also said that this sense of community results in a feeling of being cared for and 'held' by the group and that there appeared to be a gradual increase in positive views of support groups and willingness to join if recommended with increased stage of readiness, together with a corresponding decrease in negative views of support group participants. Although family and other social support networks are important. Ussher et al., (2005) emphasized that support groups are generally perceived as the safest place to express emotions about cancer. In particular, they said that people say they feel safe to openly discuss ordinarily taboo subjects, like cancer or death and that people also encourage each other and give advice about how to cope with negative feelings or issues. Besides, Ussher et al., (2005) conveyed that everyone involved in a cancer support group has experienced cancer, creating a powerful empathy within the group while those people outside the support group may dismiss a person's feelings or have difficulty understanding their experiences. Hence, they highlighted in their article that in the support group, participants are heard and understood and are not patronized or told to be optimistic. Therefore, we hypothesize:  $H_1$ : Cancer patients prefer family as a source of support.

*Religious and Spiritual resources*

According to Spirituality in Cancer Care (2011), many patients diagnosed with cancer rely on religious or spiritual beliefs and practices as a means of coping with their illness. Research indicates that cancer patients who rely on spiritual and religious beliefs to cope with their illness are more likely to use an active coping style in which they accept their illness and try to deal with it positively and purposefully (Weaver & Flannelly, 2004). For many patients', religion plays an important role in the coping process (Pargament, 1997), predominantly to those diagnosed with a life-threatening disease (Plakas, Boudioni, Fouka, & Taket, 2011; Tix & Frazier, 1998; Zwingmann, Wirtz, Müller, Körber, & Murken, 2006). In a study conducted by Tatsumura et. al, (2003), participants reported using a variety of religious and spiritual resources such as: (1) personal faith; (2) attending religious services; and (3) the use of religious materials as means of coping. Such beliefs according to Puchalski (2001), tends to enhance recovery from illness and surgery. Religion and spirituality have long been believed to affect individuals' emotional well-being (Cummings & Pargament, 2010). Personal faith, which is defined as the confidence in divine help when faced with our fragility and incapacity (Tatsumura et al., 2003; Leydon et al., 2000; Granero-Molina et al., 2014), is the commonly used source of religiosity and spirituality. Therefore, we hypothesize: *H1*: Cancer patients prefer personal faith

*Spiritual Perspective*

Cancer patients convey that their spirituality helps them find hope, gratitude, and positivity in their cancer experience (Taylor, 2003; Gall, 2002; Ferrell, 1998), and that their spirituality is a source of strength that helps them cope, find meaning in their lives, and make sense of the cancer experience as they recover from treatment (Puchalski, 2012). Rahnama et al. (2012) concluded that participants had a sense of strength, hope, peace, and confidence through a relationship with God and religious beliefs. In a study by Hatamipour (2015), some participants believed that life had become more precious than before, and liked to live, and valued life more than before. While others insisted that life had become difficult for them, and they did not enjoy it any longer. Hope is an important resource that influences an individual's ability to cope with stressful and life-threatening situations (Herth, 1989; Felder 2004). It is central to avoiding psychological hardship and complications (Herth, 1995) and helped patients emotionally to endure crises (Irving et al., 1998). Also, it is an important motivating factor in the face of adversity (Sanatani et al., 2008). On the other hand, Chi (2007) defined hope as a profound feature of human life and that it allows the living to keep on living and the dying to die more easily and with dignity. Patients with a high level of hope coped with the disease more effectively through active acceptance, normal living, and reconciling with life and death. Therefore, hope could be defined as a personal meaningful choice that individuals make insignificant life situations (Tomey & Alligood, 1998). Thus, we hypothesize: *H1*: Cancer patients perceive spirituality as seeking hope and strength.

**Theoretical Framework**

Normally, rational choice is defined as a process of determining possible available options and then selecting the most preferred choice in accordance to various but consistent criteria (Levim & Milgrom, 2004). Rational Choice Theory perceives humans as highly motivated and goal-oriented who have the preferences amongst the available choice alternatives; whereas, these preferences are assumed to be complete and transitive. Realistically speaking, the possibility of achieving all various wants and desires of an individual is very low, for individuals are subdued to make choices to both their goals, as well as the means of attaining such goals. Hence, the use of Rational Choice Theory presents an excellent view for understanding an individual's act to maximize the satisfaction of their personal preferences. In this study, Rational Choice Theory was utilized to expound the rationale behind the desired preferences of care of cancer patients.

**Methods***Research Design*

Using conjoint analysis, the paper intends to convey the importance and value of different levels of attributes of cancer patients' preference for spiritual care and needs. Conjoint analysis is a multivariate technique that can understand how an individual's preferences are developed (Popovic, 2012). Healthcare researchers have continued to use this technique to elicit patients' preferences, rankings, and ratings in the treatment and delivery of different types of health care services (Liew, 2014; Bridges J., 2012; Pignone, 2012; Pieterse, 2010; Phillips, 2002; Ryan, 2000). Thus, the potential benefits of conjoint analysis go beyond the valuation of health care interventions (Bridges, 2011).

*Subjects and Setting*

Two hundred (200) cancer patients from tertiary-level government hospitals and cancer support groups in Metro Manila were included in the study. Purposive sampling was used to have a wide range of non-probability sampling techniques where the respondents should meet the following criteria: a) aged 18-65 years old; and b) is diagnosed with any type and stage of cancer. On the other hand, those who currently have a cognitive impairment, emotional instability or had metastasis in the brain were excluded in the study. The conjoint analysis survey was conducted in the respective healthcare facilities during the scheduled date and time agreed by both the researchers and the institution.

*Research Instrument*

To gather the data needed in the study, a two-part researcher-made instrument was utilized. The first part was the respondents' robotfoto to profile their baseline characteristics. It consisted of the respondents' age, gender, marital status, religion, diagnosis, educational attainment, and family income. For the second part of the instrument, the orthogonal plan was primarily deployed in the study to produce respondents' framework preferences or combinations of factor levels in spiritual care and needs with six attributes. Each of this attribute and its corresponding levels were derived from different literature in the field of spirituality in nursing which is all assumed to be potential determining factors of the selected respondents (see table 1). Of the four hundred eighty-six choice bundles produced by the orthogonal plan ( $2 \times 3 \times 3 \times 3 \times 3 \times 3 = 486$ ), only twenty-two were obtained including four additional choice bundles or hold outs for reliability purposes. The choice bundles were then presented through the orthogonal cards.

The instrument/tool was validated by four experts (three in the field of spirituality and one in conjoint analysis). It was also translated in the Filipino language with the help of a certain expert and was also back-translated in the English language with the assistance of another expert to assess the sufficiency and equivalence of the translation made. The tool has a Cronbach's alpha score of 0.87 which establishes the reliability and validity of the tool.

*Data Collection Procedure*

Data gathering procedure started from August 2015 to November 2015. The researchers obtained approval from two different tertiary level hospitals in Manila and a cancer support group. Before the data gathering, the researchers underwent good clinical practice training to implement the study appropriately and ethically. For the study proper, 200 respondents were gathered and their consents were secured before the study. The respondents were asked to fill out the robotfoto which contained their personal information. After completing the preliminary sketch, the respondents were then asked to assess different sets of orthogonal cards composed of a combination of levels, from the six major attributes determined through the extensive literature review done about spiritual care and needs of cancer patients. Then, when the respondents have already sorted the orthogonal cards, they were asked to arrange or rank these cards according to their liking, from the most preferred combination to the least preferred combination. To reduce to a much smaller number of choices and that the respondents would find it easier to rank the cards, they were first asked to select their top ten orthogonal cards before arranging it by rank. The gathered results were encoded and processed again using SPSS 21.

**Data Analysis***Ethical Considerations*

Institutional policies were followed including ethical and institutional review board approval of the study sites and the UST-College of Nursing Ethics Review Board with protocol no. 2-141525. Informed consents were secured from the respondents after giving full disclosure of the study's background, purpose, risks, and benefits as well as their rights. Personal identifiers such as age, gender, marital status, religion, place of origin, diagnosis, age when diagnosed with cancer, educational attainment and family income were encoded using encrypted codes made by the researchers to ensure privacy and confidentiality. Interventions were done in a conducive environment and the respondents were not coerced to take part in the study.

*Data Analysis*

This study utilized Conjoint Analysis using Statistical Package for the Social Sciences (SPSS) version 21 to come up with the orthogonal design wherein combinations of different attributes and levels were generated. These attributes are the variables and the levels of each attribute are the sub-variables. It is also used to determine and analyze the best attributes and preferences on spiritual care and need that were prioritized by the respondents and the frequency and effectiveness of spiritual care and needs to be received. More so, descriptive analysis using percentage

was applied to determine the demographic profile of the respondents.

## Results

### *Demographic Characteristics of the Cancer Patients* (N=200)

Table 1 illustrates the demographic characteristics of cancer patients. Consistent with the demographics associated with the population of interest, there were more females (78%) than males, 54% were married and within the age range 53-57 years old (20%). Sixty-four percent (64%) of them were Roman Catholics, whereas 38% of them only graduated from high school with a family income of less than Php. 20, 000 (64%) and most of them were diagnosed with breast cancer (61%).

### *According to Importance of Attributes and Part-worth of levels*

Table 2 shows the importance of attributes and part-worth of levels of the spiritual care preferences of cancer patients. The results of the data shows the conjoint model performed to be substantially fit; Pearson's R 0.984,  $p < 0.05$  and Kendall's tau 0.926,  $p < 0.05$ . Among the attributes of spiritual care and needs preferences, the spiritual perspective is the most important factor considered by cancer patients (19.78%), followed by caring involvement (18.57%) and spiritual resources with (17.30%). On the other hand, they preferred less the support groups (17.06%) and responsive caring environment (16.84%) while communication (10.46%) is their least priority attribute. As for the part-worth of levels of the spiritual care and needs preferences of cancer patients, it is identified as follows: Based from the spiritual perspective of cancer patients, searching for hope and strength has the highest utility while in terms of involvement in care, the collaborative role was prioritized by the cancer patients. Regarding spiritual resources, cancer patients prefer to use religious materials like prayer booklets, bible, rosary, among others, since they consider this to be of great help for them. Particularly, cancer patients still strongly depend on their family as their support group and found to prioritize the place of care consistent with their choice. Lastly, affective communication is more likely their means of optimal nurse-patient communication.

Table 1 illustrates the demographic characteristics of the cancer patients

Profile	N	%	Profile	N	%
<b>Gender</b>			<b>Educational Attainment</b>		
Male	45	23%	Elementary	37	19%
Female	155	78%	High School Graduate	76	38%
<b>Age</b>			College Graduate	73	37%
18-22	2	1%	Post-Graduate	14	7%
23-27	3	2%			
28-32	7	4%	<b>Family Income</b>		
33-37	21	11%	Less than Php. 20,000	127	64%
38-42	31	16%	Php. 20,000-Php. 40,000	40	20%
43-47	30	15%	Php. 50,000-Php. 70,000	18	9%
48-52	38	19%	Greater than Php. 70,000	15	8%
53-57	40	20%			

Table 1 continued.

53-57	40	20%			
58-65	28	14%	<b>Diagnosis</b>		
			Breast Cancer	121	61%
<b>Marital Status</b>			Adenocarcinoma	4	2%
Single	58	29%	Ductal carcinoma	5	3%
Married	108	54%	Head and neck cancer	3	2%
Widow	18	9%	Cervical cancer	14	7%
Legally Separated	16	8%	Pancreatic cancer	4	2%
			Nasopharyngeal cancer	4	2%
<b>Religion</b>			Lymphoma	13	7%
Roman Catholic	128	64%	Fibro adenoma	2	1%
Christian	36	18%	Endometrial adenocarcinoma	2	1%
Protestant	12	6%	Rectal cancer	3	2%
Iglesia ni Cristo	22	11%	Bone cancer	3	2%
Dating Daan	1	1%	Lung cancer	3	2%
Jehovah's Witness	1	1%	Squamous cell carcinoma	2	1%
			Colon cancer	13	7%
			Colorectal cancer	2	1%
			Laryngeal cancer	2	1%

Table 2. Summary of the Importance of Attributes and Part-worth of Levels of the Spiritual care Preferences of Cancer Patients (n=200)

Attribute	Level	Utility Estimate	Std. Error	Importance Value	Rank
Communication	Instrumental communication	-0.071	.073	10.455	6TH
	Affective communication	<b>0.071</b>	.073		
Involvement in Care	Passive role	-0.277	.097	18.573	2ND
	Active role	-0.036	.097		
	Collaborative role	<b>0.312</b>	.097		
Responsive Caring Environment	Safe, comfortable & relaxed	-0.044	.097	16.840	5TH
	With fellow patients & privacy	-0.123	.097		
	Place of care consistent with my choice	<b>0.167</b>	.097		
Support Groups	Family	<b>0.098</b>	.097	17.057	4TH
	Peers	-0.171	.097		
	Cancer organization	0.074	.097		
Resources	Personal faith	-0.147	.097	17.297	3RD
	Attending religious services	0.056	.097		
	Use of religious materials	<b>0.092</b>	.097		
Perspective	Seeking closer with Divine Being	-0.084	.097	19.778	<b>1ST</b>
	Finding meaning & purpose in life	-0.024	.097		
	Searching for hope & strength	<b>0.107</b>	.097		

Goodness of fit:

Pearson's R = 0.984,  $p < 0.05$

Kendall's tau = 0.926,  $p < 0.05$

Kendall's tau for Holdouts = 0.667,  $p < 0.05$

## Discussion

This study explicated the spiritual preferences of a selected group (n=200) of Filipino cancer patients in the tertiary hospitals and cancer support groups in Manila, Philippines. According to the evaluated preferences in terms of spiritual care and needs, "spiritual perspective" were rated high in the importance value by the respondents while the attribute "communication" garnered the least.

In a study of Préau, Bouhnik, and Le Coroller Soriano (2013), their sample, which included all cancer types and where their participants were of heterogeneous age and gender, nearly half the patients had found comfort in spirituality, to different degrees over the disease duration. Van de Geer and Wulp, (2011) believed that spirituality is the dynamic dimension of human life that relates to the way persons, may it be an individual or a community, experience, express and/or seek meaning, purpose and transcendence, and the way they connect to the moment, to self, to others, to nature, to the significant and/or the sacred. Further, quantitative studies, likewise, have



shown that 87% of patients consider spirituality to be important in their lives (Hills, Paice, Cameron and Shott, 2005). With this, it can be ascribed to the fact that as clients wrestle with challenges, spirituality often becomes more salient (Koenig, 2007; Pargament, 1997), particularly among cancer patients who rely on the spiritual aspect, since for them spiritual adjustment is the strongest method they use to deal with their disease (Sharma, Astroko, Texeria, and Sulmasy, 2012).

Filipino cancer patients in this study prefer to perceive spirituality as searching for hope and strength. This may be because hope, according to Olsson et al. (2010), has long been recognized as an important component of patients' existential needs. In an analysis of interview data of Chen, (2003), six subthemes were identified and "energy" was the only theme consistently expressed by each participant to describe hope or hopefulness. Hope provides an adaptive power and allows personal adjustment during suffering (Herth, 1989; Ebright & Lyon, 2002; Herth & Cutcliffe 2002b). For people with cancer, hope is an important resource because it can affect how one views oneself, one's health status and one's future possibilities (Rustoen et al. 2010). Moreover, patients who recognized more positive meaning to their pain, such as viewing pain as a challenge, tended to have a higher degree of hope (Tavoli et al., 2008). Thus, De Guzman et. al (2009) stated that to proceed with life, the role of hope cannot be underestimated. They further highlighted that it influences how people view the crises encountered in life and that although hope itself would not cure the disease physiologically; it would greatly help the person live with the disease.

Concerning communication, Song, Weaver, Chen, Bensen, Fonham, Mohler, and Sleath, (2014) stated that communication greatly depends on pre-existing, shared cultural patterns and social structures of the individual to understand patient-provider communication. An effective communication in the treatment phase is considered the key to good cancer care (Van Weert et al., 2013) where there are different communication strategies that are utilized in order to effectively interact and elicit patient concerns that often come from on-the-job experience and consultations with more proficient nurses rather than formal communication skills training and evaluation (Clayton et al., 2014). Based on the findings found by Thorne, Hislop, Armstrong, & Oglov (2008), they believed that many cancer patients understand cancer communication to play some role in shaping their disease outcomes. However, in this study, communication is preferred to be the least priority of cancer patients. This is maybe due to the fact that cancer patients do not want to talk about their illness and the possible consequences of their current condition which can also be associated to the findings of Kvåle (2007) where in her study the essential meaning emerging from the interviews made, revealed that the patients most often did not want to talk to the nurses in the ward about their disease all the time and the difficult emotions regarding the future because according to some patients, they were afraid of becoming depressed if they talk about the future. Based on the results, it was known that they wanted an offer to talk, but they wanted to choose to whom, when and about what. Also, it was found out that if there had been a need, according to the patients, they would not have hesitated to talk to the nurses about their difficult emotions.

Results of the part-worth utilities confirm that Filipino cancer patients prefer nurses to use affective communication techniques rather than instrumental communication. This may be due to the reason that affective and relational aspects of communication are salient means to these patients because of their frequent encounter with pronounced cancer-related psychological distress (Song et al., 2014). The findings of this study are consistent with the previous research of Kruijver, Kerkstra, Bensing, and van de Wiel (2001) wherein affective behavior is interrelated with "emotion-oriented coping". In turn, as stated by Venetis, Robinson, Turkiewicz, and Allen (2009), the use of affective communication behavior or patient-centered communication is by nurses have significantly stronger associations with patient satisfaction than instrumental communication.

Contrary to our hypothesis regarding the second priority attribute that is "involvement in care", the level collaborative role is most preferred by Filipino cancer patients. In studies that used preferences scale to categorize patients' preferences, 11 out of 20 clearly expressed a preference for a collaborative role in treatment decision making rather than an active or passive role (Hubbard, Kidd, & Donaghy, 2008). Also, in a study of Beaver, Luker, Jones, Susnerwala, Campbell, Craven, Tomlinson, and Witham (2003) and Pyke-Grimm, Degner, Small, and Mueller (1999), a majority of the patients preferred a collaborative role in treatment decision making. Patients who seem to have a higher-level education prefer either a collaborative or active role in decision making (Rothenbacher et. al., 1997). Likewise, in a study of Lown, Hanson, and Clark (2009), patients and physicians who facilitate shared decision making, seeks to make a personal connection with each other. In here, they have stated that shared decision making is possible through the patient and the physician, offering trust, respect, and empathy to one another. Furthermore, they also described decision making as a dynamic process that occurs within the context of a relationship that includes trust and respect and it occurs by building a relationship that facilitates sharing control and responsibility.

Contrary to the fifth hypothesis, as regards to the attribute "Spiritual Resources", it was determined to be the third

priority in this study, Filipino cancer patients prefer the use of religious materials as a means of the spiritual and religious resource. The use of religious or spiritual resources in the coping process during the early stages of cancer plays an important role in the adjustment process in patients (Thuné-Boyle, Stygall, Keshtgar, Davidson, & Newman, 2013). According to Thuné-Boyle et al. (2010), patients benefit from having their spiritual needs addressed. Analyzed studies on religious and spiritual involvement stated that cancer patients with stronger spiritual well-being and belief in a divine being were better able to maintain relationships and social roles during their illness (Dall, 2015). According to Dana-Farber Cancer Institute, reading religious materials that are uplifting is one of the ways that patients may find comfort and meaning; through their faith or religion where they can feel connected to a higher divine power.

The hypothesis for the attribute that is considered to be the fourth priority was supported in this study. This may be brought about by the family-oriented culture of Filipinos. In a study conducted by Narayanasamy and Nixon (2010), spiritual needs included family relationships, emotional support, loneliness, religious needs, need to talk, reassurance, anxiety, solitude, denial, plans for the future, thoughts about the meaning of life, end of life decisions and discussion of beliefs. They emphasized that it was particularly important for patients to have their family at their side during their hospital stay. Maintaining supportive family relationships was a major spiritual need identified by patients in line with the findings of previous studies of Narayanasamy, (2006) and Taylor, (2003). Kissane et al., (2006) used evidence from their randomized control trial study to suggest that family-centered care is imperative in cancer care.

On the other hand, the third hypothesis about the responsive caring environment, which garnered the fifth importance value, is also opposed in this study because results showed that the most preferred level of cancer patients is “being cared for in the place of my choice”. Higginson and Sen-Gupta (2000) stated that the way preferences were elicited, varied greatly. They further explained that three studies recorded were preferences for place of care in the light of existing conditions that include choice of patient to be best cared for considering his or her present state (Hinton, 1994), choice that the patient regarded as most realistically achievable after considering difficulties such as immobility (Dunlop, 1989) and choice recorded as home, hospital, or home conditional on families ability to care (McWhinney, Bass & Orr, 1995). Hence, a preference on the place of care, according to Higginson, (2013), will be affected by prior good or bad experiences, those of friends and recent experiences of how services have worked, as well as the patient’s condition and the views of family and friends. She then added that a shift in preference may be influenced by, for example, care at home breaking down or failing, particularly good or poor experiences in hospital or inpatient hospice, physical symptoms or perception of family burden. However, at present, the reasons for the change in preferences are poorly studied and need further research (Higginson & Sen-Gupta, 2000; Gomes, et al., 2013). In a study of McCall and Rice (2005), they found out that although all of their participants admitted that they had always presumed that they would be cared for at home with their families, this perception of them had changed largely with increasing illness and dependency. Thus, this can be attributed to the fact that when deciding regarding ongoing care in advanced disease, patients took into consideration the overall care burden on others, whether family or friends (McCall & Rice, 2005).

## Conclusion

This study aimed to explicate the spiritual preferences of a selected group of Filipino cancer patients in tertiary government hospitals and certain cancer support groups through the use of conjoint analysis with an outlook of informing healthcare professionals on possible preferences on spiritual care and needs of cancer patients that are essential in order improve the patients’ quality of life. Among the attributes, the researchers came up, “spiritual perspective” was rated to be the most important factor considered by cancer patients regarding spiritual care and needs when dealing with their illness. Moreover, it has been known from this study that Filipino cancer patients prefer affective communication from healthcare providers, are more inclined to practice collaborative role in involving care and desire to be cared for in a place of their choice, such as the use of religious materials (eg: praying the rosary and reading the bible) are perceived to be their spiritual perspective in searching for hope and strength.

## Limitations

Certain limitations perceived in this study such as the number of respondents and the kind of tertiary hospital, where this study only considered public hospitals. Moreover, this study only identified the importance of each attribute together with the part-worth utilities of each corresponding level to know the preferences of cancer patients when it comes to spirituality and did not determine the correlation between preferences of cancer patients on spiritual care and needs and their demographic profile.

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