## The Type, Extent of Use, and Perceived Effects of Complementary and Alternative Medicine Among Breast Cancer Survivors

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#### Abstract

This research study determined the type, extent of use, and perceived effects of complementary and alternative medicine among the 44 breast cancer survivors in Iloilo City, Philippines. Spiritual healing and prayer, relaxation techniques, special diet and nutritional supplement are the commonly used complementary and alternative medicine. Breast cancer survivors perceived an improvement of condition with spiritual healing and prayer, while, counseling has no clear influence on them. Married and college educated respondents have used more of special diet and nutritional supplement because they are much aware that these therapies would improve their condition. More research investigations are needed to understand better the reasons and motivations in using CAM, as well as the effectiveness of these therapies in relation to their survival. Counseling as a form of CAM should be strengthened in order to meet patient information needs.

**Keywords**: Complementary and Alternative Medicine, Breast Cancer, Survivors, Use of CAM

### 1. Introduction

Complementary and alternative medicine has been described as comprising diverse group of treatments, ranging from symptomatic interventions to be used in conjunction with traditional therapies, therapeutic touch or meditation, to unique treatments meant to replace conventional chemotherapy or surgery. CAM includes complex and longstanding fields of study, such as acupuncture, ayurvedic medicine, and homeopathy, but can also be as straightforward as taking a specific dietary supplement to lower blood pressure or blood lipid concentrations (Karemow, 2007).

The terms "complementary" and "alternative" are sometimes used to refer to non-traditional methods of diagnosing, preventing, or treating cancer or its symptoms (https://www.cancer.org). However, there is an important difference between the two therapies. A complementary therapy can be used with conventional medical treatment (http://www.cancerresearchuk.org). Whereas, the alternative therapy refer to those that are used instead of known conventional therapies (Deng & Cassileth, 2013).

Despite of remarkable advances achieved by conventional medicine, there has been an exponential growth in interest in and usage of complementary and alternative medicine, especially in developed countries, and found to be a significant element of treatment in poor and developing countries (Spadacio & de Barros, 2008), especially among patients with cancer.

Complementary and alternative medicine is becoming a significant factor in the arena of cancer care. Several studies have shown that breast cancer patients are more likely to use CAM than unaffected individuals in the general population (Mueller *et al.*, 2008). Approximately 34% of cancer patients worldwide have used complementary and alternative medicine approaches (Wheat & Currie, 2007 cited by Murie, 2013). The usage of CAM has

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been prevalent especially breast cancer survivors, wherein, 51 percent of the participants had reported CAM use as complementary treatment (Saibul *et al.*, 2012). Prayer, reading books, taking antioxidants, eating various grains, and maintaining a vegetarian diet proved to be the five most frequently used CAM practices among breast cancer survivors (Wang & Chung, 2012).

Research into the usage and the effects of CAM among breast cancer survivors has been limited. Locally, there is still dearth of information relating to usage of CAM and no study has yet explored this area. Therefore, it would be interesting to determine the type, extent of usage, and the perceived effects of complementary and alternative medicine among breast cancer survivors in Iloilo City, Philippines and how age, civil status, educational attainment, work status, income, length/duration of illness, and stage of illness influence the extent of use and the perceived effects of these therapies.

## 2. Objective of the Study

This study determined the type, extent of use, and perceived effects of complementary and alternative medicine among breast cancer survivors in Iloilo City, Philippines.

## 3. Methodology

This is a descriptive research, one-shot survey. The respondents were all the 44 breast cancer survivors, who are members of the Bosom Friends, Incorporated, in Iloilo City, Philippines. Bosom Friends is an organization founded in 2001, which is a support group for breast cancer survivors.

The study has used a researcher-made questionnaire-checklist. The first part includes the demographic profile of the respondents such as age, civil status, educational attainment, work status, family monthly income, length/duration of illness, stage of illness, and the types of complementary and alternative medicine used by the respondents.

To determine the extent of use and the perceived effects of complementary and alternative medicine, the respondents were asked to check if they use any of the complementary and alternative medicine listed. They were also made to check whether or not CAM therapy alleviates their condition, using a response of either yes or no. The perceived effects of CAM therapy was further categorized as improved or no effect.

Before the conduct of the study, permission from the President of the Bosom Friends was obtained. Consent was secured from the participants before data gathering. The consent contained statements that they could freely decide to participate or not, and their privacy as a participant shall be highly maintained and would be used solely for research.

The data gathered was subjected to appropriate descriptive treatment using the Statistical Package for Social Sciences (SPSS). Frequency counts and percentages were used to describe the demographic profile of the respondents, the types, the extent of use, and the perceived effects of complementary and alternative medicine. Z-test was used to determine the significant differences between the profile of the respondents and the extent of use and the perceived effects of complementary and alternative medicine. Level of significance was set at .05.

### 4. Results and Discussions

## 4.1. Profile of the Respondents

Majority of the respondents included in this study were married (70.5%) and aged more than fifty years old (72.8%). While, more than one-fourth were single and aged below 50 years old (29.5% and 27.2%, respectively). The mean age was 56.4. In terms of educational attainment, the data further show that more than three-fifths (63.7%) of the respondents were college educated. Only 36.3 percent were high school and elementary educated.

Most of the respondents (75%) had a total monthly income of above ten thousand pesos (PHP) while 25 percent of them had an income of below ten thousand pesos (PHP). The data further reveal that more than one-half of them (54.5%) were working while 45.5 percent were not working. In the length and stage of illness, more than three-fifths (63.6%) of the respondents were diagnosed of breast cancer for less than nine years. While, more than one-third (36.4 percent) had breast cancer for more than ten years. The data also show that one-half of the respondents had stages 1 and 2 breast cancer (50.0%) and the other half (50.0%) had stages 3 and 4.

The data in Table 1 has shown that majority of the respondents were in the late adulthood, married, college educated, working, and had a family monthly income of above ten thousand pesos (PHP). Mostly, they were diagnosed of breast cancer for less than nine years and from stages 1 to 4.

## **4.2.** Common Types of Complementary and Alternative Medicine Used by Breast Cancer Survivors

Almost all of the breast cancer survivors had been using spiritual healing and prayer (97.7%). More than three-fourths of them had used relaxation techniques (84.1 %) and special diet and nutritional supplement (79.5%). Less than one-half had used counseling (38.6%). The data reveal that breast cancer survivors believed more on spiritual healing and prayer.

The result is consistent with the findings of Naja *et al.*, (2015), Hwang *et al.*, (2015), Saibul *et al.*, (2012) and Shaharudin et al (2011) wherein vitamins, spiritual healing and prayer, and dietary supplements and nutritional therapies were the most commonly used CAM therapies by the breast cancer survivors.

Table 1. Distribution of Respondents When Classified According to Age, Civil Status, Educational Attainment, Work Status, Family Monthly Income, Length/Duration of illness, and Stage of Illness

| Profile                       | Frequency | Percentage |
|-------------------------------|-----------|------------|
| Age                           |           |            |
| Below 50 years old            | 12        | 27.2       |
| 50 years old and above        | 32        | 72.8       |
| Mean Age: 56.4                |           |            |
| Total                         | 44        | 100.0      |
| Civil Status                  |           |            |
| Single                        | 13        | 29.5       |
| Married                       | 31        | 70.5       |
| Total                         | 44        | 100.0      |
| <b>Educational Attainment</b> |           |            |
| High School and Elementary    | 16        | 36.3       |
| College                       | 28        | 63.4       |
| Total                         | 44        | 100.0      |
| Work Status                   |           |            |
| Working                       | 24        | 54.5       |
| Non-working                   | 20        | 45.5       |
| Total                         | 44        | 100.0      |
| Family Monthly Income         |           |            |
| 10 thousand and below (PHP)   | 11        | 25.0       |
| 10 thousand and above (PHP)   | 33        | 75.0       |
| Total                         | 44        | 100.0      |
| Length/Duration of Illness    |           |            |
| Nine years or less            | 28        | 63.6       |

| Ten years or more       | 16 | 36.4  |
|-------------------------|----|-------|
| Total                   | 44 | 100.0 |
| Stage of Illness        |    |       |
| First and Second Stages | 22 | 50.0  |
| Third and Fourth Stages | 22 | 50.0  |
| Total                   | 44 | 100.0 |

Table 2. Common Types of Complementary and Alternative Medicine Used by Breast Cancer Survivors

| Types of Complementary and Alternative<br>Medicine | Frequency (n=44) | Percentage (100%) |
|--|------------------|-------------------|
| Spiritual Healing/ Prayer                          | 43               | 97.7              |
| Relaxation Techniques                              | 37               | 84.1              |
| Special Diet and Nutritional Supplement            | 35               | 79.5              |
| Counseling   | 17               | 38.6              |

## 4.3. The Use of Complementary and Alternative Medicine in Terms of Age, Civil Status, Educational Attainment, Work Status, Family Monthly Income, Length/Duration of illness, and Stage of Illness

Age. All of the respondents who were below 50 years old had been using spiritual healing and prayer as a form of CAM and 96.9 percent of the respondents who were above 50 years old had been using the same kind of CAM. The same percentages were noted to respondents below 50 years old who had been using special diet and relaxation techniques (83.3% and 83.3%, respectively). While less than one-half of the respondents had used counseling (41.7%). Moreover, 84.4 percent and 78.1 percent of the respondents who were above 50 years old had been using relaxation techniques and special diet and nutritional supplement. However, only 37.5 percent had been using counseling. The Z-test result is not significant in the proportion of two age groups who have been using any of the CAM. The result did not support earlier studies by Tautz, Momm, Hasenburg, and Guethlin (2012) in which being young predicts CAM use.

Civil Status. Almost all of the respondents who were single and married had been using spiritual healing and prayer as a form of CAM. There were more respondents who were married had been using special diet and nutritional supplement (74.2%), while more respondents who were single had used relaxation techniques (84.6%). Only 38.5 percent and 38.7 percent of the respondents (single and married) had used counseling. The Z-test for difference did not show significant result on spiritual healing and prayer (p=1.0), relaxation techniques (p=0.059), and counseling (p=-0.080), except for special diet and nutritional supplement. Moreover, the Z-test for significant difference in the use of complementary and alternative medicine in terms of special diet and nutritional supplement yielded significant result (p=0.025). Furthermore, there were more married respondents than the single ones who were using special diet preparation and nutritional supplement.

Educational Attainment. Almost all of both age groups had been using spiritual healing and prayer as a form of CAM (100.0% and 96.4 %, respectively). Among those who had used special diet and nutrition and relaxation techniques, there were more college educated respondents (71.4% and 89.3%) than the high school and elementary educated (68.7%). Less than two-fifths of both groups had used counseling (39.3% and 37.5%, respectively). The Z-test result for spiritual healing and prayer (p=1.0), relaxation techniques (p=-0.968),

and counseling (p=-0.073) did not show significant results. However, there is a significant difference between educational attainment and the use of special diet and nutritional supplement (p=0.027). College educated tended to use more of special diet and nutritional supplement than the high school and elementary educated. The present finding is consistent with the results of the two previous studies which found that education was significantly associated with CAM use (Kristoffersen, Norheim, & Fønnebø, 2013 & Saibul et al., 2012).

Family Monthly Income. Majority of the respondents who had an income of below ten thousand pesos (PHP) and above ten thousand pesos (PHP) had been using spiritual healing and prayer, special diet, nutritional supplement, and relaxation techniques as a form of CAM. Only, a small percentage had been using counseling (40.0% and 37.5%, respectively). The result of the Z-test for the difference in income and the all types of CAM were too small to reach a significant result (p=1.0, p=0.836, p=-0.564, and p=0.103). On the contrary, the findings of Knight, Hwa, and Hashim (2015) and Kristoffersen, Norheim, and Fønnebø (2013) revealed that income was associated with CAM use.

Work Status. Majority of the respondents who were working and those who were not working had been using spiritual healing and prayer (100.0% and 95.0%, respectively). There were more respondents who were working preferred relaxation techniques (87.5%) than using special diet and nutritional supplement (75.0%). While, many of those who were not working had been using special diet (85.0%). Less than one half of those respondents who were both working (33.3%) and non-working (45.0%) had been using counseling as a form of therapy. No significant difference in the Z-test results in both groups in all types of CAM.

Length/Duration of Illness. In terms of length of illness, all of the respondents who were diagnosed of breast cancer of less than nine years had been using spiritual healing and prayer (100.0%), and only 93.8 percent of those respondents with more than ten years of breast cancer had also used healing and prayer as a form of therapy. There were more respondents with more than ten years of breast cancer had used relaxation techniques (87.5%), than those with less than nine years (82.1%). Counseling was the least form of therapy that both groups had used (42.9% and 31.1%, respectively). The result of Z-test showed no significant difference between the use of CAM and the length of illness (p=1.00, p=.546, p=-0.428, and p=0.103).

Stage of Illness. In this aspect, those respondents who had first and second stages of breast cancer had been using spiritual healing and prayer as a form of therapy (100.0%), while one-half of them (50.0%) had used special diet and nutritional supplement (50.0%). Those who had third and fourth stages of breast cancer, majority had been using spiritual healing and prayer (97.5%), special diet and nutritional supplement (82.5%), and relaxation techniques (85.5%). It was also noted that the least used therapy was counseling in both groups (40.0% and 25.0%, respectively). There is no significant difference between the two groups as indicated by the result of the Z-test (p=1.0, p=-1.551, p=-0.671, and p=-0.558). The result is not consistent with the finding of Naja et al (2015) that the use of CAM was positively associated with an advanced stage of the disease.

Table 3. Distribution of Respondents According to the Use of Complementary and Alternative Medicine in Terms of Age

| Complementary and Alternative Medicine     | Age             | Total<br>(N= 44)<br>p Value |    |      |           |
|--|-----------------|-----------------------------|----|------|-----------|
|  | Below 50<br>( n |                             |    |      |           |
|  | f               | %                           | f  | %    | 1.0       |
| Spiritual Healing/<br>Prayer               | 12              | 100                         | 31 | 96.9 | 1.0 ns    |
| Special Diet and<br>Nutritional Supplement | 10              | 83.3                        | 25 | 78.1 | 0.417 ns  |
| Relaxation Techniques                      | 10              | 83.3                        | 27 | 84.4 | -0.090 ns |
| Counseling                                 | 5               | 41.7                        | 12 | 37.5 | 0.175 ns  |

Table 4. Distribution of Respondents According to the Use of Complementary and Alternative Medicine in Terms of Civil Status

| Complementary and                          |                 | Total |                  |      |                           |
|--|-----------------|-------|------------------|------|---------------------------|
| Alternative Medicine                       | Single ( n =13) |       | Married ( n= 31) |      | (N= 44)<br><i>p</i> Value |
|  | f %             |       | f                | %    |                           |
| Spiritual Healing/<br>Prayer               | 13              | 100   | 30               | 96.8 | 1.0 ns                    |
| Special Diet and<br>Nutritional Supplement | 9               | 69.2  | 23               | 74.2 | 0.0275 sig                |
| Relaxation Techniques                      | 11              | 84.6  | 26               | 83.9 | 0.059 ns                  |
| Counseling                                 | 5               | 38.5  | 12               | 38.7 | -0.080 ns                 |

Table 5. Distribution of Respondents According to the Use of Complementary and Alternative Medicine in Terms of Educational Attainment

| Complementary and         | Ed  | Total |                     |      |                           |  |
|---------------------------|---|-------|---------------------|------|---------------------------|--|
| Alternative Medicine      | High School and<br>Elementary<br>( n= 16) |       | College<br>( n= 28) |      | (N= 44)<br><i>p</i> Value |  |
|                           | f %                                       |       | f                   | %    |                           |  |
| Spiritual Healing/ Prayer | 16  | 100   | 27                  | 96.4 | 1.0 ns                    |  |

| Special Diet and<br>Nutritional Supplement | 11 | 68.7 | 20 | 71.4 | 0.027 sig |
|--|----|------|----|------|-----------|
| Relaxation Techniques                      | 12 | 75   | 25 | 89.3 | -0.968 ns |
| Counseling                                 | 6  | 37.5 | 11 | 39.3 | -0.073 ns |

Table 6. Distribution of Respondents According to the Use of Complementary and Alternative Medicine in Terms of Family Monthly Income

| Complementary and                          | ]                            | Total |    |                |                    |
|--|------------------------------|-------|----|----------------|--------------------|
| Alternative Medicine                       | 10 thousand and below (n=20) |       |    | 10,000<br>=24) | (N= 44)<br>p Value |
|  | f %                          |       | f  | %              |                    |
| Spiritual Healing/ Prayer                  | 20                           | 100   | 23 | 95.8           | 1.0 ns             |
| Special Diet and<br>Nutritional Supplement | 17                           | 85    | 18 | 75             | 0.836 ns           |
| Relaxation Techniques                      | 16                           | 80    | 21 | 87.5           | -0.564 ns          |
| Counseling                                 | 8                            | 40    | 9  | 37.5           | 0.103 ns           |

Table 7. Distribution of Respondents According to the Use of Complementary and Alternative Medicine in Terms of Terms of Work Status

| Complementary and                                    |    | Work | Total                     |    |           |
|--|----|------|---------------------------|----|-----------|
| Iternative Medicine Working Non-workin (n=24) (n=20) |    | U    | (N= 44)<br><i>p</i> Value |    |           |
|  | f  | %    | f                         | %  | 1.0       |
| Spiritual Healing/ Prayer                            | 24 | 100  | 19                        | 95 | 1.0 ns    |
| Special Diet and<br>Nutritional Supplement           | 18 | 75   | 17                        | 85 | -0.671 ns |
| Relaxation Techniques                                | 21 | 87.5 | 16                        | 80 | 0.692 ns  |
| Counseling   | 8  | 33.3 | 9                         | 45 | -0.463 ns |

Table 8. Distribution of Respondents According to the Use of Complementary and Alternative Medicine in Terms of Length of Illness

| Complementary and<br>Alternative Therapy |    | Total               |                  |      |                           |
|--|----|---------------------|------------------|------|---------------------------|
|  |    | ars or less<br>=28) | 10 years<br>(n=2 |      | (N= 44)<br><i>p</i> Value |
|  | f  | %                   | f                | %    | 1.0                       |
| Spiritual Healing/ Prayer                | 28 | 100                 | 15               | 93.8 | 1.0 ns                    |

| Special Diet and Nutrition | 23 | 82.1 | 12 | 75.0 | 0.546 ns  |
|----------------------------|----|------|----|------|-----------|
| Relaxation Techniques      | 23 | 82.1 | 14 | 87.5 | -0.428 ns |
| Counseling                 | 12 | 42.9 | 5  | 31.3 | 0.103 ns  |

Table 9. Distribution of Respondents According to the Use of Complementary and Alternative Medicine in Terms of Stage of Illness

| Complementary and                       |                                 | Total |                           |      |                           |
|---|---------------------------------|-------|---------------------------|------|---------------------------|
| Alternative Medicine                    | First and Second Stages ( n= 4) |       | Third and<br>Stag<br>( n= | ges  | (N= 44)<br><i>p</i> Value |
|   | f                               | %     | f                         | %    | 1.0                       |
| Spiritual Healing/ Prayer               | 4                               | 100   | 39                        | 97.5 | 1.0 ns                    |
| Special Diet and Nutritional Supplement | 2                               | 50    | 33                        | 82.5 | -1.551 ns                 |
| Relaxation Techniques                   | 3                               | 75    | 34                        | 85   | -0.671 ns                 |
| Counseling                              | 1                               | 25    | 16                        | 40   | -0.558 ns                 |

## 4.4. Perceived Effects of the Types of Complementary and Alternative Medicine Used by Breast Cancer Survivors

Table 10 show that spiritual healing and prayer had an improved effect to the majority of the respondents (97.7 percent). Moreover, an equal percentage in the use of special diet, nutritional supplements, and relaxation techniques (68.2 % and 68.2%, respectively) were found to have an improved effect to the respondents. Only one-fourth of the respondents (25.0%) who used counseling experienced an improvement of condition. Very low percentages were noted to those respondents who experienced no effects of CAM.

The result has shown that breast cancer survivors who used spiritual healing and prayer brought an improvement to their condition. The result is supported by the findings of Bahall (2017) that spiritual therapy has been used by cancer patients because of the perceived benefits and satisfaction.

## 4.5. Perceived Effects of Spiritual Healing and Prayer According to Age, Civil Status, Educational Attainment, Work Status, Family Monthly Income, Length of Illness, and Stage of Illness

Table 11 reveal that majority of the respondents in all groups had experienced an improvement of condition with spiritual healing and prayer. Only one of them perceived no improvement with spiritual healing and prayer.

Table 10. Perceived Effects of the Types of Complementary and Alternative Medicine Used by Breast Cancer Survivors

| Complementary and Alternative Medicine  | Perceived Effects |       |           |      |  |  |
|---|-------------------|-------|-----------|------|--|--|
|   | Impr              | roved | No Effect |      |  |  |
|   | f                 | %     | f         | %    |  |  |
| Spiritual Healing/ Prayer               | 43                | 97.7  | 1         | 2.3  |  |  |
| Relaxation Techniques                   | 30                | 68.2  | 5         | 11.4 |  |  |
| Special Diet and Nutritional Supplement | 30                | 68.2  | 7         | 15.9 |  |  |
| Counseling                              | 11                | 25    | 6         | 13.6 |  |  |

## 4.6. Perceived Effects of Special Diet and Nutrition According to Age, Civil Status, Educational Attainment, Work Status, Family Monthly Income, Length of Illness and Stage of Illness

Majority of the respondents who had been using special diet and nutritional supplements were found to have an improved condition regardless of age, civil status, educational attainment, income, and length of illness. In terms of stage of illness, one-half (50.0%) of the respondents with first and second stages of cancer had an improved condition with special diet and nutritional supplements, however, the other half (50.0%) did not have an improved condition.

## 4.7. Perceived Effects of Relaxation Techniques According to Age, Civil Status, Educational Attainment, Work Status, Family Monthly Income, Length of Illness and Stage of Illness

The same trend was also noted to all respondents who had been using relaxation techniques, wherein almost all of them had an improved condition regardless of age, civil status, educational attainment, work status, income, length of illness, and stage of illness.

# 4.8. Perceived Effects of Counseling According to Age, Civil Status, Educational Attainment, Work Status, Family Monthly Income, Length of Illness, and Stage of Illness

The data reveal that counseling had an improved effect to the majority of the respondents regardless of age, civil status, work status, and length of illness. On the other hand, however, counseling had no effects to those respondents who were less educated, those who had less income, and in all stages of breast cancer.

Table 11. Perceived Effects of Spiritual Healing and Prayer According to Age, Civil Status, Educational Attainment, Work Status, Family Monthly Income, Length of Illness, and Stage of Illness

|  | Sp       | iritual Heali |    |        |       |     |
|--|----------|---------------|----|--------|-------|-----|
| Personal Characteristics   | Improved |               | No | Effect | Total |     |
|  | f        | %             | f  | %      |       |     |
| Age  | 12       | 100.0         | 0  | 0      | 12    | 100 |
| Below 50 years old<br>50 years old and above                     | 31       | 96.9          | 1  | 3.1    | 32    | 100 |
| Civil Status   | 13       | 100           | 0  | 0      | 13    | 100 |
| Single<br>Married  | 30       | 96.8          | 1  | 3.2    | 31    | 100 |
| Educational Attainment High School and Elementary College        | 16       | 100           | 0  | 0      | 16    | 100 |
|  | 27       | 96.4          | 1  | 3.6    | 28    | 100 |
| Work Status Working Non- Working                                 | 24       | 100           | 0  | 0      | 24    | 100 |
|  | 19       | 95.0          | 1  | 5      | 20    | 100 |
| Family Monthly Income  | 20       | 100           | 0  | 0      | 20    | 100 |
| 10 thousand and below Above 10 thousand                          | 23       | 95.8          | 1  | 4.2    | 24    | 100 |
| Length of Illness Nine years or less Ten years or more           | 28       | 100           | 0  | 0      | 28    | 100 |
|  | 15       | 93.8          | 1  | 6.3    | 16    | 100 |
| Stage of Illness First and Second Stages Third and Fourth Stages | 4        | 100           | 0  | 0      | 4     | 100 |
|  | 39       | 97.5          | 1  | 2.5    | 40    | 100 |

Table 12. Perceived Effects of Special Diet and Nutrition According to Age, Civil Status, Educational Attainment, Work Status, Family Monthly Income, Length of Illness and Stage of Illness

| Personal Characteristics                     |          | ved Effects of<br>Nutritional S | m    |        |       |     |
|--|----------|---------------------------------|------|--------|-------|-----|
|  | Improved |                                 | No 1 | Effect | Total |     |
|  | f        | %                               | f    | %      |       |     |
| Age  | 8        | 80                              | 2    | 20     | 10    | 100 |
| Below 50 years old<br>50 years old and above | 22       | 88                              | 3    | 12     | 25    | 100 |
| Civil Status                                 | 11       | 91.7                            | 1    | 8.3    | 12    | 100 |
| Single<br>Married                            | 19       | 82.6                            | 4    | 17.4   | 23    | 100 |
| Educational Attainment                       | 13       | 86.7                            | 2    | 13.3   | 15    | 100 |

| High School and Elementary<br>College                          | 17 | 85   | 3  | 15   | 32 | 100 |
|--|----|------|----|------|----|-----|
| Work Status Working Non- working                               | 15 | 83.3 | 3  | 16.7 | 18 | 100 |
|  | 15 | 88.2 | 2  | 11.8 | 17 | 100 |
| Family Monthly Income 10 thousand and below Above 10 thousand  | 14 | 70   | 6  | 30   | 20 | 100 |
|  | 16 | 66.7 | 8  | 33.3 | 24 | 100 |
| Length of Illness  | 20 | 87   | 3  | 13   | 33 | 100 |
| Nine years or less Ten years or more                           | 10 | 83.3 | 2  | 16.7 | 12 | 100 |
| Stage of Illness First and Second Stage Third and Fourth Stage | 2  | 50   | 2  | 50   | 4  | 100 |
|  | 28 | 70   | 12 | 30   | 40 | 100 |

Table 13. Perceived Effects of Relaxation Techniques According to Age, Civil Status, Educational Attainment, Work Status, Family Monthly Income, Length of Illness and Stage of Illness

| Personal Characteristics   |          | Perceived<br>Relaxation |           |      |       |     |  |
|--|----------|-------------------------|-----------|------|-------|-----|--|
|  | Improved |                         | No Effect |      | Total |     |  |
|  | f        | %                       | f         | %    |       |     |  |
| Age  | 8        | 80                      | 2         | 20   | 10    | 100 |  |
| Below 50 years old<br>50 years old and above                     | 22       | 81.5                    | 5         | 18.5 | 27    | 100 |  |
| Civil Status   | 10       | 90.9                    | 1         | 9.1  | 11    | 100 |  |
| Single<br>Married  | 20       | 76.9                    | 6         | 23.1 | 26    | 100 |  |
| Educational Attainment High School and Elementary College        | 10       | 83.3                    | 2         | 16.7 | 12    | 100 |  |
|  | 20       | 80                      | 5         | 20   | 25    | 100 |  |
| Work Status Working Non- working                                 | 16       | 76.2                    | 5         | 23.8 | 21    | 100 |  |
|  | 14       | 87.5                    | 2         | 12.6 | 1     | 100 |  |
| Family Monthly Income  | 13       | 81.3                    | 3         | 18.8 | 16    | 100 |  |
| 10 thousand and below Above 10 thousand                          | 17       | 81                      | 4         | 19   | 21    | 100 |  |
| Length of Illness  | 20       | 87                      | 3         | 13   | 23    | 100 |  |
| Nine years or less<br>Ten years or more                          | 10       | 71.4                    | 4         | 28.6 | 14    | 100 |  |
| Stage of Illness First and Second Stages Third and Fourth Stages | 3        | 75                      | 1         | 25   | 4     | 100 |  |
|  | 27       | 67.5                    | 13        | 32.5 | 40    | 100 |  |

Table 14. Perceived Effects of Counseling According to Age, Civil Status, Educational Attainment, Work Status, Family Monthly Income, Length of Illness, and Stage of Illness

|   | Perce    |      |    |        |       |     |
|---|----------|------|----|--------|-------|-----|
| Personal Characteristics                                  | Improved |      | No | Effect | Total |     |
|   | f        | %    | f  | %      |       |     |
| Age   | 4        | 80   | 1  | 20     | 5     | 100 |
| Below 50 years old 50 years old and above                 | 7        | 58.3 | 5  | 41.7   | 12    | 100 |
| Civil Status  | 4        | 80   | 1  | 20     | 5     | 100 |
| Single<br>Married   | 7        | 58.3 | 5  | 41.7   | 12    | 100 |
| Educational Attainment High School and Elementary College | 1        | 16.7 | 5  | 83.3   | 6     | 100 |
|   | 10       | 90.9 | 1  | 9.1    | 11    | 100 |
| Work Status Working Non- working                          | 6        | 75   | 2  | 25     | 8     | 100 |
|   | 5        | 55.6 | 4  | 44.4   | 9     | 100 |
| Family Monthly Income                                     | 3        | 15   | 17 | 85     | 20    | 100 |
| 10 thousand and below<br>Above 10 thousand                | 8        | 33.3 | 16 | 66.7   | 24    | 100 |
| Length of Illness Nine years or less Ten years or more    | 6        | 50   | 6  | 50     | 12    | 100 |
|   | 5        | 100  | 0  | 0      | 5     | 100 |
| Stage of Illness  | 1        | 25   | 3  | 75     | 4     | 100 |
| First and Second Stages Third and Fourth Stages           | 10       | 25   | 30 | 75     | 40    | 100 |

## 5. Summary of Major Findings

- 1. Majority of the respondents are in the late adulthood, married, college educated, working, and has a family monthly income of above ten thousand pesos (PHP). Mostly, they are diagnosed of breast cancer for less than nine years and from stage 1 to 4. The mean age is 56.4.
- 2. Almost all of the breast cancer survivors have been using spiritual healing and prayer, relaxation techniques, and special diet and nutritional supplement. Less than half of them have used counseling. The data reveal that breast cancer survivors believed more on spiritual healing and prayer.
- 3. There is no significant difference between all types of complementary and alternative medicine and the respondents' age, income, work status, length/duration of illness, and stage of illness.
- 4. There is a significant difference between special diet and nutritional supplement and the respondents' civil status and educational attainment.
- 5. Almost all of the breast cancer survivors perceived an improvement of condition with spiritual healing and prayer.

- 6. Majority of the respondents in all groups have an improved condition with spiritual healing and prayer, special diet and nutritional supplements, and relaxation techniques. In terms of stages of the illness, those with first and second stages of cancer perceived an improved condition with special diet and nutritional supplements, however, those with third and fourth stages of cancer perceived no improvement of condition.
- 7. Counseling has no effect to the condition of the respondents who are less educated, with less income, and in all stages of breast cancer.

#### 6. Conclusions

The findings revealed that spiritual healing and prayer, relaxation techniques, special diet and nutritional supplement are the commonly used complementary and alternative medicine among the breast cancer survivors. Married and college educated respondents tended to use special diet and nutritional supplement because they are more aware that there condition would improve with these therapies. Breast cancer survivors perceived an improvement of condition with spiritual healing and prayer, while, counseling has no clear influence to them. More research investigations are needed to understand better the reasons and motivations in using CAM, as well as the effectiveness of these therapies in relation to their survival. Counseling as a form of CAM should be strengthened in order to meet patient information needs.

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