Quality of Life Among Cancer Survivors

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ABSTRACT

This study determined the perceptions of cancer survivors on their quality of life. The descriptive-correlational method of research was utilized. The population of the study were 19 patients who sought consultation in private hospitals of Metro Vigan. A questionnaire-checklist formulated by the researcher was used as data gathering instrument.

Findings revealed that the respondents are in their late middle adulthood, female, married and college graduates, have a source of income and reside in the rural areas. Majority have been diagnosed to have breast cancer, Stage 2, initially felt as a lump in their breast and has not improved for most of them and none of their relatives are afflicted with any form of cancer. The respondents underwent diagnostic procedures to confirm their illnesses and underwent surgery for the removal of the growth or lump following a fine needle biopsy or excision biopsy.

Overall, the respondents’ quality of life is at a very satisfactory level. A significant relationship existed between the quality of life, particularly on economic productivity and educational attainment, occupation and treatment modalities. Further, the diagnostic examinations and treatment modalities undertaken affect the dimensions of effective political, social and community participation of the respondents.

Keywords: cancer, quality of life, survivor, treatment, diagnostic procedure

INTRODUCTION

Cancer is the leading cause of death in the United States. In the Philippines, the percentage of deaths due to cancer have steadily increased, despite major advances in treatment and the increase in awareness of people on the disease. The Philippine Cancer Society has reported that the increase in mortality ratio (IMR) is roughly 2:1. The IMR varies by site and reflects the prognosis of the disease (Savella 2010).

Further, new cases of cancer will rise by half by 2030, reaching 21.6 million per year, compared to 14 million in 2012, according to the United Nations, in a global analysis of the scourge. Cancer deaths, meanwhile, will likely rise from 8.2 million to 13 million per year as the world population grows and ages and more people adopt risky lifestyle habits. The World Health Organization said that the overall impact from
cancer would “unquestionably” hit developing countries the hardest, already grappling with poverty associated cancers and infection and worsened by cancers associated with affluent lifestyles—high tobacco and alcohol use, eating processed foods and not exercising (Ngelangel & Wang, 2002).

According to Mages and Mendelsohn in the study of Savella (2010), cancer endangers the health of an individual because of the prolonged stress resulting from the discovery of the disease, the process of diagnosing, the surgical interventions, the medical treatment, medical follow-up and fear of recurrence. Additionally, women with breast cancer are undergoing stress because of breast surgery which entails disfigurement. How cancer patients adjust to the alterations in their lives caused by these ongoing stressful experiences presumably depends on their coping strategies.

The process of physical, psychosocial and emotional adjustments which the cancer patients undergo cannot be underestimated. Many of those who have undergone chemotherapy or surgery need more than this intervention. Sessions with support groups is just one. Counselling, spiritual journey, psychotherapy or total change in environment are some mechanisms used for patients with anxiety or depression. One would, then, doubt whether the quality of their lives would remain unchanged in the course of their illness and during medical interventions.

Quality of life is an individual’s satisfaction or happiness with life in domains he or she feels important. Historically known as “life satisfaction” or subjective well-being, it is now known as quality of life. Numerous taxonomies of life domains have been proposed by social, psychological, gerontological and health scientists based on studies of general population of both well and ill people. A typical taxonomy is that of Flanagan which categorizes 15 dimensions of life into 5 domains as: physical and material well-being, relations with other people, social, civic and community activities, personal development, fulfilment and recreation.

Quality-of-life (QOL) issues have become a vital area of concern to cancer survivors, their families, and care providers. In large measure, attention to QOL in cancer survivors developed out of the expressed needs of more than 10 million cancer survivors, who are demanding greater attention to maintain or restore QOL after cancer treatment. Future advances in cancer treatment will further heighten the importance of survivorship issues in comprehensive cancer care.

Moreover, in many families, the impact of chronic illness may be felt not primarily on physical impairment but rather in the associated familial, psychological, social or economic concomitants. Further, the quality of life of the long-term illness-patient is very much affected by the degree to which he can do things he considers important and maintain his independent and contributing role in the family.
Miller, et al. (2003) highlighted the need for assessment of quality of life and emotional functioning of cancer patients. These researchers administered questionnaires to 95 patients with gynecologic cancer at least six months after completion of treatment. The questionnaires asked patients to retrospectively rate any emotional symptoms experienced during active treatment. Fifty seven percent of patients reported needing help dealing with emotional problems. A majority of patients wanted their physicians to ask questions dealing with spirituality, death and emotional problems.

In a similar study, Miller, Pittman, Case and McQuellon (2002) compared QOL in disease-free gynecologic cancer patients (N = 85) to that of 42 unmatched healthy women seen for standard gynecologic screening exams. Their data showed no overall difference in FACT-G scores between gynecologic cancer patients and normal women. The authors propose that lower levels of education may be predictive of a less supportive social environment, limited knowledge of health issues and poor general health. Lack of help at home was also predictive of poor QOL.

Lutgendorf et al. (2002) assessed 98 women with early stage or regionally advanced gynecologic cancer. Prospective assessments were done measuring QOL (FACT-G), coping style (COPE) and mood (POMS) at pre-treatment and one year post-diagnosis. Sleep disturbance was common throughout the study, and occurred in approximately 40 percent of the sample. Lack of energy and sexual satisfaction were the other two most common complaints.

Surprisingly, medical factors such as disease extent and treatment intensity did not significantly predict physical well being at one year. However, coping strategies contributed significantly to the variance of physical well being, even when medical factors were controlled. Over the course of the first year following diagnosis, emotional and functional well being improved significantly for both early stage and advanced patients. The authors note that this improvement occurred even in the absence of significant increases in physical well being, suggesting possible adaptation to residual physical limitations. Decreases in anxiety, depression and confusion were seen in both groups, but regionally advanced patients had poorer QOL and mood compared to early stage patients.

It is in the light of the above situation that the researcher ventured on a study on the quality of life of cancer patients. It is hoped that the results would give more insights on the needs of cancer patients, especially those who are on the path of survival, to boost whatever coping strategies they have and hasten their recovery.
Specifically, it looked into the profile of the respondents in terms of socio-demographic and disease-related variables like type of cancer, stage of cancer during diagnosis, family history of cancer, Signs and symptoms experienced, diagnostic examinations and management/treatment modalities. Moreover, the relationship between the profile and the quality of life among cancer survivors was also looked into.

**METHODOLOGY**

This study used the descriptive-correlational method of research. The socio-demographic data of the respondents as well as their perceptions on the quality of their lives were investigated. The significant relationship between the quality of life and the socio-demographic and disease-related profile of the respondents was also determined.

The population of the study were patients considered as survivors of cancer who sought consultation from two oncologists in private hospitals of Metro Vigan. A total of 19 patients participated in the study. Newly diagnosed patients and those who have just started treatment were not included in the study.

A questionnaire-checklist formulated by the researcher and content validated by three experts was used in the data gathering. This was used as aid in the interviews conducted by the researcher. Interviews were done during their follow-up check-ups with their doctors whose permission were obtained before the conduct of the study. The following statistical tools were utilized to analyze the data gathered in the study: frequency count and percentage, and Chi Square test for relationship.

For ethical consideration, a verbal consent was obtained from the respondents after thorough explanation of the purpose of the study. Likewise, the anonymity of the respondents and strict confidentiality of information was maintained in this study.

**RESULTS AND DISCUSSION**

**Profile of the Respondents**

*Socio-demographic Data*

A substantial percentage (7 or 36.8%) of the respondents are in their late middle adulthood, belong to the age bracket of 51-60 years old and 61 years old and above. A great majority (16 or 84.2%) of the respondents are female. Only three or 15.8% are males. Majority (13 or 68.4%) of the respondents are married. There are six (31.6%) who are single. A marked percentage (7 or 36.8%) of the respondents are
college graduates, followed by those who are high school graduates (5 or 26.3%). In addition, a great number (6 or 31.6%) of the respondents have no source of income. However, five (26.3%) respondents are practicing their professions while another five (26.3%) are semi-skilled workers. Among those who are working, the biggest number (4 or 21.05%) are earning a monthly income of Php 30,001-40,000 range. This is followed by three respondents (15.8%) earning less than Php 10,000 and another three whose income ranges from Php 10,001 to 20,000. Further, most (16 or 84.2%) of the respondents live outside Metro Vigan. Only three (15.8%) are from the five municipalities of Metro Vigan.

Disease –Related Profile

Type of Cancer. Majority (11 or 57.9%) of the respondents have been diagnosed to have a breast cancer while two (10.5%) respondents have a diagnosis of ovarian cancer. There are respondents who have been diagnosed with cancer of the uterus (1 or 5.3%), lungs (1 or 5.3%), colon (1 or 5.3%), prostate (1 or 5.3%), bone (1 or 5.3%) and blood (1 or 5.3%).

Stage of Cancer during Diagnosis. A great number (8 or 42.10%) of the respondents have been diagnosed in the third stage of the disease followed by six (31.6 %) diagnosed in the 2nd stage and three (15.8%) in the fourth stage. The stage has not improved for most of them but two (10.5 %) claimed that they have been declared cancer free.

Family History of Cancers. Majority (14 or 73.68%) of the respondents have no genetic predisposition as they claimed that no relatives are afflicted with any form of cancer. Only a few (5 or 26.92%) have relatives who have cancer. They are their cousins, siblings, aunts and uncles, mostly on the maternal side.

Signs and Symptoms initially Experienced. A great number (11 or 57.89%) of the respondents disclosed that they felt a lump in their breast. This was described as painless by 64.28%. Only 27.3% described the lump as painful. No associated fever, headache or other constitutional symptoms were elicited in other respondents but other respondents described their initial signs as bleeding post-coitus (cervical) (15.78%), persistent cough (5.26%), hoarseness of voice (5.26%) and back pain (5.26%) which was a sign initially felt by a respondent with breast cancer.

Diagnostic Procedures Undertaken. The respondents underwent diagnostic procedures to confirm their illnesses. Breast ultrasound (14) and biopsy (13) were mostly done on respondents with breast cancer. Other procedures done were computerized tomography (CT) scan (4), mammography (6), MRI or magnetic resonance imaging (2). CBC and blood chemistry were routinely done on all patients.
(19) before chemotherapy to assess their general health status or to identify medical conditions that might hinder or delay treatment modalities. Liver scan or ultrasound (4) were also done to localize the lesions. Bone scans were done in 3 patients to rule out extension or metastases to the bone, a condition usually complicating breast cancer. Excision biopsy, a procedure to detect the presence of pathology in the cell development of a tumor, is mostly or routinely done in patients with an abnormal growth. It detects the abnormal growth as well as the stage of the disease. This is mostly done as an initial step before decision for management is given to the client. In almost all cases, the procedure was not repeated after treatment but doctors explain that repeated biopsies may be done when new growths appear.

Treatment modalities. Management of cancer addressed the disease itself but many interventions were meant to alleviate the signs and symptoms brought about or which are secondary to the primary treatment. Most of the respondents underwent surgery (17 or 89.47%) for the removal of the growth or lump following a fine needle biopsy or excision biopsy. One respondent claimed to have undergone chemotherapy (18 or 94.73%) without undergoing surgery. A colon cancer client was immediately operated on after tests indicated colon cancer. A colostomy was placed for months before the part was reconnected to the original stump. Respondents continued to work as a domestic helper afterwards.

Quality of Life

The quality of life of cancer survivors is discussed below. There are three (3) dimensions of life used to indicate quality of life: 1. Physical ability to enjoy life, 2. Psycho-spiritual ability to cope with the effects of the disease and 3. Effective and meaningful political, community and social participation. The following table shows the quality of life of the cancer survivors.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>Descriptive Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical ability to enjoy life</td>
<td>4.07</td>
<td>Very Satisfactory</td>
</tr>
<tr>
<td>Psycho-spiritual ability to cope with the effects of the disease</td>
<td>4.36</td>
<td>Excellent</td>
</tr>
<tr>
<td>Economic Productivity</td>
<td>3.11</td>
<td>Satisfactory</td>
</tr>
<tr>
<td>Effective and meaningful political, community and social participation</td>
<td>3.56</td>
<td>Very Satisfactory</td>
</tr>
<tr>
<td><strong>Grand Mean</strong></td>
<td><strong>3.87</strong></td>
<td><strong>Very Satisfactory</strong></td>
</tr>
</tbody>
</table>

Norm

- 4.21 – 5.00 Excellent
- 3.41 – 4.20 Very satisfactory
- 2.61 – 3.40 Satisfactory
- 1.81 – 2.60 Fair
- 1.00 – 1.80 Poor
As a whole, the quality of life of the respondents is very satisfactory \((M=3.87)\). Taken singly, their physical ability to enjoy life \((M=4.07)\) suggests very satisfactory quality of life. The respondents often do activities for personal grooming with ease, have minimal elimination problems and are able to engage in household chores. They sometimes are able to engage in physical activity and cope with pain, headache and minor ailments but only on a limited basis. This implies that despite the seriousness of this disease, activities that are necessary for life such as feeding, toileting, personal grooming, all of which require movement and stamina, are carried out. Rest, relaxation and sleep are always achieved. All these, in effect, contribute to their very satisfactory quality of life along this dimension.

Cella (1993) defined quality of life in cancer patients as the extent to which one’s usual or expected physical, emotional and social well-being is affected by a medical condition or its treatment and described quality of life in terms of various dimensions. Along the physical dimension, symptoms of the disease and side effects of treatment are included. In this study of cancer survivors, whose chemotherapy and other medical modalities are almost completed, the respondents who claimed that symptoms have ebbed (especially those who have undergone surgical interventions) are able to function well enough to do activities of daily living. This supports the earlier statement of Cella on functional dimension, which is often determined by physical well-being, that patients manifest the ability to do personal grooming, feeding, toileting and some aspects of their work, mainly because they are more or less on their road to recovery. Other physical activities that they are able to involve themselves in are gardening, helping in taking care of children and doing light household chores. During the initial phase of treatment when side effects of chemotherapy and radiotherapy were at their highest, respondents claimed to have made modifications in their lifestyle to physically cope with weakness, nausea and vomiting and lack of energy. These include enforced rest and sleep, dietary changes such as shift from street and comfort foods to fresh fruits and vegetables.

The overall mean rating \((4.36)\) for the psycho-spiritual dimension shows that the respondents have an excellent coping ability for their condition. They claimed to have always found relief and comfort in praying, maintain close relationship with God, felt accepted and loved by relatives and friends, experienced contentment despite their situation and have maintained their self-esteem. Furthermore, they claim that they are able to discuss their condition with people other than their family, and be free from undue anxiety. This implies that most of the respondents still hold strong hopes for recovery probably because they are undergoing treatment for cancer. This could also imply that they have accepted their disease and are positive about the outcomes of their medical intervention. One aspect, for instance, is the issue on disfigurement and poor body image. As claimed, the respondents almost were in denial when they first realized the presence of the disease. As days passed and they
underwent treatment, there was slow realization of the magnitude of the condition until they found comfort in the support their families and friends gave and in God whom most respondents consider as the most important source of strength.

On economic productivity, the findings reveal a satisfactory quality of life as supported by the mean rating of 3.11. As gathered from the interview, some of the respondents took time off from work for diagnostic procedures and chemotherapy or radiotherapy. A few stopped completely from income-generating activities but some had to continue because of financial reasons. This suggests that the ability to be gainfully employed or to gain income by themselves has been affected by their condition. Moreover, in a few cases, the disruption in their work and ability to gain has been compensated by the assistance given by relatives. In some cases, the various effects of their condition on their work include lack of concentration and physical symptoms such as generalized weakness, anorexia and muscle pains. In the workplace, this was remedied by resting or just verbalizing what they felt to their peers, who either allowed them to rest or reduced their responsibilities in their work.

Finally, the quality of life along effective social, political and community participation was very satisfactory as indicated by the overall mean rating of 3.56. From the above findings, it appears that while the disease affects the respondents to some extent on the physical and economic aspects, the process of treatment and support from relatives and friends provided them with a very satisfactory psycho-spiritual support, enabling them to still participate in social and community activities. Furthermore, this may be because most of the respondents are in the early stage of the disease and have sought early medical intervention. During the course of chemotherapy, some respondents experienced side effects such as alopecia and dry skin. Others had to accept their changed body image because of breast removal. This partly affected their social and community life but as treatment ended, they were able to cope well and lead normal lives. They are able to continue communicating with friends and always make major decisions involving themselves such as health care or career.

**Relationship between the profile and the quality of life of cancer survivors**

The results of the correlation analysis on the relationship between the Quality of life and the Socio-demographic and Disease-Related profile of the respondents are shown in Table 2.
Table 2
Correlation Coefficients of the Quality of Life of the Respondents and The Socio-demographic and Disease-Related Profile of the Respondents

<table>
<thead>
<tr>
<th>Socio-demographic Factors</th>
<th>Physical ability</th>
<th>Psycho-spiritual ability</th>
<th>Economic Productivity</th>
<th>Effective and meaningful participation</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>-.008</td>
<td>-.053</td>
<td>-.099</td>
<td>.118</td>
<td>-.022</td>
</tr>
<tr>
<td>Sex</td>
<td>-.407</td>
<td>-.214</td>
<td>-.419</td>
<td>.128</td>
<td>-.308</td>
</tr>
<tr>
<td>Civil Status</td>
<td>.117</td>
<td>.353</td>
<td>.102</td>
<td>.254</td>
<td>.236</td>
</tr>
<tr>
<td>Educational Attainment</td>
<td>.367</td>
<td>.226</td>
<td>.589*</td>
<td>.220</td>
<td>.466*</td>
</tr>
<tr>
<td>Occupation</td>
<td>.130</td>
<td>.102</td>
<td>.552*</td>
<td>.214</td>
<td>.348</td>
</tr>
<tr>
<td>Income</td>
<td>-.047</td>
<td>-.330</td>
<td>.188</td>
<td>.008</td>
<td>-.020</td>
</tr>
<tr>
<td>Place of Residence</td>
<td>-.109</td>
<td>-.278</td>
<td>-.189</td>
<td>-.229</td>
<td>-.243</td>
</tr>
<tr>
<td>Disease-Related Factors</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Type of cancer</td>
<td>-.006</td>
<td>.323</td>
<td>-.224</td>
<td>-.272</td>
<td>-.088</td>
</tr>
<tr>
<td>Stage of cancer during diagnosis</td>
<td>-.317</td>
<td>-.124</td>
<td>-.159</td>
<td>-.091</td>
<td>-.215</td>
</tr>
<tr>
<td>Current stage of cancer</td>
<td>-.228</td>
<td>.038</td>
<td>.065</td>
<td>-.055</td>
<td>-.947</td>
</tr>
<tr>
<td>Family history of cancer</td>
<td>-.134</td>
<td>-.060</td>
<td>-.150</td>
<td>.252</td>
<td>-.045</td>
</tr>
<tr>
<td>Signs and Symptoms Experienced</td>
<td>-.257</td>
<td>-.251</td>
<td>-.362</td>
<td>-.428</td>
<td>-.407</td>
</tr>
<tr>
<td>Diagnostic Exams done</td>
<td>-.196</td>
<td>-.309</td>
<td>-.102</td>
<td>-.529*</td>
<td>-.326</td>
</tr>
<tr>
<td>Treatment Modalities</td>
<td>-.525</td>
<td>-.376</td>
<td>-.550*</td>
<td>-.559*</td>
<td>-.631</td>
</tr>
</tbody>
</table>

An overall significant relationship existed between educational attainment and the quality of life among cancer survivors. A significant relationship also existed between educational attainment and economic productivity. This tends to imply that respondents who have attained higher education are more or less able to earn productively, hence, are more capacitated to maintain a very satisfactory quality of life.

Taken singly, it can be gleaned from the table that there is an inverse significant relationship between treatment modalities and economic productivity. This tends to imply that those who are economically productive avail of chemotherapy as a treatment. This maybe because chemotherapy is a cancer treatment modality that involves the use of new and expensive drugs that interfere with cancer cell growth. As such, this entails a lot of money each time the patient undergoes treatment. It also entails time spent for the different sessions, traveling to and from the health provider and periods of rest because of the side effects. Thus, only those who have financial resources usually avail of this expensive treatment. This may also be the reason why
others continue to work even to a limited extent and some are forced to squeeze in their treatment to continue working for financial reasons.

Furthermore, it can be seen on the table that there is an inverse significant relationship between treatment modalities and effective and meaningful political, community and social participation. This tends to imply that as the respondents undergo more treatment, the lesser is their participation in political, community and social activities. Time and energy has become more limited and is directed only to the necessary trips to the doctor. Hence, activities for social and community endeavours are usually shelved.

In addition, educational attainment and occupation yielded a significant relationship to economic productivity which implies that those with means of livelihood have a better quality of life. This finding is contrary to expectations that having no income deprives men and women of the opportunities for better life.

**CONCLUSIONS**

Results of the study revealed that a substantial percentage of the respondents are in their late middle adulthood, female, are married, college graduates, have a source of income and most live outside Metro Vigan.

Majority of the respondents have been diagnosed to have breast cancer, diagnosed in the second stage of the disease, and for most of them have not improved, have no genetic predisposition as they claimed that no relatives are afflicted with any form of cancer. On signs and symptoms initially experienced, a great number of the respondents disclosed that they felt a lump in their breast. The respondents underwent diagnostic procedures to confirm their illnesses. On treatment modalities, most of the respondents underwent surgery for the removal of the growth or lump following a fine needle biopsy or excision biopsy.

Economic productivity, educational attainment and occupation have bearing on the quality of life of cancer patients involved in the study. Patients undergoing treatment modalities affect the political, community and social participation of patients.

**RECOMMENDATIONS**

A comprehensive plan should be undertaken by both government and non-government organizations to address the high cost of treatment and medications especially on cancer. This will lessen the burden of patients and their family in seeking and continuing medical treatment. Additionally, a sustained psychosocial and spiritual
support should be provided to uplift the respondents’ coping. This may be done through an organized support group of patients who may share positive coping techniques and experiences to boost their feelings. Emphasis should also be given on the prevention as well as screening and early detection of any form of cancer.

Above all, a standardized approach to measuring quality of life can be used sensibly by the clinician in thinking through and discussing treatment options with patients to improve the treatment outcome of patients.

**LITERATURE CITED**


