



Original Research

Depression and the Quality of Life among Filipino Chemotherapy Patients

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ABSTRACT

Introduction: Undergoing chemotherapy has adverse effects to the physical, emotional and mental health of the chemotherapy patient that may cause depression and disturb the quality of the chemotherapy patient's life. Hence, the study aimed to determine the level of depression and the quality of the Filipino chemotherapy patient's life.

Methods: The study applied a quantitative descriptive-correlational research design. Purposive sampling was done to identify the 102 respondents, who were Filipino chemotherapy patients admitted in a tertiary hospital in Eastern Visayas from December 2018 to March 2019. The study used standardized questionnaires and these were distributed among the respondents. To analyze the data, descriptive statistics and total scores were used. Likewise, Pearson-Product Moment Coefficient analysis was also used to determine the correlation between the two variables.

Results: 102 patients participated in the study. Findings indicated that most of the respondents (52.38%) experienced mild depression and that their quality of life is good (97.05%). However, there were four respondents who experienced moderate depression. Moreover, results also show that there is a strong relationship between the two variables ($R=-0.053$; $P\text{-value}=0.000$).

Conclusion: The study's result highlights the crafting of a home-based care plan that will guide the chemotherapy patients and their families in the prevention of depression. Likewise, it is also aimed in achieving a favorable quality of the chemotherapy patient's life.

ARTICLE HISTORY

Received: October 08, 2020
Accepted: December 28, 2020

KEYWORDS

depression; quality of life; chemotherapy; cancer; mental health

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Cite this as: Paz, P. I. V. D. (2021). Depression and the Quality of Life among Filipino Chemotherapy Patients. *Jurnal Ners*, 16(1). 1-5. doi:<http://dx.doi.org/10.20473/jn.v16i1.22502>

INTRODUCTION

Chemotherapy has been used by many cancer patients to eradicate cancer cells in their bodies, not only in the United States but also in Asian countries like the Philippines. According to Chabner and Roberts (2005), the treatment method has been utilized by cancer patients to achieve higher survival rate. During the treatment, it not only kills the cancer cells, but also destroys the normal and healthy cells. Hence, the use of chemotherapy treatment has adverse effects which can cause changes not only to the body, but also to the emotional and mental state of the cancer patient undergoing chemotherapy (American Cancer Society, 2014).

Depression is one of the common health issues faced by cancer patients undergoing chemotherapy and which is characterized by a decrease or loss of interest in things, guilt, low self-confidence, sleeping

and eating disorders, fatigue and inability to perform daily activities (Smith, 2015). Studies show that a range of 1.5 to 53% prevalence rate of depression occurs during chemotherapy treatment and 25% of the patients experience a severe level of depression, which implies that both depression and the quality of the cancer patient's life are positively associated (Craig & Abeloff, 2004).

The quality of a person's life pertains to the insight of life, morals, interest and indicates one's general wellbeing (World Health Organization, 1998). Hence, one of the priorities in cancer management is achieving a favorable quality of life since it indicates one's effectiveness of cancer treatment modality (Ngelangel, 2012). Several studies revealed that the majority had a good quality of life immediately after chemotherapy treatment. However, the occurrence of bodily and mental issues, such as pain and depression, were still evident, which can hamper the

quality of one's life (Bower et al., 2006). Furthermore, studies also suggest that the quality of a cancer patient's life who has had 3-5 chemotherapy cycles is good and also claimed that their sleep patterns were improved after chemotherapy. Likewise, study also showed that the number of chemotherapy cycles is associated with the cancer patient's quality of life (Dehkordi, Heydarnejad, & Fatehi, 2009).

With the above given premise, it is, therefore, necessary that healthcare providers such as nurses are able to recognize the signs and symptoms of depression so as to be able to render prompt management and treatment to avoid further complications. Moreover, several studies were conducted that focused on measuring the level of depression and its association with the quality of the cancer patient's life in foreign countries, but not in the Philippines. Few studies were documented about the depression level and the quality of Filipino chemotherapy patients' life. Hence, this issue has been addressed by conducting this study among chemotherapy patients residing in Eastern Visayas which has aimed to determine the level of depression and the quality of life of Filipino chemotherapy patients.

MATERIALS AND METHODS

The study utilized a descriptive- correlational design which used two standardized tools for data gathering. This study focused on the assessment of the level of depression and the quality of the chemotherapy patients' life in a tertiary categorized hospital in Eastern Visayas. Likewise, it also examined the association of the depression level toward the quality of the chemotherapy patients' life.

The study sample was a total of 102 cancer patients undergoing chemotherapy treatment in a tertiary hospital in Eastern Visayas. The purposive sampling method was used in the selection of the respondents. The inclusion criteria were the following (1) Must be 18 years old and above; (2) must be a Filipino; (3) Lives in Eastern Visayas; (4) A cancer patient undergoing chemotherapy from December 2018-March 2019; (5) Completed at least three chemotherapy sessions prior to data collection; (6) Can understand the English language; (7) Willing to be part of the study. Those not mentioned in the inclusion criteria are the exclusion criteria.

The study used two standardized tools. The first was Beck's Depression Inventory tool (BDI) tool, which is composed of 21 items and the second is the Quality of Life tool for those treated with anti-cancer drugs (QoL-ACD), which is composed of 22 items. BDI is answerable by the rating of 0-3 and the level of depression is determined by calculating the sum total of scores (Beck, Steer, & Gabin, 1996). On the other hand, QoL-ACD is a tool which is answerable by the scale of 0-5 and the quality of life is determined by calculating the average score (Kurihara et al., 1999).

First, transmittal letters were sent to the tertiary hospitals where the cancer patients were undergoing chemotherapy treatment for their permission and approval to conduct the study. After the approval, the list of qualified respondents was obtained from the selected tertiary hospital. Attendance during the fourth week of chemotherapy treatment was done by the researcher to find possible respondents. Before the actual data gathering, the informed consents of the respondents were secured by asking them to sign the informed consent form, which indicated the respondent's voluntary decision to be part of study after the researcher explaining carefully the study and the questionnaire. Next, the self-administered questionnaires were distributed among the participants and retrieved after a week. Lastly, the accomplished questionnaires were then processed, analyzed, presented in tabular forms and interpreted.

The data on the level of depression were derived from the Beck Depression Inventory by summing up all scores in the 21-item test. The scores were interpreted using the following scale: 0-13 for depression at minimal level, 14-19 for depression at mild level, 20-28 depression at moderate level and 29-63 for depression at severe level. Moreover, the quality of the chemotherapy patients' life was determined by calculating the average score of the 22-item test. The average score of 1 would mean worst, 2 for bad, 3 for normal, 4 for better and 5 for best quality of life. Furthermore, the relationship between the two variables was determined by using the Pearson-Product Moment Coefficient analysis.

Before the data collection, the respondents were given informed consents, which indicated the purpose of the study, the potential benefits and harm of the research, ensured their complete anonymity throughout the research and stated that they had the freedom to withdraw from the study anytime. After the distribution of the informed consents, the respondents were asked to sign the informed consent signifying the respondent's voluntary decision to be part of the study. The researcher addressed issues such as confidentiality, anonymity and privacy. Furthermore, the accomplished questionnaires were stored in a safe place and will be shredded or burned after two years.

RESULTS

A total of 102 chemotherapy patients in Eastern Visayas agreed to participate in the study and completed the questionnaire. Table 1 shows the depression level while Table II shows the quality of the chemotherapy patient's life and Table 3 shows the test for significance between the two variables.

DISCUSSION

Table 1 shows the level of depression of the respondents based on the results of Beck Depression Inventory. The result reveals that the majority (52.38%) experienced a mild level of depression. However, there were four respondents with

Table 1. Level of Depression

Level of Depression	f	%
Minimal	43	42.16
Mild	55	52.38
Moderate	4	3.81
Total	102	100

Table 2. Quality of Life

QOL	f	%
Good	99	97.05
Normal	3	2.94
Total	102	100

Table 3. Test of Relationship between Level of Depression and Quality of Life

Paired Variables	R	P-value	Interpretation
Level of Depression and quality of Life	-0.053	0.000	Significant

moderate depression. Mild depression means that symptoms such as the feelings of sadness, being discouraged about the future, lack of enjoyment in things, guilt, thoughts of committing suicide, worthless, crying, difficulty in concentrating, sleep and eating pattern changes, irritability, fatigue, loss of interest in sex were mildly felt by the respondents.

The results of this present study supported the study of Breitbart et al. (2014) which also revealed that breast cancer patients who underwent chemotherapy treatment reported an overall mild level of depression and individual participants ranged from mild to severe depression. The symptoms of sleeping problems, fatigue, weight loss, and appetite change were the most prevalent symptoms of depression in the study. Likewise, a study conducted among 79 lung cancer patients who underwent chemotherapy treatment showed that the majority (34.2%) of the respondents experienced mild depression (Sah, Sapkota, Adhikari, Singh, & Pokhrel, 2018). Another study conducted among Iranian cancer patients who underwent chemotherapy treatment revealed that the majority reported mild depression (Mashadi, Shakiba, & Zakeri, 2013). However, there were some studies that did not support the result of this present study. A study by Warmenhoven et al. (2011). showed that 10 out of the 46 post-chemotherapy patients with advanced cancer were diagnosed with severe depression. Further, Derogatis et al. (2003) also reported that, among the 215 cancer patients admitted at various cancer centers and randomly assessed for the prevalence and severity, it was found that 44% of the respondents had severe depression. Hence, all post-chemotherapy patients regardless of the socio-demographic profile and the cancer diagnosis and treatment must be screened for depression.

Quality of Life

Table 2 presents the information on the quality of the chemotherapy patient's life. The majority (97.06%) of the respondents perceived that their quality of life was good while the rest of the respondents have normal quality of life (2.94%). The following are the indicators of a good quality of life, even when experiencing the adverse effects of chemotherapy: still able to accomplish their daily activity; go out without help; take a half hour walk; felt no difficulties in walking even a short distance; able to walk up and down the stairs; bath by themselves; felt well; had good appetite; enjoyed their meals; often experienced vomiting; had lost weight; able to devote themselves to becoming enthusiastic about something; able to deal with stress; can concentrate on something; got encouragement from something or somebody they believed in; worry about their disease; had no problems dealing with people outside their family; thinks that their family was not troubled by their treatment; does not worry about their social life in the future; and does not worry much about financial problems caused by their treatment.

The results of the study are congruent to studies previously conducted among breast cancer patients who had chemotherapy treatment. The study revealed that the breast cancer patients undergoing chemotherapy treatment still reported a good quality of life. Another study conducted among 200 patients receiving chemotherapy reported that 29% of the respondents had fear about their future and 26% of the respondents were thinking about the disease and its consequences, yet still reported a good quality of life (Newel, 2009). Another study conducted among cancer patients by Singh and Bala, (2014) revealed that their quality of life was enhanced progressively over six months after the completion of the chemotherapy sessions and they also reported to have good quality of life.

However, there were also studies that deviated from the results of this present study. In a study conducted among breast cancer patients, the results revealed that the majority of the respondents had a bad quality of life, which may be caused by the disruption of daily activities as the result of the toxicity of the therapy (Alzabaidey, 2012). Likewise, a study of 103 young patients with breast carcinoma receiving adjuvant therapy revealed a bad quality of life, especially in the daily activities domain (Arora, Gustafson, Hawkins, McTavish, & Cella, 2001). Hence, based on the studies presented, it can be concluded that the quality of the cancer patient's life can be affected differently and should be assessed, especially after undergoing chemotherapy treatment.

Relationship between Depression level and the Quality of the Chemotherapy Patient's Life

Table 3 reflects that the quality of the chemotherapy patient's life is positively associated with their depression level. In this study, the majority had a minimal level of depression and reported a 'good'

QOL while those who had depression at a mild level reported a 'normal' QOL. The result indicates that those who claimed to have a normal quality of life have a greater tendency to declare 'mild' depression.

Depression is commonly experienced by chemotherapy patients. Being diagnosed with cancer and undergoing chemotherapy treatment is a life-changing event that may result in extensive emotional, physical and social suffering, which may lead to depression. After a series of chemotherapy treatments, there is a high probability of experiencing adverse effects, which may lead the person's quality of life to be at a reduced level (Tierney et al., 1991). Chemotherapy's adverse effects have the possibility to influence the overall wellbeing of the person (Humpel & Iverson, 2007). Studies in Western countries have demonstrated a prevalence rate of 1%-56% of depression among cancer patients after undergoing chemotherapy treatment (Zainal, Nik-Jaafar, Baharudin, Sabki, & Ng, 2013). Moreover, depression significantly impairs functioning in different areas, such as in work functioning, social functioning and health (Mendlowicz & Stein, 2000). Being depressed can reduce physical, emotional, mental and social functioning, which may hamper the person's quality of life (Brenes, 2007). A depressed person will manifest several symptoms, such as loss of pleasure or joy in life, difficulty in concentrating or focusing, feels hopeless, lack of self-esteem, sleeping problems, low energy level, loss of appetite, worthlessness and suicidal thoughts and wishes and, when left untreated, this could lead to altered physical, mental, social and psychological functioning (Keith, Harvey, & Merika, 2007).

Moreover, several studies have reported that the quality of the cancer patient's life depends on the depression level being experienced. A study shows that a 'favorable' quality of the breast cancer patient's life was noted after undergoing chemotherapy for a year. However, they reported a deterioration in body image, sexual interest and functioning after two years. Moreover, a study conducted among prostate cancer patients reported a low to moderate quality of life after treatment and experience of moderate fatigue (Rondorf-Klym & Colling, 2003). Likewise, results also reveal that the quality of life is worst among persons showing severe levels of depression (Seeman et al., 2017). Hence, the literature cited above are congruent with the results of this study.

CONCLUSION

This study revealed that the majority of the chemotherapy patients had mild depression. Moreover, a good level of quality of a chemotherapy patient's life was also reported and showed strong association between the two variables. This implies that patients with cancer and who had undergone chemotherapy treatment in Eastern Visayas have successfully coped with the different adverse effects of chemotherapy treatment that could possibly lead them to depression. However, a few of the

respondents were not able to cope with the adverse effects of chemotherapy treatment, particularly those who manifested moderate depression. Therefore, prompt management and treatment are deemed necessary. The researcher recommends the development of a home-care plan for the chemotherapy patients and their families that will serve as a guide in dealing with the management of chemotherapy patients. Therefore, prevalence of depression is prevented, and a favourable quality of life is expected among the chemotherapy patients.

ACKNOWLEDGMENT

The author would like to express her sincerest gratitude to the Biliran Province State University Administration and the Commission on Higher Education for the financial support given in conducting the study.

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