



UNIVERSITI PUTRA MALAYSIA

***SELF-ESTEEM AMONG ONCOLOGY PATIENTS RECEIVING
CHEMOTHERAPY IN SELECTED GOVERNMENT STATE HOSPITALS IN
PENINSULAR MALAYSIA***

VIDTHYA SIVAPERUMAL

FPSK(M) 2018 19



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PENINSULAR MALAYSIA**

By

VIDHYA SIVAPERUMAL

**Thesis Submitted to the School of Graduate Studies, Universiti Putra
Malaysia, in Fulfillment of the Requirements for the Degree of
Master of Science**

June 2018

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Abstract of thesis presented to the Senate of Universiti Putra Malaysia in fulfillment of the requirement for the degree of Master of Science

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VIDTHYA SIVAPERUMAL

June 2018

Chairman : Professor Sherina Mohd Sidik, PhD
Faculty : Medicine and Health Sciences

Background : Cancer is one of the leading causes of mortality in both developed and developing countries and is a major public health problem in the world today. According to the World Health Organization (WHO), by 2020 mortality due to cancer shall total up to above 11 million people worldwide. The GLOBOCAN 2012 project shows that approximately 14.1 million new cancer cases reported and 8.2 million deaths due to cancer occurred in 2012. While in Malaysia, death caused by cancer in 2008 was 20,100 and this increased to 21,700 in 2012. The most common treatment given for cancer is chemotherapy and it is known for its side effects

Objectives: The aim of this research was to determine the self-esteem among oncology patients receiving chemotherapy in Malaysia and to determine the predictors that affect their self-esteem. The factors which were included in this study were socio-demographic profile, physical effects of chemotherapy, anxiety, depression and quality of life.

Methodology: An analytical cross sectional study with a quantitative approach was designed and carried out in the oncology wards in 10 government hospitals with oncology facilities in Malaysia. A total of 953 respondents were selected. Data were collected via questionnaires which included questions on socio demographics, Physical Effects (Common Terminology Criteria for Adverse Events), Anxiety (Generalized Anxiety Disorder 7), Depression (Patient Health Questionnaire 9) and Quality of Life (The World Health

Organization Quality of Life Instrument). Data were analysed using the Statistical Package for Social Sciences Software (version 22).

Results: This study had 100% responds rate of 953 participants. The mean (SD) self-esteem was 22.67 (4.98). The maximum point for self-esteem score in the questionnaire used in this study is 40 with no cut off point. Score 22.67 is considered to be moderate self-esteem (wati et al, 2008). The predictors were age, gender, marital status, working, anxiety, depression, nausea, anemia, hair loss, skin and nail changes, overall quality of life and psychological domain of quality of life. Since there is an increasing trend of cancer diagnosis globally, the side effects of cancer treatment are most likely on the rise. This study provides baseline data of self-esteem among oncology patients undergoing chemotherapy which may be helpful to determine the proper support and guidance to be given to patients.

Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi keperluan untuk ijazah Master Sains

**HARGA DIRI DI KALANGAN PESAKIT ONCOLOGI YANG MENERIMA
KEMOTERAPI DI HOSPITAL KERAJAAN TERPILIH DI SEMENANJUNG
MALAYSIA**

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Latar Belakang: Kanser merupakan salah satu punca kematian di kedua-dua negara maju dan negara yang sedang membangun dan juga merupakan sebuah masalah besar kepada sektor kesihatan awam. Menurut *World Health Organization (WHO)*, kadar kematian disebabkan kanser akan meningkat kepada 11 juta orang di seluruh dunia sebelum tahun 2020. *GLOBOCAN 2012* pula menyatakan bahawa kira-kira 14.1 juta kes kanser baru dilaporkan dan 8.2 juta daripadanya telah menyebabkan kematian pada tahun 2012. Kematian berpunca daripada kanser di Malaysia pula berjumlah 20,100 pada tahun 2008 dan telah meningkat kepada 21,700 pada tahun 2012. Rawatan bagi kanser yang paling biasa adalah kemoterapi dan ia terkenal dengan kesan sampingannya. Pada zaman ini, imej tubuh badan adalah salah satu elemen yang penting bagi identiti diri yang menentukan harga diri seseorang itu.

Objektif: Matlamat utama kajian ini adalah untuk menentukan tahap harga diri pesakit yang menerima rawatan kemoterapi di Malaysia dan untuk menentukan faktor yang mungkin mempengaruhi tahap harga diri pesakit tersebut. Peramal yang dilibatkan di dalam kajian ini adalah profil socio-demografik, kesan fizikal rawatan kemoterapi, kebimbangan, kemurungan dan kualiti kehidupan.

Metodologi: Satu kajian analitikal keratan rentas telah dijalankan di 10 buah hospital kerajaan yang mempunyai fasiliti kemoterapi di Malaysia. Jumlah responden yang dipilih adalah sebanyak 953. Data dikutip menggunakan

borang soal selidik yang merangkumi soalan berkenaan profil sosio-demografik, kesan fizikal rawatan kemoterapi (*Common Terminology Criteria for Adverse Events*), kebimbangan (*Generalized Anxiety Disorder-7*), kemurungan (*Patient Health Questionnaire-9*) dan kualiti kehidupan (*The World Health Organization Quality of Life Instrument*). Data dianalisa menggunakan *Statistical Package for Social Sciences Software* (versi 22).

Keputusan: Kajian ini mempunyai 100% kadar responden dengan 953 responden. Dilihat, purata (sisihan piawai) harga diri adalah 22.67 (4.98). Purata maksima yang boleh dicapai dalam boring soal selidik harga diri yang digunakan di dalam penyelidikan ini adalah 40. Purata 22.67 adalah dikategorikan sebagai sederhana (Wati et al, 2008). Peramal dalam kajian ini adalah, umur, jantina, status perkahwinan, status pekerjaan, gelisah, kemurungan, muak, muntah, anemia, kehilangan rambut, infeksi kulit dan kuku, keseluruhan kualiti kehidupan dan domain psikologi. Jumlah statistik bagi diagnosis kanser menaik di seluruh dunia dan ini akan menyebabkan kesan sampingan yang turut serta bersama rawatan kemoterapi akan turut meningkat. Kajian ini dapat memberikan tahap harga diri di kalangan pesakit kemoterapi dan ia adalah penting bagi menentukan sokongan dan bimbingan yang akan diberikan kepada pesakit.

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I certify that a Thesis Examination Committee has met on 29 June 2018 to conduct the final examination of Vidhya a/p Sivaperumal on her thesis entitled "Self-Esteem among Oncology Patients Receiving Chemotherapy in Selected Government State Hospitals in Peninsular Malaysia" in accordance with the Universities and University Colleges Act 1971 and the Constitution of the Universiti Putra Malaysia [P.U.(A) 106] 15 March 1998. The Committee recommends that the student be awarded the Master of Science.

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LIST OF ABBREVIATIONS

CDR	Cytotoxic Drug Reconstitution
CI	Confidence Interval
CINV	Chemotherapy-induced nausea and vomiting
MOH	Ministry of Health
NCI	National Cancer Institute
NMRR	National Medical Research Register
PHQ 9	Patient Health Questionnaire 9
SPSS	Statistical Package for Social Sciences Software
WHO	World Health Organization
GAD-7	Generalized Anxiety Disorder - 7 Scale
GAD	Generalized Anxiety Disorder
CRC	Colorectal Cancer
CID	Chemotherapy Induced Diarrhea
CIC	Chemotherapy Induced Constipation
CIT	Chemotherapy Induced Thrombocytopenia
CTCAE	Common Terminology Criteria For Adverse Effect
RSES	Rosenberg Self Esteem Scale
WHOQOL-BREF	World Health Organization Quality Of Life
IARC	International Agency for Research on Cancer
NV	Nausea and Vomiting
CRF	Cancer Related Fatigue

CHAPTER 1

INTRODUCTION

This chapter provides an overview of the background of cancer, self-esteem and the significance of this study.

1.1 Background

Cancer is a condition where there is rapid, abnormal and uncontrolled replication of the cells in the body. These cells are also known as malignant tumors which have invasive property. This means the cells may grow beyond their normal area where they invade the joints, limbs, tissues, organs or anything surrounding it. The consequences of cancer vary and death would be one of the most common ones (World Health Organization (WHO), 2012). National Cancer Council Malaysia has come up with the theme for 2016 which is "We Can, I Can" mainly focusing on taking proactive approaches in the fight against cancer because cancer is seen as a very serious public health problem worldwide these days.

According to WHO, by the year 2020 cancer related deaths will total up to above 11 million people worldwide. In 2015, cancer was recorded as the second leading cause of death globally with a figure of over 8.7 million just after cardiovascular disease (GBD 2015 Mortality and Causes of Death Collaborators, 2016). World Cancer Report 2014 recorded a total of 8.2 million cancer cases which were connected to death in the year 2012.

In the year 2008, deaths in Malaysia due to cancer was 20,100 and this number has increased to 21,700 in 2012 (Ferlay, Bray, Steliarova-Foucher, & Forman, 2010). It is estimated by National Cancer Registry that in a lifetime of a Malaysian, 1 in 4 may have the chances of getting cancer (Lim, 2015). The incidence of cancer in Malaysia according to data from IARC produced by the Globocon reported an increase from 32,000 new cases in 2008 to 37,400 in 2012. This number is expected to rise to 56,932 by 2025 if no action is taken. The top three cancer sites from 2007-2011 is breast (17.7%), colorectal (13.2%) and trachea, bronchus and lungs (10.2%).

Cancer patients are normally treated with radiotherapy, chemotherapy and surgery (Breitbart et al., 2015). It is known that these therapies comes in a package of unwanted side effects and their psychological stability may be disturbed. Self-esteem is one of the psychological element which may deteriorate when the patient tries to adapt to the problem, deal with their suffering and take control over incidence that is caused because of the disease

(Leite, Nogueira, & Terra, 2015). Self-esteem refers to a person's opinion and belief in themselves which contributes to confidence in their own ability, self-satisfaction and sense of being in control of their life. Self-esteem is a reflect of their own emotional evaluation of their self-worth and judgment towards themselves. For example, 'I am successful, I am respected", and emotions such as despair, pride, triumph and shame (Hewitt, 2009). It was shown in a study conducted in Semnan University Hospital that there were no chemotherapy patients with high self-esteem. Most of them had moderate self-esteem (88.8%) and a small minority of 11.2% had low self-esteem (Abbasian, Kia, Mirmohammadkhani, Ghahremanfard, & Ghods, 2016). Study by Farah et al., 2016 also concludes that patients receiving chemotherapy have lower self-esteem as compared to the others. A study conducted in University Sains Malaysia Hospital shows that self-esteem among majority (65.9%) chemotherapy patients was seen to be moderate (Wati, Mazlah, & Sarimah, 2008). Cancer may seem to be common but very few has actual and precise knowledge on what it is all about.

1.2 Problem Statement

Self-esteem is a very complex concept and there is no general agreement of a particular definition for it (Demo, 1985). It is widely understood that self-esteem literally brings a meaning the reflection of a person's overall evaluation of his or her self-worth and their feelings towards themselves (Hewit, 2009). The number of studies focusing on self-esteem in chemotherapy patients are very limited. Self-esteem plays an important role in coping and accepting disease such as cancer. Deterioration of self-esteem is a very common feeling among most cancer patients. A study done in Iran shows that the level of self-esteem among patients affects the level of hope they have in life (Parvan et al., 2015). Gynecological cancer patients were seen to have long term side effect such as infertility which causes distress and decreased self-esteem (Yap & Davies, 2007). Bertan & Castro (2009) found out that anxiety and depression were very much lower in the high self-esteem group and higher in the low self-esteem group. Patients with low self-esteem have more negative outlook as compared to the high self-esteem group. The high self-esteem group tends to think more positively. A study conducted in Malaysia, whereby breast cancer survivors finds it difficult to return to work mainly because of their image presentation and self-conscious awareness which erodes their self-esteem (Tan, Loh, Su, Veloo, & Ng, 2012). Cancer these days does not necessarily means it is fatal because of the increasing cure rate globally. Cure should not only be based biological but also psychologically. Therefore the ultimate goal should include in a way that it will lead to increase in self-esteem (Maciel et al., 2014). The number of cancer sufferings has been growing from year to year and one of the main contributions to this is lack of application of known intervention such as early detection, prevention, treatment and pain control. All these factors are crucial in saving life and eliminating sufferings which may possibly expedite the control of cancer earlier in today's world (American Cancer Society, 2015). Hopelessness is a risk factor of suicide (Lin,

Wu, & Lee, 2009). Study by Abdullah-zadeh, Agahosseini, Asvadi-Kermani, & Rahmani (2011) states that hope is a very important factor in the recovery of cancer patients. Self-esteem was found to be positively correlated with the level of hope of a cancer patients. Thus, identifying factors that affects the hope of cancer patients, which one of it is self-esteem especially in newly diagnosed patents is of great importance (Parvan et al., 2015).

1.3 Significance of study

Since there is an increasing trend of cancer diagnosis globally, the side effects which comes along with cancer treatment are most likely on the rise. This study provides the predictors of self-esteem among chemotherapy patients which is crucial to determine the proper support and guidance to be given to patients. As health care professionals plays a huge role in patients' daily life, the results of this study will add to their existing knowledge and increase their awareness on chemotherapy patients. It also gives an opportunity for new guidelines and measures to be developed. Knowing the needs of the patients are vital for the planning of actions that aim to adequately meet their needs and provide the best level of comfort, which may contribute to increase in self-esteem and their general wellbeing.

1.4 Study Objectives

1.4.1 General Objective

To determine the self-esteem among oncology patients receiving chemotherapy in 10 state government hospitals in Peninsular Malaysia.

1.4.2 Specific Objectives

- I. To determine the socio-demographic profile (age, gender, ethnicity, religion, marital status, number of family members living together, education level, working, financial income level, stage of cancer, number of chemotherapy cycle, pain due to chemotherapy and worried of adverse effect due to chemotherapy among oncology patients receiving chemotherapy).
- II. To determine the physical effects (nausea, vomiting, anorexia, diarrhea, constipation, anemia, fever, fatigue, infection, bleeding, hair loss, mouth, gum and throat infection and skin and nail changes) among oncology patients receiving chemotherapy.
- III. To determine the psychological effects (anxiety, depression) among oncology patients receiving chemotherapy.
- IV. To determine the quality of life among oncology patients receiving chemotherapy in government hospitals in Malaysia

- V. To determine the association between the socio-demographic profiles, physical effect, psychological effect, quality of life and self-esteem among oncology patients receiving chemotherapy.
- VI. To determine the predictors of self-esteem among oncology receiving chemotherapy.

1.5 Research Hypothesis

- I. There is significant association between self-esteem and socio-demographic profile (age, gender, ethnicity, religion, marital status, number of family members living together, education level, working, financial income level, stage of cancer, number of chemotherapy cycle, pain due to chemotherapy, worried of adverse effect due to chemotherapy among oncology patients receiving chemotherapy.
- II. There is significant association between self-esteem and physical effects (nausea, vomiting, anorexia, diarrhea, constipation, anemia, fever, fatigue, infection, bleeding, hair loss, mouth, gum and throat infection and skin and nail changes) among oncology patients receiving chemotherapy.
- III. There is significant association between self-esteem and psychological effects (anxiety, depression) among oncology patients receiving chemotherapy.
- IV. There is significant association between self-esteem and quality of life among oncology patient receiving chemotherapy.

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