ORIGINAL ARTICLES

Prevalence of Anxiety and Depression among Caregivers of Cancer Patients A Case Study in a Public Hospital in Malaysia

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ABSTRACT

INTRODUCTION: Anxiety and depression are common mental illnesses among cancer caregivers. Most caregivers often sacrifice a lot of time, energy and their own physical and emotional needs. **MATERIALS AND METHOD**: A cross sectional study was conducted among 156 caregivers of cancer patients who were providing treatment and moral support to cancer patients at the Oncology clinic of Sultan Ismail Hospital (SIH), Johor Bahru, Malaysia. The Hospital Anxiety Depression Scale (HADS) was used to assess the depression and anxiety levels among the respondents. Data was analysed using Statistical Package for Social Sciences version 17.0 software. The P value of less than 0.5 was taken a significant. **RESULTS**: In general, there was moderate relationship between cancer caregivers and patients in term of emotional, care and patient treatment, but in some circumstances, caregivers were also exposed to risk during care period of cancer patients. There was a significant relationship with moderate correlation between factors of taking care of emotion of patients ($p<0.05$, $r=0.403$), their diseases ($p<0.05$, $r=0.456$) and treatment ($p<0.05$, $r=0.600$) with the level of anxiety. There was a strong correlation between caring and anxiety in the item of lack of attention on patient demand ($p< 0.05$, $r=0.91$) and not angry to patient ($p<0.83$). **CONCLUSION**: The awareness regarding the anxiety and depression among caregivers need to be increased among health professionals such as physicians and nurses. Although the interventions are aimed to help the patients, but this can also cause anxiety and depression to caregivers.

Keywords
anxiety, depression, cancer, caregiver, family

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INTRODUCTION

Anxiety is one of the common reactions to mental illness. Anxiety is also a normal reaction to stress and it helps people to deal with a tense situations in offices or while studying harder for an exam. However, anxiety also leaves a distressing? feelings of something unlikely to happen, such as the feeling of imminent death. Anxiety is not fear.Fear is a feeling about something realistically intimidating or dangerous and is an appropriate response to a perceived threat. Anxiety, however, is a feeling of fear, worry, and uneasiness, usually generalized and unfocused. It is often accompanied by state of restlessness, fatigue, problems in concentration, and muscular tension. Anxiety is not considered to be a normal reaction to a perceived stressor although many people feel it occasionally.[1]

In our context, anxiety refers to problems of restlessness, fatigue and concentration including muscle tension felt by the cancer caregiver when in hospitals. They are actually with the patient for a long periods of time.[2] The mental, emotional, and physical aspects of fatigue among caregivers are often overlooked by the general public including medical doctors as priority is given to cancer patients rather than their caregivers. The same is true for the aspect of depression that is also experienced by cancer caregivers.[3] Many studies show that cancer caregivers actually experience depression when dealing with cancer patients over a long period of time. Caregivers experience sadness and sorrow when they see the condition of a cancer patients undergo chemotherapy treatment and even

more unfortunate when the cancer patient can no longer be saved.[4] If this condition occurs among people close to them such as siblings, parents, and relatives, then this condition can affect their jobs, feelings and even worse they will experience depression and mental health related disorders.[5]

A study by Aytul K et. al (2018) showed that individuals with low cognitive flexibility levels are more likely to have depressive and anxiety symptoms.[6] Based on their findings, the evaluations of cognitive strategies and social support of caregivers are needed to determine the risk of depression in caregivers of cancer patients. This is inconsistent with the needs of the caregivers of cancer patients who reported that fear of an unpredictable future was the most prevalent problem for the caregivers. In all 80% while 48% of the caregivers experienced anxiety about their own health.[7] Some studies have reported the risk factors for caregiver anxiety and depression commonly involved were female gender, spousal relationship to the recipient of care, high perceived caregiver burden, familial conflicts, financial problems, poor patient performance status and long duration of illness patients while undergoing treatment in hospitals.[8]

It is well documented that the caregivers among cancer patients live in highly anxiety and stressed environment. The life of caregivers of cancer patients differs significantly from caregivers of others diseases because of the frequent close contact with patient having severe illnesses and the expectations they can help distress of patients. Cancer patients may undergo greater anxiety, depression and stress, as such the caregivers have to face difficult patient situations physially and emotionally. The physical and emotional demands, and increasing in financial expenses have indirect impact on the life satisfaction of family caregivers. Caring for an illness and disable relatives showed to be harmful to the health of the caregivers among cancer patients in terms of anxiety and depression. Family caregivers with different abilities, experience and personalities in term of socio-demographic status will handle anxiety and depression differently.[3] Beside the workload any cancer caregivers may be considered as to have heavier responsibilities due to the need to perform adequately care of patients with low body resistant after their treatment.

Unfortunately, there is a lack of study being conducted investigating the anxiety and depression among family caregivers of cancer patients in Malaysia. Therefore, this study was aimed to determine the anxiety and depression level among cancer caregivers and identify causes by various sociodemographic and clinical factors including the caring factors; the disease, diagnosis, treatment, physical demands, emotional demands and financial demands experienced by cancer caregivers during treatment period in respective hospitals. The data could help authorities in planing the mental health among the caregivers and not only focussing on the cancer patients per se.

MATERIALS AND METHOD

This study used quantitative research design to examine the relationship between caring factors towards anxiety and depression among caregivers. This study was connducted at the Radiotherapy and Oncology clinic of Sultan Ismail Hospital (SIH), Johor Bahru, Malaysia. Due to the very limited amount of sampling, the researcher used convenient sampling where there are some special characteristics selected in this study.[9] During the researcher's initial visit to SIH a total of 185 caregivers were present with cancer patients. From that number, the researcher took a sample of 156 people who were willing to cooperate in this study. This is because there were a number of problems faced by caregivers such as, no longer receiving patient treatment at the hospital, work commitments, and caregivers not being able to be contacted anymore.

This sampling of 156 people involved the entire population included in this study. According to Creswell the use of the entire population is a good method because it involves all available sampling and reduces errors in sampling.[10] Convenient sampling techniques was used to recruit respondents at the SIH. The care givers defined in the study were those caregivers whom either as individuals or in a family groups, having the responsibility

and concern to care for the patients. These included siblings, parents and immediate family members of cancer patients. Other inclusion criteria were the caregivers who were present during the study and those fulfilled the following:

a) Caregivers of cancer patients who received follow-up treatment from oncologists at the SIH.
b) Caregivers who provided care to a non-complex cancer diseases (e.g. Intestinal cancer, liver cancer, breast cancer, prostate cancer, lymph cancer, and blood cancer) as patients of this study and
c) Caregivers of cancer patients whom the treatment period ranged from 6 months to 3 years in SIH.

Respondents who were excluded were those who didn't give consent to the study and those caring cancer patients with a history of complex and difficult to cure diseases such as heart diseases.

STUDY TOOL

We used the Malay translated Hospital Anxiety and Depression Scale (HADS) by Heng Yew et. Al. to screen for anxiety and depression of the respondents.[11] It is a brief 14-item, self-administered questionnaire specifically designed for screening of anxiety and depressive symptoms. It is not confounded by any psychical symptoms of illness or diseases.[12] HADS had also been used for wide range of respondents in clinical to non-clinical conditions, comprising of 14 items, in which seven items assess depression and another seven items assess anxiety. The questionnaire is suitable for use in assessing level of depression and anxiety in patients with medical and surgical illnesses such as those with traumatic head injury as HADS focus on the psychological rather than on physical symptoms in which the latter may be present in both traumatic head injury, and depression and anxiety. The questionnaires were based on a 4-Likert scale ranging from 0 (Never), 1(Occasionally), 2(Frequently), and 3(Extremely) and containing 14 items translated and modified related to psychological, anxiety and depression based on local contextual study. The original version of it is a 14-item self-reported scale developed by Zigmond and Snaith (1994) which was translated extensively and is available in different languages. HADS is a reliable and valid self-assessment questionnaire developed to identify the anxiety and depression among hospital out patients.

Next, the questionnaire regarding "Caring for Cancer Patients" and "contributing factors" which may give an effect to the anxiety and depression among cancer caregivers were developed from Reality Therapy Theory (1970). This instrument is taken from Jusoh et. al. (2011) and a total of 10 items in this section where the 3-Likert scale ranging from disagree, neutral and agree scale of instrument.[13] The contents of this questionnaire are divided into two sections, Parts A and B. The part A gathered information regarding demographic data i.e. background covering aspects of gender, age, job status, level of anxiety and depression (HADS) of respondents, and the relationship of caregivers to the patients. Whereas part B contained the construct of HADS and contributing factors to anxiety and depression.

PILOT TEST

Creadibility of instruments of this study was achieved by a pre-test on questionaire conducted at the Oncology ward in HIS. The Oncology ward was chosen because of the similarity of patient's condition, treatment and caregivers responsibilities with Radiotherapy and Oncology Clinic. In all 25 caregivers from different sociodemographic involved in the pre-test questionaire in order to ensure that the items were easy to understand and relevent to the field of study.[14] From the pilot study, the reliability of this HADS Cronbach alpha obtained was 0.77 and factors contributing to anxiety and depression was 0.83. According to Connely, L, a pilot study sample should be 10% of the sample projected for the larger parent study.[15] Nevertheless Issac, R , suggested 10 – 30 participants.[16] It was also conducted to measure the amount of time given to the respondent as being appropriate. The reliability of this questionaire obtained the alpha Cronbach value of 0.77. The Alpha coefficients above 0.5 indicate that research instruments have high reliability and can be used for real research.[17] It showed in the range of high reliability and accepted to be used in the field .

STATISTICAL ANALYSIS

All data analysis was carried out using the Statistical Package for Social Sciences (SPSS) version 17.0 software. Cronbach's alpha coefficient was used to determine the internal consistency of the items in measuring the same construct. The recommended Cronbach's alpha coefficient for self-reported measurement should be at least 0.70 in order to be reliable.[18] Convergent validity was conducted to assess the degree of the items for which the subscales are measuring and what theoretically it should measure. Pearson's Correlation coefficient was used to determine the convergent validity of the subscales and also the inter-correlation between the subscales and a value of 0.40 and above was considered as satisfactory. Descriptive data was used to analyze the level of anxiety and depression of the patient's caregiver, as well as to obtain the age level, race type, and employment status. While inferential analysis was used to obtain relationships and correlations between factors that contribute to using the Pearson's Correlation test to see the strength of the relationship between the variables and the factors that contribute whether they have a strength of relationship or vice versa.

RESULTS

Table 1: Sociodemographics and level of Anxiety of the Caregivers

Variables	Level of Anxiety			
	Normal n (%)	Mild n(%)	Moderate n(%)	Severe n(%)
Age (years)				
18-25	20 (18.0)	8 (22.8)	3 (37.5)	1 (14.3)
26-35	28 (26.5)	8 (22.8)	0 (0)	3 (42.9)
36-45	22 (20.8)	8 (22.8)	2 (25.0)	1 (14.3)
≥ 46	36 (33.9)	11 (31.4)	3 (37.5)	2 (28.5)
Race				
Malay	65 (61.3)	15 (42.9)	6 (75.0)	6 (85.7)
Chinese	29 (27.4)	16 (45.7)	1 (12.5)	0 (0)
Indian	11 (10.4)	4 (11.4)	1 (12.5)	1 (14.3)
Sabahan	1 (0.9)			
Gender				
Male	53 (50.0)	19 (54.3)	6 (75.0)	4 (57.1)
Female	53 (50.0)	16 (45.7)	2 (25.0)	3 (42.9)
Relationships of caregivers to				
Cancer patients:				
Patient's children	54 (50.9)	15 (42.9)	4 (50.0)	5 (71.4)
Patient's husband	28 (26.4)	10 (28.6)	1 (12.5)	2 (28.6)
Patient's relatives	17 (16.0)	9 (25.7)	0 (0)	0
Patient's wife	7 (6.6)	1 (2.8)	3 (37.5)	0
Job status				
Permanently working	35 (33.0)	18 (51.4)	5 (62.5)	6 (85.7)
Temporary working	36 (34.0)	11 (31.4)	2 (25.0)	1 (14.3)
Not working	35 (33.0)	6 (17.2)	1 (12.5)	0

Table 1 shows the distribution of respondents according to their sociodemographics and anxiety among the caregivers. From 92 (%) respondents who did not feel any depression, 29 (31.6%) were aged more than 46 years old, 21 (22.8%) were of age 26-35 years old, 20 (21.7%) were of age 36-45 years old and another 22 (23.9%) were of age 18-25 years old. A total of 58 (63.0%) respondents who did not felt depression were Malays, 23 (21.5%) respondents were Chinese and 11 (11.9%) respondents were Indians. For their working status 45 (48.9%) were fulltime workers, followed by 33 (35.9%) respondents were unemployed and 14 (15.2%) respondents were parttime workers. The majority of the respondents were children of patients 47 (51.1%), 28 (30.4%) were husband of patients, 14 (15.2%) were relatives of patient's and 3 (3.3%) were wives of patients. Analysis on mild depression showed 14 (30.4%) respondents were aged more than 46 years old, 13 (28.2%) respondents were aged of 36-45 years old, 11 (23.9) respondents were aged of 26-35 years old and 8 (17.5%) respondents were aged of 18-25 year old. Analysis also showed an equal numbers 23 (50.0%) were female and male respondents.

In all 30 (62.1%) respondents who did not feel depression were Malays, 13 (28.2%) respondents were Chinese and 3 (9.7%) respondents were Indians. Majority of them 28 (60.9%) were fulltime workers, 12 (26.1%) were unemployed and 6 (13.0%) respondents were part time workers. It was also found that most of the respondents 21 (45.6%) were children of patients, 11 (23.9%) were husbands of patients, 10 (21.7%) were relatives of patients and four(8.8%) were wives of patient's. A total of 7 (41.1%) respondents were aged more than 46 years old experience moderete depression, 6 (35.3%) respondents were aged of 26-35 years old, 3 (17.6%) were aged of 18-25 year old and only one (6.0%) were aged of 36-45 years old. Eleven (64.7%) of respondents were females and 6 (35.3%) were male respondents. Analysis for races showed 8 (47.0%) respondents who did not feel depression were Malays, 7 (41.2%) respondents were Chinese and 1 (5.9%) was Indian and 1 Sabahan respondents. Eight (47.0%) were unemployed, 6 (35.3%) of them were fulltime workers, and 3 (17.7%) respondents were parttime workers.

Most of the respondents were children of patient's 9 (52.9%), 4(35.3%) respondents were husband of patients, and an equal numbers of respondents 2 (5.9%) were wives and relatives of patients.

Table 2: Sociodemographics and level of Depression of the Caregivers

Variables	Level of Depression		
	Normal N (%)	Mild N(%)	Moderate N(%)
Age (years)			
18-25	22 (23.9)	18 (17.5)	3 (17.6)
26-35	21 (22.8)	11 (23.9)	6 (35.3)
36-45	20 (21.7)	13 (28.2)	1 (6.0)
≥ 46	29 (31.6)	14 (30.4)	7 (41.1)
Race			
Malay	58 (63.0)	30 (62.1)	8 (47.0)
Chinese	23 (21.5)	13 (28.2)	7 (41.2)
Indian	11 (11.9)	3 (9.7)	1 (5.9)
Sabahan	0	0	1 (5.9)
Gender			
Male	19 (31.5)	23 (50.0)	11 (64.7)
Female	63 (68.5)	23 (50.0)	6 (35.3)
Relationships of caregivers to cancer patients:			
Patient's children	47(51.1)	21(45.6)	9(52.9)
Patient's husband	28(30.4)	11(23.9)	4(35.3)
Patient's relatives	3 (3.3)	4(8.8)	2(5.9)
Patient's wife	14(15.2)	10(21.7)	2(5.9)
Job status			
Permanently working	45(48.9)	28(60.9)	6(35.3)
Temporary working	33(35.9)	12(26.1)	8(47.0)
Not working	14(15.2)	6(13.0)	3(17.7)

Distribution of respondents according to their sociodemographics and level of depression was showed in Table 2. From 92 (%) respondents who did not feel any depression, 29 (31.6%) were aged more than 46 years old, 21 (22.8%) were aged of 26-35 years old, 20 (21.7%) were aged of 36-45 years old and another 22 (23.9%) were aged of 18-25 years old. Majority of respondents 63 (68.5%) were females and another 19 (31.5%) respondents were males. Analysis for races showed 58 (63.0%) respondents who did not felt depression were Malays, 23 (21.5%) respondents were Chinese and 11 (11.9%) respondents were Indians. For their working status fourty-five (48.9%) were fulltime workers, followed by 33 (35.9%) respondents were unemployed and 14 (15.2%) respondents were parttime workers. The majority of the respondents were children of patients 47 (51.1%), 28 (30.4%) were husbands of patients, 14 (15.2%) were relatives of patients and 3 (3.3%) were wives of patient's.

Analysis on mild depression showed 14 (30.4%) respondents were aged more than 46 years old, 13 (28.2%) respondents were aged of 36-45 years old, 11 (23.9) respondents were aged of 26-35 years old and 8 (17.5%) respondents were aged of 18-25 year old. Analysis also showed an equal numbers 23 (50.0%) were females and male respondents. Analysis for races showed 30 (62.1%) respondents who did not feel depression were Malays, 13 (28.2%) respondents were Chinese and 3 (9.7%) respondents were Indians. Majority of them 28 (60.9%) were fulltime workers, 12 (26.1%) were unemployed and 6 (13.0%) respondents were parttime workers. It was also found that most of the respondents 21 (45.6%) were children of patients, 11 (23.9%) were husbands of patients, 10 (21.7%) were relatives of patients and four (8.8%) were wives of patients. A total of 7 (41.1%) respondents were aged more than 46 years old experience moderete depression, 6 (35.3%) respondents were aged of 26-35 years old, 3 (17.6%) were aged of 18-25 year old and only one (6.0%) were aged of 36-45 years old. Eleven (64.7%) of respondents were females and 6 (35.3%) were male respondents.

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Table 3: Relationship between Caring and to Anxiety among cancer Caregivers

Caring for Cancer Patient	Pearson Correlation (r Value)
Love patient	-.0.97
Feel emphaty to patient	-.090
Not angry to patient	.083
Lack of attention on patient demand	.091
Has limited time with patient	.006

 Correlation is significant at the 0.05 level (2-tailed)

Table 3 showed relationship between caring and anxiety among caregivers. The item of lack of attention on patient demand ($p<0.05$, $r=0.91$) and not angry to patient ($p<0.83$) showed there were a strong correlation of caring and anxiety. However, for item, love patient ($p<0.05$, -0.97) and feel emphaty to patient ($p<0.05$, -0.90) showed

a negative correlation with strong correlation of caring and anxiety.

Table 4: Relationship between Caring and Depression among Caregivers

Caring for Cancer Patient	Pearson Correlation (r Value)
Love patient	-.048
Feel emphaty to patient	-.059
Not angry to patient	.014
Lack of attention on patient demand	.103
Has limited time with patient	.054

 Correlation is significant at the 0.05 level (2-tailed)

Table 4 showed relationship between caring and depression among caregivers. The item of limited time with patient ($p< 0.05$, $r=0.54$) showed there was a moderate correlation of caring and depression. However, for item, love patient ($p< 0.05$, -0.48) and feel emphaty to patient ($p<0.05$, -0.59) showed a negative correlation with moderate correlation of caring and depression.

DISCUSSION

THE SOCIODEMOGRAPHICS AMONG CANCER CAREGIVERS

Only family caregivers of cancer patients followed up at the Radiotherapy and Oncology Clinic of SIH were involved in this study (n=156). Analysis finding showed all respondents were patient's family which patient's children 78 (50.0%) were the highest among them. Majority of them were females 81 (51.9%) and from Malays 93 (59.6%) ethnic group. In addition most of the respondents had permenant jobs 78 (50.0%) as their source of family income. Most of them were aged more than 46 years old 51 (32.7%); however, an equal numbers of respondents were aged between 18 years old to 45 years old.

Results of our study is supported by Nanna [19] showed there was no difference between cancer care settings, but family members who has more likely to have anxiety were women, those who was working, and those of patients with advance cancer disease. Another similar finding by Charles[20] which result showed depression is the most significant risk factor for suicide, a leading cause of death worldwide, especially in adolescents, young adults, and elderly individuals. In term of physiology of depression, a study also showed women had generally greater symptoms of depression than men.[2]

LEVEL OF ANXIETY AND DEPRESSION AMONG CAREGIVERS BASED ON THEIR SOCIODEMOGRAPHICS.

The prevalence of anxiety in this study showed only 9.6% family caregivers of cancer patients were having severe and moderate level of anxiety; and 22.4% were in the mild level of anxiety. Most respondents 67% did not felt any anxiety symptom during taking care of their love one with cancer. In addition for level of depression none of the repondents felt severe depression when taking care of cancer patients. More then half of the respondents 59.6% did not having any depression, 29.5% of the respondents having mild depression and only 10.9% felt moderate depression along taking care of patients with cancer. However, the result contradicts with others reports obtained. A study done by Park, Kim, Shin et. al [22] showed family caregivers of patients with cancer in Korea experienced high levels of anxiety and depression. And these finding also was comparable with a study done by Ambigga, Sherina and Suthahar[23], where their studies with respondents of 177 showed the prevalence of moderate to severe anxiety 86 (48.6%) and prevelance of moderate to severe depression 52 (29.4%) among family caregivers in Oncology Clinic at a tertiary care center in Wilayah Persekutuan Malaysia.

In addition, in this studied results showed family caregivers from all age range had felt mild to severe anxiety. Most of them are patient's children who also formed the largest sub-population of the research. From 17 respondents who felt moderate depression most of them from age more then 46 years old. A total of 14 of them working and had income for their family. Most of them was male respondent and spouse of patients. This is supported by Ambigga, Sherina and Suthahar [23], studies found that caregivers aged 45-54 reported the highest levels of depressive symptoms and caregivers who were patients children with cancer and who were employed reported high levels of depressive symptoms. Research surveys done by Iqbal, Qureshi and Saeed [24], also showed

depression and anxiety are almost as common among patients' partners as among patients themselves.

Throughout studies of anxiety disorders and depressive disorders by Tyree [25], scientists have come to multiple conclusions about the cause. This disorder is caused by a combination of biological, psychological, and environmental factors. These factors include imbalances to neurotransmitters in the brain, traumas, stresses, and an unstable home environment. Since the possible causes of anxiety disorders and depressive disorders are so similar, it is not surprising that these disorders occur so frequently together: approximately 58% of patients with major depression also have an anxiety disorder, and approximately 17.2% of patients with generalized anxiety disorder also have depression.

Even though most respondents in this study did not feel any anxiety symptom and more then half of the respondents did not having any depression along taking care of the patient with cancer, the statistical test showed there were significant relationship with moderate and strong correlations between the sociodemographics data of family caregivers to cancer patients; and level of anxiety and depression with $p<0.05$. Our results rejected the null hypothesis stating there is no relationship between anxiety level and depression level with sociodemographics among family caregiver of cancer patients.

RELATIONSHIP BETWEEN CONTRIBUTING FACTORS TOWARDS ANXIETY AND DEPRESSION AMONG CAREGIVERS

Analyses showed the highest range of responses of factor contributing to anxiety and depression were from covariable of "taking care of patient emotion". These results had similar finding with study by Halgren, Hastert, Carnahan et. al.[26], caregivers often report exhaustion and fatigue, and feel captive in their role, particularly when the patient has high level of physical or emotional demands. Finding also supported by Jacobsen[27] stated family caregivers have difficulty dealing with patients' depression, anxiety, and uncertainty, and they need more guidance from health professionals on how to deal with the emotional aspects of cancer patient. A survey carried out by Khalidah[28], also stated handling of uncooperative cancer patients form one of the major stressor among caregivers.

The second highest covariables causing anxiety and depression among family caregivers of cancer patients was "patients disease". Most respondents who scored 'Yes' were patient's children and husband. A study by Tang, Chang, Chen et. al[29] has similar findings whereby, spousal or adult child family caregivers suffered more depressive symptoms showed as the death of patients approached. Unlike professional caregivers such as physician and nurse, informal caregiver typically family members feel unprepared to provide the care expected from them.[30] Caregivers have their own emotional responses to the diagnosis and prognosis of patients. The physical and emotional demands of caregiving reach their peak as the disease progresses to the terminal phase. Another study reported that the diagnosis of cancer precent a major crisis not only to the patient but also to the patient's primary caregiver.[31]

Analysis on "Patient's treatment" showed as the third covariable factor contributing to anxiety and depression among family caregivers of cancer patients in this study. A study done by Bevans and Sternberg[32] showed similar findings, which caregivers reported extremly high levels of psychological distress, including anxiety and depression prior to patient's treatment such as chemotherapy or radiotherapy. Patients with cancer now receive toxic treatments in outpatient settings and return home to the care of their family members, provide tasks that were previously provided by nurses. This experience commonly perceived as a chronic stressor, and caregivers often experience negative psychological and physiological effects on their daily lives and health.[32] The diagnosis and treatment of cancer may provoke various emotional disturbances in their spouse; the feeling of anxiety during investigation period and during the course of treatment is very common among spouses off cancer patients. In study done by Ryn, Sanders, Kahn et. al[30], 64% of spouses of patients were presented with anxiety especially when patients receiving chemotherapy which is thought to be a major source of tension and anxiety in patients and their

family members. Families appear to have a beneficial impact on the patient's response to treatment. They act as buffers for patient anxiety and serve as valuable resources for patient care.

RELATIONSHIP BETWEEN CARING FACTORS TOWARDS ANXIETY AND DEPRESSION AMONG CAREGIVERS

Result on family caregivers feeling for their love one mostly showed positive finding as the variables of "not angry to patients", "Love patient" and "Feel emphaty to patients" had scored 91.7% to 96.8%. Caregivers are often afraid of losing their loved one. Maslow's hierarchy reminds us that until such fears are addressed and relieved, no progress can be made toward improved quality of life or ascending into the upper levels of the pyramid. However, dealing with dying and suffering patients is unavoidable in cancer care.[32] Therefore, these finding indicated that even the family caregivers were experiencing anxiety and depression most of them still continue providing emotional support to their love one.[33] study showed despite the sadness and shock of having a loved one with cancer, many caregivers find personal satisfaction in caring for that person and see it as a meaningful role that allows them to show their love and respect for the person.

The other two questions in this section was related to caregivers caring toward cancer patients. Result showed most of caregivers scored negatively on variables of caring. For the variables of "Lack of attention on patient demand" 87.2% respondents scored 'Yes' and 64.1% respondents scored 'Yes' for variable of "Has limited time with patients". Similar finding by Parker, Sricharoenchai, Raparla, et al.[34] decreased time occurs from daily life demands and pressure its might feel a deep sense of unsatisfaction and uncomplishment in caring for someone. Study by Bevans and Sternberg[32] the caregivers reported extremely high levels of anxiety and depression because they needed to modify their lifestyles to accommodate and prioritize the needs of the patient over their own. These demanding task will lead the care givers of cancer patient leaking in their own needs especially rest. In relation of Maslow hierarchy of needs, if these physiological needs are not met the individual will feel anxious and tense.[36] This situation can reduce the capability of respondents to care for the terminally ill patients. Study by Karrie, Kelly and Andrew[37], reported anxiety or depression symptoms among family caregivers will affects quality of care that is being provided to the patient. This is also because they are unprepared to provide care and have inadequate knowledge about patient's care.

However, even though most respondents in this study has limited time with their loves one but they still providing specific care for the patients. The statistical test also showed there was no significant relationship between felling and caring effect; and level of anxiety and depression with $p<0.05$. The result accepted the null hypothesis stating there is no relationship between feeling and caring effects towards cancer patient by their family caregiver and level of anxiety and depression.

RELATIONSHIP BETWEEN CARING FACTORS TOWARDS ANXIETY AND DEPRESSION AMONG CAREGIVERS

Results on family caregivers feeling for their love one mostly showed positive findings as the variables of "not angry to patients", "Love patient" and "Feel emphaty to patients" had scored 91.7% to 96.8%. Caregivers are often afraid of losing their loved one. Maslow's hierarchy reminds us that until such fears are addressed and relieved, no progress can be made toward improved quality of life or ascending into the upper levels of the pyramid. However, dealing with dying and suffering patients is unavoidable in cancer care.[33] Therefore, these finding indicated that even the family caregivers were experiencing anxiety and depression most of them still continue providing emotional support to their love one. 37 study showed despite the sadness and shock of having a loved one with cancer, many caregivers find personal satisfaction in caring for that person and see it as a meaningful role that allows them to show their love and respect for the person.

Study by Pratibha[35] the caregivers reported extremely high levels of anxiety and depression because they need to modify their lifestyles to accommodate and prioritize the needs of the patient over their own. These demanding tasks will lead the care givers of cancer patients leaking in their own needs especially rest. In relation of Maslow hierarchy of needs, if these physiological needs are not met the individual will feel anxious and tense.[36] This situation can reduce the respondents capability in caring for the terminally ill patients. Study by Karrie, Kelly and Andrew[37] reported anxiety or depression symptoms among family caregivers will affects quality of care that is being provided to the patient. This is also because they are unprepared to provide care and have inadequate knowledge about patient's care.

However, even though most respondents in this study had limited time with their loves one but they still providing specific care for the patients. The statistical test also showed that there was no significant relationship between felling and caring effect; and level of anxiety and depression with $p<0.05$. The results accepted the null hypothesis stating there is no relationship between feeling and caring effects towards cancer patient by their family caregiver and level of anxiety and depression.

LIMITATIONS OF THE STUDY

Since this study is focused on identifying level of anxiety and depression among family caregivers of cancer patients at Radiotherapy and Oncology Clinic at SIH, these carers who are at high risk can be identified and help. The focus of this study was only on caregivers of cancer patients who are not cancer patients receiving treatment. Likewise with the focus of the study to see the variables of anxiety and depression, and emotions. The assessing results about the family caregivers level of burden including emotional problems, can help family caregivers to improve level of functioning in order to achieve quality care for the terminally ill patients especially at home.

CONCLUSION

This prevalence of anxiety and depression affects the quality of life of the caregiver. Commonly, caregiver were affected with many sign and symptoms such as exhaustion and fatigue, and feel captive in their role, particularly when the patient has high level of physical or emotional demands. In addition, they also affected with depression, anxiety, and uncertainty and need more guidance from health professionals on how to deal with the emotional aspects of cancer patients. In spite of to care the patients being for uncertain periods, many caregivers find personal satisfaction in caring for that person, play meaningful roles and show respect for the patients. Furthermore, health care practitioners either doctors or nurses should made be aware that interventions aimed to decrease symptom severity whereby its can affect caregiver burden and depression. Practitioners should be aware of the needs of caregivers of patient because caregivers are at risk from negative outcomes from both caregiver and patient characteristics. Thus, an intervention program need to be planned and implemented to improve the emotional health of cancer caregivers especially towards the end of the life of loved ones.

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