



UNIVERSITI PUTRA MALAYSIA

**DEPRESSION, ANXIETY AND QUALITY OF LIFE AMONG
HEMATOLOGICAL CANCER PATIENTS IN AMPANG HOSPITAL**

PRISCILLA DAS

FPSK(m) 2011 49

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**MASTER OF SCIENCE
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2011

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By

PRISCILLA DAS

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

March 2011

DEDICATIONS

I would like to dedicate this thesis to all hematological cancer patients that fight this life-threatening disease. I hope that this thesis will be meaningful and provide some insight for cancer patients.



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

**DEPRESSION, ANXIETY AND QUALITY OF LIFE AMONG
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March 2011

Chair: Professor Azhar Md. Zain, MD

Faculty: Medicine and Health Sciences

Objectives: The present study was designed to determine the prevalence of major depressive disorder (MDD), anxiety disorders and other psychiatric disorders in hematological cancer patients. The study also investigates the socio-demographic profiles, hematological cancer diagnoses, clinical characteristics and psychosocial characteristics between patients with MDD or anxiety disorders and patients without the MDD or anxiety disorders.

Methods: The research, which uses a cross sectional design with universal sampling, has been carried out at Ampang Hospital, Kuala Lumpur. The hospital is a tertiary referral center for cancer cases that include non-Hodgkin lymphoma, acute myelogenous leukemia, acute lymphoblastic leukemia, Hodgkin lymphoma and other

hematological cancers. The study population consisted of all hematological cancer patients admitted to hematological wards during the sampling period between May 2009 and December 2009. The face to face interview questionnaire, MINI International Neuropsychiatric Interview was used in the study for diagnosis of MDD, anxiety disorder and other psychiatric disorders. The following self administered questionnaires were used: Patient Health Questionnaire (PHQ-9) for assessment of the severity of depressive symptoms, European Organization for Research and Treatment of Cancer Quality Of Life questionnaire (EORTC QLQ-C30) to assess the respondents' quality of life, Brief Cope to examine coping styles, Visual Analog Pain scale to assess pain and Single Item Measure Support to determine the number of people willing to help patients. The Statistical Package for Social Sciences (SPSS) programme version 17.0 was used for data analysis and $p < 0.05$ was set for statistical significance.

Results: In total, 105 patients (100% response rate) with hematological malignancies were successfully included in the study. The prevalence of MDD was 24.8% (n=26), with the majority of the patients experiencing moderately severe depression (38.5%). About 92.3% (n=24) of depressed hematological cancer patients were diagnosed with a current episode of MDD. The depressed patients also had a significantly reduced quality of life in the physical, role, emotional, cognitive and social domains ($p < 0.05$). They also had significantly more symptoms of fatigue, nausea and vomiting, dyspnoea, insomnia, appetite loss, constipation, diarrhea, financial difficulties and poor global health status ($p < 0.05$). The MDD was correlated with global health status, physical functioning, role functioning, emotional functioning, cognitive

functioning, social functioning, fatigue, nausea and vomiting, dyspnoea, insomnia, loss of appetite, constipation, diarrhea and financial difficulties ($p < 0.05$). Significant factors related to MDD in terms of quality of life were social functioning, nausea and vomiting, insomnia and financial difficulties.

The overall prevalence of anxiety disorders among the patients was 30.5% ($n=32$). Types of anxiety disorders include: agoraphobia without history of panic disorder (24.8%); generalized anxiety disorder (10.5%); social anxiety disorder (7.6%); panic disorder with agoraphobia (2.9%); post traumatic stress disorder (2.9%); obsessive compulsive disorder (1.9%) and panic disorder without agoraphobia (1%). Anxiety disorders significantly affected patients' quality of life by altering the physical, emotional, role, and cognitive functions, insomnia, dyspnoea, nausea and vomiting, appetite loss and constipation ($p < 0.05$) compared to patients without the disorder. In short, anxiety disorders were found to be correlated with quality of life. Among the subjects the suicidal ideations was found 2.9%, other psychiatric disorder: alcohol dependence, abused alcohol, substance abuse and anorexia nervosa were 1%, substance dependence was 1.9% and 4.9% had bulimia nervosa.

The two most prevalent symptoms/problems among the hematological cancer patients were fatigue (79%; severe: 38%) and financial difficulties (74%; severe: 57%). We also found significant differences in patients' employment statuses, monthly wages and types of hematological cancer diagnoses with quality of life in different domains.

The four leading coping strategies employed by hematological cancer patients were behavioral disengagement (7.21%), active coping (6.44%), denial (6.32%) and venting (6.21%). The coping styles were found to be associated with MDD, socio-demographic profiles and clinical factors. Significant related factors to MDD were the self-distraction coping style and the positive reframing coping style.

Conclusion: In brief, like other cancer patients, hematological cancer patients were also more likely to have psychiatric disorders such as depression, anxiety, other psychiatric disorders, reduced quality of life and poor coping styles. Special attention in psychotherapy should be provided to them to improve their quality of life together with their coping styles so that they may overcome their overall mental health problems.

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

**TEKANAN, KERISAUAN DAN KUALITI KEHIDUPAN DI KALANGAN
PESAKIT KANSER DARAH DI HOSPITAL AMPANG**

Oleh

PRISCILLA DAS

Mac 2011

Pengerusi: Profesor Azhar Md. Zain, MD

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Objektif: Kajian ini telah dijalankan untuk menentukan peratus gangguan tekanan utama, gangguan kerisauan dan gangguan psikiatri yang lain di kalangan pesakit kanser darah. Kajian ini juga menyiasat cirri-ciri demografik sosial, diagnosis kanser darah, klinikal dan psikososial di antara pesakit dengan gangguan tekanan utama atau gangguan kerisauan dan pesakit tanpa gangguan tekanan utama atau gangguan kerisauan.

Cara: Kajian ini telah menggunakan cara “cross sectional” dengan “universal sampling” di Hospital Ampang, Kuala Lumpur. Hospital ini adalah pusat rujukan untuk penyakit kanser seperti “non-Hodgkin lymphoma”, “acute myelogenous leukemia”, “acute lymphoblastic leukemia”, “Hodgkin lymphoma” dan penyakit

kanser darah yang lain. Kajian populasi ini adalah di antara pesakit kanser darah yang telah dimasukkan ke dalam wad pesakit darah dalam bulan Mei 2009 hingga Disember 2009. Soalan yang digunakan dalam kajian ini adalah: “MINI International Neuropsychiatric Interview” untuk diagnosis gangguan tekanan utama, gangguan kerisauan dan gangguan psikiatri yang lain,” Patient Health Questionnaire” untuk mengukur tahap tekanan utama, “European Organization for Research and Treatment of Cancer Quality Of Life questionnaire” untuk menilai mutu kehidupan responden, “Brief Cope” untuk menilai cara dalam menangani masalah, ”Visual Analog Pain scale” untuk mengukur tahap kesakitan dan “Single Item Measure Support” untuk menentukan bilangan orang yang sanggup menolong pesakit. “Statistical Package for Social Sciences (SPSS)” siri 17.0 telah digunakan dalam data analisis dan $p < 0.05$ telah ditentukan untuk nilai statistik yang signifikan.

Keputusan: Sejumlah 105 (100% angka respon) pesakit darah telah menyertai kajian ini. Peratus gangguan tekanan utama adalah 24.8% (n=26) dengan majoriti pesakit mengalami gangguan tekanan utama sederhana (38.5%). Kira-kira 92.3% (n=24) pesakit kanser darah yang mengalami gangguan tekanan utama telah didiagnosis dengan episode tekanan utama kini. Pesakit dengan tekanan juga mempunyai mutu kehidupan yang rendah dalam domain seperti fizikal, peranan, “cognitive”, dan sosial ($p < 0.05$). Mereka juga mempunyai simptom-simptom seperti letih, ketidakselesaan dalam perut dan muntah, kesukaran bernafas, kesukaran untuk tidur, kehilangan selera makanan, sembelit, cirit-birit, masalah kewangan dan mutu kehidupan global yang lemah ($p < 0.05$). Faktor yang signifikan yang berhubung kait dengan gangguan tekanan utama dalam kualiti kehidupan adalah fungsi sosial,

ketidak keselesaan dalam perut dan muntah, kesukaran untuk tidur dan masalah kewangan.

Keseluruhannya peratus gangguan kerisauan adalah 30.5%. Jenis gangguan kerisauan ini termasuk: agorafobia tanpa sejarah gangguan panik (24.8%); gangguan kebimbangan menyeluruh (10.5%); gangguan kebimbangan sosial (7.6%); gangguan panik dengan agorafobia (2.9%); gangguan tekanan selepas trauma (2.9%); gangguan obsesi kompulsi (1.9%) and gangguan panik tanpa agorafobia (1%). Keseluruhannya gangguan kerisauan telah menjejaskan mutu kehidupan dalam fizikal, emosi, peranan, “cognitive”, kesukaran untuk tidur, kesukaran bernafas, ketidak keselesaan dalam perut dan muntah, kehilangan selera makan dan sembelit ($p < 0.05$) berbanding daripada pesakit tanpa gangguan ini. Secara keseluruhannya gangguan tekanan utama dan gangguan kerisauan berkait rapat dengan kualiti kehidupan. Di antara pesakit, perasaan bunuh diri didapati 2.9%, gangguan psikiatri yang lain seperti: pergantungan kepada alkohol, penyalahgunaan alkohol, penyalahgunaan bahan dan anorexia nervosa di dapati 1%, pergantungan bahan (1.9%) dan bulimia nervosa (4.9%).

Dua simptom/masalah yang paling kerap yang dialami oleh pesakit kanser darah adalah letih (79%; tahap kronik: 38%) dan masalah kewangan (74%; tahap kronik: 57%). Keputusan yang signifikan juga diperolehi antara pesakit yang berkerja, status gaji dan jenis kanser darah dengan kualiti kehidupan.

Empat cara menangani masalah yang paling kerap digunakan di antara pesakit kanser darah adalah cara melepaskan sikap (7.21), cara mengatasi dengan aktif (6.44), cara menolak (6.32) dan cara melepaskan kemarahan (6.21). Cara menangani juga berhubung kait dengan gangguan tekanan utama, demografik sosial dan factor klinikal. Faktor yang signifikan yang berkait rapat dengan gangguan tekanan utama adalah cara menangani dengan “self-distraction dan “positive reframing”.

Kesimpulan: Secara ringkasnya, pesakit kanser darah seperti pesakit kanser yang lain juga menghadapi masalah psikiatri terutamanya tekanan, gangguan kerisauan, gangguan psikiatri yang lain, kualiti kehidupan yang rendah dan cara menangani masalah yang lemah. Perhatian terhadap mereka dalam mengatasi gangguan mental dengan memperbaiki kualiti kehidupan dan cara menangani masalah memainkan peranan penting.

ACKNOWLEDGEMENTS

I would like to express my heartfelt and deepest gratitude to my supervisory committee, Prof. Dr. Azhar Md Zain, Dr. Hamidin Bin Awang, Assoc. Prof. Dr. Khin Ohnmar Naing Noor Jan, Dr. Salmiah Bt Md.Said and Dr. Bahariah Bt Khalid for their supervision and guidance throughout this study. Special thanks to Dr. Hamidin Bin Awang for giving me the chance to conduct this research for my master's degree and for his support in this study. It would not have been possible to complete this research without their guidance.

I would also like to thank the Universiti Putra Malaysia (UPM) for financial support under the Research University Grant Scheme (RUGS), Project no: 04-03-08-0458RU (91463). In addition, I would like to acknowledge the Ministry of Science, Technology and Innovation for their National Science Fellowship award. I would also like to thank the director of Ampang Hospital, Consultant Hematologists Dr. Ong Tee Chuan and Dr. Chang Kian Meng, the staff of the hematological units and the patients who participated in the study. Special thanks to my father who provided me with transportation to the research area and to my family who gave me encouragement and guidance.

Above all, I praise the Lord, God Almighty with many thanks, who grant me success in this study. Though I stumble, I will not fall because God upholds me by His hand (Psalm 37:24) and I will remember His grace forever, Amen.

I certify that a Thesis Examination Committee has met on 21.03.2011 to conduct the final examination of Priscilla Das on her thesis entitled “Depression, Anxiety and Quality of Life among Hematological Cancer Patients in Ampang Hospital” 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 (degree of Master of Science)

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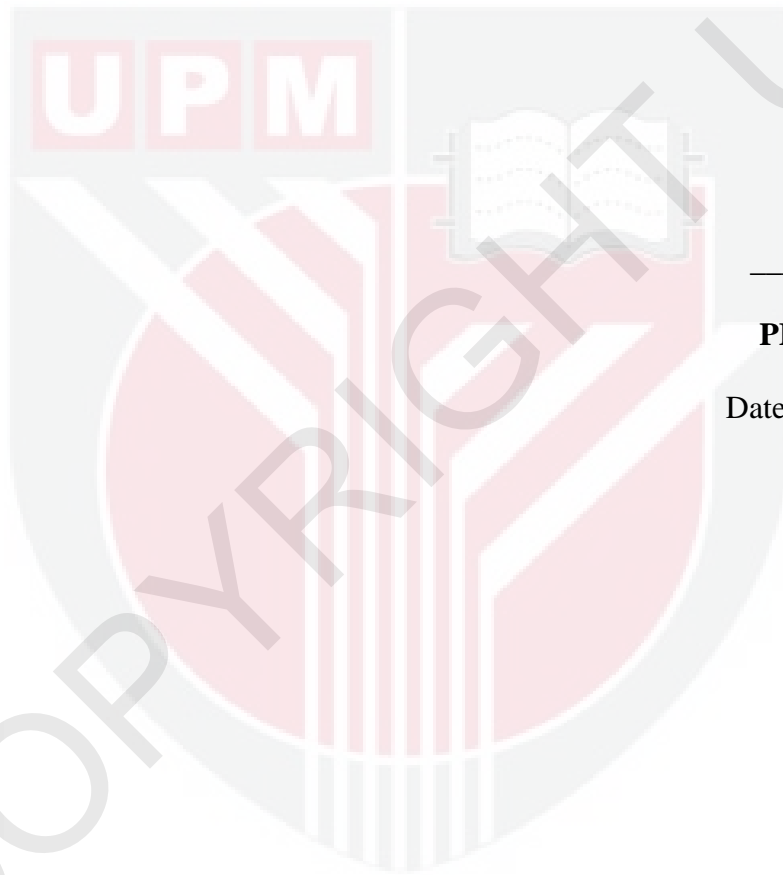
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DECLARATION

I declare that the thesis is my original work except for quotations and citations which have been duly acknowledged. I also declare that it has not been previously, and is not concurrently, submitted for any other degree at Universiti Putra Malaysia or at any other institution.



PRISCILLA DAS

Date: 21 March 2011

TABLE OF CONTENTS

	Page
DEDICATIONS	ii
ABSTRACT	iii
ABSTRAK	vii
ACKNOWLEDGEMENTS	xi
APPROVAL	xii
DECLARATION	xiv
LIST OF TABLES	xix
LIST OF ABBREVIATIONS	xx
CHAPTER	
1	
INTRODUCTION	1
1.1 Cancer prevalence	1
1.2 Hematological cancer	1
1.3 Psychiatric disorders	2
1.3.1 Prevalence	2
1.3.2 Major depressive disorder and anxiety	2
1.4 Problem statement	3
1.5 Justification of study	4
1.6 Study Objectives	5
1.6.1 General Objectives	5
1.6.2 Specific Objectives	5
1.7 Research hypothesis	7
1.8 Conceptual framework	7
2	
LITERATURE REVIEW	10
2.1 Hematological cancer	10
2.2 Depression	10
2.2.1 Epidemiology of depression in cancer patients	10
2.2.2 Causes of depression	11
2.2.3 Symptoms of depression	12
2.2.4 Depression by gender	12
2.2.5 Depression by socioeconomic factors	13
2.2.6 Depression during cancer treatment	13
2.2.7 Depression and pain	15
2.2.8 Survival rate in cancer patients with psychiatric disorders	15
2.3 Anxiety disorders	17
2.3.1 Epidemiology of anxiety disorders	17
2.3.2 Types of anxiety disorders	18
2.3.3 Causes of anxiety disorders	18
2.3.4 Anxiety disorders by gender	19
2.4 Depression and anxiety	19
2.5 Measurement of major depressive disorder and anxiety disorders	20
2.6 Measurement of severity of major depressive disorder	21
2.7 Quality of life	21

	2.7.1	Quality of life measurements and it's domains	21
	2.7.2	Quality of life in hematological cancer patients	22
	2.7.3	Quality of life by gender	23
	2.7.4	Age impact on quality of life	23
	2.7.5	The impact of education on quality of life	24
	2.7.6	Quality of life according to hematological cancer diagnosis	24
	2.7.7	Effect of depression and anxiety on the quality of life	24
	2.7.8	Quality of life and treatment	26
2.8		Coping styles	27
	2.8.1	Measurement of coping styles and it's domains	27
	2.8.2	Types of coping styles	27
	2.8.3	The effects of coping styles on depression and anxiety	28
2.9		Possible treatment for patients with psychiatric disorders	29
	2.9.1	Pharmacotherapy	29
	2.9.2	Psychotherapy	30
	2.9.3	Patient-provider interactions	31
3		METHODOLOGY	33
	3.1	Study location	33
	3.2	Study design	33
	3.3	Sampling method	34
	3.4	Sample population	34
	3.5	Sampling frame	34
	3.6	Study duration	34
	3.7	Inclusion criteria	35
	3.8	Exclusion criteria	35
	3.9	Sample size calculation	35
	3.10	Questionnaires	37
	3.10.1	Socio-demographic questionnaires	37
	3.10.2	Medical information	37
	3.10.3	European Organization for Research and Treatment of Cancer Quality Of Life	38
	3.10.4	Brief COPE	38
	3.10.5	Visual Analog Scale-Pain (VAS-P)	39
	3.10.6	Single Item Social Support (SISS)	39
	3.10.7	MINI International Neuropsychiatric Interview (MINI)	40
	3.10.8	Patient Health Questionnaire (PHQ9)	40
	3.10.9	Quality control	41
	3.11	Data collection technique	41
	3.12	Statistical test and data analysis	43
	3.13	Study Ethics	46
4		RESULTS	47
	4.1	Socio-demographic characteristics of respondents	47
	4.2	Clinical characteristics of the respondents	49

4.3	Comparison of age based on mean rank according to cancer diagnosis	51
4.4	Prevalence of psychiatric disorders	53
4.4.1	Prevalence of major depressive disorder and the severity	53
4.4.2	Prevalence of anxiety disorders	54
4.4.3	Prevalence of other psychiatric disorders	55
4.5	Mean score of quality of life	55
4.5.1	Quality of life mean rank scores (EORTC QLQ-C30) between depressed and non-depressed patients	58
4.5.2	Between-group differences in the quality of life mean rank score as a function of anxiety disorders	60
4.5.3	Between-group differences in quality of life mean rank score as a function of socio-demographic profiles	64
4.5.4	Between-group differences in quality of life mean rank score as a function of hematological cancer diagnosis	66
4.6	Relationship between psychiatric disorders and quality of life	69
4.6.1	Relationship between MDD and quality of life	69
4.6.2	Relationship between anxiety disorders and quality of life	70
4.7	Predictors of major depressive disorder as function of quality of life domains	73
4.8	Coping styles of hematological cancer patients	74
4.9	Predictors of major depressive disorder as function of coping styles	75
4.10	Between-group difference in coping styles scores by depression status, clinical characteristics, socio-demographic factors and types of caregivers	77
5	DISCUSSION	82
6	SUMMARY, CONCLUSION AND RECOMMENDATION FOR FUTURE RESEARCH	106
	REFERENCES	108
	APPENDICES	116
A	Questionnaire	116
A1	Questionnaires in English	116
A2	Questionnaires in Malay	132
A3	Questionnaires in Mandarin	148
A4	Questionnaires in Tamil	163
A5	MINI Questionnaires in English	180
A6	MINI Questionnaires in Malay	208
B	Ethical clearance	241
B1	Ethical Approval from Ministry of Health Malaysia	241