



**EMPLOYEE PERCEIVEDNESS TOWARDS THE IMPORTANCE OF
WORKPLACE SUPPORT SYSTEM IN REDUCING ANXIETY LEVEL
AMONG WORKERS WITH CANCER IN JORDAN**

By

ABDEL RAHMAN AREF ALI ABU SHREEA

**Thesis Submitted to the School of Graduate Studies, Universiti Putra Malaysia,
in Fulfilment of the Requirements for the Degree of Doctor of Philosophy**

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This study is aimed to determine the prevalence of anxiety disorder among workers with cancer in the Jordanian population and its relationship with a workplace support system and work-related issues. To attain this aim, a cross-sectional study was conducted at the King Husain Cancer Centre (KHCC) in Amman, Jordan. A proportional sampling technique was used to obtain the sample population of (354) workers with cancer.

The data were collected by self-administered Generalized Anxiety Disorder (GAD-7), and newly developed work-related issues and work support system questionnaires. To analyze the data, SPSS version 25 and AMOS version 25 were used. A response rate of 100% were obtained from the participants. Prevalence of anxiety disorder among workers with cancer was recorded at 20.8%, with male (23.1%) having the higher prevalence rate than female (17.3%) workers with cancers. A significant and a strong positive correlation between anxiety disorder and age rank ($r = 1, p < 0.032$) and anxiety disorder with age ($r = 0.492, p < 0.037$) were observed in this population. The logistic regression model was statistically significant, $\chi^2(4.480) = 37, p < .0001$. The model explained 30.8% (Nagelkerke R^2) of the variance in anxiety disorder and correctly classified 76.3% of cases. Interestingly, female respondents were more likely to suffer from anxiety (AOR 2.448, 95% CI 0.371 to 1.118) than their male counterparts. In respect of the educated individuals, particularly the holder with a bachelor degree are 5.660 times more likely to suffer from anxiety (AOR 5.660, 95% CI 0.060 to 0.821); widowed/divorced respondents are more likely to suffer from anxiety (8.858) times the married respondents (AOR 8.858, 95% CI 0.072 to 34.396). There is a high prevalence of anxiety disorder among workers with cancer in Jordan. Predictors of anxiety among workers with cancer were also identified in this report. The study found that the government and the ministry of health should improve their management and intervention to avoid adding more deteriorating diseases to the

workers with cancer. The study highlighted the importance of improving return to work theory for cancer employee. The study articulates the importance of relating workplace support system with mental health. The study recommends organizations to establish support programs to help employees manage their anxiety risks. The study took place at King Husain Cancer Centre (KHCC) in Amman, Jordan. The primary outcome of the study was that there is a significant difference in the workplace support system, work-related issues, and generalized anxiety disorder according to demographic information (age, gender, marital status, education, and job role). As for the secondary outcome was that the levels of anxiety among workers varied among the workers due to gender, educational, and job title. This study also presents implications that managing Jordan's workplace anxiety level for employee's resolve workplace issues and create a workplace support system is critical and bound to have practical implications in managing anxiety at the workplace.

Keywords: Workplace support system, employee perception, anxiety level, workers with cancers, Jordan.

Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi keperluan untuk ijazah Doktor Falsafah

PENENTU SISTEM SOKONGAN DI TEMPAT KERJA, ISU-ISU YANG BERKAITAN KERJA DAN KEGELISAHAN DALAM KALANGAN PEKERJA YANG MENGHIDAP KANSER DI JORDAN

Oleh

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Kanser adalah penyebab kematian kedua terbesar di seluruh dunia dan mengakibatkan kira-kira 9.6 juta kematian pada tahun 2018. Secara amnya dan di seluruh dunia, kira-kira 1 dari 6 kematian disebabkan oleh barah. Kira-kira 70% kematian akibat barah berlaku di kedua negara berpendapatan rendah dan sederhana. Di Jordan, barah adalah penyebab utama kematian kedua selepas penyakit jantung yang berkaitan. Kegelisahan ialah antara penyakit psikiatri yang sering dikesan pada pesakit kanser dan sering diabaikan. Kira-kira 10% pesakit kanser di seluruh dunia terkesan oleh kegelisahan. Oleh itu, kajian ini bertujuan menentukan prevalens gangguan kegelisahan dan faktor-faktor yang berkaitan dalam kalangan pekerja yang menghidap kanser di dalam populasi penduduk Jordan. Sebuah kajian keratan rentas dilakukan di Pusat Kanser King Husain (KHCC) di Amman, Jordan. Teknik persampelan berkadar digunakan untuk mendapatkan populasi sampel 354 pekerja yang menghidap kanser. Data dikumpulkan melalui soal selidik yang dikendalikan sendiri iaitu Gangguan Kebimbangan Umum (GAD-7), soal selidik masalah berkaitan kerja dan soal selidik sistem sokongan kerja. Analisis dijalankan menggunakan SPSS versi 25 dan AMOS versi 25. Kadar respons 100% diperoleh daripada peserta. Prevalens gangguan kegelisahan dalam kalangan pekerja yang menghidap kanser dicatatkan pada 20.8% dengan pekerja lelaki (23.1%) mempunyai kadar prevalens penghidap kanser yang lebih tinggi daripada pekerja wanita (17.3%). Korelasi positif yang signifikan dan kuat antara gangguan kecemasan dan peringkat umur ($r = 1, p < 0,032$) dan gangguan kegelisahan dengan usia ($r = 0.492, p < 0.037$) diperhatikan dalam populasi ini. Model regresi logistik signifikan secara statistik, $\chi^2(4.480) = 37, p < .0001$. Model tersebut menjelaskan 30.8% (Nagelkerke R^2) daripada variasi gangguan kegelisahan dan mengklasifikasikan 76.3% kes dengan betul. Responden wanita adalah 2.448 kali lebih berkemungkinan untuk menderita akibat kegelisahan (AOR 2.448, 95% CI 0.371 hingga 1.118) daripada lelaki. Jika dibandingkan perkaitan tahap pendidikan, mereka yang mempunyai ijazah sarjana muda adalah 5.660 kali lebih berkemungkinan untuk menderita akibat kegelisahan (AOR 5.660, 95% CI 0.060 hingga 0.821); responden

berstatus balu adalah lebih cenderung untuk mengalami kegelisahan sebanyak 8.858 kali ganda daripada responden yang berkahwin (AOR 8.858, 95% CI 0.072 hingga 34.396). Prevalens gangguan kegelisahan yang tinggi dikesan dalam kalangan pekerja yang menghidap kanser di Jordan. Petunjuk ramalan kegelisahan dalam kalangan pekerja yang menghidap kanser juga dikenal pasti dalam laporan ini. Penemuan daripada kajian ini menunjukkan bahawa perkhidmatan rawatan kanser harus ditingkatkan dalam pengurusan dan intervensi untuk mengelakkan pertambahan penyakit yang menyebabkan kemerosotan kesihatan pesakit kanser. Kajian itu menekankan kepentingan menambah baik teori kembali bekerja untuk pekerja kanser. Kajian itu juga menyatakan kepentingan mengaitkan sistem sokongan tempat kerja dengan kesihatan mental. Kajian itu mengesyorkan organisasi untuk mewujudkan program sokongan untuk membantu pekerja menguruskan risiko kebimbangan mereka. Kajian itu berlaku di Pusat Kanser King Husain (KHCC) di Amman, Jordan. Seramai (354) pekerja telah mengambil bahagian dalam kajian ini. Hasil utama kajian ialah terdapat perbezaan yang signifikan dalam sistem sokongan tempat kerja, isu berkaitan kerja, dan gangguan kebimbangan umum mengikut maklumat demografi (umur, jantina, status perkahwinan, pendidikan, dan peranan pekerjaan). Bagi hasil sekunder pula ialah tahap kebimbangan dalam kalangan pekerja berbeza-beza di kalangan pekerja disebabkan oleh jantina, pendidikan dan jawatan.

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This thesis was submitted to the Senate of Universiti Putra Malaysia and has been accepted as fulfilment of the requirement for the degree of Doctor of Philosophy. The members of the Supervisory Committee were as follows:

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TABLE OF CONTENTS

	Page
ABSTRACT	i
ABSTRAK	iii
ACKNOWLEDGEMENTS	v
APPROVAL	vi
DECLARATION	viii
LIST OF TABLES	xiv
LIST OF FIGURES	xvii
LIST OF APPENDICES	xviii
LIST OF ABBREVIATIONS	xix
CHAPTER	
1 INTRODUCTION	1
1.1 Background of the Study	1
1.2 Problem Statement	2
1.3 Significance of the Study	5
1.4 Research Hypothesis	6
1.5 Research Questions	7
1.6 Objectives of the Study	7
1.6.1 Research Objectives	7
1.6.2 General Objective	7
1.6.3 Conceptual Framework	8
1.6.4 RO4: Specific Objectives to examine the Correlation between Demographic Variables with Anxiety Levels among Cancer Patients	9
1.6.5 RP5: To investigate the correlation between Cancer and anxiety	9
1.6.6 RO6: To investigate the Anxiety levels among cancer patients	9
1.6.7 RO7: To investigate the relationship between Workplace Support System and anxiety levels among cancer patients	9
1.6.8 RO8: To investigate the correlation between Work-Related Issues and anxiety levels among cancer patients	10
2 LITERATURE REVIEW	11
2.1 Overview of Cancer	11
2.2 Global Prevalence Cancer	11
2.3 Cancer Epidemiology and Statistics	12
2.4 Cancer as Burden in Public Health	12
2.4.1 Cancer Statistics in the Middle East	13
2.4.2 Cancer Management and Cases in Jordan	15
2.5 Anxiety, Prevalence, and Risk Factors	15
2.5.1 Factors Causing Anxiety Disorder	16

	2.5.2	Gender Distribution of Anxiety Disorder	17
	2.5.3	Anxiety and Cancer	17
	2.5.4	Anxiety and Workplace Support System	19
	2.5.5	Anxiety and Cancer Patients at Work	19
	2.6	Theoretical Frameworks	21
	2.7	The Borkovec's Framework of GAD	21
	2.8	Application of Model of Mental Health at Workplace	22
	2.9	Workplace Support System and Mental Health	23
	2.10	Other Challenges Faced by Cancer Workers	26
	2.11	Social and Emotional Support	27
	2.12	Methods	27
	2.13	Quality Assessment	27
	2.14	Sub Topics	27
	2.15	Literature Searching Strategies	31
	2.16	Summary	31
3		RESEARCH DESIGN AND METHODS	34
	3.1	Study Design	34
	3.2	Study Location	34
	3.2.1	Amman City in Jordan	35
	3.2.2	Selected Hospital for the Study	35
	3.3	Study Duration	36
	3.4	Study Population	36
	3.5	Selection Criteria	36
	3.5.1	Inclusion Criteria	36
	3.5.2	Exclusion Criteria	37
	3.6	Sampling Frame	37
	3.7	Samples and Sampling Techniques	37
	3.8	Estimation of Sample Size	38
	3.9	Instrument for Data Collection	39
	3.9.1	Questionnaire Development: Workplace Support System Survey (WSSS)	39
	3.9.2	Questionnaire	40
	3.9.3	Socio-Demographic Information	41
	3.9.4	Cancer Disease Information	41
	3.9.5	Workplace Support System	41
	3.9.6	Work-Related Issues	42
	3.9.7	Generalized Anxiety Disorder (GAD-7)	42
	3.9.8	How this Questionnaire was Developed	42
		Original Articles based CAESAR-study	53
	3.10	Methods	57
	3.10.1	Development of the Questionnaire	57
	3.11	Quality Control	58
	3.11.1	Pre-Testing of the Questionnaire	58
	3.11.2	Reliability of the Questionnaire	58
	3.12	Pilot Study	59
	3.12.1	KMO and Bartlett's Test of the Pilot Study	59
	3.13	Data Collection Process	59
	3.14	Content Validity	60

3.15	Methods	60
3.16	Statistical Analysis	61
3.17	Ethical Considerations	62
4	RESULTS	63
4.1	Socio-Demographic Characteristics of the Respondents (1 st Research Objective) to examine the Correlation between Demographic Variables with Anxiety Levels among Cancer Patients	63
4.2	Descriptive Statistics of Cancer Disease Information (Clinical Characteristics) (1 st Research Objectives)	64
4.3	Association between Socio-Demographic Characteristics and Clinical Characteristics of Cancer (1 st Research Objective)	66
4.4	Demographic Variables and Cancer (1 st Research Objective)	67
4.5	Comparison of Age Based on Mean Rank According to Cancer Stage	67
4.6	Dimensional Descriptive Analysis for Generalized Anxiety Disorder (GAD-7)	67
4.6.1	Prevalence of Generalized Anxiety Disorder (GAD-7) and its Severity	68
4.7	Dimensional Descriptive Analysis for a Workplace Support System (7 th Objective)	69
4.7.1	Normality Test	69
4.8	Dimensional Descriptive Analysis for Work-Related Issue	75
4.9	Study Hypotheses	79
4.9.1	First Main Hypothesis	79
4.9.2	Second Main Hypothesis	79
4.9.3	Third Main Hypothesis	93
4.9.4	Fourth Main Hypothesis	96
4.10	Relationship of Generalized Anxiety Disorder and other Variables	98
4.11	Predicators Contributing to Anxiety Disorder	101
4.12	Exploratory Factor Analysis (EFA)	102
4.12.1	Examination of the Sample and the Correlation Matrix of Workplace Support System	102
4.13	Examination of the Sample and the Correlation Matrix of Work-Related Issues	109
4.13.1	Factors Extraction Method of Work-Related Issues	109
4.13.2	The Rotation Process of Work-Related Issues	111
4.13.3	Rename the Extracted Factors Work-Related Issues	113
4.14	Confirmatory Factor Analysis (CFA)	114
4.14.1	CFA of Workplace Support System First Order	114
4.14.2	CFA of Work-Related Issues First Order	117
4.14.3	CFA of Workplace Support System, Work-Related Issues, and GAD-7 (Second-Order)	120

5	DISCUSSION	124
5.1	Introduction	124
5.2	Discussion	124
5.2.1	The Correlation between Demographic Variables with Anxiety Levels among Cancer Patients	124
5.2.2	The Correlation between Cancer and Anxiety Disorder	126
5.2.3	Workplace Support System and Work-Related Issues Relationship to Anxiety Disorder	127
5.3	Summary about the Discussion	129
6	CONCLUSION AND RECOMMENDATION	131
6.1	Introduction	131
6.2	Conclusion	131
6.2.1	The Correlation between Demographic Variables with Anxiety Levels among Cancer Patients	131
6.2.2	The Correlation between Cancer and Anxiety Disorder	132
6.2.3	Workplace Support System and Work-Related Issues Relationship to Anxiety Disorder	134
6.3	Summary about the Conclusion	135
6.4	Recommendations	136
6.5	Contribution of the Study	138
6.6	Limitation of the Study	138
	REFERENCES	139
	APPENDICES	164
	BIODATA OF STUDENT	180
	LIST OF PUBLICATIONS	181

LIST OF TABLES

Table	Page
3.1 Reliability Results	59
3.2 KMO and Bartlett's Test	59
4.1 Distribution of the Respondents According to Socio-Demographic Characteristics (n = 354)	63
4.2 Cancer Disease Information Clinical Characteristics of the Respondents (n = 354)	65
4.3 Association between Socio-Demographic Characteristics and Severity of Cancer (n = 354)	66
4.4 Comparison of Age based on Mean Rank According to Cancer Stage	67
4.5 Descriptive Analysis of the Generalized Anxiety Disorder (GAD-7)	68
4.6 Severity of Symptoms of Anxiety Disorder among Workers with Cancer (n=354)	68
4.7 Normality Test for all Research Variables	69
4.8 Descriptive Analysis of the Dimensions of the Workplace Support System	70
4.9 Descriptive Analysis for Work Schedule and Job Demand	71
4.10 Descriptive Analysis for Employment Opportunities and Job Security	71
4.11 Descriptive Analysis for Training and Return to Work Program	72
4.12 Descriptive Analysis for Financial Support	73
4.13 Descriptive Analysis for Social Support	74
4.14 Descriptive Analysis for Physical Work Environment	75
4.15 Descriptive Analysis of the Dimensions of the Work-Related Issues	76
4.16 Descriptive Analysis for Work Absences	76
4.17 Descriptive Analysis for Work Capacity and Work Performance	77
4.18 Descriptive Analysis for Work Motivation	78

4.19	Descriptive Analysis for Work Stress and Emotion	78
4.20	Difference in a Workplace Support System, Work-Related Issues, and Generalized Anxiety Disorder According to the Diagnosed Time	80
4.21	Difference in Workplace Support System According to the Diagnosed Time	81
4.22	Difference in Work-Related Issue According to the Diagnosed Time	82
4.23	Difference in the Workplace Support System, Work-Related Issues, and Generalized Anxiety Disorder According to the Stage of Cancer	83
4.24	Difference in Workplace Support System According to the Stage of Cancer	84
4.25	Difference in Work-Related Issue According to the Stage of Cancer	85
4.26	Difference in the Workplace Support System, Work-Related Issues, and Generalized Anxiety Disorder According to the Type of Cancer	86
4.27	Difference in Workplace Support System According to the Type of Cancer	87
4.28	Difference in Work-Related Issue According to the Type of Cancer	89
4.29	Difference in the Workplace Support System, Work-Related Issues, and Generalized Anxiety Disorder According to the Treatment Type of Cancer	91
4.30	Difference in Workplace Support System According to the Treatment Type of Cancer	91
4.31	Difference in Work-Related Issue According to the Treatment Type of Cancer	92
4.32	Impact of Workplace Support System and Work-Related Issues on Generalized Anxiety Disorder	94
4.33	Pearson Correlation Matrix among the Respondents	95
4.34	Pearson Correlation Matrix among the Variables	97
4.35	Relationship of Anxiety Disorder and other Variables	98
4.36	Crude Odds Ratio of Simple Logistic Regression Anxiety	99
4.37	Model Summary for Anxiety Disorder	100

4.38	Classification for Anxiety Disorder based on SLR	100
4.39	Predictors of Anxiety Disorder among Workers with Cancer	101
4.40	Predictors of Anxiety Disorder among Workers with Cancer through Multiple Logistic Regression	102
4.41	KMO and Bartlett's Test	103
4.42	The Result of Extracting the Factors of Workplace Support System	104
4.43	Paragraphs Saturation after Deletion and Rotation of Workplace Support System	107
4.44	Renaming the Workplace Support System Section	108
4.45	KMO and Bartlett's Test	109
4.46	Paragraphs Saturations before Rotation of the Work-Related Issues	112
4.47	Paragraphs Saturation after Deletion and Rotation of Work-Related Issues	113
4.48	Goodness-of-Fit Test of the Model for Workplace Support System First Order	117
4.49	Goodness-of-Fit Test of the Model for Work-Related Issues First Order	120
4.50	Goodness-of-Fit Test of the Model for Workplace Support System, Work-Related Issues, and GAD-7 (Second-Order)	123

LIST OF FIGURES

Figure		Page
2.1	Trend of Cancer in Jordan between 1983 and 2017	14
2.2	Three threads of the Integrated Approach to Workplace Mental Health	22
2.3	Search Flow Diagram	28
2.4	Cancer and Work Model	30
3.1	Jordanian Population Categorized based on Gender	35
4.1	Assessment of Model Discrimination by Area under the ROC Curve for Anxiety Disorder among Workers with Cancer	100
4.2	Scree Plot of Workplace Support System	105
4.3	Scree Plot of Work-Related Issues	111
4.4	Structure of the Factor Scale of Workplace Support System First Order	115
4.5	Estimation of the Factor Scale of Workplace Support System First Order	116
4.6	Structure of the Factor Scale of Work-Related Issues First Order	118
4.7	Estimation of the Factor Scale of Work-Related Issues First Order	119
4.8	Structure of the Factor Scale of Workplace Support System, Work-Related Issues, and GAD-7 Second-Order	121
4.9	Estimation of the Factor Scale of Workplace Support System, Work-Related Issues and GAD-7 Second-Order	122

LIST OF APPENDICES

Appendix	Page
A Ethical Approval	165
B Questionnaire (English Version) Respondent's no.	167
C Questionnaire (Arabic Version)	172



LIST OF ABBREVIATIONS

KHCC	King hussien cancer centre
GAD-7	Generalized anxiety disorder
SPSS	Statistical package for Social Sciences
KMO	Kaiser-Meyer-Olkin
WHO	World health organization
KHCF	King hussien cancer foundation
EMRO	Eastern Mediterranean regional office
UICC	International union for cancer control
MOH	Ministry of health
FCTC	The framework convention on tobacco control
NCR	National cancer registration
JCR	Jordan cancer registry
PD	Panic disorder
PDA	Panic disorder with agoraphobia
OCD	Obsessive compulsive disorder
PTSD	Posttraumatic stress disorder
DSM	Diagnostic and Statistical Manual of Mental Disorders
HADS	Hospital anxiety and depression scale
RMS	Royal medical services
KAUH	King abdullah university hospital
JUH	Jordan University hospital
EFA	Exploratory factor analysis
CFA	Confirmatory factor analysis

ROC	receiver operating characteristic curve
VIF	Variance Inflation Factor
UPM	University Putra Malaysia
FMHS	Faculty of medicine and health sciences
IRB	Institutional Review Board
WSJD	Work schedule and job demand
EOJS	Employment opportunities and job security
TRWP	Training and return to work program
F. S.	Financial support
S. S.	Social support
CSPWE	Co-workers' support and physical work environment
CFI	Comparative fit index
TLI	Tucker-Lewis index
RMSEA	Root mean square error of approximation
SRMR	Standardized root means squared residual
WA	Work absence
WCWP	Work capacity and work performance
WSE	Work stress and emotion
WM	Work motivation
SAD	Social Anxiety Disorder
WPSS	Workplace support system
WRI	Work-related issues
HLDC	How long were you diagnosed with cancer?
WYSC	What is your stage of cancer?

WYTC

What is your type of cancer?

WYTTC

What is your treatment type of cancer?



CHAPTER 1

INTRODUCTION

1.1 Background of the Study

Cancer is considered a major health problem all worldwide (Malvezzi *et al.*, 2012; R. Siegel *et al.*, 2012; Lindsey A Torre *et al.*, 2015). According to the Global Cancer Facts, million new cases of cancer and 8.2 million cancer deaths were identified in the year 2012 ,with an estimated 21.7 million cases by the year 2030 (Tarver, 2012; Vineis & Wild, 2014). It has also been expected that cancer deaths will rise to 13 million due to the rapidly aging population and growth rate of cancer. Cancer is a disease wherein abnormal cells divide without control and can attack other tissues. Due to its increasing prevalence rate, it could be considered a pandemic disease (Byers *et al.*, 1999; Jacox *et al.*, 1994; R. L. Siegel *et al.*, 2015). Cancer is also identified as the second leading cause of death in Jordan (Abdel-Razeq *et al.*, 2015). The mortality and morbidity of cancer are increasing due to increasing life expectancy and higher exposure to risk factors. The mortality and morbidity increase as the young generation ages with the longer life expectancy (Abdel-Razeq *et al.*, 2015).

Anxiety and stress affect one in six British workers every year. A reported 8.2 million cases of anxiety were documented in the UK over the last decade, and the number keeps increasing due to longer working lives (Fineberg *et al.*, 2013). A workplace will never be free without associative anxiety. A typical situation is managing an important project, and meeting deadlines are common situations in a workplace that offer many challenges which make put some workers under pressure. These feeling of anxiety can affect some people's live negatively in their daily lives. The key is to ensure that any anxiety-inducing situations are well-managed and employees feel supported in their workplace. This highlights the importance of workplace support system (WPSS) in facilitating patients' support, diagnosis, and treatment. WPSS is applied to promote psycho-social recovery and rehabilitation of patients (Saha *et al.*, 2020). To elaborate, both social and psychological support play a pivotal role in curing cancer patients (Scignaro, Barni, and Magrin, 2011). It can be deduced that workers with cancer need social and psychological support from the employers to be able to mitigate the consequences of cancer. According to ILO¹, the minimum requirement for an employer to support workers with cancer are occupational health services are tasked with primarily preventive functions, such as creating and maintaining a safe and healthy working environment that promotes optimal physical and mental health, as well as adapting work to workers' abilities. In pertaining to their functions, such services should be multidisciplinary and have complete professional independence from employers, workers, and their respective representatives.

The minimum requirements of workplace support system are social support, the good patient-physical interaction and the good hospital work environment, support from

¹ https://www.ilo.org/legacy/english/osh/en/story_content/external_files/fs_st_1-ILO_4_en.pdf

physicians (Ansmann et al., 2014). It is worth to mention that workplace support system can be applied to certain industries, such as organizations, companies, and hospitals. As a matter of fact, workplace support system leads to positive impacts. To clarify, employer's support towards employees lead them to perceive the enhanced performance (Mughal, 2019). In Jordan, the caregivers should provide workers with cancer the following support and guidelines; including, activity management, personal care, work, interpersonal interaction and finance, and involvement with health care, work (Al Jauissy, 2010).

According to Kay (2007), benchmarking is important in hospitals in delivering improvements in productivity, quality, and efficiency. It is worth to mention that workplace support system is part of benchmarking. According to Ettorchi-Tardy, Levif, and Michel (2012) benchmarking, which is defined as a management approach for executing best practices at lower cost, is applied recently in healthcare system. There are no minimum requirements stated in Jordan and no guidelines indicated in the literature regarding the required basic support for employer to give to workers with cancer, but rather it relies on treatment that is provided with no costs for Jordanian citizens without underscoring the importance of other elements of the continuum of cancer. Besides, the hospitals in Jordan do not have structured programs to provide psychological support for patients with cancer (Abdel-Razeq, Attiga, and Mansour, 2015).

It is necessary to indicate that International labor organization ILO convention is concerned with monitoring working environment for employees (www.Internationallabourorganization.com). To elaborate, convention No. 155 on "Occupational Safety and Health provides" calls for adopting health policy and national occupational safety, along with an action to be adopted by governments and within companies to enhance occupational safety and health to encourage working conditions.

1.2 Problem Statement

Cancer has been the leading cause of death all over the world and can be perceived as a chronic disease compared to terminal illness. There were 14 million new cases and 8.2 million cancer-related deaths globally. In 2012, 57% of new cancer cases were discovered in the less developed region of the world, which includes Africa, Asia, and Central America ,with more than 65% reported cancer death in these regions (L. A. Torre *et al.*, 2015). The number of new cancer cases per annum is expected to rise high to 23.6 million by the year 2030 (IARC, 2018). The following section presents the statistics that are work related regarding the anxiety levels among workers with cancer in Jordan. The cancer is not necessarily related to work. The cancers that the respondents are having are not confirmed to be related to work. The causes are variety. To elaborate, cancer in Jordan is the second leading cause of death after heart disease. In 2011, a reported case of newly registered patients was 6,971 ,of which 4,675 were Jordanian ,and 2,296 were non-Jordanian. This figure has even decreased by 246 cases among Jordanians compared to 4,921 cases in 2010. However, according to a Jordan Times report, the number of new cases has significantly increased in 2013, raising to

8744 of which 5416 were Jordanians, and 3328 were Arabs and foreigners.

According to SIGI, the most commonly widespread types of cancer among women in Jordan are breast cancer (1040 cases, 36.5 percent), colorectal cancer (268 cases, 9.4 percent), thyroid cancer (175 cases, 6.1 percent), cervical cancer (152 cases, 5.3 percent), and leukaemia (134 cases, 4.7 percent) while in men are mostly colorectal cancer (325 cases, 12.7 percent), lung cancer (283 cases, 11 percent), bladder cancer (214 cases, 8.3 percent), and prostate cancer (197 cases, 6.6 percent). However, SIGI further reported that the most common cancer among Jordanian children (15 years and less) was blood cancer (32.9 percent), brain and nerve cancer (17.9 percent), lymphatic cancer (11.1 percent), bone cancer (7.9 percent), and kidney cancer (7.5 percent). Therefore, support of psychology would significantly impact the pace of progression of disease as patients who are feeling less isolated, depressed, and frightened may work well compared to those who feel unsupported and demoralized. The status of cancer patients and survivor has vital implication for labour market and society that can affect the social, economic, effected individual and psychological health.

The “Workplace Gender Equality Act 2012” in Australia intended for the protection of employees any sort of discrimination based on health state. It improves and maintains gender equality in workplace among women and men by supporting employers to remove the barriers between males and females’ employees. The cancer survivor across Australia and other states such as Canada and USA have reported adequate issues at workplace after returned to work challenges (Butow *et al.*, 2020; Valdivieso *et al.*, 2012). Some of the problems observed are related to falling wages, discrimination, hostility and the challenge of obtaining new employment. Returning to work can be seen as an important step towards financial and social support for cancer workers (Johnsson *et al.*, 2010; Kennedy *et al.*, 2007; McKay *et al.*, 2013). By considering active treatment of cancer to maintain health, cancer patients can play professional and social roles. Previously research reports have stated that various types of cancer in the workplace may evolve many major problems in the workplace, such as unemployment, changes in the working environment, problems between peers, and reduced capacity in the workplace (Feuerstein *et al.*, 2010). The consequences and challenges related to cancer and its approaches of treatment are more prone to effect in novel manner and influence working abilities of individual (Watts *et al.*, 2016).

Cancer can place an intense economic, social and psychological burden on individual and their relation professional and personal (Brown *et al.*, 2001; Stein *et al.*, 2008). Previous research confirms that there is little evidence that employees with cancer receive help. On the other hand, it has also been found that greater pressure among family caregivers can interfere with their ability to provide logistical or emotional support to meet the needs of patients (Reinhard *et al.*, 2008). Informal support from friends or support from family members can provide sufficient information, logistical and emotional support. Appropriate formal and informal support can help patients perform their basic tasks. Without informal support, the impact of psychological and social problems can be effectively exacerbated. The cancer survivor reported that psychosocial support is not considered as the vital element of high-quality care of cancer and might failed for recognition of adequate treatment, reference of stress,

depression, stress and anger of cancer survivor (Grassi & Travado, 2008; Poulsen *et al.*, 2016).

A thorough reading of the literature shows that the number of studies that addressed the workplace support system are scarce. To elaborate, the majority of the previous studies (Saifan *et al.*, 2019; AbuAlRub *et al.*, 2016) were conducted on nurses. None of them were conducted on the impact of workplace on nurses working for cancer patients. None of the previous addressed the impact of workplace support system on reducing anxiety among workers with cancer. Therefore, this study seeks to bridge this gap in literature. It should be mentioned that risk management means the risk that might occur in the hospital's management and cannot be expected. The workplace risk management program has a positive impact on the project's performance (Alkhlaifat, 2021). However, in Jordan, there is a shortage in the implementation of workplace risk management. As a result, this study will fill this gap by addressing the impact of workplace risk management program in reducing anxiety levels among cancer employees.

It is worth to mention that the existing normative requirements in Jordan require an amendment because of the lack of health resource allocation to support services and the lack of long-term funding schemes (Marzouk *et al.*, 2019). The patients with cancer need more healthcare needs; thus, an individualized comprehensive of patients' needs from their views is necessary to initiate an essential treatment plan (Al-Jauissy, Al-Hassan, and Akhu-Zaheya, 2009). According to ILO, Jordan needs to formulate national strategy due to the lack of occupational safety and health ambitions and objectives.

The public health is the main concern for cancer patients in Jordan. In Jordan as an Arab culture, there is a strong correlation between emotional response and social support system, such as strong family (Mosleh *et al.*, 2018). The residential support system is highly important in which supervision, assistance, and training are provided to enable patient to improve their health and their skills by doing their daily activities, to adapt their attitude to society, to participate, and to develop relationships. According to ILO, residential care support means providing people with disabilities sufficient care for meal, bath, and elimination. According to VITAL, Jordan hospitals provide residential care support by enabling patients to save money and taking care of themselves by applying check-ups at home and routine procedures. They receive care in comfortable and familiar environment. WHO² Jordan has founded an occupational health program, which seeks to enhance present strategies concerning safety and health in the workplace. WHO collaborates with the Ministry of Health to execute several awareness-raising campaigns on the importance of a healthy and safe working environment.

Workers with cancer are known to have an increased level of anxiety disorder that are associated with loss of job, psychological and social distress, and loss of productivity, adjustment disorders and discrimination. All these factors are due to

² <https://www.emro.who.int/jor/programmes/occupational-health.html>

Lack of structural support system put in place by the working organization. Jordan does not have such kind of structured support system due to the fact that it is incomparable with developed world. Moreover, previous studies have mainly focused on breast and gynecologic cancers, including mostly female. Thus, this study seeks to address and explore the determinants of anxiety, and workplace support system among all workers with cancer. To overcome anxiety level among patients with cancer, workplace support system is considered as an optimal solution in reducing anxiety among. To elaborate, religious coping, positive thinking, denial, and family support are considered as stress relief among patients with cancer (Baqutayan, 2019). Besides, it is important to implement a cancer policy that is available and relevant to employees (Nowrouzi et al., 2009). According to Zamanzadeh et al. (2018), there are some issues that reduce anxiety level among cancer patients; such as providing emotional support and asking about their health, occupational support by reducing work load, eliminating night shifts, and financial support such as monthly payment of pension, benefits, and salary. To address this problem, the study developed and designed a questionnaire regarding the workplace support system and work-related issues.

According to WebMD, there are four stages to cancer ranging from 0-4. To elaborate, 0 stage that is so-called carcinoma, which means that there are abnormal cells with the possibility to become cancer. Stage 1, which is so-called early stage cancer. It means that the cancer is only in one-place and small. Stages 2 and 3 mean that the cancer becomes larger and has grown into nearby lymph nodes or tissues. Stage 4 is so-called metastatic or advanced cancer, which has spread to several parts of the body. Owing to the fact that caregivers of cancer patients with stage 5 are more vulnerable to anxiety and depression (Karabekiroğlu et al., 2018). Therefore, workplace support system is considered an optimal method to reduce anxiety among cancer patients. The willingness of the employers to spend to the patients was not clearly addressed in literature within Jordanian context. Although, the good relationship between employers and patients improves the patients. However, the literature indicate that patient safety culture has not been fully executed in Jordanian hospitals (Khamaiseh, Al-Twalbeh, and Al-Ajlouni, 2020).

1.3 Significance of the Study

In fact, there is a high percentage of anxiety disorders among employees with cancer in Jordan (Shreea, et al., 2020). In addition, patients with cancer should be provided with psychological support, particularly in the early stage of cancer detection. The measurement of anxiety is often high among with patients with cancer (Niedzwiedz et al., 2019). No. GAD can be used to measure anxiety among all groups of adult people. Therefore, the same questionnaire was used to measure anxiety among normal people can be used.

The findings of this research will offer valuable information and insights about the researches, practitioners, administrators, regarding the management of employee with cancer. The evaluation of measurement of anxiety among cancer employee and the impact of social support system in enterprises are helpful for development and deployment of novel strategies for enhancement of engagement of staff and enhances

the entire usefulness of research and possibly useful for reduction of anxiety levels. The finding enables the supervisors for creation of work atmosphere that in turn lead to improved engagement of cancer patients where information can be utilized for execution of similar studies. Patients' resilience, optimism, emotional support, and social support play a pivotal role in reducing the cancer symptoms and improving the health of cancer patients (Ruiz-Rodríguez et al., 2022).

The researcher can utilize such information for execution of related research studies that can have vital contribution in foundation of knowledge. The number of survivors from cancer is exponentially rising in forthcoming era and increasing number of cancer patients is subjected to increase number of employees with cancer. The finding will be helpful for highlighting the social, emotional and spiritual experiences encountered by patients and employees with cancer.

1.4 Research Hypothesis

1. There is a significant difference in a workplace support system, work-related issues, and generalized anxiety disorder according to demographic information (age, gender, marital status, education, and job role).
2. There is a significant difference in a workplace support system, work-related issues, and generalized anxiety disorder according to cancer disease information (diagnosed time, stage of cancer, type of cancer and treatment type of cancer).
3. There is a significant impact of workplace support system and work-related issues on generalized anxiety disorder.
4. There is significant relationship of workplace support system (dimensions), work-related issues (dimensions) and generalized anxiety disorder.

This study is concerned with examining the impact of workplace related system and work-related issues on reducing anxiety levels among cancer employees in Jordan. The paucity of studies that were conducted within Jordanian context has prompted the researcher to bridge this gap in literature. To examine the hypotheses, the researcher developed a questionnaire that investigates the correlation between workplace support system and anxiety by referring to the literature (Rutter and Brown, 2017; Levis, Benedetti, and Thombs, 2019). It was developed in English and Arabic. Then the study collected socio-demographic information and cancer disease information. After that, a questionnaire related to workplace support system and work related issues were developed.

1.5 Research Questions

This study seeks to answer the following research questions:

1. What is the relationship between workplace support system, work-related issues, and generalized anxiety disorder according to demographic information (age, gender, marital status, education, and job role)?
2. What is the relationship between workplace support system, work-related issues, and generalized anxiety disorder according to cancer disease information (diagnosed time, stage of cancer, type of cancer and treatment type of cancer)?
3. What is the impact of impact of workplace support system and work-related issues on generalized anxiety disorder?
4. What is the relationship of workplace support system (dimensions), work-related issues (dimensions) and generalized anxiety disorder?

1.6 Objectives of the Study

1.6.1 Research Objectives

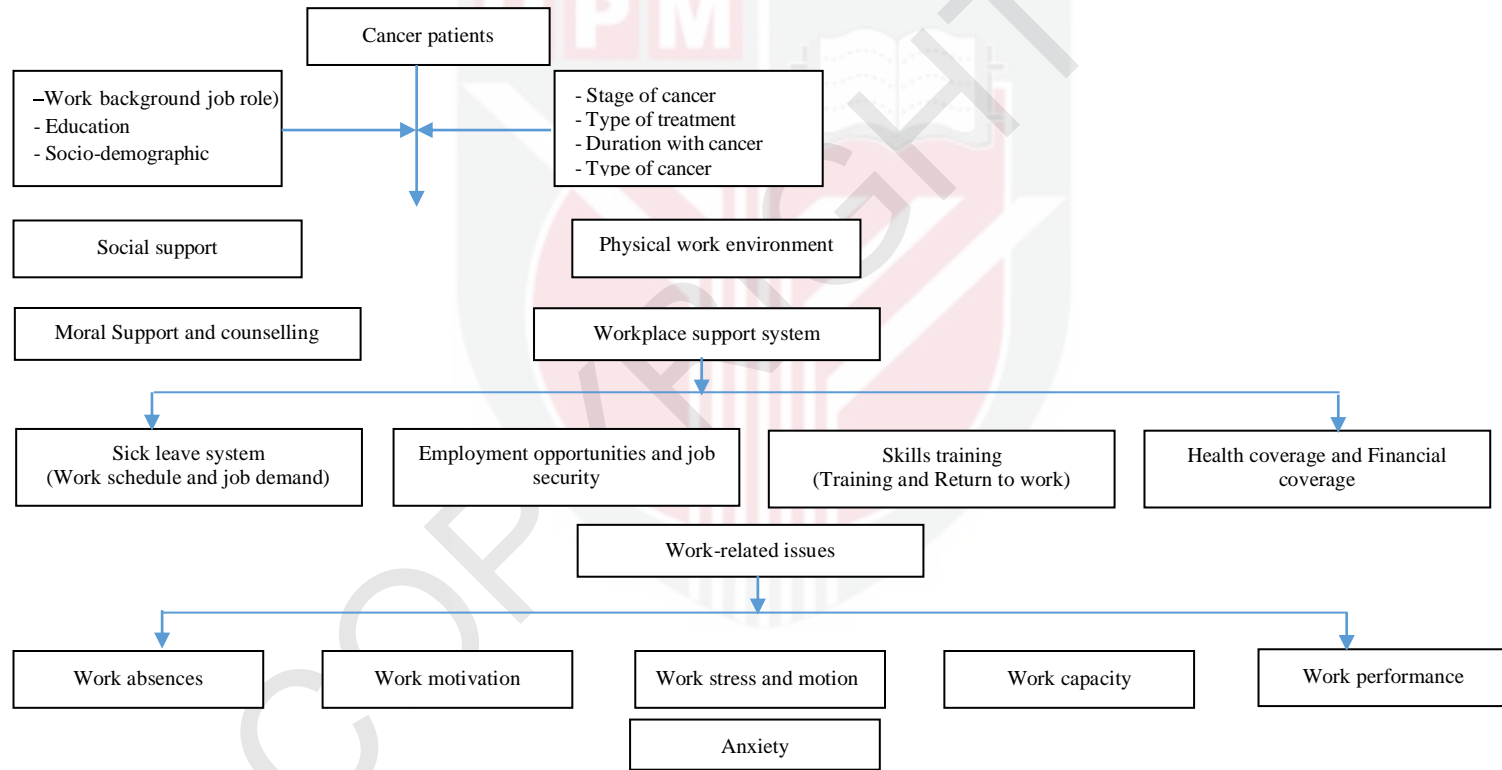
1.6.2 General Objective

To identify the determinants of workplace support system, work-related issues and anxiety among workers with cancer in Jordan. The importance of workplace support system; including, emotional, financial, occupational, family support, and positive thinking, in reducing anxiety among patients with cancer.

To achieve this objective, the study developed a module using inclusion and exclusion criteria in selecting the participants to examine the effectiveness of workplace support system and anxiety level among (354) workers with cancer at King Husain Cancer Centre (KHCC), who were divided into five groups according to their ages. The psychometric Properties of the Generalized Anxiety Disorder Scale-7 (GAD-7) in Outpatients with Anxiety and Mood Disorders scale and patient Health Questionnaire-9 (PHQ-9) for screening to detect major depression were adopted. The researcher developed a questionnaire that investigates the correlation between workplace support system and anxiety by referring to the literature (Rutter and Brown, 2017; Levis, Benedetti, and Thombs, 2019). It was developed in English and Arabic. Then the study collected socio-demographic information and cancer disease information. After that, a questionnaire related to workplace support system and work related issues were developed. The study aims to determine the prevalence of cancer in Jordan, to explore the relationship between demographic variables and anxiety levels among cancer patients, to articulate the relationship between workplace support system and work related issues with anxiety disorder,

1.6.3 Conceptual Framework

The study will specifically focus on the cancer patient living in Jordan.



As shown in the conceptual framework, the study is conducted on cancer patients. The study collected information about the participants; including, - Work background (job role), education, and socio-demographic. Besides, information regarding stage of cancer, type of treatment, duration with cancer, and type of cancer was collected. The study seeks to investigate the impact of workplace support system, which includes social support (moral support and counselling) and physical work environment. As for social support, it includes sick leave system (Work schedule and job demand), employment opportunities and job security, skills training (Training and Return to work), and health coverage and Financial coverage. As for work-related issues, it includes work absence, work motivation, work stress and emotion, work capacity, and work performance. Work related issues are connected with other variables; including, work absence, work motivation, work stress and motion, work capacity, work performance, and anxiety.

However, its conceptual definition means other related mental illness, burnout, and workplace stress (Mohanty, Kabi, and Mohanty, 2019). Finally, the anxiety was unraveled. It is worth to mention that the social support in the workplace is highly important for employees in general. In their study Velando- Soriano et al. (2018) found that social support received from the coworkers and supervisors play a critical role in preventing the disease among workers.

1.6.4 RO4: Specific Objectives to examine the Correlation between Demographic Variables with Anxiety Levels among Cancer Patients

1.6.5 RP5: To investigate the correlation between Cancer and anxiety

It is a group of diseases involving abnormal cell growth beyond their usual boundaries, with the potential to invade or spread to other parts of the body. It's one of the leading causes of morbidity and mortality worldwide (WHO, 2012).

1.6.6 RO6: To investigate the Anxiety levels among cancer patients

Anxiety, tension, worry, stress, and strain are all familiar feelings, and it is a part of our life today. Simple anxiety or stress will not drive us to look for the specialist (Rabin *et al.*, 2007), but when these feelings become a chronic and interfere with our lives, we need to do something and look for ways to manage it to function well (Baqtayan, 2012).

1.6.7 RO7: To investigate the relationship between Workplace Support System and anxiety levels among cancer patients

Razeq *et al.* (2015) defines that Workplace Support System are developed to facilitate and support the patients. It also facilitates the adjustment for the diagnosis and disease treatment. The workplace support systems are intended for the promotion of psycho-

social recovery as well as rehabilitation of patients in addition to facilitation of support for healthcare resource utilization in effective manner. The workplace support system should enhance the successful retention and return to work, workplaces should provide systems for supporting employees' readjustment (White, 2013; Eguchi, 2017).

1.6.8 RO8: To investigate the correlation between Work-Related Issues and anxiety levels among cancer patients

Hewitt and Rowland (2002) the perceptions of employers regarding providing a proper accommodation to the patients with cancer or any other chronic diseases, flexible arrangement of working, job replacement, meeting with employer when return to work. The perceived work-related barrier is employer discrimination due to cancer, non-supportive workplace atmosphere and others. It is worth to mention that medical social work department, which means the existence of psychiatric and medical social workers in the hospitals. Social workers in the hospital are assigned to do a wide range of activities; including, direct patient service, administration, teaching, training, and supervision, and research (Kumar, 2019). However, the medical social worker is lacking in Jordanian hospitals.

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