

# Relationship between psychological distress, hospital anxiety and depression among care givers of breast cancer patient



By

Laiba Ayaz

Bsp201052

DEPARTMENT OF PSYCHOLOGY  
Faculty of Management and Social Sciences  
Capital University of Science & Technology,  
Islamabad  
January, 2024

RELATIONSHIP BETWEEN PSYCHOLOGICAL  
DISTRESS, HOSPITAL ANXIETY AND  
DEPRESSION AMONG CARE GIVERS OF  
BREAST CANCER PATIENT



by

Laiba Ayaz

BSP201052

A Research Thesis submitted to the  
DEPARTMENT OF PSYCHOLOGY  
in partial fulfillment of the requirements for the degree of  
BACHELOR OF SCIENCE IN PSYCHOLOGY

Faculty of Management and Social Sciences  
Capital University of Science & Technology,  
Islamabad  
January, 2024

## Certificate of Approval

It is certified by the thesis titled " Relationship between Psychological Distress, Hospital Anxiety and Depression among Caregivers of Breast Cancer Patients " performed through Laiba Ayaz, Reg. No. BSP 201052 under the supervision of Miss Uzma Mushtaq, Capital University of Science & Technology, Islamabad is fully adequate, in scope and quality, as a Research Thesis for the degree of BS Psychology.

Supervision:



Miss Uzma Mushtaq  
Lecturer

Department of Psychology  
Faculty of Management & Social Science  
Capital University of Science and Technology, Islamabad

Relationship between Psychological Distress, Hospital Anxiety and Depression  
among Caregivers of Breast Cancer Patients

By

Laiba Ayaz

Registration # BSP201052

Approved By



Supervisor

Ms. Uzma Mushtaq



Internal Examiner-I Ms.  
Anam Mahmood



Internal Examiner-II  
Mr. Zeeshan Iltaf



Thesis Coordinator  
Ms. Irum Noureen



Head of Department  
Dr. Sabahat Haqqani

## **DECLARATION**

This is declared to be a unique part of our work, unless otherwise indicated by the content and references of the text. This work has not been submitted to a university or higher education group of another level or degree, nor has it been submitted to obtain a degree in that university or other university or institution.

**Laiba Ayaz**

**BSP201052**

**January, 2024**

## **ACKNOWLEDGEMENTS**

In the name of Allah Almighty, the Most Beneficent and the Most Merciful. All praises be to Allah for the strength and countless blessings including for provision of opportunity to completing the thesis. This thesis has been a great exposure to the field along with challenges that have surely left a lasting mark on my understanding hence making all the devotion and efforts worthwhile.

Completing this thesis with quality work, precision and knowledge was the utmost requirement, therefore appreciation is all for our supervisor Ms. Uzma Mushtaq, lecturer in Department of Psychology, capital university of science and technology. I would like to express my deepest gratitude to her because with her efforts, supervision, compassion and motivating personality

I was able to complete with utmost understanding of my thesis. Also, my humble gratitude goes to my parents whose prayers, encouragement, and support because of which I have been able to complete the thesis. I would also like to thank my friends and all those people who helped me in my data collection process as it was a critical phase towards completion of thesis.

Laiba Ayaz

## **Abstract**

This thesis investigates the relationship between psychological distress, hospital anxiety, and depression among caregivers of breast cancer patients. The primary aim is to find the nature and extent of these relationships and explore potential differences across demographic and caregiving-related factors. Data was analyzed through the Statistical Package of Social Sciences (SPSS, version 21). Results from the analysis reveal a significant relationship between psychological distress, hospital anxiety, and depression among caregivers of breast cancer patients. This finding underscores the complex emotional challenges faced by individuals in caregiving roles. No statistically significant differences were identified in gender, age, the nature of their relationship to the patient, or the duration of caregiving. The implications of these findings extend to the development of tailored support systems for caregivers, acknowledging the shared emotional challenges they face.

**Keywords** *Psychological distress, hospital anxiety, depression, caregiver, breast cancer.*

## Table of Content

Certificate of Approval	i
Declaration	iv
Acknowledgements	v
Abstract	vi
List of Tables	ix
List of figures	x
<b>Chapter 1 Introduction</b>	<b>1</b>
Hospital Anxiety	4
Psychological Distress	6
Depression	9
Literature review	12
Rationale	21
Objective	22
Hypotheses	22
<b>Chapter 2 Method</b>	<b>23</b>
Research design	23
Population and sample	23
Sampling technique	23
<i>Inclusion criteria</i>	23
<i>Exclusion criteria</i>	24
Instruments	24
<i>Kessler Psychological Distress</i>	24
<i>Hospital Anxiety and Depression Scale (HADS)</i>	24
Procedure	25
Ethical consideration	25
Proposed data analysis	26
<b>Chapter 3 Results</b>	<b>27</b>
<b>Chapter 4 Discussion</b>	<b>38</b>
Limitations	44
Implications	46
<b>References</b>	<b>47</b>
<b>Appendices</b>	<b>52</b>
Permission Letter	52
Permission to use scale	53
Kessler Scale	54
Hospital Anxiety and Depression Scale (HADS)	1



## **List of Tables**

Table 1 Demographic Characteristics Of The Participants	28
Table 2 Descriptive, Reliability Analysis	29
Table 3 Median, Mode, and Kolmogorov-Smirnov test statistics	31
Table 4 Correlation of Hospital anxiety and depression and Kessler Scale,	33
Table 5 Mann-Whitney U- Test Values for Scales In Gender	34
Table 6 Kruskil Wallis Test on The Demographic “Age	35
Table 7 Kruskil Wallis Test On The Demographic “relation”	36
Table 8 Kruskil Wallis Test On The Demographic “duration	36

## List of figures

Figure 1Histogram Hospital anxiety and Depression Scale	31
Figure 2Histogram of Kessler Distress Scale	32

## **Chapter 1**

### **Introduction**

Breast Cancer is a chronic, life-threatening illness that not only has an impact on the patients but also significantly impacts the people who care for them. Due to their demanding and emotionally difficult job, caregivers of breast cancer patients frequently experience psychological distress, including feelings of worry and despair. Understanding the link between caregivers' psychological distress and hospital anxiety and depression is essential for providing the right assistance and implementing initiatives that will advance their wellbeing. (Kim & Given, 2008)

It is said to be the most common cancer and also the primary cause of mortality due to cancer in female around the World. About 1.38 million new breast cancer cases were diagnosed in 2008 with almost 50% of all breast cancer patients and approximately 60% of deaths occurring in developing countries. There is a huge difference in breast cancer survival rates worldwide, with an estimated 5-year survival of 80% in developed countries to below 40% for developing countries (Kim & Given,2008)

Breast cancer is a type of cancer that originates in the cells of the breast tissue. This provides an overview of breast cancer, including its causes, risk factors, symptoms, diagnosis, and treatment options to understand breast cancer, it's essential to know the basic anatomy of the breast. The breast is primarily composed of glandular tissue, fatty tissue, blood vessels, and lymph nodes. Glandular tissue contains milk-producing glands, while

fatty tissue provides shape and protection. The exact cause of breast cancer is not fully understood, but several risk factors are associated with an increased likelihood of developing the disease. These risk factors include gender (women are more susceptible), age (risk increases with age), family history of breast cancer, certain genetic mutations (e.g., BRCA1 and BRCA2), hormone levels, and exposure to estrogen, among others. (Folkman, 2005).

The symptoms of breast cancer can vary, but common signs to watch for include a lump or mass in the breast, changes in breast size or shape, nipple discharge (other than breast milk), skin changes on the breast, and pain in the breast or nipple. It's important to note that not all breast lumps are cancerous, and many breast conditions are benign. Once breast cancer is diagnosed, it is staged to determine the extent and severity of the disease. Staging helps guide treatment decisions. Stages range from 0 (in situ, meaning the cancer is confined to the milk ducts or lobules) to stage IV (advanced, with cancer spreading to distant organs) (C. W., & Sherwood, P. (2012).

Breast cancer caregivers play a crucial and often underappreciated role in society, providing essential support and assistance to individuals who are unable to fully care for themselves due to illness, disability, or other limitations. Caregivers can be family members, friends, or trained professionals, and they dedicate their time and energy to ensuring the well-being and comfort of those in their care. Caregivers play a very important role in our communities, the challenges they face, and the impact of their selfless efforts on both the individuals they care for and society as a whole. They take on a diverse range of responsibilities depending on the needs of the person they are caring for. These responsibilities may include assisting with daily activities such as bathing, dressing, and

meal preparation, administering medication, providing emotional support, and coordinating medical appointments. Caregivers often act as advocates, helping their loved ones navigate the complex healthcare system and ensuring their voices are heard. (Gordon & Brandish, 2016).

Various emotional and psychological symptoms known as psychological distress, anxiety, and depression are experienced by people who are overburdened by pressures or difficult living conditions (Mirowsky, & Ross, 2003). Breast Cancer patients' caregivers frequently deal with a variety of stressors, including having to deal with their loved ones' physical and mental pain, managing challenging treatment plans, financial obligations, and disruptions to their regular lives. These pressures may make caregivers more psychologically distressed than usual.

### **Hospital Anxiety**

Hospital anxiety and Post-Traumatic Stress Disorder (PTSD) are two distinct yet interrelated mental health conditions that can affect individuals who have experienced traumatic medical events or prolonged hospital stays. While they have different diagnostic criteria and characteristics, they both involve emotional distress and can significantly impact a person's mental well-being.

Hospital anxiety is a complex and often overlooked aspect of healthcare that can significantly impact the well-being of patients. When individuals find themselves in a hospital setting, they often experience heightened anxiety, which is a natural response to the unfamiliar environment, uncertainty about their condition, and concerns about medical procedures and outcomes. This introduction will delve into the topic of hospital anxiety,

highlighting its prevalence, causes, and the importance of addressing it in the healthcare system. Hospital anxiety refers to the emotional distress and apprehension that patients may experience during their hospital stay. It is a multifaceted emotional response that can manifest in various ways, including feelings of fear, worry, unease, or even panic. Hospital anxiety is not limited to any specific demographic and can affect individuals of all ages, backgrounds, and medical conditions. Riggs, K. (2007).

Post-Traumatic Stress Disorder (PTSD) a mental health disorder that can develop after a person has experienced a traumatic event. While it is often associated with combat veterans, it can also occur in individuals who have experienced other types of traumas, including medical trauma. PTSD is characterized by symptoms such as flashbacks, nightmares, severe anxiety, and intrusive thoughts related to the traumatic event. These symptoms can persist long after the trauma has occurred, and they can significantly disrupt a person's daily life.

A variety of physical and emotional symptoms as well as enduring emotions of melancholy are all characteristics of the mental health illness known as depression (Horwitz & Wakefield, 2007). Regardless of age, gender, or origin, anyone can be afflicted by this widespread ailment. Loss of interest or pleasure in once enjoyed activities are some of the symptoms of depression that are frequently experienced by people. weight changes (major weight gain or reduction), changes in appetite, sleep issues like excessive or incontinence sleeping fatigue or a decrease in energy

Anxiety or distress that is specifically tied to being at a hospital or other medical facility is referred to as "hospital anxiety" (Bratås, Grønning & Forbord, 2014). It is a

psychological condition that many people may go through for a variety of reasons, including being in an unfamiliar environment, being afraid of medical procedures, anticipating getting medical diagnoses or treatments, worrying about the results of medical interventions, or worrying about one's own or a loved one's health.

### **Psychological Distress**

Psychological distress refers to the wide range of emotional and mental distress that people experience as a result of various stressors, challenges, or disorders. It includes feelings of anxiety, depression, agitation, or unease, all of which can have a significant impact on a person's well-being, functioning, and overall quality of life. Psychological distress can manifest as symptoms such as persistent sadness, irritability, difficulty concentrating, sleep disturbances, and changes in appetite (Belay et al., 2021).

The term "psychological distress" in the context of caregivers of breast cancer patients refers to a range of emotional and mental health symptoms resulting from the unique stressors and demands associated with providing care to someone battling cancer. Psychological distress refers to a broad range of emotional, cognitive, and behavioral symptoms that indicate an individual is experiencing significant mental and emotional strain. Unlike specific mental health disorders like depression or anxiety, psychological distress is a more general term encompassing various symptoms that may result from life stressors, trauma, or other challenging circumstances. It is a common aspect of the human experience and can manifest in different ways for different individuals. (Goldberg, & Huxley 1992).

Psychological distress emerges as a thread that weaves through moments of challenge, stress, and adversity. Unlike diagnosable mental health disorders, psychological distress is a more general term encompassing a range of emotional, cognitive, and behavioral symptoms that signify an individual's struggle with mental and emotional strain. This introduction delves into the concept of psychological distress, exploring its manifestations, contributing factors, and the crucial role it plays in the intricate landscape of mental well-being (Meader, N. (2011).

While psychological distress illuminates' moments of vulnerability, it also serves as a guide toward building resilience. Acknowledging distress, seeking support, and implementing coping strategies contribute to the development of emotional strength and adaptive mechanisms. Viewing psychological distress as a navigational tool underscores the transformative potential embedded in the human capacity for growth and adaptation (Meader, 2011)

Psychological distress refers to a broad range of emotional, cognitive, and behavioral symptoms that indicate an individual is experiencing significant mental and emotional strain. It is a non-specific term that encompasses various psychological symptoms and can result from a variety of stressors or challenges in life. Psychological distress can manifest in different ways and may affect an individual's thoughts, feelings, and behaviors. Understanding and addressing psychological distress is an important aspect of mental health care, emphasizing the need for a holistic approach to well-being that considers both emotional and physical aspects of an individual's health. (Gift & DeVoss, 2008)



Psychological distress among caregivers can be influenced by factors such as the severity of cancer, the caregiving duration, and the availability of support systems. Witnessing the physical and emotional toll of cancer treatment on a loved one, coupled with the potential strain on personal and professional aspects of life, contributes to the overall burden on the caregiver's mental health. Recognizing and addressing psychological distress among caregivers is crucial for both the well-being of the caregiver and the quality of care provided to the breast cancer patient. Supportive interventions, such as counseling, caregiver education programs, and respite care, play a vital role in mitigating distress and enhancing the overall caregiving experience. Australian Ovarian. (2011)

Psychological distress encompasses a range of cognitive and emotional symptoms that indicate mental strain. This can involve feelings of overwhelm, difficulty concentrating, changes in thought patterns, or persistent negative thoughts. It serves as a barometer for the strain experienced in the mind, reflecting feelings of anxiety, sadness, or a sense of being overwhelmed. Unlike diagnosable mental health disorders, psychological distress is often a transient state, influenced by external stressors or internal struggles Kessler, R. C., et al. (2003).

Psychological distress can be prompted by a myriad of factors, including life stressors, chronic health conditions, relationship challenges, or exposure to trauma. Biological factors, such as genetic predispositions and neurochemical imbalances, can also contribute. The interplay of these elements underscores the complex tapestry of psychological distress, making it a dynamic and individualized experience. Kessler, R. C., et al. (2003).

Individuals experiencing psychological distress may undergo intense and negative emotions. These can include feelings of sadness, anxiety, fear, irritability, or a sense of hopelessness.

Distress often affects an individual's thought processes. This may involve persistent worrying, difficulty concentrating, negative self-talk, or intrusive thoughts. Addressing psychological distress often involves a combination of self-care strategies and seeking support. Talking to friends, family, or mental health professionals, engaging in stress-reducing activities, and adopting healthy lifestyle practices can contribute to managing distress. In some cases, when distress becomes more severe or persistent, professional mental health interventions such as psychotherapy or counseling may be recommended. Understanding psychological distress as a part of the human experience and recognizing its contributing factors are crucial steps in promoting mental health awareness and fostering supportive environments for individuals facing challenges. (WHO, (2021)

The psychological distress that develops in patients, their families, or even healthcare professionals who work in a hospital setting is frequently referred to as "hospital anxiety". Hospital anxiety must be recognized and treated since it affects patients' general wellbeing, the effectiveness of their treatments, and their satisfaction with the healthcare system. Hospital anxiety can be controlled and reduced by a variety of therapies, including informational support, counselling, emotional support, and relaxation techniques. (Kessler et al., 2010).

## **Depression**

Depression is a pervasive mental health disorder characterized by persistent feelings of sadness, hopelessness, and a lack of interest or pleasure in daily activities. It affects the way a person thinks, feels, and handles daily activities, making even routine tasks challenging. Depression is a common and serious medical condition that can negatively impact an individual's overall well-being and quality of life. Sherwood, P. (2012)

Depression is a complex mental health disorder characterized by persistent feelings of sadness, hopelessness, and a lack of interest or pleasure in daily activities. It is a prevalent and disabling condition that affects individuals of all ages, genders, and backgrounds. The World Health Organization (WHO) estimates that more than 264 million people worldwide suffer from depression, making it a leading cause of disability globally. (WHO, 2021).

Depression, a prevalent mental health disorder, transcends beyond mere feelings of sadness and encompasses a spectrum of symptoms that significantly impact an individual's thoughts, emotions, and behaviors. As a complex and multifaceted condition, depression poses considerable challenges to both affected individuals and the broader society. This detailed note aims to provide an in-depth understanding of depression, including its key features, types, causes, risk factors, and available treatments. Zhang, L., & Mood, D. W. (2010)

Understanding the origins of depression requires consideration of a combination of biological, psychological, and environmental factors. Biological factors include

abnormalities in neurotransmitter function, genetic predisposition, and structural brain changes. Psychological factors encompass experiences of trauma, chronic stress, and negative thought patterns. Environmental factors involve adverse life events, a history of abuse, or a family history of depression. Often, the interplay of these elements contributes to the onset and persistence of depression. Zhang, L., & Mood, D. W. (2010)

Depression can significantly impact various aspects of an individual's life, including their relationships, work, and physical health. It often coexists with other medical conditions, complicating the overall health picture. The exact causes of depression are multifaceted and involve a combination of genetic, biological, environmental, and psychological factors.

The symptoms of depression can vary widely, but commonly include feelings of sadness or emptiness, changes in appetite and sleep patterns, fatigue, difficulty concentrating, and thoughts of self-harm or suicide. It is essential to recognize the signs and seek professional help, as depression is a treatable condition with various therapeutic approaches, including psychotherapy, medication, and lifestyle changes. (Kessler et al., 2003).

Depression among caregivers of breast cancer patients is a multifaceted phenomenon influenced by various factors. Witnessing the physical and emotional challenges faced by the patient, dealing with the uncertainties of treatment outcomes, and managing the logistical aspects of caregiving contribute to the overall burden on the caregiver's mental health. The symptoms of depression in caregivers may include persistent sadness, feelings of hopelessness, changes in appetite and sleep patterns, fatigue, and a

diminished interest in activities. These symptoms not only affect the caregiver's quality of life but can also impact the quality of care provided to the individual with breast cancer. (Psychological Bulletin, 1999)

Recognizing and addressing depression among caregivers is crucial for the well-being of both the caregiver and the patient. Supportive interventions, such as counseling, psychoeducation, and respite care, can play a pivotal role in alleviating depressive symptoms and promoting the mental health of caregivers. (Kessler et al., 2003).

Above mentioned variables highlight a wide range of emotional and psychological symptoms that signify a person's subjective feeling of discomfort, agony, or mental suffering are referred to as psychological distress (Ridner, 2004). It frequently results in substantial emotional strain or a decline in day-to-day functioning. Anxiety, despair, irritability, mood fluctuations, feelings of helplessness, loss of interest or enjoyment in activities, problems concentrating, sleep disruptions, and changes in appetite are just a few of the symptoms that might appear when someone is experiencing psychological distress.

Mental Health Conditions such as anxiety disorders, depressive disorders, post-traumatic stress disorder (PTSD), obsessive-compulsive disorder (OCD), and other psychiatric illnesses can cause significant psychological distress (Gordon & Brandish, 2016). However, psychological distress can result from a variety of factors. Psychological discomfort can be brought on by life stressors and challenging events like the death of a loved one, money troubles, marital problems, work-related stress, trauma, or significant life transitions, and long-term illness or pain due to the emotional strain and negative effects on their quality of life, people who are managing chronic physical illnesses, chronic

pain conditions, or disabling diseases may experience psychological distress. *Journal of Clinical Oncology*, 25(30)

## **Literature review**

Depression, hospital anxiety, and psychological distress are interrelated factors that are crucial to comprehending and treating mental health issues. Throughout their course of treatment and recovery, cancer patients frequently need a lot of care and assistance. This care can be provided by many different carer types, and these caregivers' psychological health may be impacted in many ways. Here are a few frequent sorts of breast cancer patients' caregivers and potential impacts on their psychological wellbeing. Given, B., Wyatt, (2009)

Breast cancer is extremely common and very worrying experience for numerous females every year in developing and developed countries. Psychological research has given an image of the emotional and community impact of breast cancer on females' lives, and of factors linked with better versus worse amendment. Psychosocial mediations have been helpful in reducing patients' grief and improving their life quality. Current study also recommends that psychological aspects might be associated with potentially significant biological ailment linked processes. Additionally, to giving an idea of the psychological aspects in breast cancer, investigation in this vicinity has given a foundation for further studies on adjustment to health-related nervous tension in common. Mood, D. W. (2010)

Family members frequently provide care for breast cancer patients, including spouses, parents, siblings, and grown children. They could feel a variety of things while

giving care, such as tension, anxiety, despair, and guilt. The duties of providing care can be emotionally and physically taxing Mood, D. W. (2010)

Caring for individuals with breast cancer is a significant responsibility that can have a profound impact on caregivers. Research has explored the experiences, challenges, and needs of caregivers of breast cancer patients.

According to the World Health Organization (WHO), enhancing breast cancer outcome and survival by early detection remains the foundation of breast cancer regulations. Different modern medicines are prescribed to treat breast cancer. Medical therapy of breast cancer with antiestrogens such as raloxifene or tamoxifen might avoid breast cancer in individuals who are at increased possibility of developing it Surgery of both breasts is an added preventative measure in some increased probability of developing cancer in female. In patients who have been identified with breast tumor, different strategies of management are used such as targeted therapy, hormonal therapy, radiation therapy, surgery and chemotherapy. In individuals with distant metastasis, managements are typically aimed at enhancing life quality and survival rate. The unpleasant side effects of breast cancer treatment are one of the most motivating factors to find some alternative methods. The use of herbs for treating the patients having breast cancer is considered a natural alternative, because some plants may contain properties that naturally have the ability to treat breast cancer (Bailey, 1984)

Friends and family members enjoy Cancer sufferers' close friends and loved ones may also take on caregiving responsibilities. They could encounter the same emotional difficulties and psychological suffering as family members (Bailey, 1984). They might

have trouble finding a balance between their caregiving responsibilities and other elements of their lives, which could put them under more stress and have a bad effect on their mental health.

Professional caretakers are essential in providing cancer patients with specialized care, including nurses, home health aides, and hospice staff. Although these caregivers are prepared to help patients' physical and emotional needs, they may nevertheless encounter substantial difficulties in coping with the stress of their jobs (Walshe & Luker, 2010). Compassion fatigue, emotional tiredness, and an increased chance of developing cancer can result from seeing the suffering and loss suffered by cancer patients lead to compassion fatigue, emotional exhaustion, and a higher risk of psychological issues such as depression and anxiety.

Despite extensive research on depressive symptomatology in those who care for breast cancer patients, little is known about depressive disorders. We conducted a thorough review of the literature and included studies looking at breast cancer patients' carer that reported the prevalence of major depressive disorder in accordance with diagnostic criteria as determined by a standardized psychiatric diagnostic interview. These studies were found in the major bibliographical databases (Medline, Psychinfo, Dissertation Abstracts). There were ten studies found with a total of 790 caregivers (sample sizes: 22–147). A representative community sample was only used to one study. Snaith, R. P. (1983)

A total of 176 participants (22.3%) (prevalence range: 0.15–0.32) had a depressive condition. In other studies, reporting distinct prevalence rates for men and women, men were found to have slightly lower prevalence rates than women. In other research, a control



group (largely matched) and caregivers were contrasted. The relative odds of caregivers developing a depressive disorder ranged from 2.80 to 38.68; all RRs were statistically significant. There were three prospective studies that revealed rather high incidence rates (0.48). This study established the increased prevalence and incidence of depressive disorders in cancer patients' caregivers. Rahbar, M. (2004)

The prevalence of depression among cancer patient caregivers was found to be generally high, according to the analysis of 35 research comprising 11,396 participants. Studies that used cross-sectional data, as opposed to those that used longitudinal data, specifically revealed a higher prevalence of depression. Additionally, compared to male caregivers, female caregivers had a higher risk of depression. Another study found that anxiety and despair affected about one-third of participants, including cancer survivors and family caregivers. Within patient-caregiver couples, the correlation between anxiety and depression ranged from 0.25 to 0.32.

The association between anxiety and depression in these pairings was influenced by a number of variables, including the characteristics of the persons with cancer, the family caregivers, and family dynamics. Within patient-caregiver pairings, the general quality of life was impacted to some extent by both the person who was experiencing anxiety and depression and their spouse (Li et al., 2018). In addition, caregivers who supported cancer patients reported higher-than-average levels of stress, anxiety, and sadness. The gender, age, and relationship of the carer to the patient, as well as the family's financial situation, religious convictions, and length of caregiving, all had an impact on how severe these problems were (Bedaso et al., 2022). The multiple regression analysis found that age and religious belief were significant predictors of stress, economic status

predicted sadness, and age predicted anxiety (Xu et al., 2020). The Beck Depression Inventory (BDI) scores of caregivers who looked after men were substantially higher than those of caregivers who looked after women. Compared to individuals who did not receive support with caring, caregivers who did so had statistically lower mean scores on the BDI. Cognitive flexibility, strain, and a lack of social support were all predictors of caretaker's depression (Karabekiroglu et al., 2018).

Over the past 20 years, numerous studies<sup>19,68</sup> have documented caregivers' need for education and support and the stress they often experience as they provide care to patients with cancer. At present, there is no systematic way to ensure that caregivers have access to what they need to help them provide high-quality patient care. In addition, there is no one on the health team who oversees caregivers' ability to provide care. For caregivers to administer medications, deal with anxiety and depression, perform daily home treatments (e.g., dressings, catheters, injections), and adhere to complex treatment schedules, they need timely access to information, resources, educational programs, and support to maximize their knowledge and skills (Palliat Nurs 10:58- 65, 2004)

These caregiver champions would review existing evidence-based programs for caregivers or patient-caregiver dyads and then implement interventions that are most relevant for caregivers in their setting. Third, clinicians need to refer caregivers and patients to established organizations, such as the Cancer Support Community, which offer psychosocial care in many communities at no cost, and to Cancer Care, which provides free telephone counseling with oncology social workers and a multitude of web-based services for patients and caregivers. Finally, oncology professionals and their organizations need to partner with organizations such as the Rosalynn Carter Institute for Caregiving, the

National Alliance for Caregiving, NCI, and ACS to advocate for policy changes that can improve caregivers' quality of life and the quality of care they provide to patients with cancer. (S, Langbecker D, et al 2007)

Research shows that psychological distress among caregivers, as assessed by the HADS, may manifest in symptoms such as persistent worry, difficulty concentrating, changes in sleep patterns, and feelings of sadness or hopelessness. These symptoms not only impact the caregiver's own quality of life but can also influence the effectiveness of the care provided to the cancer patient. Rahbar, M. (2004)

Research has consistently shown that caregiving can lead to high levels of stress and emotional burden. Studies like Pearlin et al. (1990) and Schulz & Sherwood (2008) have highlighted the negative impact of caregiving on the mental and physical health of caregivers. Several studies have explored the concept of caregiver burnout, characterized by emotional exhaustion, depersonalization, and reduced personal accomplishment. Maslach and Jackson (1981) introduced the concept of burnout, which has been applied to caregiving contexts.

Research has shown that caregiving roles are often disproportionately assumed by women. Studies like Pinquart and Sörensen (2006) have explored gender differences in caregiving responsibilities and the impact on caregiver well-being (Pinquart, M., & Sörensen, S. (2006).

Approximately 87.8% of caregivers in a 2018 study by Majeed et al. were between the ages of 11 and 16 years, and a sizable majority (94.6%) had assistance from another carer. Over 95% of caregivers reported having anxiety symptoms, with female caregivers

having a higher incidence. 73% of the caretakers had low monthly incomes, compared to 22.9% who had middle incomes or more. Anxiety and depressive symptoms were more prevalent in caregivers with low income, with 70% of them reporting having them. Young adults between the ages of 17 and 18 expressed less anxiety (10.9%) than their younger colleagues. Two caregivers (67.5%), three caregivers (16.2%), and four caregivers (4 caregivers) all had lower reported levels of anxiety and depression. Higher symptom frequency was associated with longer hospital admissions, however this association disappeared after 5 weeks. In another study, there were 167 males and 133 women caregivers, with an average age of . Significant numbers of caregivers (46.3%), (53%), and (30.7%) reported feeling extremely depressed, anxious, and burdened.

Significant predictors of caregiving burden included factors like the patient's age, receiving outpatient care, retirement, depression, having supplemental health insurance, being illiterate, undergoing surgery, having an Eastern Cooperative Oncology Group (ECOG) performance status of 1, and caregiving for 24 months or more (Moghaddam et al., 2023).

The characteristics of patients and caregivers strongly predicted caregiving anxiety and depression in the multiple regression analyses. 39% of the variance in sadness and 48% of the variance in anxiety were both explained by the model. According to Govinda et al. (2019), female caregivers, those who care for male lung breast cancer patients, those who don't undergo surgery, those who live with the patient, those who are younger, those who use private transportation to the hospital, those who have prior caregiving experience, and those who perceive a greater degree of overall burden are common characteristics of caregivers who experience higher levels of anxiety and depression. 16.5% of the study's

participants said they had experienced psychological anguish. Education level and the kind of help received were found to be important characteristics connected with psychological discomfort among caregivers, according to the mean score for negative emotions. Another study undertaken (Long et al., 2020) also demonstrated strong relationships between the level of psychological distress among caregivers and gender, occupation, financial hardship, treatment belief, and social support. Previous studies have repeatedly demonstrated that cancer patients' caregivers frequently feel high levels of anxiety and sadness.

The prevalence of depression and anxiety among family caregivers of cancer patients was found to be 42.3% and 46.56%, respectively, in a study by Geng et al. (2018). Other studies have identified a number of variables that are linked to carer depression and anxiety, including patient characteristics like age, gender, symptoms, recurrence, caregiving burden, and quality of life, as well as carer characteristics like age, sex, education level, occupation, relationship to the patient, and self-efficacy. These studies (Lee et al., 2013; Park et al., 2013; Rhee et al., 2008; Katende and Nakimera, 2017; Tang et al., 2007; Dumont et al., 2006; Given et al., 2004) show the complexity of the causes causing psychological distress among caregivers of cancer patients. When taking on the task of caring, informal caregivers frequently encounter major psychological obstacles, such as depression and carer burden, according to the findings of another study (Papastavrou et al., 2012).

## **Theoretical framework**

### ***Transactional Model***

The framework of stress and coping theories, as well as the transactional model of stress and coping developed by Lazarus & Folkman in 1987 can be used to understand the relationship between psychological discomfort and hospital anxiety and depression among caregivers of cancer patients. These ideas provide as a framework for comprehending caregivers' psychological experiences and how they connect to their levels of anxiety and depression.

According to stress and coping theories, people get stressed when they sense a threat or an imbalance between the demands that are being made of them (stressors) and their capacity to handle those demands (coping resources). Caregivers of cancer patients frequently deal with a variety of stressors, such as seeing their loved ones suffer, handling challenging medical conditions, and enduring disruptions in their own life (Lazarus & Folkman, 1987).

Theories of stress and coping suggest that caregivers' psychological suffering, such as depression and anxiety, can be viewed as a reaction to the pressures they face. The difficulty in adjusting to the changes and uncertainties that cancer brings to their lives, as well as the mental strain and load connected with caregiving responsibilities, are the causes of the distress.

Anxiety and depression are examples of emotional and psychological symptoms that are referred to as psychological distress. Due to the long-term and difficult nature of caregiving, the emotional toll of seeing their loved ones suffer, and the uncertainty surrounding the illness and its treatment, caregivers may experience elevated levels of distress.

Specific types of psychological distress encountered by caregivers in a hospital setting include hospital anxiety and sadness. Due to the mental stress and difficulties, they have managed their caregiving responsibilities in the hospital setting, caregivers may experience anxiety and depression. The hospital environment can be overwhelming.

In order to explain health and illness, this model takes into account how biological, psychological, and social elements interact. Biological factors, such as genetic predispositions and physiological reactions to stress, psychological factors, such as cognitive appraisals and coping mechanisms, and social factors, such as social support, caregiving demands, and cultural influences, can all have an impact on the psychological distress of caregivers.

### **Rationale**

Quality of Patient Care, which can be affected by caregivers' psychological discomfort, can affect the standard of care givers to breast cancer patients. High levels of anxiety and despair can make it difficult for caregivers to support and help patients manage their illnesses. Designing treatments can be made easier for healthcare practitioners by comprehending the effects of carer distress on patient care. It is crucial to explore the connection between caregivers of breast cancer patients' psychological discomfort and their hospital anxiety and depression for a number of compelling reasons. (Kitrungle, Luppana, and Marlene Z. Cohen. 2006.)

Impact on Carer Well-Being: Cancer patients' caregivers frequently endure high levels of psychological discomfort, including depressive and anxiety symptoms. Their mental health may suffer as a result of the stress and the strain of providing care.

Understanding the connections between psychological discomfort and hospital anxiety and depression can shed light on the causes of carer distress and point to potential treatment options .( Kitrungrrote, Luppana, and Marlene Z. Cohen. 2006.)

Caregivers often act as intermediaries between patients and healthcare providers, facilitating communication and ensuring that patients fully understand their treatment options, side effects, and prognosis Caregiver involvement extends beyond the treatment phase, as they provide ongoing support during survivorship. This support can be instrumental in helping survivors navigate the physical and emotional challenges that may persist after treatment (Kitrungrrote, Luppana, and Marlene Z. Cohen. 2006.)

In summary, research conducted over the years has consistently highlighted the essential role of caregivers in the care of breast cancer patients. Their involvement is associated with improved patient outcomes, reduced healthcare costs, enhanced quality of life, and support for patients' psychological needs. Recognizing and supporting caregivers as integral members of the cancer care team is essential for providing comprehensive and patient-centered care to individuals facing a cancer diagnosis.

### **Objective**

- To find out the relationship between psychological distress, hospital anxiety and depression among care giver of breast cancer patient
- To study the role of demographic variables (age, gender, relationship to patient, and caregiving duration) among psychological distress, hospital anxiety and depression among care giver of breast cancer patient



## **Hypotheses**

- There will be a significant relationship between psychological distress and hospital anxiety and depression among caregivers of breast cancer patients.
- There will be significant difference in demographic variables (age, gender, relationship to patient and caregiving duration) in psychological distress, hospital anxiety and depression among caregivers of breast cancer patients.

## **Chapter 2**

### **Method**

#### **Research design**

This study will adopt a correlational design to assess the relationship between psychological distress and hospital anxiety and depression among caregivers of cancer patients.

#### **Population and sample**

The population selected was caregivers of breast cancer patients. The sample was selected from local hospitals and support organizations.

#### **Sampling technique**

A purposive sampling method has been used to recruit caregivers of breast cancer patients from local hospitals and cancer support organizations. Total sample size was 70.

### ***Inclusion criteria***

For the purpose of this study the sample selected was individuals aged 18 years to 49 aged care givers who are living with breast cancer patient in hospitals

### ***Exclusion criteria***

Individuals who are not currently caregivers of cancer patients and minors under the age of 18 are excluded

### **Instruments**

#### ***Kessler Psychological Distress***

The Kessler Psychological Distress Scale (K10) is a widely used self-report questionnaire designed to measure an individual's level of psychological distress or mental health symptoms over a specific period. It was developed by Dr. Ronald C. Kessler and his colleagues in the 1990s and has since become a valuable tool in assessing mental health and emotional well-being the total reliability of k10 was 0.844

The K10 consists of 10 questions, each of which assesses the presence and severity of various emotional and psychological symptoms that may indicate distress. Respondents are typically asked to rate the frequency of experiencing each symptom during the past 30 days on a scale that ranges from 1 (none of the time) to 5 (all of the time).

#### ***Hospital Anxiety and Depression Scale (HADS)***

The Hospital Anxiety and Depression Scale (HADS) is a self-report questionnaire designed to assess and measure the levels of anxiety and depression in individuals,

especially those who are patients in a hospital setting. The HADS was developed by Zigmond and Snaith in the late 1970s and has become a widely used tool in healthcare and clinical research.

The HADS consists of 14 questions, with seven questions dedicated to assessing anxiety symptoms and another seven questions for assessing depression symptoms. Respondents are asked to indicate how they have been feeling over a specified time frame, often the past week, by choosing one of four response options for each question. The response options are typically scored on a scale ranging from 0 to 3, with 0 indicating the absence of the symptom and 3 indicating a high level of the symptom. The total score for each subscale (anxiety and depression) can indicate a significant correlation with both the anxiety (0.73) and depression (0.77) range from 0 to 21, with higher scores indicating higher levels of anxiety or depression.

## **Procedure**

Participants were selected from Rawalpindi and Islamabad through purposive sampling. The sample size will be determined using power analysis to ensure sufficient statistical power. A consent form will be signed by the participants, they will be informed about the objectives and purpose of the study beforehand and will be given the right to withdraw from the study at any time. They will also be informed of their confidentiality rights. Afterward, they will be asked to fill out the given questionnaire.

## **Ethical consideration**

APA guidelines were followed to conduct this research. An approval was obtained from CUST. Participants' identities were kept anonymous, and their confidentiality was

assured. Participants were briefed about the purpose of the study, and they received their rightful benefits. Any personal information received was kept hidden, unless it was deemed necessary to be shared solely for research purposes. After the research, participants were debriefed properly where they were able to explain the study's objectives, address any concerns, and ensured participants' well-being. The findings were accurately reported and selective reporting or manipulation of data was avoided to fit the desired outcomes.

### **Proposed data analysis**

Data will be analyzed through the Statistical Package of Social Sciences (SPSS, version 21). The correlational analysis will be used to investigate the relationship between variables. T-test and ANOVA will be used to find out the role of demographic variables. T-test is used for relationships with patient (do you have close relation with patient or not) and ANOVA is used for age.

## **Chapter 3**

### **Results**

This study aimed to find out the relationship between Psychological distress, Hospital anxiety and depression among caregivers of breast cancer patient. The data has been collected from the hospitals of Islamabad and Rawalpindi and was analyzed through descriptive and inferential statistics includes, mean, median, mode, and frequency statistics for demographic variables and also calculate the reliability and Spearman correlation of variable (Psychological distress and Hospital anxiety and depression) here spearman correlation was used because the Kolmogorov value for scales showing non-normal distribution as it is significant value was ( $p < .05$ ) while considering the values of skewness and kurtosis and the shape of the histogram as well and to check the effect of gender, age, duration and relation with patient Mann-Whitney and Kruskal-Wallis analysis was used.

**Table 1***Demographic Characteristics of the Participants (N=70)*

<b>Variables</b>	<b>Categories</b>	<i>F</i>	<b>%</b>
<b>Gender</b>	Male	29	41.4
	Female	41	58.6
<b>Age</b>	20 – 25	21	30.0
	26 – 30	21	30.0
	31– 45	20	28.6
	46-50	8	11.4
<b>Relation with patient</b>	Spouse	6	8.6
	Parents	15	21.4
	Siblings	11	15.7
	Other family member	28	40.0
	Friends	10	14.3
<b>Duration of care</b>	0 to 6 month	22	31.4
	6 months to 2 years	14	20.0
	2 years to 5 years	28	40.0
	5 years and beyond	6	8.5

*Note:* f=frequency and % = Percentage

In this study, a diverse group of caregivers was examined based on various demographic characteristics. The majority of caregivers identified as female (58.6%), while 41.4% identified as male. Regarding age distribution, participants were fairly evenly distributed across three age groups: 20-25 years (30.0%), 26-30 years (30.0%), and 31-45 years (28.6%). A smaller proportion of caregivers fell into the age categories of 46-50 years (11.4%).

In terms of the relationship with the patient, the caregiver roles varied, with the largest percentage being other family members (40.0%), followed by parents (21.4%), siblings (15.7%), friends (14.3%), and spouses (8.6%).

Duration of care also demonstrated variability, with caregivers reporting diverse time commitments. The majority of caregivers had been providing care for 2 years to 5 years (40.0%), followed by 0 to 6 months (31.4%), 6 months to 2 years (20.0%), and 5 years and beyond (8.5%).

**Table 2**

*Descriptive, Reliability Analysis and Cronbach's Alpha Relationship with Mean and Standard Deviation of the Scale (N=70)*

Variables	$\alpha$	Mean	SD	Range		Skewness	Kurtosis
				Actual	Potential		
THAD	0.88	34.7	6.70	14-56	27-49	0.31	-1.46
TKS	0.80	25.3	7.50	10-50	11-44	-0.08	-0.95

*Note: SD = standard deviation,  $\alpha$  = alpha reliability, Thad = Hospital anxiety and depression and TKS=Kessler distress scale*

Table 2 presents the results of a descriptive analysis, reliability analysis, and the relationship between Cronbach's alpha, mean, and standard deviation for two variables, Hospital anxiety and depression and the Kessler distress scale. The study involved a sample size of N=70. For the Hospital anxiety and depression variable, Cronbach's alpha reliability coefficient is reported as 0.88, indicating a high level of internal consistency. The mean score for Hospital anxiety and depression is 34.7 with a standard deviation of 6.70. The skewness is 0.31, suggesting a slightly positively skewed distribution, while the kurtosis is -1.46, indicating a platykurtic distribution.

Turning to the Kessler distress variable, the reliability coefficient ( $\alpha$ ) is reported as 0.80, suggesting good internal consistency. The mean score for the Kessler distress scale is 25.3, and the standard deviation is 7.50. The skewness is -0.08, indicating a near-normal distribution and the kurtosis is -0.95, reflecting a slightly platykurtic distribution.



**Table 3**

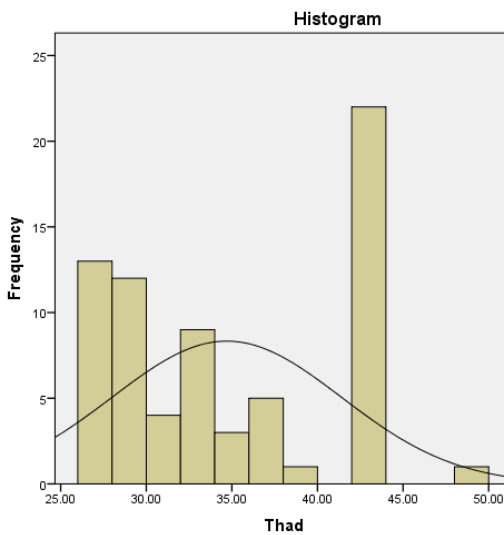
*Median, Mode, and Kolmogorov-Smirnov test statistics of the Hospital anxiety and depression and Kessler distress scale*

Variables	Mode	Median	K-S
THAD	43	33	0.22
TKS	30	27	0.12

*Note: Thad = Hospital anxiety and depression and TKS=Kessler distress scale*

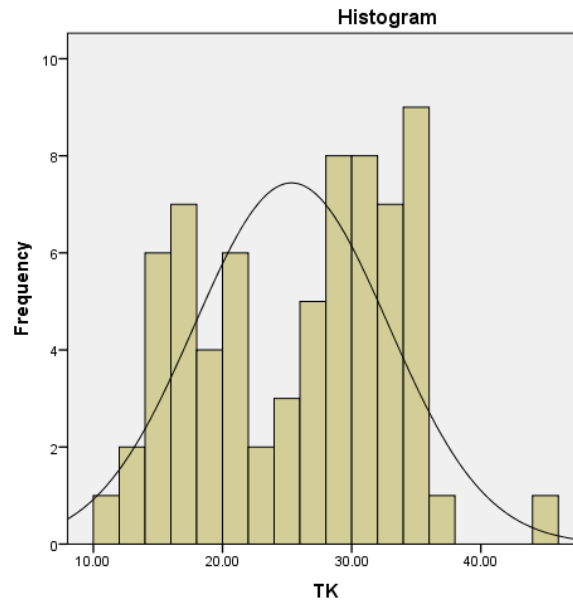
Table 3 shows the K-S value for Hospital anxiety and depression and the Kessler distress scale were non-normal distribution as it is significant value was ( $p < .05$ )

The data is normally distributed because the graph exhibits a symmetrical, bell-shaped.



***Figure 1*** Histogram Hospital anxiety and Depression Scale

The data deviates from a normal distribution due to its skewed shape, as indicated by the histogram.



***Figure 2*** Histogram of Kessler Distress Scale

The data deviates from a normal distribution due to its skewed shape, as indicated by the histogram

**Table 4**

*Correlation of Hospital anxiety and depression and Kessler distress scale, (N=70)*

<b>Variables</b>	<b>1</b>	<b>2</b>
<b>1. THAD</b>	-	-
<b>2. TKS</b>	-	.93**

*Note: Thad = Hospital anxiety and depression and TKS=Kessler distress scale*

Table 4 presents the one-tailed correlation coefficients exploring the associations among Hospital anxiety and depression and Kessler distress scale. The correlation coefficient between Hospital anxiety and depression and Kessler distress scale was 0.93\*\*. The positive correlation coefficient indicates a strong positive relationship between Hospital anxiety and depression and Kessler scale. The findings suggest that there is a high tendency for higher scores on the Hospital Anxiety and Depression scale to be associated with higher scores on the Kessler Distress Scale.

**Table 5**

*Mann-Whitney U- Test Values for Scales in Gender (N=350)*

Note: M = Mean, U  
= Mann-Whitney,  
P= Significance  
value,

	Male		Female		U
	N	M	N	M	
For the					
Hospital Anxiety					
and Depression					
THAD	29	34.4	41	36.28	562.500
TKS	29	35.02	41	35.84	580.500

(THAD) scale, the mean score for males (M = 34.4) was compared to the mean score for females (M = 36.28). The Mann-Whitney U-statistic was calculated as 562.500, and the resulting p-value was .698. This non-significant result ( $p > 0.05$ ) suggests that there is no statistically significant difference in Hospital Anxiety and Depression scores between male and female participants in this study.

Turning attention to the Kessler Distress Scale (TKS), the mean score for males (M = 35.02) was contrasted with the mean score for females (M = 35.84). The Mann-Whitney U-statistic for TKS was calculated as 580.500, resulting in a non-significant outcome (U = .867) with a p-value exceeding 0.05. These findings imply an absence of statistically significant gender-based variations in Kessler Distress Scale scores in this particular sample.

**Table 6***Kruskal Wallis Test on The Demographic “Age”*

Variable	Age				Df	X <sup>2</sup>	P
	20-25	26-30	31-45	46-50			
	(21)	(21)	(20)	(8)			
THAD	33.38	36.79	34.53	40.13	3	.797	0.85
TKS	32.81	34.83	36	43.06	3	1.521	0.67

*Note df = \*p>0.05, x2 = chi square, Thad = Hospital anxiety and depression and TKS=Kessler distress scale*

For the THAD scale, the mean scores across the age groups were as follows: 33.38 for ages 20-25, 36.79 for ages 26-30, 34.53 for ages 31-45, and 40.13 for ages 46-50. The Kruskal-Wallis test yielded a chi-square statistic of .797 with 3 degrees of freedom, resulting in a non-significant p-value of 0.85. These findings indicate that there are no statistically significant differences in THAD scores across the specified age groups.

Turning to the Kessler Distress Scale (TKS), mean scores for the age groups were 32.81 for ages 20-25, 34.83 for ages 26-30, 36 for ages 31-45, and 43.06 for ages 46-50. The Kruskal-Wallis test produced a chi-square statistic of 1.521 with 3 degrees of freedom, resulting in a p-value of 0.67. While the p-value exceeds the conventional significance threshold of 0.05, the relatively low value suggests a marginal trend toward significance. It is crucial to interpret this cautiously, acknowledging that the result does not reach conventional statistical significance.

**Table 7**

*Kruskal Wallis Test on the Demographic ‘‘relation’’*

Variable	Relation					df	X <sup>2</sup>	P
	Spouse	Parents	Siblings	Others	Friends			
	(6)	(15)	(11)	(28)	(10)			
THAD	22.67	32.23	32.91	39.11	40.85	4	4.676	.322
TKS	34.7	29.7	35.0	38.8	35.5	4	5.754	.218

*Note df = \*p>0.05, x2 = chi square, Thad = Hospital anxiety and depression and TKS=Kessler distress scale*

For the THAD variable no, significant differences were observed across the relationship categories ( $\chi^2(4) = 4.676$ ,  $p = .322$ ). Post hoc analyses would be required to determine specific group differences. This result suggests that there are no statistically significant variations in Hospital Anxiety and Depression scores among individuals with different relationship types. The mean ranks for THAD scores vary across categories, with Spouse having the lowest mean rank (22.67) and Friends having the highest mean rank (40.85).

Conversely, when examining the TKS variable, the Kruskal-Wallis test did not reveal significant differences across relationship categories ( $\chi^2(4) = 5.754$ ,  $p = .218$ ). This implies that there are no statistically significant variations in Kessler Distress Scale scores among individuals with different relationship types. The mean ranks for TKS scores show relatively consistent patterns across the relationship categories, with no clear disparities.

**Table 8**

*Kruskal Wallis Test on the Demographic “duration”*

Variable	Duration				df	X <sup>2</sup>	P
	0-6m	6m-2y	2-5y	5&beyond			
	(22)	(14)	(28)	(6)			
THAD	33.95	45.96	32.95	28.67	3	5.115	.164
TKS	34.30	45.36	34.14	23.25	3	5.713	.126

Note df = \*p>0.05, X<sup>2</sup> = chi square, *Thad* = *Hospital anxiety and depression and*

*TKS*=*Kessler distress scale*

For the THAD scores, the median scores for each duration category were as follows: 0-6 months (33.95), 6 months to 2 years (45.96), 2-5 years (32.95), and 5 years and beyond (28.67). The Kruskal-Wallis chi-square statistic was calculated as 5.115 with 3 degrees of freedom. However, the associated p-value (.164) was greater than the conventional significance level of 0.05, indicating a lack of statistical significance. Therefore, there is no compelling evidence to suggest that the duration variable significantly influences THAD scores in this study.

Similarly, for the Kessler Distress Scale (TKS), the median scores for the different duration categories were: 0-6 months (34.3), 6 months to 2 years (45.36), 2-5 years (34.14), and 5 years and beyond (23.25). The Kruskal-Wallis chi-square statistic for TKS was 5.713 with 3 degrees of freedom, and the associated p-value was .126. Once again, the p-value exceeded the conventional threshold of 0.05, indicating a lack of statistical significance. Therefore, the duration variable does not appear to exert a statistically significant influence on Kessler Distress Scale scores in this particular study.

## **Discussion**

The aim of this study was to find out the relationship between psychological distress, hospital anxiety and depression among the caregivers of breast cancer patients. The results tabulated in tables 4, 5, 6, 7 and 8 provide empirical evidence that supports or refutes the claims of the study.

The primary objective of this study is to investigate the correlation between psychological distress, hospital anxiety, and depression among caregivers of breast cancer patients. The results, as outlined in Table 4, support this objective by showing a strong positive correlation among these variables. In simpler terms, our findings indicate that as psychological distress increases in caregivers of breast cancer patients, so does hospital anxiety and depression.

This observation aligns with existing research. This study and others have consistently reported elevated rates of anxiety and depression among individuals fulfilling the role of caregivers. The implication drawn from these collective findings is that depression and anxiety are prevalent within the caregiver population (Al-Zahrani et al., 2015).

The results in Table 4 back up the first hypothesis which suggests that “There's a significant positive correlation between psychological distress, hospital anxiety and depression”. The results found a strong link—when caregivers felt more psychologically stressed, their anxiety and depression levels were higher. This matches findings from other



both anxiety and depression, and this is also tied to the distress felt by the people they're taking care of (El-Jawahri et al., 2021).

The prevalence of psychological distress, anxiety and depression can be high to certain influences, the cases that exist are also due to not receiving proper psychological treatment or having access to counselling or therapy (Pascoe et al., 2000). It is important to note that depression among caregivers can be influenced by the Quality of Life they are receiving. Depression among caregivers is more prevalent if the quality of life is low (Jeyagurunathan et al., 2017).

Another leading cause of psychological distress, anxiety and depression among caregivers is financial issues. Individuals who are not financially distressed have lower levels of psychological distress and anxiety, whereas individuals with financial issues tend to have higher psychological distress (Hou et al., 2020).

Understanding this relationship is crucial for finding ways to help caregivers facing the challenges of looking after breast cancer patients. It shows that there is a need to consider the complexity of psychological distress, hospital anxiety, and depression to provide effective support for caregivers.

The second objective of this study aimed to find the role of demographic variables, such as age, gender, relationship of the caregiver to the patient, marital status and caregiving duration in psychological distress, hospital anxiety and depression among caregivers of breast cancer patients. The findings presented in Tables 5, 6, 7, and 8 offer evidence that contradicts this objective. According to the results, the study did not find any significant differences in these variables based on caregivers' demographics.

Tables 5, 6, 7 and 8 provide refutable claims for the second hypothesis “There will be differences in gender, age, relationship of the caregiver to the patient, marital status, caregiving duration, and perceived support between psychological distress, hospital anxiety and depression among caregivers of breast cancer patients. The study set out to see if differences in factors like gender, age, relationship to the patient, marital status, how long someone has been caregiving, and the support they feel would lead to differences in how psychologically distressed, anxious, or depressed caregivers of breast cancer patients are. However, the results shown in these tables suggest that there were no significant differences in these aspects among caregivers based on the levels of psychological distress, hospital anxiety, and depression they experienced.

No gender differences were found in psychological distress, hospital anxiety and depression among caregivers of breast cancer patients. This finding is shown in Table 5. This suggests that the perception and experience of psychological distress, anxiety and depression is not different in the demographic of gender. Studies have shown that caregivers experience no gender difference in the amount of anxiety and depression they experience in the time spent caring, the amount of support they receive or the responsibilities they have to bear (Perz et al., 2011). No major demographic differences exist across different anxiety groups in terms of gender (Amanda et al., 2021)

The examination of age-related differences in psychological distress, hospital anxiety, and depression among caregivers of breast cancer patients gave important findings. Contrary to initial expectations and the second hypothesis suggesting potential age-related variations, the results, as evidenced in Table 6, revealed no significant

differences in psychological distress, hospital anxiety, and depression based on the age of the caregivers.

Differences in age can vary in terms of psychological distress and anxiety, studies show that the prevalence of anxiety compared to depression observe no age differences (Pouwels et al., 2016). Unlike depression, which tends to exhibit clear age-related patterns, anxiety doesn't show significant distinctions based on age (Silverstein, 1999). Most studies show a decrease in age related differences across age groups. This is either due to the patterns of depression in the demographic, or due to external variables affecting it. (Jorm, 2000).

This unexpected outcome challenges common assumptions about age playing a substantial role in the emotional well-being of caregivers. The lack of age-related distinctions implies that individuals across different age groups, when assuming the caregiving role for breast cancer patients, experience comparable levels of psychological distress, hospital anxiety, and depression. This finding underscores the importance of recognizing the universal challenges and emotional burdens faced by caregivers, irrespective of their age, and emphasizes the need for support strategies that address the diverse needs of individuals involved in caregiving duties for breast cancer patients.

The findings presented in Table 7 shed light on the relationship between caregivers and breast cancer patients. In analyzing the relationship between caregivers and patients, the study found no differences in psychological distress, hospital anxiety, and depression across various caregiver types, including spouses, parents, siblings, friends, and others. The lack of significance in the results suggests a consistency in how psychological distress is

experienced irrespective of the caregiver's relationship to the breast cancer patient. This means that caregivers go through emotional and mental challenges that go beyond how they're related to the patient.

Sociodemographic variables are not significant predictors of anxiety and depression in caregivers of ill patients. This suggests that how close the caregiver is to the patient doesn't strongly influence how stressed they feel (Sklenarova et al. 2015). This opens up possibilities to look more closely at the details of caregiving and how it affects mental health. This implies that factors such as age, gender, or socio-economic status, which often play pivotal roles in mental health outcomes, may not exert the same influence in the context of caregivers dealing with breast cancer patients.

Table 8 explores the duration of caregiving by caregivers of breast cancer patients in terms of psychological distress, hospital anxiety and depression. The results reveal that there is no significant difference based on the length of time individuals have been caregivers. This indicates that the emotional challenges such as psychological distress, hospital anxiety, and depression do not seem to change significantly over time for caregivers of breast cancer patients. The prevalence and frequency of anxiety and depression in caregivers has no difference in the duration they care for the chronically ill patients (Dura et al., 1991). Duration of caring is not associated with higher levels of anxiety (Copper et al., 2007).

The consistency in these variables implies that the prevalence and frequency of anxiety and depression among caregivers remain steady, regardless of the duration of their caregiving responsibilities. In simpler terms, whether someone has been a caregiver for a

short or long time, they are likely to experience similar levels of anxiety and depression when caring for individuals with chronic illnesses like breast cancer. This insight challenges common assumptions and emphasizes the need to look beyond the length of caregiving when understanding the mental well-being of those providing care to individuals with chronic illnesses.

## **Conclusion**

In conclusion, the discussion of this study has shed light on the complex relationship of psychological distress, hospital anxiety, and depression among caregivers of breast cancer patients. The study has uncovered a significant relationship between psychological distress, hospital anxiety and depression among caregivers of breast cancer patients. This underscores the impact that caregiving responsibilities can have on the mental well-being of individuals in this role. Notably, this study has revealed that certain demographic factors, such as age and gender, do not serve as differentiating factors in the experience of psychological distress, hospital anxiety, and depression among these caregivers.

Irrespective of the caregiver's relationship to the patient or the duration of caregiving, the findings indicate a surprising consistency in the prevalence of these emotional challenges. Whether caregivers are spouses, parents, siblings, friends, or have been in their role for a short or extended period, the emotional toll remains notably constant. This insight challenges assumptions and underscores the need for an in-depth understanding of the psychological distress, hospital anxiety and depression faced by caregivers of breast cancer patients. Regardless of differences in age, gender, relationship

to the patient, or the duration of caregiving, the emotional toll is a shared aspect of the caregiver experience.

### **Limitations**

Following are the limitations present in this study.

The results provided might not be universally applicable to every caregiver since individual experiences can differ due to various factors like cultural background, socioeconomic status, and the unique circumstances of caregiving.

The presented data captures a momentary glimpse at a specific time. Conducting longitudinal studies that follow caregivers over an extended duration would provide a more thorough insight into the evolution of their emotional well-being over time.

The emotional difficulties mentioned rely on self-reported measures, which are open to individual interpretation and perception. Increasing reliability could be achieved through the inclusion of objective measures or cross-referencing with additional data sources.

Although the study took into account age, gender, relationship to the patient, and the duration of caregiving, it did not investigate other pertinent demographic factors, such as educational background and employment status. A more thorough analysis would encompass a wider array of demographic variables.

The identified connections between caregiving factors and emotional distress do not imply causation. To delve into causal relationships and potential contributing factors more thoroughly, additional research is required.

The study might not be culturally specific enough, and cultural norms that could affect caregivers' emotional experiences may not have been explicitly covered in the data. To gain a more comprehensive understanding, a sample with greater cultural diversity would be necessary.

The research does not distinguish among different stages or types of breast cancer, and the emotional effects on caregivers could vary depending on the severity and specific characteristics of the patient's condition. A more thorough investigation into these elements would enhance the understanding with greater detail.

The study does not thoroughly investigate the wide array of coping mechanisms utilized by caregivers. Gaining insight into how individuals manage emotional challenges could offer valuable perspectives on the efficacy of different coping strategies and guide the development of supportive interventions.

## **Implications**

This research study highlights the importance of creating tailored support systems in future that will address the emotional needs of caregivers. Such support systems could include counseling services, peer support groups, educational resources, and respite care options.

Healthcare providers and support organizations can improve the overall well-being of both caregivers and the patients they care for by recognizing and addressing the shared emotional challenges they face.

In future these findings may inform healthcare policies aimed at improving caregiver support infrastructure, which will ultimately improve the quality of care provided to breast cancer patients and families.

The link between caregivers of cancer patients' psychological suffering, hospital anxiety, and depression underscores the need for focused therapies. The development and evaluation of therapies especially designed to address the psychological wellbeing of caregivers should be the main focus of future research. Psychoeducation, counselling, support groups, and respite care programs are a few examples of these therapies. Healthcare practitioners can lessen psychological discomfort and enhance the general wellbeing of caregivers by offering tailored support.

Recognizing and addressing psychological distress among caregivers can be facilitated by integrating mental health support into the cancer care system. The detection, assessment, and management of psychological distress among caregivers can be enhanced



by collaborative care models that entail close collaboration between medical professionals, oncologists, psychologists, and social workers. Future studies should examine how effective integrated care models in reducing psychological distress and improving outcomes for caregivers and cancer patients.

## References

- Al-Zahrani, R., Bashihab, R., Ahmed, A. E., Alkhodair, R., & Al-Khateeb, S. (2015). The prevalence of psychological impact on caregivers of hospitalized patients: The forgotten part of the equation. *Qatar medical journal*, *2015(1)*, 3.
- Amanda C. Blok, Thomas S. Valley, Lauren E. Weston, Jacquelyn Miller, Kyra Lipman, Sarah L. Krein; Factors Affecting Psychological Distress in Family Caregivers of Critically Ill Patients: A Qualitative Study. *Am J Crit Care* 1 January 2023; *32 (1)*: 21–30
- Bedaso, A., Dejen, G., & Duk, B. (2022). Depression among caregivers of cancer patients: Updated systematic review and meta-analysis. *Psychooncology*, *31(11)*, 1809–1820. <https://doi.org/10.1002/pon.6045>
- Belay, A. S., Guangul, M. M., Niguse, W., & Mesafint, G. (2021). Prevalence and Associated Factors of Psychological Distress among Nurses in Public Hospitals, Southwest, Ethiopia: A cross-sectional Study. *PubMed*, *31(6)*, 1247–1256. <https://doi.org/10.4314/ejhs.v31i6.21>
- Complicated grief and bereavement-related depression as distinct disorders: preliminary empirical validation in elderly bereaved spouses. (1995). *American Journal of Psychiatry*, *152(1)*, 22– 30. <https://doi.org/10.1176/ajp.152.1.22>
- Cooper, C., Balamurali, T. B. S., & Livingston, G. (2007). A systematic review of the prevalence and covariates of anxiety in caregivers of people with dementia. *International psychogeriatrics*, *19(2)*, 175-195.

- Dura, J. R., Stukenberg, K. W., & Kiecolt-Glaser, J. K. (1991). Anxiety and depressive disorders in adult children caring for demented parents. *Psychology and Aging*, *6*(3), 467–473.
- El-Jawahri, A., Greer, J. A., Park, E. R., Jackson, V. A., Kamdar, M., Rinaldi, S. P., ... & Temel, J. S. (2021). Psychological distress in bereaved caregivers of patients with advanced cancer. *Journal of pain and symptom management*, *61*(3), 488-494.
- Geng, H., Chuang, D., Yang, F., Yang, Y., Liu, W., Liu, L., & Tian, H. (2018). Prevalence and determinants of depression in caregivers of cancer patients. *Medicine*, *97*(39), e11863. <https://doi.org/10.1097/md.00000000000011863>
- Govina, O., Vlachou, E., Kalemikerakis, I., Papageorgiou, D. T., Kavga, A., & Konstantinidis, health facility-based study in Vietnam 2019. *Health Psychology Open*. <https://doi.org/10.1177/2055102920975272>
- Hou, D., xia Chen, Y., He, D., Zhang, X., & Fan, X. (2020). The relationship between caregiver reactions and psychological distress in family caregivers of patients with heart failure. *Journal of Cardiovascular Nursing*, *35*(3), 234-242.
- Jeyagurunathan, A., Sagayadevan, V., Abdin, E., Zhang, Y., Chang, S., Shafie, S., ... & Subramaniam, M. (2017). Psychological status and quality of life among primary caregivers of individuals with mental illness: a hospital based study. *Health and quality of life outcomes*, *15*, 1-14.

- Jorm, A. F. (2000). Does old age reduce the risk of anxiety and depression? A review of epidemiological studies across the adult life span. *Psychological medicine*, *30*(1), 11-22.
- Long, N. X., Phung, T. T., Ngoc, N. B., Linh, D. T. D., Anh, T. N., Lan, N. T. M., ... & Minh, H. V. (2020). Self-reported psychological distress among caregivers of patients with cancer: Findings from a health facility-based study in Vietnam 2019. *Health Psychology Open*, *7*(2), 2055102920975272.
- Karabekiroğlu, A., Demir, E. Y., Aker, S., Kocamanoglu, B., & Karabulut, G. S. (2018). Predictors of depression and anxiety among caregivers of hospitalised advanced cancer patients. *Singapore Medical Journal*, *57*2–577.
- Katende, G., & Nakimera, L. (2017). Prevalence and correlates of anxiety and depression among family caregivers of cancer patients in a cancer care and treatment facility in Uganda: a crosssectional study. *African Health Sciences*, *17*(3), 868.
- Lai, Y. H., Liao, Y., Yu, C., Shun, S. C., Liu, Y., Chan, J., & Yang, P. (2013). Anxiety, depression and related factors in family caregivers of newly diagnosed lung cancer patients before first treatment. *Psycho-oncology*, *22*(11), 2617–2623.
- Li, Q., Lin, Y., Xu, Y., & Zhou, H. (2018). The impact of depression and anxiety on quality of life in Chinese cancer patient-family caregiver dyads, a cross-sectional study. *Health and Quality of Life Outcomes*, *16*(1).

- Majeed, M. T., Khokhar, M. F., Abid, M., Raza, A., Qaisar, M. N., Ali, A. B., & Waqas, A. (2018). Frequency and correlates of symptoms of anxiety and depression among young caregivers of cancer patients: a pilot study. *BMC Research Notes, 11*(1).
- Moghaddam, Z. K., Rostami, M., Zeraatchi, A., Bytamar, J. M., Saed, O., & Zenoian, S. (2023). Caregiving burden, depression, and anxiety among family caregivers of patients with cancer: An investigation of patient and caregiver factors. *Frontiers in Psychology, 14*.
- Papastavrou, E., Charalambous, A., & Tsangari, H. (2012). How do informal caregivers of patients with cancer cope: A descriptive study of the coping strategies employed. *European Journal of Oncology Nursing, 16*(3), 258–263.
- Park, B., Kim, S. Y., Shin, J., Sanson-Fisher, R., Shin, D. M., Cho, J., & Park, J. C. (2013). Prevalence and predictors of anxiety and depression among family caregivers of cancer patients: a nationwide survey of patient–family caregiver dyads in Korea. *Supportive Care in Cancer, 21*(10), 2799–2807.
- Pascoe, S., Edelman, S., & Kidman, A. (2000). Prevalence of psychological distress and use of support services by cancer patients at Sydney hospitals. *Australian & New Zealand Journal of Psychiatry, 34*(5), 785-791.
- Pouwels, S., Beurskens, C. H., Kleiss, I. J., & Ingels, K. J. (2016). Assessing psychological distress in patients with facial paralysis using the Hospital Anxiety and Depression Scale. *Journal of Plastic, Reconstructive & Aesthetic Surgery, 69*(8), 1066-1071.

- Q., Shu, Y. Q., Yang, L. Q., & Shi, H. P. (2020). Investigation of Anxiety, Depression, Stress and Related Factors in the Primary Caregivers of Inpatients with Cancer. *Journal of Nutritional Oncology*, *5*(4), 176–181.
- Silverstein, B. (1999). Gender difference in the prevalence of clinical depression: the role played by depression associated with somatic symptoms. *American Journal of Psychiatry*, *156*(3), 480-482.
- Sklenarova, H., Krümpelmann, A., Haun, M. W., Friederich, H. C., Huber, J., Thomas, M., ... & Hartmann, M. (2015). When do we need to care about the caregiver? Supportive care needs, anxiety, and depression among informal caregivers of patients with cancer and cancer survivors. *Cancer*, *121*(9), 1513-1519.
- T. (2019). Factors Associated with Anxiety and Depression among Family Caregivers of Patients Undergoing Palliative Radiotherapy. *Asia-Pacific Journal of Oncology Nursing*, *6*(3), 283–

## Appendices

## Appendix A

### Permission Letter



Capital University of Science and Technology  
Islamabad

Islamabad Expressway, Kahuta Road,  
Zone - V, Islamabad, Pakistan  
Telephone : +92-(51)-111-555-666  
              : +92-51-4486700  
Fax: : +92-(51)-4486705  
Email: : info@cust.edu.pk  
Website: : www.cust.edu.pk

Ref. CUST/IBD/PSY/Thesis-601  
August 7, 2023

#### TO WHOM IT MAY CONCERN

Capital University of Science and Technology (CUST) is a federally chartered university. The university is authorized by the Federal Government to award degrees at Bachelor's, Master's and Doctorate level for a wide variety of programs.

**Ms. Laiba Ayaz**, registration number **BSP201052** is a bona fide student in BS Psychology program at this University from Spring 2020 till date. In partial fulfillment of the degree, she is conducting research on "Relationship between psychological distress, hospital anxiety and depression among caregiver of cancer patient". In this continuation, the student is required to collect data from your institute.

Considering the forgoing, kindly allow the student to collect the requisite data from your institute. Your cooperation in this regard will be highly appreciated.

Please feel free to contact undersigned, if you have any query in this regard.

Best Wishes,

**Dr. Sabahat Haqqani**  
Head, Department of Psychology  
Ph No. 111-555-666 Ext: 178  
sabahat.haqqani@cust.edu.pk

## Appendix B

### Permission to use scale



Good afternoon,

Thank you for contacting Dr. Kessler regarding the use of the K6 and K10.

My apologies for the delayed response.

Use of the K6/K10 is free and does not require any formal permission or approval. We do ask that you please cite the below article and include the copyright when using the K6/K10. In addition, we would appreciate it if you would send us the citations to all final publications that use the K6/K10.

Kessler, R.C., Barker, P.R., Colpe, L.J., Epstein, J.F., Gfroerer, J.C., Hiripi, E., Howes, M.J., Normand, S-L.T., Manderscheid, R.W., Walters, E.E., Zaslavsky, A.M. (2003). Screening for serious mental illness in the general population. *Archives of General Psychiatry*. 60(2), 184-189.

Copyright © Ronald C. Kessler, PhD. All rights reserved.

You will find the Urdu translation of K6 and K10 on [our website](#)

Kind regards,

Teresa Gorman

Research Assistant

Department of Health Care Policy

Harvard Medical School



## Kessler Scale

## کیسلر نفسیاتی دباؤ کا پیمانہ

(K10+)

نیچے دئیے گئے سوالات میں آپ سے پوچھا گیا ہے کہ آپ پچھلے 30 دنوں میں کیسا محسوس کرتے رہے ہیں۔ برائے مہربانی ہر سوال کے لیے، اس نمبر کے گرد دائرہ لگائیں جو اس بات کی بہترین وضاحت کرتا ہو کہ آپ نے اس کیفیت کو کتنی مرتبہ محسوس کیا۔

جز نمبر	Q1: پچھلے مہینے میں آپ نے کتنا محسوس کیا؟	1 ہر وقت	2 زیادہ تر	3 کبھی کبھار	4 بہت کم وقت	5 کبھی بھی نہیں
1	بغیر معقول وجہ کے تھک جانا؟					
2	گھبراہٹ؟					
3	اتنی گھبراہٹ کے کوئی چیز بھی آپکو سکون نا دے سکے؟					
4	نا امدی؟					
5	بے آرام یا بے چین؟					
6	اتنے بے چین کے آپ سکون سے نا بیٹھ سکتے تھے؟					
7	آداس/افسردہ؟					
8	اتنے آداس کے کوئی چیز آپکو خوش نا کر سکتی تھی؟					
9	یہ کے ہر چیز ایک کوشش تھی؟					
10	بے وقعت؟					

## Appendix D

## Hospital Anxiety and Depression Scale (HADS)

131

## Appendix D

## Hospital Anxiety and Depression Scale (HADS)

ذیل میں احساسات سے متعلق کچھ بنیادی باتیں ہیں۔ ہر بیان کو گور سے نہیں اور اس جواب کی بنا پر یہ کہیں جو آپ پہلے ایک پہلے میں محسوس کرتی رہی ہیں۔

۱۔	میں وقتی طور پر ڈانٹا محسوس کرتی ہوں	۸۔	مجھے محسوس ہوتا ہے جیسے میں سست ہو گئی ہوں
---	اکثر اوقات	---	تقریباً ہر وقت
---	بہت ورت	---	بہت دفعہ
---	کبھی کبھار	---	کبھی کبھار
---	کبھی نہیں	---	بالکل نہیں
۲۔	مجھے اب بھی سچوں میں پہلے کی طرح ہراس ہے	۹۔	مجھے خوف اور ڈانٹ محسوس ہوتا ہے جو وہ دور سے گھبرانے محسوس ہوتی ہے
---	یقیناً پہلے کی طرح	---	بالکل نہیں
---	پہلے سے کچھ کم	---	کبھی کبھار
---	بہت کم	---	اکثر
---	نہ ہونے کے برابر	---	بہت دفعہ
۳۔	مجھے خوف اور ڈانٹ محسوس ہونے لگا ہے جیسے کوئی خطرہ اکٹارت ہونے والی ہے	۱۰۔	مجھے اپنے تئیں میں ڈر گئی محسوس ہوتی ہے
---	یقیناً بری طرح سے	---	یقیناً
---	پانچواں اکتوبر نہیں	---	میں اتنا خیال نہیں رکھتی جتنا کہنا چاہے
---	تھوڑا سا لیکن مجھے پریشان نہیں کرتا	---	میں شاید پہلے سے کم خیال رکھتی ہوں
---	بالکل نہیں	---	میں پہلے جتنا خیال رکھتی ہوں
۴۔	میں اس سبب میں ہرج مہج میں کے غمخیز ہونے لگی ہوں۔	۱۱۔	مجھے ایسی بے چینی ہوتی ہے جیسے کہ مجھے کچھ نہ کچھ کرتے رہنا چاہیے۔
---	بیش کی طرح	---	بہت ہی زیادہ
---	پہلے سے کم	---	زیادہ
---	یقیناً پہلے سے کم	---	زیادہ نہیں
---	بالکل نہیں	---	بالکل نہیں
۵۔	پریشان کرنے والے خیالات میرے ذہن میں شرماتے ہیں۔	۱۲۔	میں شوق سے سچوں کی خبر دیتی ہوں
---	بہت ہی زیادہ وقت	---	پہلے کی طرح
---	بہت ورت	---	پہلے سے کم
---	کبھی کبھار لیکن اکثر نہیں	---	یقیناً پہلے سے کم
---	بہت ہی کم	---	نہ ہونے کے برابر
۶۔	مجھے خوش محسوس ہوتی ہے۔	۱۳۔	مجھے ایک خوفناک شے محسوس ہونے لگی ہے
---	بالکل نہیں	---	یقیناً اکثر اوقات
---	اکثر نہیں	---	اکثر اوقات
---	کبھی کبھار	---	اکثر نہیں
---	اکثر اوقات	---	بالکل نہیں
۷۔	میں آرام سے جیسے کسی میں اور سکون محسوس کرتی ہوں	۱۴۔	میں ابھی تک وہی جیانی ویگن وگرا م سے لطف اٹھا سکتی ہوں
---	یقیناً	---	اکثر
---	عام طور پر	---	کبھی کبھار
---	اکثر نہیں	---	اکثر نہیں
---	بالکل نہیں	---	بہت کم