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INTEGRATED STUDY MASTER THESIS

Psychological Distress Among Caregivers of Cancer Patients.

Literature Review

Supervisor: Assoc. Prof. Giedre Bulotiene MD, PhD

The head of Clinic of Psychiatry: Prof. Sigita Lesinskienė, PhD

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Student’s email: irem.canak@mf.stud.vu.lt

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Abstract

Cancer caregiving is a challenging and demanding task that affects a person's psychological well-being. The purpose of this paper is to discuss the psychological distress of cancer caregivers, its signs, causes, and how it can be addressed. Stress, anxiety, depression, and burnout are some of the issues that affect caregivers since caregiving is an emotionally and physically draining task, financial pressures, and social isolation. These stressors result in poor mental and physical health, including chronic fatigue, sleep disorders, and weakened immune systems. Mindfulness-based interventions, social support, and psychoeducational programs have been found to help reduce distress among caregivers.

Maladaptive coping styles like repression and substance use exacerbate psychological problems, which indicates the need for specific strategies for coping. Counseling and peer support effectively reduce distress and enhance caregivers' flexibility. Nevertheless, system-level barriers deny caregivers much-needed support, including lack of funds and resource deficiency. The reviews highlight the relationship between the caregiver and the patient and present comprehensive, accessible, and individualized approaches. Review suggestions include increasing the focus on caregivers, integrating support services into cancer care, and recognizing and bridging gaps to ensure that all caregivers receive adequate support.

Keywords

Psychological distress, cancer caregivers, anxiety, depression, coping strategies, support interventions, emotional well-being, and healthcare interventions.

List of Abbreviations

- **CBT** – Cognitive Behavioral Therapy
- **GAD** – Generalized Anxiety Disorder
- **MBSR** – Mindfulness-Based Stress Reduction
- **SES** – Socioeconomic Status
- **ADLs** – Activities of Daily Living
- **PTSD** – Post-Traumatic Stress Disorder

- **MSDs** – Musculoskeletal Disorders

1. Introduction

Cancer caregiving is a challenging role that requires the caregiver to provide not only physical care but also emotional and psychological support. It is much more than just meeting the patient's needs, as caregivers take on many roles: friends, defenders, and emotional supporters during a complicated process. Caring for others while juggling multiple responsibilities can take a serious toll on caregivers, increasing their risk of anxiety, depression, and ongoing stress. This often results in emotional exhaustion, role strain, and neglect of their own needs as they focus on the patient. Figure 1 illustrates the ABCD framework: Awareness, Balance, Communication and Delegation. These components help caregivers to manage their responsibilities effectively while maintaining their well-being.

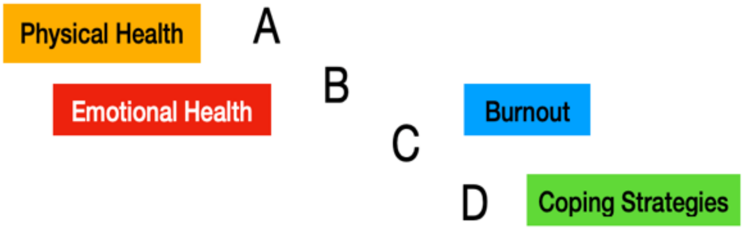


Figure 1. *The Physical and Emotional Toll of Caregiving* The figure illustrates the ABCD framework (Awareness, Balance, Communication, and Delegation) as a structured approach to caregiving. Adapted from *Caregiving Risk: The Hidden Challenges of Caregiving Risk in Retirement* (2024). FasterCapital. https://fastercapital.com/startup-topic/Emotional-Toll.html.

As cancer rates rise worldwide, the need for caregiving is also increasing. Family members or friends often provide this care voluntarily or due to a lack of paid caregivers. This shift places substantial pressure on caregivers as they must balance their family, work, and social responsibilities. The patient's physical suffering, the treatment process's management, and the outcome's uncertainty increase emotional stress, as defined in Figure 1 above. Additionally, caregiving is not a temporary obligation but may take several months or years. Consequently, the psychological pressure is constant and often intense.

This topic is relevant because caregivers' well-being directly impacts the patient. Caregivers are also crucial in ensuring patients comply with treatment and their emotional well-being. If caregiver distress is not addressed, the consequences can be seen in the quality of care and impact both the caregiver and the patient. The increasing focus on patient-centered care makes it crucial to address caregiver distress to enhance overall cancer care delivery.

This literature review seeks to identify the background, symptoms, and effects of psychological distress in cancer patient caregivers. It will also focus on the coping mechanisms and interventions recommended to enhance caregivers' well-being while offering care.

2. Conceptual Framework and Definitions

2.1 Defining Psychological Distress

Psychological distress is a term that refers to several negative emotions, such as depression, anxiety, fear, and despair. It occurs when people experience stressors that overwhelm their emotional or psychological strength, which results in the deterioration of their ability to function and well-being. Cancer caregivers do not experience psychological distress as a temporary reaction to the situation but rather develop a chronic state of suffering. This stress results from the physical, mental, and emotional challenges that they undergo as they accompany their loved ones through the cancer process. The literature shows that 30-50% of caregivers of cancer patients experience clinical depression, which is characterized by symptoms such as sadness, irritability, and apathy (Bedaso et al., 2022; Belapurkar et al., 2023).

2.1.1 Anxiety

When caregivers are faced with the challenges of caring for a relative because of the unpredictable state of the patient, anxiety, which is a state of uneasiness of the mind, occurs. These are some of the reasons why caregivers experience a high level of stress, including multiple interventions, an uncertain outcome, and possible relapses. This anxiety is often due to concerns about the patient's prognosis, the efficacy of the treatments, and the potential complications. Besides physical pressure, caregivers are also burdened by the fact that they cannot influence the development of the disease. Some of the signs of anxiety include palpitations, headaches, muscle tension, and fatigue, which are likely to affect their performance. In addition, caregivers may develop GAD, which results in chronic concern, psychological discomfort, and somatic symptoms that exacerbate the caregiving burden

2.1.2 Depression

Depression is one of the most serious and disabling mental illnesses that caregivers of cancer patients can develop. Depression is a chronic disease that is characterized by the lack of interest in activities that were once enjoyable, fatigue, and hopelessness. The caregivers themselves are helpless as they watch their loved ones go through mental and physical suffering. This is in addition to the caregiving responsibilities that lead to caregiver stress, social isolation, and self-neglect. LeSeure and Chongkham-ang (2015) note that 30-50% of caregivers of cancer patients experience clinical depression, which is defined by symptoms such as sadness, irritability, and lack of interest in activities. They may also feel guilty, for instance, when they have a feeling that they cannot meet the patient's needs or when they have to meet their own needs. This kind of guilt results in self-blame and isolation, which only worsens the state of depression even further

2.1.3 Stress

Stress is one of the most common psychological issues that affect caregivers of cancer patients. Stress in this case is the psychological and physiological experience of the caregiver in relation to the caregiving demands that are beyond the coping capacity of the caregiver. The physical, medical, and emotional tasks of caring for the patient, administering treatments, scheduling appointments, and offering support are overwhelming. The stress that comes with caregiving is not acute but chronic and progressive, increasing as the disease progresses or the patient's condition deteriorates. Stress is a long-term condition that has physical and psychological effects, such as headaches, muscle tension, fatigue, irritability, and poor concentration. Zajdel et al. (2023) have noted that stress arising from caregiving is associated with elevated cortisol levels that have adverse physiological effects on the body, including immune suppression, cardiovascular stress, and metabolic changes. Apart from the physical health effects, stress weakens the psychological resilience of caregivers and exposes them to anxiety, depression, and burnout.

2.2 Theoretical Perspectives

2.2.1 Lazarus and Folkman's Stress-Coping Model

The Stress-Coping Model was created by Lazarus and Folkman in 1984 to explain how individuals manage stress, particularly under demanding conditions such as caregiving (Lazarus

& Folkman, 1984). The model suggests that stress arises when individuals perceive the demands placed on them as exceeding their ability to cope. For caregivers of cancer patients, this perception of imbalance is central to experiencing psychological distress. The level of stress a caregiver experiences depends on their ability to meet the patient's medical, emotional, and physical needs. When caregivers become overwhelmed by these demands, they experience stress, which can lead to anxiety, depression, and physical health issues. Conversely, when caregivers believe they can meet these demands, such as through social support, financial resources, and emotional strength to deal with stress, they are better position to manage stress and maintain their well-being.

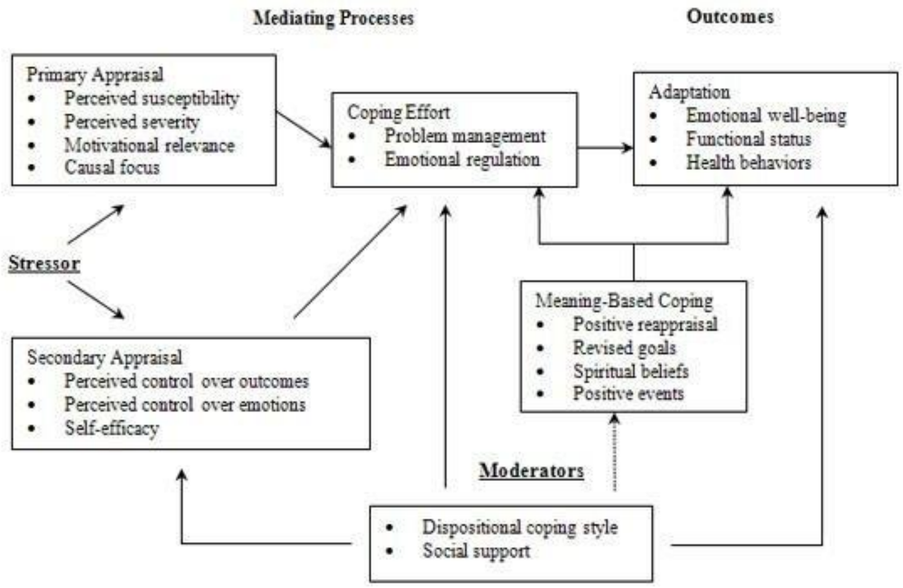


Figure 2. Lazarus and Folkman's Stress-Coping Model. This figure illustrates the Transactional Model of Stress and Coping conceptualized by Lazarus and Folkman (1984), emphasizing the role of cognitive appraisal and coping strategies in stress management. Adapted from Glanz, K., Rimer, B. K., & Viswanath, K. (2008). *Health Behavior and Health Education: Theory, Research, and Practice* (4th ed.). Jossey-Bass. Retrieved via ResearchGate (Exploring Stress and Recovery Among High-Achieving Career Development Event Teams, 2020).

The model also divides coping into two main processes: primary appraisal and secondary appraisal. Primary appraisal is the first step in the stress process, where an individual evaluates a situation as threatening, challenging, or benign. In the case of caregivers, the primary appraisal might entail determining whether the cancer is terminal or if the patient is in a critical state. Secondary appraisal, on the other hand, is a process of assessing the resources that are available to one to deal with the stressor. The caregivers evaluate their personal assets, support from others, and resources in the environment to determine how they will manage the caregiving role.

2.2.2 Pearlin’s Stress Process Model

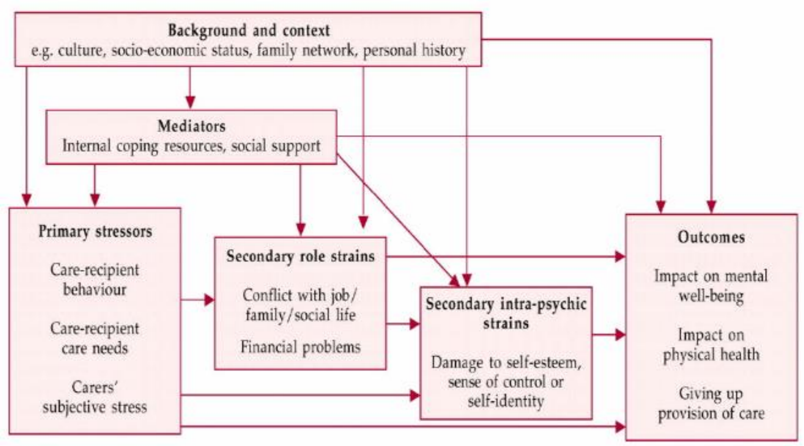


Figure 2: ***Psychological Distress in Carers of People with Mental Disorders***
"Psychological Distress in Carers of People with Mental Disorders" *(October 2010),* British Journal of Medical Practitioners, 33. *https://www.researchgate.net/publication/228662269_Psychological_Distress_in_Carers_of_People_with_Mental_Disorders*.

Another framework that can be used to explain caregiver stress is Pearlin’s Stress Process Model, which was developed in the 1980s; it also considers the temporal aspect of caregiving and the interaction between the external and internal contexts (Yu et al., 2020). Pearlin’s model of caregiving stress comprises three types of stressors: primary stressors, which are the caregiving demands; secondary stressors, which are the social, financial, and emotional impacts of caregiving; and mediators, which are the characteristics of the caregiver and the social support that influence the stress response. This framework is especially helpful in comprehending the general context of cancer caregiving since the main source of stress is the patient. Other types of stress include financial stress, work-family stress, and stress due to loneliness. The model shows that the psychological distress of caregivers depends on the current caregiving demands and depends on the social and economic environment of caregiving.

3. Literature Review: Comprehensive Analysis

3.1 Psychological Distress in Caregivers

It has been documented in several studies that cancer caregivers are more psychologically distressed than the general population. It is not only a physical process but also an emotional one and it results in hopelessness, anger and anxiety. The illness is a stressful situation for the family members because they have to visit many appointments, adhere to a complex treatment regimen, and see the patient’s decline. Bedaso et al. (2022) also revealed that 45-60% of cancer caregivers have clinically significant symptoms of anxiety and depression.

These statistics show the level of suffering that caregivers undergo, which is even higher than the suffering of the patients. The caregivers often fail to consider their own needs, and they leave their emotional and physical state to deteriorate in order to attend to the patient. As a result, they are likely to develop burnout, emotional exhaustion, and a decline in their psychological well-being (Belapurkar et al., 2023). The constant stress of caregiving may cause burnout, entrapment, and loneliness among the caregivers, which contributes to the psychological burden. Figure 4 below presents the percentage of caregivers who had depression, anxiety, and other physical health issues as per the various studies, which shows that a high percentage of caregivers are affected. These results show that caregiving has a significant effect on mental health and that a large number of caregivers also experience physical health problems.

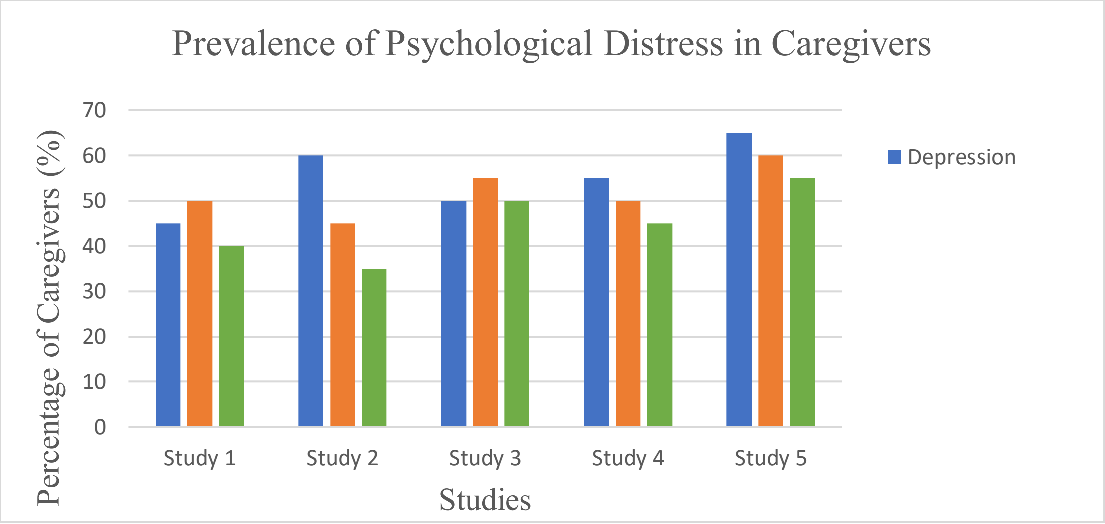


Figure 3: Prevalence of Psychological Distress in Caregivers Across Different Studies, *"Depression Among Caregivers of Cancer Patients: Updated Systematic Review and Meta-Analysis"* (09 October 2022). https://onlinelibrary.wiley.com/doi/10.1002/pon.6045.

Figure 4 shows the distribution of health outcomes in the distressed caregivers. A significant proportion of caregivers exhibited symptoms of psychological distress, including moderate to high levels of depression, anxiety, and overall emotional stress in the studies. The data highlights the challenges caregivers face, reinforcing the need for targeted measures to support their mental health. The results show that addressing distress in caregivers is crucial for enhancing morale and improving patient care. Depression is one of the highest marks of psychological distress, Bedaso et al. (2022).

Kim et al. (2020) also noted that caregivers of cancer patients suffer from distress due to the uncertainty of the disease and its outcomes. Cancer caregiving is different from other forms of caregiving in that the condition is not stable and may have times of remission and recurrence. Therefore, caregivers are always anxious about the future and the well-being of their loved ones. In addition, caregivers may experience guilt if they think that they are not able to offer the kind of care they deem appropriate (Molassiotis & Wang, 2022). This can cause stress and depression among caregivers as they feel that they are not doing enough for the patient despite their efforts. When the patient is on aggressive or palliative treatment, the caregivers are likely to experience anticipatory grief due to the likelihood that the patient may not survive. This constant emotional up and down only worsens the psychological state of the caregiver.

One of the most significant sources of stress is the physical demands that come with caregiving. Darragh et al. (2013) pointed out that caregivers are involved in physically strenuous activities such as lifting and supporting patients, which causes burnout and reduced well-being. Long-term caregiving, especially for patients with high care needs, results in chronic fatigue, sleep disorders, and increased susceptibility to diseases such as cardiovascular diseases and weakened immunity, chronic muscular pain, including back and pain. (Llamas-Ramos et al., 2022).

Stress is another reason caregivers are distressed because of the role strain that comes with caregiving and other responsibilities. Kayaalp et al. (2020) revealed that most of the caregivers are employed, have family and social obligations, and are caring for cancer patients. This is not easily achievable and leads to financial issues, unemployment, and conflicts with other family members or friends. They may also be socially isolated since they are mostly restricted to the patient (Pope et al., 2022). This stress is compounded by financial pressure, as many caregivers are forced to reduce their working hours or even resign, resulting in economic insecurity and no time for social breaks or even to relieve stress.

In addition, cultural factors are also found to influence the level of psychological distress in caregivers. Tran et al. (2023) have pointed out that in some cultures, caregiving is considered as a family responsibility and there are beliefs that families should be able to care for their members on their own. While such cultural practices may offer meaning and a sense of place in the world, they may also impose a burden on the caregivers, who feel guilty, like failures, and shameful when seeking help. On the other hand, caregivers in cultures with well-developed formal care support may experience lower levels of psychological stress because some of the caregiving demands are met by professional services (Zarzycki et al., 2022). It is for this reason that one needs to have a clear understanding of a given culture in order to be in a position to come up with the right kind of interventions that will be acceptable in that culture. Cultural sensitivity in the provision of support services can increase the uptake of the services by the caregivers and decrease the level of stress without eradicating cultural practices.

3.2 Factors Contributing to Distress

3.2.1 Caregiver Demographics and Role

The findings of the study indicate that the demographic characteristics of the caregivers influence the level of psychological distress in caregivers of cancer patients. The study has also shown that young caregivers, those who are below 30 years of age, are more distressed than the older caregivers. This is because they have no experience in caregiving, they are emotionally unstable, and they lack coping skills, as pointed out by Jabbari et al. (2024). Younger caregivers may also have other roles in their lives, such as work, study, or children of their own. They, therefore, experience role stress and are in a dilemma of how to meet the needs of their families and other responsibilities. Young caregivers may lack the financial or social resources to cope with the stress that is inherent in caregiving (El-Jawahri et al., 2021). The stress that comes with caregiving and the lack of support from the society leads to anxiety, depression, and emotional stress.

Sharma et al. (2016) also observed that gender is another factor influencing caregiver distress, with female caregivers experiencing more stress than male caregivers. The conventional expectation of women as caregivers and supporters increases their awareness of their responsibilities and amplifies feelings of guilt when they feel unable to meet all caregiving demands. While female caregivers may bear an emotional burden, male caregivers might not experience the same feelings; however, they may cope with issues of masculinity that prevent them from expressing emotions or seeking help and lack of financial support. These gendered expectations impact the caregiving and coping processes, highlighting the need for gender- and role-tailored interventions.

In the study by Zarzycki et al. (2022), the authors also identified that the nature of the caregiver-patient relationship also affects psychological distress. It was also found that the level of distress is higher among family caregivers, especially those who are partners or children of the patient. This is because they are close to the patient, and thus, the experience of seeing their loved one sick is even more distressing. The partners may experience anticipatory grief because they are always in a state of waiting for the worst to happen since their partner has cancer, which increases helplessness and anxiety (Zarzycki et al., 2022). Children who are taking care of their parents also experience stress because they see their parents suffering or worsening, and they may not know how to deal with such a situation.

Wang et al. (2021) also note that a caregiver's level of distress depends on their socioeconomic status and employment. Employed caregivers may face significant pressure as they must balance work with caregiving responsibilities. This can result in role conflict, as caregivers find themselves torn between their professional and caregiving duties. Also, low-income earners may be financially stressed since they may be forced to reduce their working hours or even resign to attend to the patient. The financial pressure, coupled with the costs of receiving medical care and treatment, can worsen the hopelessness and anxiety (Wang et al., 2021). On the other hand, employed or retired caregivers may have more time to devote to caregiving but may be limited by factors such as poor health care or lack of services. This implies that the caregiver is likely to have poor mental health since they lack adequate financial and social resources to cope with the stress of caregiving

It is also believed that cultural factors are also influential in determining the level of caregiver distress. Cultural expectations and demands of caregiving can either reduce or enhance the stress of the caregivers (Zarzycki et al., 2022). In some cultures, caregiving is a normative role and families are closely knit, hence the caregiver is not lonely. However, in other cultures, caregiving may be considered as a burden or as something shameful, which results in no support and stress. These cultural factors should therefore be taken into consideration in order to come up with some strategies that will help the caregivers of different cultures and reduce their psychological stress.

3.2.2 Patient Factors

According to El-Jawahri et al. (2021), the cancer stage of the patient is one of the factors that determine the level of psychological distress among caregivers. The symptoms of cancer are worse in the later stage, the patients need more attention, more visits to the hospital, and more complicated treatment, which is very challenging for the caregivers. The caregivers of the advanced or terminal cancer patients are more likely to feel helpless, anxious and grieving because they know that the patient may not live long (George et al., 2020). The study has also shown that caregivers of patients in the early stages of cancer are less distressed because the treatment and recovery process is easier.

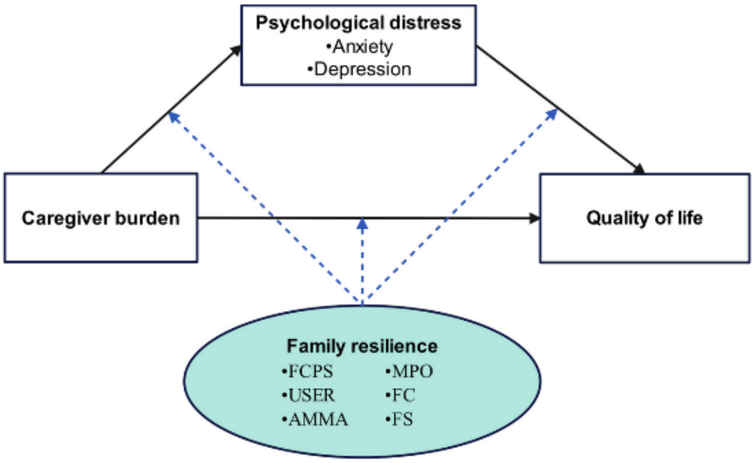


Figure 4: ***The model of the burden of Caregiver in Cancer Caregiving***

Conceptual model of caregiver burden, psychological distress, quality of life, and the moderating role of family resilience. Adapted from BMC Public Health *(2024), https://doi.org/10.1186/s12889-024-18321-3.*

Besides the stage of cancer, the type of cancer and the symptoms related to the cancer also affect the level of distress in the caregivers. According to Litzelman (2019), the level of care varies depending on the type of cancer, and some cancers are related to severe or disabling symptoms like chronic pain, nausea, fatigue, and cognitive impairment. For example, caregivers of patients with lung, pancreatic, or brain cancer are likely to experience higher levels of distress because of the challenges in managing physical symptoms and possible changes in cognition.

The worsening of a patient's cancer, including the development of metastasis or recurrence, can also impact the level of distress experienced by caregivers. Caregivers tend to feel more anxious when the patient is diagnosed with metastatic cancer since this represents a more severe stage of the disease (LeSeure & Chongkham-ang, 2015). The uncertainty arising from stage-based developmental processes influenced by perception, intention, and relationships creates a complicated imbalance for the caregiver. Those caring for patients with cancer in remission but at high risk of relapse remain constantly alert, observing the patient and worrying about the recurrence of the disease, which can lead to exacerbation and panic. This state of ambiguity results in ongoing stress for caregivers, as they must be prepared for any reversals while simultaneously attending to the needs of the patient. Additionally, caregivers may feel helpless as they witness the patient deteriorating physically and are unable to alleviate the patient's pain or halt the progression of the disease. Caregivers often suppress their emotions and stress to avoid negatively impacting the patient's mood and motivation. Furthermore, the patient's decline can instill a sense of hopelessness within the family, increasing the risk of depression (LeSeure & Chongkham-ang, 2015). As the study shows, educating the caregiver on the symptoms and effects of the treatment makes the caregiver to be emotionally and mentally prepared to handle the situation.

Cui et al. (2024) also highlighted that the patient's attitude and mood contribute to the caregiver's level of distress. Patients who have hope and are willing to participate in the process of treatment can also help their caregivers to reduce the emotional load. However, the psychological distress of the caregiver may be affected by the depression, anxiety, or denial of the patient. The study has also revealed that caregivers of patients with depressive symptoms or those who lack motivation in their treatment are more distressed. This is especially the case when the caregiver is burdened by the patient's emotional demands or when the patient's behavior hinders caregiving (Cui et al., 2024). The contact between the caregiver and the patient is not only physical but also psychological. The caregivers may also experience the pain or negative feelings of the patient. On the other hand, caregivers who are emotionally detached from the patient may feel lonely or frustrated, which will lead to the deterioration of their physical and emotional health. This can cause an emotional stress, which makes the caregivers to be unable to provide the emotional support that the patient needs, thus placing them in a state of non-coping.

The level of distress that caregivers experience is also determined by the patient's ability to communicate and participate in decisions about their care. When patients are engaged in the process of expressing their needs, preferences, and concerns, caregivers may experience less anxiety and ambiguity (Kwame & Petrucka, 2021). However, when patients are unable or unwilling to discuss their care, caregivers often feel frustrated and confused. This can lead to caregivers making decisions without fully understanding the patient's preferences, which can lead to feelings of guilt or conflict. Also, patients who fail to take their medications or follow the doctor's instructions may be a burden to the caregivers and feel helpless when it comes to helping the patient. In some cases, caregivers are faced with a conflict of interest between the patient and the doctor, which results in role stress and emotional pressure. Communication between patients, caregivers, and healthcare providers is essential to avoid the feeling of being overwhelmed when making decisions (Krist et al., 2017).

Another source of stress is the amount of support that caregivers receive from their social circles. In the study by Northouse et al. (2012), it was found that caregivers who get emotional, informational, and practical support from family, friends, or support groups are likely to have low psychological distress. Social support can allow caregivers to vent their feelings, divide the caregiving duties, and seek assistance or advice. However, caregivers with low social support may feel lonely and stressed because they are the only ones who are left to care for the patient. It has also been found that caregivers who participate in support groups or seek counseling have better coping results and less distress. This calls for the need to come up with appropriate strategies to enhance the caregivers' resilience in order to enhance their quality of life and reduce hopelessness and depression in the entire family.

Lastly, the degree of independence the patient can manage will significantly influence the distress caregivers are likely to experience. Patients who can perform their ADLs with minimal assistance place less strain on their caregivers, allowing the latter to help without becoming exhausted. In contrast, patients needing help with activities such as bathing, dressing, or feeding can create stress for the caregiver, who may feel frustrated or guilty. The loss of independence also causes grief for both the patient and the caregiver, as the patient may lose his or her role as a breadwinner and become dependent. Research indicates that caregivers of patients with high dependency needs are more likely to experience burnout and emotional exhaustion.

3.2.3 Caregiving Context

The caregiving context is one of the factors that affect the psychological distress of caregivers (Vitaliano et al., 2013). Another source of stress that is apparent among caregivers is the financial burden that comes with cancer treatment. The costs of treatments, medications, hospitalization, and other related expenses can be substantial, creating an additional burden for caregivers who are already managing multiple. Many caregivers report financial stress due to their inability to work full-time or at all, as they are constantly required to meet the patient's needs and schedules. The study conducted by Vitaliano et al. (2013) revealed that caregiver distress affects their psychosocial status, financial status, and the quality of care they offer to the patients. These stressors are compounded by the fact that most caregivers do not have any financial support or even health insurance to meet their needs.

Caring work is defined by role intrusion and role overload, leading to high levels of psychological stress. Employed caregivers often adjust or have to leave work, resulting in financial instability and stressors, according to Keita Fakeye et al. (2023). Implementing respite care and flexible work schedules is essential to alleviate role strain and support caregivers in balancing their responsibilities and reducing excessive economic and psychological burdens.

The caregiving context affects caregivers' health, as they may neglect their own well-being and the needs of the patient. The time constraints for self-care and the physical demands of caregiving can lead to fatigue and health issues (Schulz & Sherwood, 2008). Common complaints among caregivers include sleep disturbances, chronic fatigue, and physical ailments like headaches and back pain stemming from their caregiving responsibilities. Additionally, the physical burden and uncertainty regarding outcomes can lead caregivers to experience anxiety and depression. Because caregivers are often preoccupied with the patient's needs, they may skip their own health issues, potentially resulting in chronic illnesses (Schulz & Sherwood, 2008). The caregiving context requires interventions supporting caregivers' physical and mental health, such as adequate respite care, healthcare services, and mental health support.

Zarzycki et al. (2022) also point out that cultural and societal factors are also relevant to the caregiving context and the level of distress that caregivers may experience. Culture plays a significant role in the perception of the caregivers and how they manage stress. For example, in some cultures, caregiving is considered as a family responsibility, and the caregivers may feel that they have no option than to care for their relatives without seeking assistance from other sources. On the other hand, other cultures may have more structured care giving systems where the pressure and stress associated with caregiving is not as much as it is in the American culture (Zarzycki et al., 2022). Moreover, the caregivers from other cultures and countries may experience stress due to discrimination, language barriers, or limited access to health care. The following cultural and societal factors should be considered when designing interventions.

3.3 Impact of Psychological Distress

3.3.1 Mental Health Outcomes

In the study by Darragh et al., (2013), the author established that long-term psychological stress impacts caregivers negatively, which results in chronic anxiety, depression, and compassion fatigue. The most frequent outcome is anxiety because caregivers are worried about the patient's state, therapy, and potential side effects. This constant state of worry leads to stress that hinders the caregivers from resting, concentrating or even sleeping. Another common outcome is depression which is defined by hopelessness, burnout, and reduced pleasure. The study also shows that caregivers with depressive symptoms are socially isolated, self-neglecting, and have problems with performing daily tasks.

As stated by Segrin et al., (2019), the burden of caregiving is further aggravated by the stress arising from the suffering of the patient. It is common for caregivers to experience anticipatory grief because they are always in a state of loss, waiting to happen. This grief is emotionally tiring and may manifest in feelings of sadness, guilt, or hopelessness. The relationship between the caregiver and the patient adds to the psychological burden, especially when the caregiver cannot alleviate the suffering of the patient or make him/her recover. This is because caregivers experience feelings of inadequacy and self-blame when they feel that they are not providing enough care to the patients, which increases their level of stress . In extreme cases, the caregivers may develop post-traumatic stress symptoms especially if they are exposed to traumatic events concerning the patient's illness or treatment.

Chronic psychological distress in caregivers can also have negative effects on physical health, which in turn affects the quality of care given to the patients. Stress and anxiety can lead to the development of other diseases such as high blood pressure, heart diseases, and gastrointestinal disorders. This is because caregivers are often overwhelmed with the needs of their patients and they neglect their own health by eating poorly, not exercising and not getting enough sleep. These physical health issues can also exacerbate their mental health issues, creating a cycle of physical and mental deterioration. Stress is characterized by high cortisol levels, which compromise the immune system and therefore the caregivers are likely to fall sick.

Psychological distress affects caregivers' social functioning significantly, leading to fewer friendships (Chambers et al., 2011). This is evident when caregivers lack respite care, confining them to their roles and straining personal relationships, including marital and familial connections. Such stress can cause resentment and frustration due to limited time for personal interactions. Moreover, psychological distress may escalate conflict and hinder communication with family members, adding to the stress. These social and relational issues highlight the need for caregivers to access mental health services and social opportunities to alleviate adverse caregiving effects.

3.3.2 Physical Health Consequences

Chronic stress arising from caregiving impacts the physical health of the caregivers since they are more vulnerable to diseases and disorders. From the literature, stress has been established to have an adverse effect on the immune system and therefore, caregivers are more vulnerable to illnesses and take longer time to heal (Zajdel et al., 2023). Cardiovascular health is particularly at risk, as stress results in hypertension, tachycardia, and inflammation. Stress and caregiving also lead to sleep disorders such as insomnia, interrupted sleep, or poor-quality sleep among caregivers. Sleep deprivation results in physical fatigue, poor concentration, and increased susceptibility to diseases such as diabetes and heart diseases. Stress and sleep loss can lead to early biological aging and decrease the life span of caregivers.

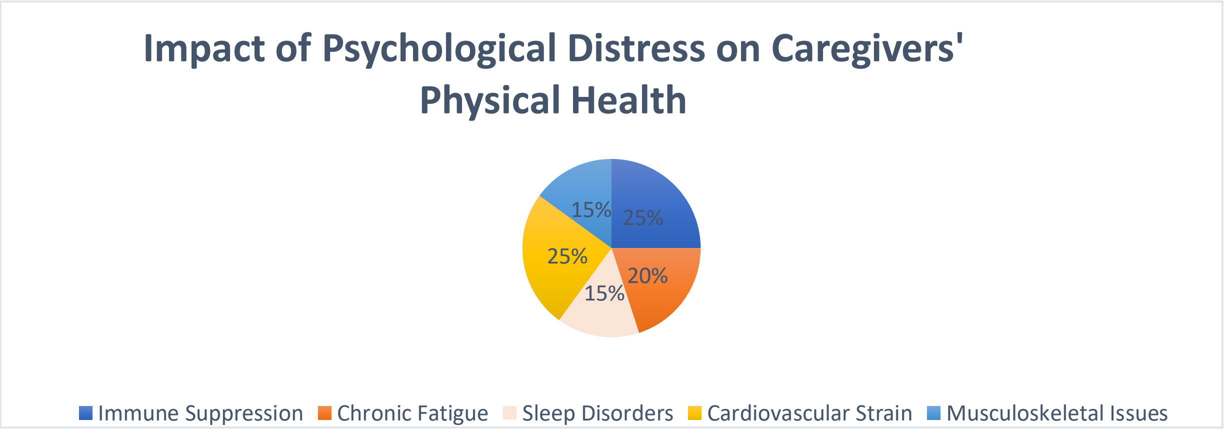


Figure 5: Impact of Psychological Distress on Caregivers Physical Health (Zajdel et al., 2023).

The physical health conditions of the caregivers are presented in Figure 6 and it is clear that immune suppression and cardiovascular stress are the most prevalent health conditions among the caregivers. From the chart, it is evident that 25% of the caregivers had immune suppression and 25% cardiovascular strains and stresses. Also, 20% of the respondents stated that they have chronic fatigue, and 15% of the caregivers stated that they have sleep disorders. These findings are in agreement with other studies that have established that high levels of caregiving stress are associated with physical health issues that affect the immune and cardiovascular systems (Zajdel et al., 2023).

The caregiving burden is not only in terms of chronic stress but also musculoskeletal disorders and injuries. Patient handling or repositioning poses a risk to the development of back and joint pain among the nurses (Darragh et al., 2013). Fatigue, limited mobility, and chronic pain resulting from long working hours may compromise the capacity of the caregivers to execute their responsibilities. From the literature, it is evident that caregivers with high physical demands are more likely to experience fatigue and stress than those who provide emotional support (Zajdel et al., 2023). These physical effects of caregiving indicate that caregivers should have the right equipment and knowledge to reduce stress and the likelihood of getting an injury.

3.3.3 Integrated Perspectives on Mental and Physical Health

In the study conducted by (Kalhovde & Kitzmüller, 2023), it was found that there is an inverse relationship between mental and physical health of the caregivers. For instance, stress and anxiety lead to headaches, gastrointestinal disorders, and cardiovascular disorders, which also contribute to the mental stress of caregivers (Zajdel et al., 2023). Similarly, physical fatigue and illnesses reduce the ability of the caregivers to handle stress hence increasing their likelihood of developing depression and emotional exhaustion. The literature shows that caregivers with mental and physical health problems have a poor quality of life and limited capacity to care for their dependents (Benson et al., 2020. This interplay implies that there is a need to address the mental and physical health of the caregivers in the support programs. The exercise and counseling have been identified to be effective in reducing stress among caregivers in physical health promotion and mental health promotion respectively. These findings therefore call for the use of a multi-dimensional approach in the improvement of the quality of life of caregivers.

3.3.4 Recommendations for Mitigation

Managing mental and physical health problems that result from psychological problems is not a joke. The symptoms such as anxiety and depression are used to determine the caregivers who require assistance.Psychoeducation and stress management tools such as mindfulness are some of the interventions that are effective. Such options as respite care and flexible shifts are helpful in avoiding stress among caregivers because they provide the much-needed break. Healthcare systems should offer services that meet the physical needs of the caregivers like physical therapy and ergonomics to help in the reduction of the physical stress that is associated with caregiving. Hence, it is crucial for the healthcare providers, social workers, and mental health professionals to develop effective support plans. These measures are advantageous to the caregivers and improve the quality of patient care, making it a positive situation for all parties.

Besides meeting the needs of the caregivers, the development of both formal and informal support systems improves the quality of the caregivers and their coping mechanisms. Face-to-face and online support groups enable caregivers to discuss their experiences, get encouragement, and learn from others who are going through similar situations. As it has been established, peer support relieves loneliness and offers emotional support since caregivers are able to find comfort in each other. Also, the inclusion of family and community services in the caregiver programs provides extra support to the caregivers to avoid burnout and to be able to feel and to be given a chance to be appreciated.

It is important to establish policies that acknowledge and facilitate the role of caregivers. Some of the helpful strategies to reduce their economic pressure and time constraints include paid family leave, flexible working hours, and financial assistance. Also, incorporating caregiver support into the health care policies and protocols guarantees that caregivers are considered and their needs are met for the sake of the patients. Addressing caregivers' needs will help to create a better and more sustainable caregiving environment.

3.4 Coping Mechanisms and Interventions

The following are some of the ways through which caregivers can deal with the psychological aspect of caregiving. These can be categorized as positive and negative. Positive coping mechanisms include social support and mindfulness which are beneficial to an individual's well-being while negative coping mechanisms include emotional suppression and substance abuse which are unhealthy to an individual's well-being as they elevate the level of stress. These coping strategies are depicted in the following figure 7, with a clear differentiation between adaptive coping and non-adaptive coping.

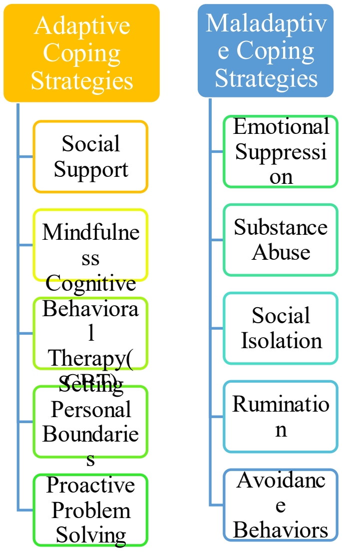


Figure 6: Comparison of Adaptive and Maladaptive Coping Strategies for Caregivers

Figure 7 shows how social support and mindfulness contribute to the caregiver resilience. On the other hand, stress enhancing strategies such as emotional restraint and substance use are negative strategies. To enhance the well-being of the caregivers and the quality of care provided to the elderly, it is important to avoid the use of maladaptive coping mechanisms and encourage the use of adaptive ones.

3.4.1 Adaptive Coping Strategies

It is important for caregivers to adopt coping strategies that will enable them to deal with the psychological stress that comes with caregiving. The most studied coping strategy is social support, which involves talking to family, friends, or caregiver support groups to share experiences and gain encouragement. Social support helps the caregivers to feel that they are not alone in their duties since they are surrounded by people who understand them. As found in the literature, caregivers who are involved with support networks are less stressed and depressed than those who are not involved with such networks (Zajdel et al., 2023). This practical aid assists in relieving the caregiver from the task, so that he or she can get distracted by other thoughts or get flooded with thoughts.

Mindfulness is a coping mechanism that entails the use of meditation, deep breathing, and yoga to enable the caregivers to concentrate on the present moment and not on the negative things. The study has shown that MBSR helps in the reduction of anxiety and improvement of the psychological well-being of caregivers (Liang et al., 2023). Coping programs help the caregivers to come to terms with the situation and how to deal with it. Kriakous et al. (2020) also found that caregivers who participated in an eight-week MBSR program had better mental health than those who did not. The non-judgmental, self-compassionate mindfulness approach allows the caregivers to focus on their needs without feeling guilty. Also, mindfulness has positive effects on physical health since it reduces cortisol, a stress hormone, and increases the quality of sleep. Mindfulness in caregiving is beneficial to the caregivers as it assists them in managing stress and maintaining a positive attitude.

Another strategy that is useful in preserving the well-being of caregivers is the setting of boundaries. Caregivers need to set boundaries to define their roles and not be consumed by the caregiving roles they are undertaking. Research indicates that caregivers who set boundaries on the amount of time and energy they are willing to devote to caregiving are less likely to become burned out and emotionally drained. For instance, those who take breaks or set certain hours for personal care activities are likely to be more positive. The caregivers keep their other relationships intact, social and emotional relationships. Setting these boundaries entails the caregivers engaging the patient and other family members and understanding their needs and other concerns. Some of the effective interventions include those that aim at helping caregivers learn how to set and enforce limits.

Kwon et al. (2017) also established that cognitive-behavioral approaches are also useful in the development of adaptive coping among caregivers. These strategies involve the recognition of negative attitudes towards caregiving and replacing them with positive attitudes towards the caregiving tasks. CBT for caregivers has been found to enhance coping skills and decrease the level of anxiety and depression (Kwon et al., 2017). For instance, CBT techniques assist caregivers in changing negative thinking patterns, which may include expecting the worst for the patient. It reduces emotional stress and improves the problem-solving skills of the caregivers to handle the caregiving issues. Zajdel et al. (2023) also note that the caregivers who received CBT showed a decrease in the level of emotional exhaustion and an increase in the level of coping self-efficacy.

According to Zajdel et al. (2023), using adaptive coping strategies entails using problem-focused coping where caregivers look for ways of reducing stress in caregiving. Preventive measures include scheduling caregiving activities, consulting with professionals, and using available resources to make caregiving easier. Studies show that caregivers who use problem-solving approaches are less stressed and more confident in their caregiving roles (Zajdel et al. 2023). These strategies assist the caregivers to be ready for any hitches that may come along the way so that they do not affect the caregivers emotionally. Proactive problem-solving also helps caregivers feel more in control of their situation, which is one of the ways of reducing stress (Zajdel et al., 2023). For example, caregivers who use respite care services or hire other people to help with caregiving can manage their duties better. Cognitive-behavioral interventions that focus on teaching problem-solving skills to caregivers have been found to enhance their flexibility and decrease psychological symptoms.

Caregivers benefit from finding meaning in their role. Recognizing their positive impact on the patient's well-being boosts morale and provides strength during tough times. Literature shows that caregivers who view their role as fulfilling experience less burnout and higher satisfaction. These caregivers are likelier to prioritize self-care and seek help. Additionally, engaging in enjoyable activities outside of caregiving helps alleviate stress and prevents overwhelming duties.

Emotional flexibility helps caregivers adapt their feelings to meet the unpredictable demands of caregiving. It allows them to cope with stress by acknowledging emotions like frustration, sadness, or anger while managing them. Caregivers with emotional intelligence can better handle challenges by adjusting their responses to situations and emotions. This flexibility promotes self-kindness, as caregivers recognize that experiencing negative emotions is natural. Techniques such as cognitive-behavioral therapy and stress management improve caregivers' emotional range and overall mental well-being (Kriakous et al. 2020).

3.4.2 Maladaptive Coping Strategies

These are behaviors or thought processes that may temporarily alleviate the stress of caregiving but in the long run increase the distress of the caregiver and hinder effective coping (Zajdel et al. 2023). Some of the negative coping strategies that have been identified include emotional suppression, avoidance, social isolation, and substance use, which are likely to lead to higher levels of psychological symptoms. While adaptive coping mechanisms are beneficial to the individual and contribute to endurance and improved mental health, maladaptive coping mechanisms have negative effects, such as burnout, increased anxiety, and other adverse mental health outcomes. Table 1 presents a list of various coping strategies, their efficacy, and their effects on the caregivers' well-being in comparison between adaptive and maladaptive coping strategies.

Various coping strategies

Coping Strategy	**Type**	**Effectiveness**	**Outcome**
Social Support	Adaptive	High	Caregivers who have strong support networks report lower levels of anxiety and depression.
Mindfulness Meditation	Adaptive	High	Mindfulness reduces anxiety and improves emotional regulation.
Problem-Solving Techniques	Adaptive	Moderate to high	Addressing caregiving challenges through planning and seeking solutions can help reduce stress and feelings of helplessness.
Exercise and physical activity	Adaptive	High	Physical activity leads to better mental health and low distress levels.
Substance abuse	Maladaptive	Very low	Alcohol or drugs provide short-term relief but increase emotional and physical health issues.
Emotional suppression	Maladaptive	Low	Suppressing emotions can lead to higher stress levels.
Social withdrawal	Maladaptive	Low	Isolating oneself increases loneliness and can worsen feelings of anxiety and depression.
Avoidance	Maladaptive	Low	Ignoring stressors may temporarily reduce anxiety but eventually lead to increased distress.
Overworking	Maladaptive	Low	Overcommitting to caregiving duties without rest can result in burnout, fatigue, and neglect of personal health.

Table 1: Comparison of Adaptive and Maladaptive Coping Strategies for Caregivers

Table 1 indicates a higher level of emotional persistence in terms of coping strategies that include developing social support, mindfulness, and problem-solving to decrease distress. In contrast, maladaptive coping styles may be detrimental, contribute to the caregiver burden, and have negative implications on the emotional and physical well-being of the individuals. It is important to meditate on how to handle these maladaptive behaviors so that the caregivers can be helped to change to more adaptive coping behaviors.

The most common dysfunctional coping style is emotional uncertainty, which entails the inhibition of emotions. The caregiver may hide their emotions just to be strong and not burden the patient even more, also within cultural norms of the caregiving position. It can also affect the relationships with the family members and healthcare workers since the caregivers may not be able to express themselves well. It is important to note that emotions that are not expressed can build up and cause burnout. Liang et al. (2023) revealed that caregivers have the tendency to hide their feelings during experiences of stress and loneliness. These results underline the need for interventions that would help caregivers manage their emotions healthily.

Another of the negative coping strategies that impact the mental health of caregivers is loneliness. Many caregivers are likely to cut down on their social interactions because the caregiving role is demanding and takes most of the caregiver’s time (Liang et al., 2023). Hopelessness and despair are compounded by isolation, and isolation leads to loneliness, which in turn leads to further psychological distress. Lack of social support also means that caregivers do not get the assistance they require in terms of practical assistance and encouragement to go through the caregiving process. For instance, Kalhovde & Kitzmüller, (2023) noted that caregivers with limited social contacts had low self-esteem and poor coping mechanisms. Some of the interventions for social isolation include: encouraging the caregivers to join support groups or providing them with information about the support.

Stress is one of the challenges that caregivers face in their day to day activities and substance abuse is one of the ways through which they attempt to cope with the stress. Substances like alcohol, prescription drugs, and other substances may be used to self-medicate for emotional distress. Although these behaviors may provide temporary comfort, they result in negative effects in the long run such as physical health issues, substance abuse, and poor decision making. Studies have revealed that caregivers are more likely to use substances than non-caregivers and this is especially the case if the caregivers are lonely or do not have access to professional support. Not only does caregiver stress increase due to substance use, but the caregiver’s capacity to care for the patient is also compromised. For instance, caregivers who are under the influence may be unable to perform some of the caregiving tasks or may administer the wrong dosage of the drugs. Perez et al. (2018) observed that caregivers who used substances to cope with stress were more likely to be burnt out and make more errors in caregiving. To address substance, use in caregivers, mental health consultation and substance abuse treatment services should be provided to them

Another unhealthy coping style that has negative effects on the psychological well-being of caregivers is rumination, which is the tendency to persistently think about negative thoughts (Michl et al. 2013). Burnout caregivers dwell on the negative aspects of caregiving or contemplate the worst that can happen when attending to a patient. This not only perpetuates hopelessness and helplessness but also prevents the caregivers from addressing problems in a constructive way. For example, caregivers who dwell on their perceived caregiving incompetence are likely to develop guilt and low self-esteem. Moreover, brooding consumes cognitive capacity that could be used in engaging in adaptive coping strategies. Kim et al. (2019) also pointed out that the interventions that targeted rumination such as CBT enhanced the emotional well-being of the caregivers. These findings suggest that more efforts should be made to assist caregivers to change their negative patterns of thinking.

Waugh et al. (2020) have identified that the unhealthy and most frequently used strategies of managing the stress related to caregiving are avoidance coping styles like procrastination or disengagement. Failure to address the caregiving issues may result to failure in the accomplishment of some of the tasks hence worsening the situation for both the caregiver and the patient. This is because avoidance is often caused by fear of failure, emotional overload, or lack of confidence in performing caregiving tasks. Although avoidance does reduce stress in the short run, it only increases the caregivers’ perceived self-efficiency and stress in the long run. For instance, if the caregivers fail to attend to financial matters or appointments, they may feel stressed when such matters worsen. It has been established that avoidance behaviors are linked with worse mental health and decreased ability to care for others (Liang et al., 2023). These behaviors can be prevented by providing encouragement to the caregivers and informing them on how to prevent such occurrences in the future. These strategies assist the caregivers to manage the challenges squarely hence minimizing the long-term effects of the maladaptive coping styles.

Another unhealthy way that is evident in caregivers is over-identification with the caregiving role. The caregivers who develop a sense of over-protectiveness may end up being preoccupied with the patient's needs and completely disregard their own needs and health (Zhai et al., 2023). It is good to have a commitment to caregiving but one should not get too engrossed in it because this may lead to caregiver burnout and emotional exhaustion. The study has revealed that caregivers who lack a positive identity outside caregiving are likely to develop resentment, anger, and hopelessness. This intense role identification can also lead to role strain and loss of personal identity since the caregivers may only see themselves as caregivers. According to the study conducted by Zhai et al., (2023), the authors noted that caregivers who participate in leisure, hobbies, or social activities are more satisfied and less stressed. Hence, it is important that caregivers should adopt positive self-images to help them overcome the negative impacts of over-identification with the caregiving role.

Another maladaptive coping style is self-blame, which involves assuming full responsibility for uncontrollable events by caregivers. The caregivers may feel that they have let the patient down if they cannot meet all the needs of the patient, although the challenges may be out of their reach, for instance, the patient's condition (Wadsworth, 2015). This kind of self-critical thinking pattern can worsen feelings of anxiety and depression, and therefore, the caregivers are always in a state of emotional distress. Research has shown that caregivers who frequently blame themselves for the caregiving difficulties are likely to experience feelings of inadequacy and guilt (Liang et al., 2023). Self-blame can also influence the caregiver's decision to seek help because they may feel that seeking help is a sign of failure. Self-blame can be treated by interventions that would help the caregivers to realize that they cannot do everything and need to change their attitude. CBT and psychoeducation about caregiving stress are effective in assisting caregivers to alter their thinking and reduce feelings of guilt that are unfounded (Kwon et al., 2017). These interventions assist the caregivers to shift from self-negativity to self-compassion, which makes them emotionally strong and not stressed.

3.4.3 Support Interventions

Counseling support interventions are very important in the minimization of the psychological effects of caregivers of cancer patients. Counseling is one of the most effective approaches of supporting caregivers since it offers them a framework in which they can voice their feelings and seek how to deal with them. Counseling for the individual or the group assists the caregivers to overcome the feelings of guilt, anxiety, and depression and also assists in enhancing the coping strategies. Studies have also shown that caregivers who undergo professional counseling are less psychologically distressed than those who do not (Zajdel et al., 2023). CBT has been found to be effective in helping caregivers change their perception of stressors associated with caregiving. Also, professional counseling helps caregivers to have a focus on their own needs and to set boundaries, which are not set in caregiving roles. The incorporation of counseling in cancer treatment implies that the caregivers are able to receive mental health services while attending to the patients. Thus, the counseling interventions that target the psychological aspect of the caregivers enhance the quality of care and the health of the family.

Daynes-Kearney & Gallagher (2023) have also noted that peer support groups is another intervention as it enables the caregiver to discuss with other people who are in the same situation. These groups assist the caregivers to be in a position to learn from others, share with others and get support from other people who are also in the same position. Other studies have also shown that peer support groups assist in decreasing the level of loneliness and increasing the level of acceptance among caregivers. Support groups also assist caregivers in terms of information on how to handle the patient, for example, how to handle symptoms or how to handle the health system (Wilson et al., 2023). Tele-support groups have been on the rise in the recent past since they are convenient and flexible in supporting the caregivers who may be busy or live far from the support group. These online platforms enable the caregivers to communicate with other people in real time and make them understand that they are not alone. This assistance helps to ease the burden on the caregivers and makes them more capable of performing their tasks.

Psychoeducational programs is another type of evidence-based intervention that seeks to ensure that the caregivers have the knowledge and skills that are needed in the caregiving process (Gordon & Bila, 2023). Such programs may contain information on the disease, symptoms, and impact on the caregiver and the care receiver. The study reveals that caregivers who participate in psychoeducational programs have low levels of anxiety and depression because they are confident in their caregiving responsibilities (Wister et al., 2022). Such programs may include practical activities for example, administering medication or recognizing when a patient is uncomfortable, which assists in decreasing the feelings of incompetence among caregivers. Moreover, psychoeducational programs also address the health of the caregivers, both physical and mental (Wister et al., 2022). Psychoeducational programs decrease the level of uncertainty and improve the quality of life of caregivers through providing them with knowledge and tools.

These interventions in cancer care should be implemented in a team work that also considers the caregivers. Healthcare providers, social workers, and mental health professionals should collaborate to assist caregivers. For example, in the care plan, hospitals and cancer centers can offer such services as counseling or support groups. It is also possible to offer relief care services to the caregivers so that they can have a break from their duties. Caregivers who participate in more than one intervention such as counseling, peer support, and psychoeducation have better mental health than those who participate in only one intervention. It also has positive impacts on patients because caregivers who are less stressed and more competent in their duties provide better care (Zajdel et al., 2023).

According to Vitaliano et al. (2013), although these interventions have been found to be effective, the question of availability remains a critical question. Some of the challenges that caregivers experience include financial problems, lack of information, or lack of time to seek assistance. The study also shows that caregivers from low income or rural setting are more vulnerable since they cannot afford counseling or support programs. Cultural beliefs also do not allow caregivers to seek help for their mental health issues, which only worsens their state. To overcome these barriers, there is need to implement policies and programs that will enhance the availability of caregiver support services. For instance, telehealth options and cheap counseling services can help the caregivers to overcome the challenges of finance and access. Public health campaigns can also assist caregivers to seek help by informing the public about the existence and the need for support interventions. This means that the caregivers and the patients should be given equal opportunities to access the support services in order to alleviate their stress.

4. Discussion

4.1. Interpretation of Key Findings

This review has demonstrated that caregivers of cancer patients are stressed and that they experience various types of stress. The issues that are associated with caregiving include stress, which is emotional, physical, and financial, and this leads to anxiety, depression, and burnout among the caregivers (Liang et al., 2023). The results on the use of adaptive coping mechanisms like mindfulness and social support suggest that there is possibility of reducing the level of caregiver distress by employing specific methods. These findings suggest that the emotional and the functional aspects of caregiving should be considered since they are interrelated and are linked to the health of the caregivers. This study also revealed that professional counseling and psychoeducational programs were the most effective support services in enhancing the psychological well-being of caregivers (Di Lorenzo et al., 2024). However, the variation in the caregivers' response to these interventions suggests that it is imperative to design particular approaches to improve the results. The review also outlines other maladaptive coping strategies that the caregiver may adopt such as emotional detachment and substance abuse. These findings underscore the need for culturally competent and integrated services for caregivers.

Therefore, it can be stated that personal and social resources of caregivers affect their psychological health. The present study also showed that caregivers with social resources and coping resources had lower level of distress and higher level of well-being than those with fewer resources (Akpan-Idiok et al., 2020). This has led to the need to incorporate social support in the caregiving models in a bid to reduce the effects of caregiving stress. Also, caregivers who use problem-solving and cognitive behavioral approaches are more resilient, which supports the need for psychoeducational approaches that strengthen such skills. However, the review also discusses the dangers of the caregivers who have no support or who look for it in the wrong way. Such individuals are likely to suffer from long-term mental disorders such as anxiety and depression. These disparities should be resolved to reduce the burden on the caregivers and improve the quality of care for both the caregivers and the patients (Liang et al., 2023).

This review also shows that caregiver distress and patient care quality are two variables that are related to each other. Stressed caregivers are likely to provide suboptimal emotional and practical support to the patients, which may influence the patients' adherence and outcomes. This is because the welfare of the caregivers should also be taken into consideration not only for the sake of the caregivers but also for the sake of the patients. The study supports the idea that caregivers should be incorporated into cancer care since their health affects the quality of care given to patients. Thus, the focus on the mental health of caregivers can help healthcare systems provide better and more efficient cancer care.

The variation in the caregivers' experience with the interventions also points to the need to consider the differences in coping styles and needs of the caregivers. Although mindfulness-based interventions and CBT have been found to be beneficial for many caregivers, it is crucial to understand that such interventions may not be effective for all patients (Kriakous et al., 2020). Some of the factors that influence the applicability of certain interventions include the caregiver, his or her personality and cultural beliefs, the type of patient, and the nature of the patient's illness. For instance, a caregiver who is shy may require one-on-one counseling or online support groups while an extroverted caregiver may require group sessions or social interactions.

This variability calls for the need to come up with care plans that will suit the needs of the caregivers. However, the caregivers' ability to implement the interventions is constrained by factors such as time, money, and access to mental health services. Therefore, these barriers should be taken into consideration by the healthcare systems when developing caregiver support programs so that caregivers of different statuses can be well supported.

Another factor that needs to be taken into consideration is the involvement of professional healthcare givers in the care of the caregivers. As much as informal caregivers rely on family and friends, the involvement of healthcare professionals can greatly improve the caregivers' capacity to cope with stress related to caregiving (Zhai et al., 2023). Nurses, physicians, and social workers can be involved in the early recognition of caregivers who are likely to experience psychological distress and link them to the right support and services. It is also important to educate healthcare providers on how to identify the signs of burnout and distress among caregivers and to incorporate routine mental health check-ups to prevent the worsening of caregiving issues. Also, involving caregivers in patient care teams by having daily or weekly meetings and information exchange can make them feel less lonely (Zhai et al., 2023). This is because, through the involvement of healthcare professionals in the caregiving process, a more holistic and integrated approach to cancer care is realized, which is advantageous to both the caregivers and the patients.

Last but not least, the effects of caregiving on mental health in the long run need to be explored and addressed. Most caregivers remain stressed and psychologically distressed even after the treatment of the patient, and some of them may develop anxiety, depression, or PTSD. The effects of caregiving may be further exacerbated by unresolved grief, role changes, and financial pressures that persist even after the caregiving process is complete. The study also reveals that caregivers are at a higher risk of developing long-term mental health issues that may affect their reintegration into society and their roles in their personal and professional lives. Therefore, it is important to offer post-caregiving support services such as counseling, peer support, and financial support to help caregivers recover from the stress of caregiving. The long-term care of caregivers' mental health should be given attention to avoid the development of chronic psychological disorders among the caregivers.

4.2. Comparison with Existing Research

This is in concordance with other studies that have shown that caregivers of cancer patients have a high level of psychological stress, in concordance with the findings on anxiety, depression, and burnout. Past studies have established that caregiving is a stressful occupation, and caregivers are more stressed than the general population (Liang et al., 2023). However, this review contributes to the existing literature by identifying new approaches, including mindfulness-based interventions, which are gradually being considered as promising in decreasing caregiver stress Mindfulness has been found to assist caregivers in dealing with emotional issues, which makes it a feasible and effective way of improving mental health (Kriakous et al., 2020). These findings supplement the previous literature that has explored the use of emotional support and counseling in the treatment process, thus adding to the list of effective approaches. In addition, this review underscores the importance of exploring social determinants of caregiving distress, which has not been well addressed in prior studies.

In comparison with previous studies, this review shows a shift towards the models of support that are directed towards the caregivers, which may suggest a shift in the dynamics of the caregiver-patient relationship. Traditionally, caregiving research was mainly concerned with the patient's well-being, with little regard for the caregiver. As the present review has shown, the current research also underlines the interdependence between the caregivers' state and the quality of the patient's care. This is in line with the understanding that caring for the carers is mutually beneficial in enhancing the emotional and practical aspects of cancer treatment. In addition, this review also discusses how caregiver's characteristics, including gender, age, and SES, influence their experiences. Although prior studies have documented these disparities, this review underscores the importance of developing targeted interventions for the identified caregiver subgroups.

However, this review shows that there are still gaps in the implementation of caregiver support strategies for different populations. Most of the studies done in this area are done on caregivers in developed countries, thus leaving out the caregivers in low-income or rural settings. Furthermore, there is a lack of literature on culturally sensitive interventions that take into consideration the social and cultural environment in which caregiving takes place. This review also emphasizes the need to extend the research on caregiving to other populations and to consider new approaches that can be implemented at a large scale. Therefore, future research can use the current literature to establish better models of support for caregivers.

4.3. Implications for Caregiver Support

This review suggests that there is a need to improve the caregiver support services and that the services should be extended and improved. The initial psychological assessment and needs assessment should help healthcare providers recognize caregivers at risk. These assessments can be helpful in identifying which caregivers are at risk and may need additional support in the form of counseling or group therapy. The incorporation of the psychological support into the primary cancer care implies that the caregivers receive the assistance they need without any additional burden in terms of coordination or funding. It is also possible to provide more targeted support, such as mindfulness or problem-solving sessions that will help the caregivers to manage stress and enhance their practice (Kriakouset al., 2020). Some of these services include the coordination of care by the healthcare providers, mental health professionals, and social workers for the caregivers.

Crisis or relief services are especially helpful in decreasing caregiver stress because they offer a temporary relief from caregiving duties. These services assist the caregivers to have a break and be in a position to continue offering their services to the patients for a long time. The findings of the study show that caregivers who use respite care are less stressed and have higher life satisfaction. However, many caregivers are not aware of these services or cannot pay for them or the services are not available in their area. It is important to ensure that there are more affordable or even free respite care services to ensure that all caregivers can access them. In addition to formal respite care, other community-based services that offer concrete assistance such as cooking or transportation can also reduce caregiver stress.

Another area that has the potential to expand the availability of caregiver support is telehealth services. Teletherapy, support, and psychoeducation can be used to reduce disparities in care for caregivers in rural or other underserved areas. Telehealth options also have the added benefit of convenience since caregivers can get support without having to leave their homes or abandon their caregiving responsibilities. The study has also shown that patients who receive telehealth services also have the same advantages in terms of mental health as those who attend conventional physical sessions. The incorporation of telehealth into the traditional care trajectories of cancer patients can significantly enhance the availability and effectiveness of caregiver support interventions. Besides, technology such as mobile health applications or online resource centers can assist the caregivers to get information and support at their own time convenience.

It is therefore important for policymakers to ensure that the needs of the caregivers are met by implementing policies that will help them overcome the financial, logistical and social challenges that they face in their efforts to seek support. Some of the ways that can help to reduce the level of stress among caregivers include offering financial support for mental health services for caregivers and offering workplace accommodations such as flexible schedules or caregiver leave. Awareness campaigns can also assist in demystifying the challenges that come with caregiving and make sure that caregivers do not struggle in vain. The caregiving process and the caregivers themselves can be improved by creating supportive environments at the macro and meso levels of healthcare systems. These initiatives are not only beneficial to the caregivers but also enhance the quality of care offered to the patients, which enhances the general outlook to cancer treatment.

Besides increasing the availability of formal and informal support services, there is a need to educate caregivers on how to provide better care and cope with stress. It is possible to improve the quality of care and protect the mental health of caregivers through psychoeducational programs that teach practical caregiving skills, communication skills, and stress reduction. These programs can assist the caregivers in learning about the type of cancer treatment, the physical and emotional needs of the patient and how to effectively manage the caregiving tasks. Informing the caregivers about the psychological effects of caregiving and the need to take care of themselves can help to eliminate the guilt and encourage them to seek help when necessary. Also, the caregivers who are knowledgeable are in a better position to identify the signs of distress in themselves and other caregivers, hence seeking help early enough. It is therefore important to incorporate caregiver education into the cancer care plans in order to improve both the caregivers and the patients.

Zhai et al. (2023) stresses even more that another factor that should be taken into account in enhancing caregiver support is the engagement of other relatives and friends in caregiving. It is important to note that caregiving is not always the sole responsibility of one person and that engaging other family members in caregiving decisions and stress reduction techniques can help to lessen the load on any one person. Caring for a family member with a chronic illness can be stressful and lead to burnout; however, family-centered interventions that encourage communication and support can help caregivers cope with the stress. These interventions can also assist the family members to appreciate the emotional and physical ordeals that the patients are going through hence promoting togetherness. Also, when several family members are involved in caregiving, the burden is not placed on one person (Zhai et al., 2023). It is recommended to provide family counseling sessions or workshops that would address the caregiving roles and responsibilities to enhance the family’s unity and support the caregivers.

Finally, the inclusion of caregiver mental health into the overall health promotion agenda is important for the sustainability of caregiver support interventions. Awareness campaigns that educate the public on the mental health issues that caregivers go through can help eliminate prejudice and encourage people to seek assistance without prejudice. These campaigns can raise awareness about the significance of caregiver mental health as a component of health and the need for structural changes that address the challenges of caregiving. In addition, the expansion of mental health services for caregivers can be done in primary care settings like general practitioners’ offices or community health centers. This would make the support for caregivers more mainstream and easily available to a larger population. The change in the perception of the society towards the mental health of caregivers can improve the quality of life of caregivers as well as the quality of care given to patients.

4.4. Gaps in the Literature and Future Research Directions

However, there are still some gaps in the literature concerning the caregiver's psychological distress. The majority of the research is cross-sectional, and there is little information about the follow-up and sustainability of coping strategies. In addition, there is a lack of research on the culturally sensitive interventions that may be needed to address the needs of ethnic and culturally diverse caregivers. Male caregivers are also not given much attention in research studies because they are different from female caregivers in terms of challenges they encounter. Another important gap is the absence of technology solutions such as mHealth and virtual reality that can provide long-term and easily accessible support for caregivers. Further research should be directed towards the long-term efficacy of psychological interventions and the impact on the quality of life of the caregivers in the long term. To develop policies, it is important to look at the correlation between caregiver stress and other factors such as income inequality and access to healthcare. Furthering the study to other types of caregivers and other forms of interventions will assist in the development of a more comprehensive understanding of the level of psychological distress among caregivers.

5. Conclusion

5.1. Summary of Findings

This literature review has shown that caregivers of cancer patients experience high levels of anxiety, depression, and burnout. Stress is inevitable in caregiving since it involves the management of the patient's disease, interaction with healthcare providers, and other responsibilities. The review also points out that caregivers experience role strain and social isolation, which worsens their suffering and decreases their quality of life. These are made worse by issues to do with finance, lack of equipment, and the pressure of seeing a relative in discomfort. These multiple stressors should be tackled to enhance the mental health of the caregivers and the quality of care they offer. This review also supports the notion of the caregiver's mental health and patient care outcomes, with a focus on psychological distress.

The following were found to be the resilience mechanisms that assisted in decreasing caregiver stress. Mindfulness-based interventions, social support, and psychoeducational programs are particularly effective in improving the emotional resilience and coping skills of the caregivers (Kriakous et al., 2020). Other services include professional counseling and peer support, both of which are evidence-based. However, the review reveals that there are some gaps in the availability of these resources especially to the caregivers in the targeted groups. Healthcare providers are in a good position to provide targeted interventions in cancer care to ensure that support services are provided to all. These findings imply that there is a need to equip the caregivers with knowledge and resources that will help them in performing their tasks and also meet their needs.

On the other hand, negative coping styles such as emotional and social isolation and substance abuse are unhealthy for the psychological health of the caregivers. Such behaviors may be observed when the caregivers are not empowered or when they are overburdened with caregiving responsibilities. The negative effects of maladaptive coping styles indicate that the problem should be detected in its early stage to avoid the effects on the mental health of the concerned persons. The review also highlights the importance of training the caregivers on how to manage stress and ensuring that they are well structured through counseling and training. Thus, it is possible to state that by targeting maladaptive behaviors, the level of distress in caregivers can be decreased and their quality of life can be enhanced in healthcare systems.

The review also discusses some of the systematic barriers that hinder caregivers from getting the necessary support such as financial constraints, lack of information, and cultural biases, including financial constraints, lack of information, and cultural biases. Some of the challenges that are peculiar to caregivers include; lack of access to resources because of geographical location and financial constraints. These disparities highlight the need for policy action to enhance the accessibility of caregiver support services and reduce disparities in care. To address these gaps, there is a need for multi-sectoral collaboration from the healthcare systems, policymakers, community-based policymakers, and community-based organizations to come up with culturally appropriate and accessible support for caregivers.

5.2. Recommendations for Practice and Policy

It is crucial for healthcare providers to recognize the psychological distress of caregivers and intervene as soon as possible. It is recommended that psychological distress screening should be done periodically in cancer care settings to identify caregivers who may require assistance. The caregiver support programs should include mindfulness training, CBT, and problem-solving sessions. These evidence-based approaches help caregivers to find ways of managing stress and enhancing their psychological health. Also, making caregivers to access respite care services will also help to reduce their level of stress since they will be relieved from their duties for some time. It is, therefore, important that these interventions are made available, accessible and culturally sensitive.

The policy interventions should focus on the expansion of the caregiver support services through subsidies, telemedicine, and community-based programs. Caregivers should be given financial assistance to enable them to be financially stable and have a better standard of living. Telehealth services such as virtual counseling and online support groups are feasible and beneficial for caregivers who lack resources. Other forms of support include local caregiver support organizations and other practical support services that can assist in the caregiving process. There is also a need for workplace policies that will enable employed caregivers to work flexibly and have special leave to attend to their caregiving responsibilities.

It is important to educate people about the difficulties that caregivers go through and to reassure the caregivers that they are not alone. These campaigns can assist in raising awareness of the existence and usefulness of support interventions, decrease the stigma, and enhance the quality of life of the caregivers. It is also important to increase the knowledge of the public and the healthcare providers on how to meet the needs of the caregivers. For there to be a long-term and sustainable caregiver support, it is important to involve the health care systems, policy makers and other community-based organizations. These can help in improving the quality of care offered to the patients, improve the quality of care given to the patients, and also help in reducing the cost of treating cancer in society.

Appendices

Appendix A: Table of Analyzed Articles.

The following table presents the articles reviewed in the literature review section of the study, including the focus of the study, the method used, and the findings.

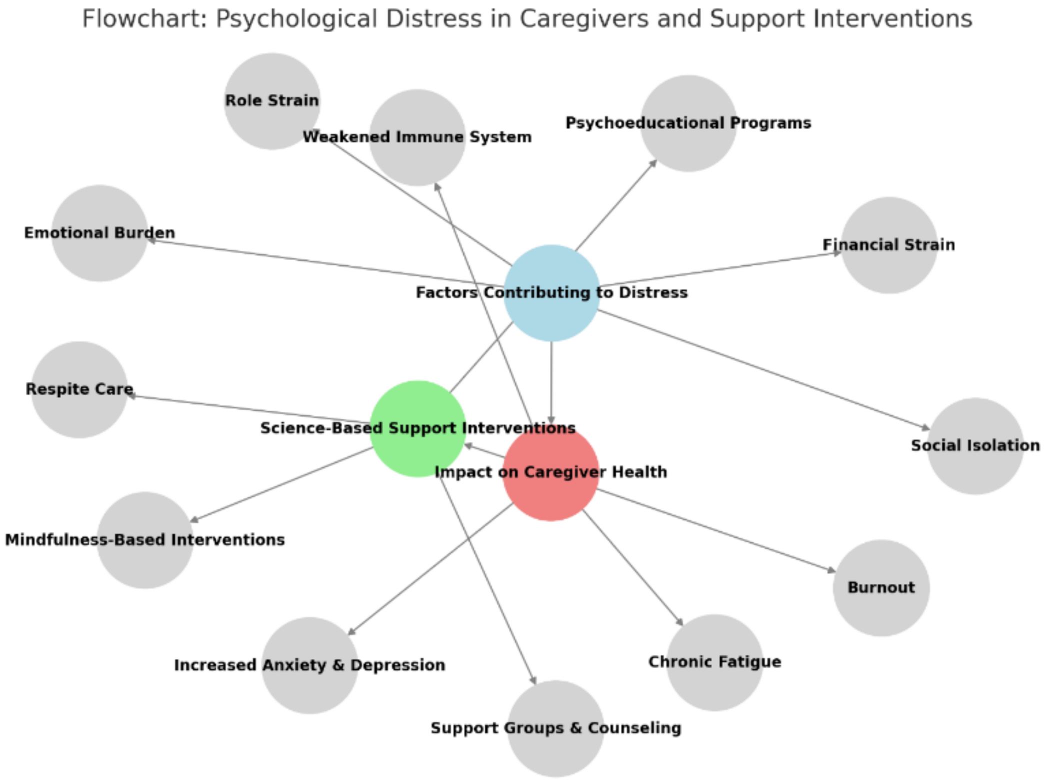
Table 2: Table of Analyzed Articles

Author(s) &Year	**Study Focus**	**Methodology**	**Key Findings**
Bedaso et al., 2022	Depression among caregivers of cancer patients	Systematic review and meta-analysis	45-60% of cancer caregivers experience clinical depression.
Belapurkar et al., 2023	Prevalence of anxiety and depression in caregivers	Cross-sectional study	High prevalence of anxiety and depression in caregivers of oral cancer patients.
El-Jawahri et al., 2021	Psychological distress in bereaved caregivers of cancer patients	Longitudinal survey study	Bereaved caregivers experience severe distress post-caregiving.
Kim et al., 2020	Long-term unmet needs among cancer caregivers	Longitudinal study over 8 years	Unmet caregiver needs persist for years post-caregiving.
Zajdel et al., 2023	Stress, coping, and physical health in caregiving	Psychological and physiological measures in caregivers	Chronic stress negatively impacts caregivers' physical health.
Kriakous et al., 2020	Effectiveness of mindfulness-based stress reduction on caregiver mental health	Systematic review	Mindfulness-based stress reduction significantly reduces stress and improves resilience.

Appendix B: Flowchart of Psychological Distress in Caregivers

The following is a flowchart of the process of psychological distress in caregivers, the factors that lead to it, the health effects, and the support interventions.

Psychological distress in caregivers



Flowchart: Psychological Distress in Caregivers and Support Interventions

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