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The impact of sociodemographic variables on anxiety and depression in caregivers

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Abstract

Caregivers for people with disabilities may encounter substantial mental health issues, such as anxiety and depression, stemming from the rigorous demands of caregiving. Comprehending the mental health of these caregivers is essential for enhancing their well-being and delivering appropriate support. This study aims to evaluate the prevalence of anxiety and depression in caregivers of individuals with disabilities and to investigate the relationship between these symptoms and sociodemographic variables. The Vietnamese adaptations of the Generalized Anxiety Disorder 7-item scale (GAD-7) and the Patient Health Questionnaire 9-item scale (PHQ-9) were administered to 914 caregivers. Descriptive statistics summarized mental health symptoms, whereas t-tests and ANOVA examined variations depending on gender, consumption of alcohol, and marital status. The findings indicated that caregivers displayed differing degrees of anxiety and depression, with females reporting elevated levels of both in comparison to males. Female caregivers exhibited elevated mean scores for both depression ($M = 0.29$, $SD = 0.41$) and anxiety ($M = 0.32$, $SD = 0.49$) in contrast to male caregivers, who demonstrated lower scores for depression ($M = 0.18$, $SD = 0.30$) and anxiety ($M = 0.19$, $SD = 0.36$). Caregivers who consumed alcohol exhibited lower depression scores ($M = 0.14$, $SD = 0.22$) in contrast to those who abstained from alcohol ($M = 0.26$, $SD = 0.39$), revealing a statistically significant difference in depression levels ($p < 0.05$). Marital status has shown strong correlations with scores for both depression and anxiety disorders. The changes were statistically significant for both depression ($F(901, 3) = 9.250$, $p < 0.001$) and anxiety disorder ($F(901, 3) = 4.895$, $p = 0.002$). Widowed caregivers exhibited the highest levels of depression ($M = 0.54$, $SD = 0.58$) and anxiety ($M = 0.51$, $SD = 0.06$). Caregivers of individuals with impairments endure substantial anxiety and depression, with notable sociodemographic disparities in symptom severity. These findings underscore the necessity for specialized mental health therapies to assist this demographic.

Keywords: Anxiety, Caregivers, Depression, Disability, Mental health, Vietnam.

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1. Introduction

Caregiving for those with disabilities is a crucial yet frequently undervalued duty that can profoundly affect the mental health and overall well-being of caregivers. As the worldwide incidence of disabilities escalates, particularly among elderly people and those with chronic ailments, the number of caregivers correspondingly rises. Caregivers, frequently family members, are responsible for addressing the physical, emotional, and medical requirements of those with disabilities, a duty that necessitates considerable time, energy, and resources. Numerous caregivers balance these responsibilities with their personal, familial, and professional commitments, resulting in considerable emotional and physical stress. The obligations imposed on caregivers may appear insurmountable, resulting in heightened stress, anxiety, despair, and burnout [1, 2]. Caregivers delivering long-term care to individuals with significant disabilities frequently endure extended durations of emotional stress and fatigue, which are intensified by insufficient mental health assistance and resources. Consequently, caregivers may endure ongoing psychological discomfort, characterized by feelings of loneliness, frustration, and helplessness, which can impede their capacity to manage the caregiving position efficiently [3, 4]. Besides the physical problems of caregiving, numerous caregivers are deprived of official support structures, such as respite care, counseling, or peer networks, which could alleviate the emotional burden of their duties. Moreover, caregivers may perceive a lack of support from healthcare systems that predominantly prioritize the care receiver, neglecting the needs of the caregiver [5-7]. The lack of support may lead caregivers to feel overwhelmed and incapable of addressing their own physical and mental health requirements. Moreover, caregiving can be especially arduous for persons lacking sufficient social or financial support, as they may be unable to access the resources or services that could mitigate their burden. The absence of support heightens the likelihood of caregiver burnout, subsequently resulting in a decline in the health of both the caregiver and the care recipient. Moreover, caregivers frequently undertake this responsibility out of a sense of obligation, which may compel them to prioritize the needs of the client they are assisting above their own, thereby intensifying the burden on their mental health. Caregiving constitutes a sort of emotional labor, which can be especially arduous for individuals lacking the requisite abilities, resources, or emotional coping mechanisms to manage the psychological demands of the role. Emotional fatigue and stress from incessantly caring for a loved one can lead to mental health disorders, including depression, anxiety, and sleep difficulties, all of which adversely affect a caregiver's quality of life [8-10]. Caregivers frequently encounter guilt, particularly when attempting to reconcile their caregiving duties with self-care or social engagements, exacerbating their emotional turmoil. Furthermore, numerous caregivers express sentiments of social isolation, as caregiving responsibilities frequently afford no opportunity for social interaction or leisure. This sensation of isolation may lead to a deficiency in interpersonal connections, exacerbating feelings of loneliness, sadness, and anxiety.

Literature extensively documents the mental health issues encountered by caregivers of individuals with disabilities, indicating that these caregivers experience a heightened risk of psychological distress relative to the general population. Caregivers of individuals with disabilities frequently encounter elevated levels of stress, anxiety, and depression as a result of the challenging nature of their responsibilities. The persistent emotional and physical strain of caregiving can result in mental health disorders, including depression and anxiety, which are prevalent among caregivers [11-13]. The continuous demands of caregiving, especially for those with significant disabilities, can generate an unyielding pressure that caregivers must navigate daily. Prolonged exposure to stress can profoundly impact caregivers' mental well-being, resulting in burnout and potential physical health issues [14-16]. The intensity, duration, and complexity of caregiving tasks might exacerbate these mental health difficulties. Caregivers of individuals with significant physical or intellectual disabilities may endure heightened psychological strain compared to those caring for individuals with less complex needs. The severity of the handicap can elevate the required level of care, hence exacerbating the caregiver's emotional load [17-19]. This pressure is exacerbated by frequently restricted access to support networks, respite care, and resources. Caregivers with insufficient social support and limited access to professional mental health care are more susceptible to psychological distress. Insufficient resources and support networks can result in feelings of loneliness and powerlessness, complicating caregivers' ability to maintain their emotional well-being while performing their caregiving responsibilities.

Beyond the caregiving situation, personal attributes such as gender and marital status significantly influence caregivers' mental health outcomes. Studies have repeatedly demonstrated that female caregivers are more prone to report elevated levels of psychological distress than their male counterparts [20-22]. This gap is typically ascribed to the unequal caregiving obligations that women undertake, as caregiving duties are commonly perceived as the responsibility of female relatives in numerous cultures. Moreover, women may encounter cultural expectations that intensify the emotional work associated with caregiving, resulting in elevated rates of sadness and anxiety. Additionally, single, widowed, or divorced caregivers may endure heightened psychological suffering due to the absence of a supportive spouse to share the caregiving responsibilities. Social isolation and the lack of a spouse can exacerbate feelings of loneliness and heighten susceptibility to mental health issues [23, 24]. These caregivers may contend not only with the emotional burdens of caregiving but also with the logistical challenges of reconciling caregiving with personal and professional obligations, resulting in elevated levels of stress and anxiety.

Lifestyle factors, including alcohol usage, profoundly affect the mental health of caregivers, with some resorting to substances like alcohol as a coping strategy to alleviate the emotional stress and substantial demands of caregiving. Caregiving frequently entails overseeing chronic or severe ailments, resulting in elevated feelings of anxiety, irritation, and emotional fatigue. To mitigate these emotions, caregivers may turn to alcohol or other narcotics for temporary comfort from their anxiety [19]. Alcohol may first provide an illusion of respite from the demands of caregiving, delivering temporary stress alleviation and enabling caregivers to briefly disengage from their obligations. This coping method may result in significant long-term repercussions for caregivers' mental health and overall well-being. Regular consumption of alcohol as a coping mechanism can lead to dependency or substance abuse, worsening pre-existing mental health disorders such as anxiety and depression, thus diminishing caregivers' emotional resilience [25]. The pattern of transient alleviation succeeded by deteriorated mental health can establish a harmful feedback loop, ensnaring caregivers in a cycle of emotional turmoil and maladaptive coping strategies. Additionally, caregivers who depend on alcohol or other substances to manage stress may encounter considerable physical health issues, as the prolonged effects of substance use can lead to elevated rates of hypertension, cardiovascular disease, and sleep disturbances [26, 27]. These physical ailments adversely impact caregivers' quality of life and their capacity to deliver sufficient care to their loved ones, hence exacerbating their emotional distress. Consequently, examining the impact of substance use among caregiver populations is essential for comprehending the comprehensive range of mental health difficulties encountered by caregivers and emphasizing the necessity for more effective and healthier coping mechanisms.

The lack of sufficient respite care and support services further restricts caregivers' capacity to manage stress properly. In the absence of respite from caregiving responsibilities, caregivers face the peril of physical and mental exhaustion, resulting in diminished opportunities for recuperation or participation in self-care activities that could mitigate stress. Respite care services are crucial for granting caregivers the vital time to rejuvenate, thereby enhancing their emotional well-being and ability to care for their loved ones. Regrettably, these programs frequently prove inadequate or unreachable, particularly in low-resource environments, compelling caregivers to navigate the substantial challenges of caregiving without sufficient assistance [28]. The absence of support, combined with insufficient access to mental health resources, hinders caregivers from pursuing professional assistance or obtaining necessary therapy. Numerous caregivers may lack awareness of accessible resources or may experience stigma due to social perceptions of mental illness, which frequently regard caregiving as a commendable, selfless endeavor that ought to be undertaken without grievance. The stigma associated with caregiving and mental health disorders may deter caregivers from seeking assistance, thereby intensifying their emotional pain and impairing their coping capabilities [29, 30].

Considering the profound effect of caregiving on caregivers' mental health, it is crucial to ascertain the primary causes that lead to psychological discomfort in this demographic. Comprehending these aspects will facilitate the creation of specialized interventions that cater to the distinct requirements of caregivers, especially those caring for individuals with disabilities. This study aims to investigate the prevalence of depression and anxiety in caregivers, emphasizing socio-demographic characteristics including gender, marital status, and alcohol intake. The project seeks to enhance the existing research on caregiver mental health by examining these relationships and offering insights that can guide the development of comprehensive support programs, policies, and services. Enhancing the mental health and well-being of caregivers will improve both their quality of life and the quality of care they provide to those with disabilities.

2. Methods

2.1. Participants

The research included 914 individuals in total. The gender distribution revealed a majority of females, including 621 individuals (67.9%), while males accounted for 293 participants (32.1%). This gender discrepancy may indicate wider population trends or the recruitment approach employed in the study. Participants were physically located in two provinces: Dong Nai and Tay Ninh. Dong Nai comprised 400 individuals (43.8%), while the majority, 514 individuals (56.2%), were located in Tay Ninh. This regional representation highlights the study's emphasis on a heterogeneous population throughout various provinces, recognized for differing socio-economic situations that may impact the findings. The participants exhibited notable uniformity in ethnic composition, with a predominant majority identifying as Kinh (n = 842; 92.1%), the principal ethnic group in Vietnam. Nevertheless, minor ethnic groups were represented, comprising Chinese individuals (n = 31; 3.4%), Tay (n = 3; 0.3%), and Nung (n = 1; 0.1%). A further 37 persons (4.0%) were classified as belonging to other, unnamed ethnic minorities. The inclusion of these groups underscores the cultural diversity within the study population, while the smaller sample numbers constrain the generalizability of findings for these minority groups. The individuals had diverse levels of educational achievement, indicating a wide range of literacy and learning experiences. Illiterate individuals constituted 6.9% of the sample (n = 63), whereas a substantial segment had attained primary education (n = 333; 36.4%) or secondary education (n = 311; 34.0%). A lesser percentage of participants indicated having completed high school (n = 153; 16.7%). Higher education was infrequent, with merely 51 participants (5.6%) possessing an undergraduate or college degree, and only one person (0.1%) having achieved a graduate-level education. Two participants (0.2%) possessed unspecified educational levels. This distribution indicates that most participants were situated at lower educational levels, mirroring the educational demographics of rural or less urbanized areas. The sample was primarily composed of married individuals, with 701 participants (76.7%) in this category. A minority of participants were single (n = 142; 15.5%), while 39 individuals (4.3%) were widowed, and 23 participants (2.5%) were separated or divorced. Nine individuals (1.0%) did not disclose their marital status, categorized as unknown. These numbers underscore a population predominantly marked by marital stability, aligning with conventional social institutions in Vietnam.

The sample of 914 individuals offers a substantial dataset, facilitating the examination of demographic, social, and cultural factors across many variables, such as gender, ethnicity, education, and marital status. This varied representation guarantees a thorough comprehension of the studied population while providing insights into certain subgroups, such as racial minorities or individuals with lower educational qualifications.

Table 1.
Overview of participants.

Characteristics		**Frequency (n)**	**Percentage (%)**
Gender	Male	293	32.1
	Female	621	67.9
Province	Dong Nai	400	43.8
	Tay Ninh	514	56.2
Ethnics	Kinh	842	92.1
	Chinese	31	3.4
	Tay	3	0.3
	Nung	1	0.1
	Others	37	4
Academic Level	Illiterate	63	6.9
	Primary	333	36.4
	Secondary	311	34
	High school	153	16.7
	Undergraduate/College	51	5.6
	Graduate	1	0.1
	Unknown	2	0.2
Marital Status	Single	142	15.5
	Married	701	76.7
	Window	39	4.3
	Separated/Divorce	23	2.5
	Unknown	9	1
Total		914	100

2.2. Measurements

This research employed two standardized self-report instruments to evaluate the mental health of caregivers for individuals with disabilities: the Vietnamese adaptations of the Generalized Anxiety Disorder 7-item scale (GAD-7) and the Patient Health Questionnaire 9-item scale (PHQ-9).

The Generalized Anxiety Disorder 7-item scale (GAD-7), created by Spitzer, et al. [31], is a prevalent tool for assessing the severity of symptoms associated with generalized anxiety disorder. The assessment comprises seven items evaluated on a 4-point Likert scale, with elevated scores signifying increased anxiety. The measure has been verified across many languages and groups, exhibiting robust psychometric features. The Vietnamese adaptation of the GAD-7 demonstrates substantial reliability and validity for evaluating anxiety symptoms within this particular cultural framework. The Patient Health Questionnaire 9-item scale (PHQ-9), developed by Kroenke, et al. [32], is a well-established instrument for screening and assessing the severity of depression. It comprises nine items derived from the DSM-IV diagnostic criteria for depression, evaluated on a 4-point scale. The PHQ-9 has been translated and validated into other languages, including Vietnamese, demonstrating exceptional internal consistency and reliability; therefore, it serves as a useful instrument for evaluating depression in Vietnamese populations.

This study utilized both measures to evaluate anxiety and depression symptoms in caregivers of individuals with disabilities, yielding Cronbach’s alpha values of 0.813 for the GAD-7 and 0.858 for the PHQ-9, which signify strong internal consistency and reliability within the sample.

2.3. Procedures

This study’s procedures were to evaluate the mental health of caregivers for individuals with disabilities through the Vietnamese adaptations of the Generalized Anxiety Disorder 7-item scale (GAD-7) and the Patient Health Questionnaire 9-item scale (PHQ-9). The study was executed in accordance with ethical standards and received permission from the appropriate ethical review board. Participants were enlisted from several caregiver support groups, community centers, and disability organizations. The inclusion criteria mandated that participants be primary caregivers of individuals with impairments, aged 18 or older, and capable of providing informed consent.

Upon agreeing to participate, individuals received a concise summary of the study along with informed consent papers detailing the aims, the voluntary nature of participation, and confidentiality protocols. Upon obtaining consent, participants completed the two self-report instruments, the GAD-7 and PHQ-9. The GAD-7, comprising seven items that evaluate generalized anxiety symptoms, was administered initially, followed by the PHQ-9, which includes nine measures assessing depressive symptoms. Each participant individually completed both scales, with instructions given in Vietnamese to ensure clarity and comprehension.

The questionnaires were disseminated in either paper format or electronically, based on participant preference. The anticipated duration to finalize both questionnaires was roughly 15 to 20 minutes. Upon completion, participants submitted the questionnaires to the study team, either in person or through a secure online platform. No personal identifiers were documented, thus preserving participant anonymity.

Data were subsequently input into a secure database for examination. The scales' reliability was evaluated by Cronbach's alpha to confirm internal consistency. Descriptive and inferential statistics were utilized to assess the degree of anxiety and depression in caregivers and to investigate potential relationships with sociodemographic variables. Concerns about participants' mental health observed throughout the study were mitigated by offering recommendations to local mental health providers. Participants were acknowledged for their participation and given information regarding caregiver support resources.

2.4. Ethical Aspects

Ethical approval was obtained from the Institutional Review Board of the Traditional Medicine Institute of Ho Chi Minh City on December 7, 2023, and complied with the ethical standards of the Declaration of Helsinki. It adhered to the American Psychological Association's guidelines for research with human subjects, safeguarding participant rights, privacy, and welfare. All subjects provided informed consent, and their anonymity was preserved. Psychological problems were mitigated by referrals to mental health providers.

2.5. Data Analysis

Data analysis was conducted utilizing statistical software, specifically SPSS (Version 26). Descriptive statistics, comprising means and standard deviations, were computed for the GAD-7 and PHQ-9 scores to encapsulate levels of anxiety and depression. Cronbach's alpha was calculated to evaluate the scales' reliability. Independent t-tests and one-way ANOVA were employed to analyze variations in mental health symptoms, with post-hoc Tukey HSD tests utilized for significant ANOVA findings. Statistical significance was established at $p < 0.05$ for all analyses.

3. Results

The research examined the prevalence, intensity, and co-occurrence of depression and anxiety disorders in caregivers of individuals with disabilities, highlighting the psychological strain linked to their caregiving responsibilities. A total of 184 participants (20.1%) were recognized as suffering from depression, with a mean depression score of $M = 7.92$ ($SD = 3.63$). Mild depression was the most commonly reported level, impacting 147 participants (16.1%), indicating that several caregivers exhibit early-stage depressive symptoms that may intensify if not addressed. Moderate depression was identified in 24 subjects (2.6%), indicating an escalation in symptom intensity. Nine participants (1.0%) experienced moderately severe depression, while four people (0.4%) exhibited severe depression, highlighting notable psychological discomfort among a small group of caregivers. The findings indicate that although severe depression is infrequent, the significant occurrence of mild and moderate depression underscores the emotional burden frequently experienced by caregivers.

Anxiety disorders were widespread among participants, with 159 individuals (17.4%) reporting symptoms and an average anxiety score of $M = 7.85$ ($SD = 3.15$). Among individuals with anxiety, mild anxiety was the most prevalent, reported by 122 participants (13.3%), suggesting elevated stress levels likely arising from caregiving duties. Twenty-six participants (2.8%) expressed moderate anxiety, while eleven people (1.2%) exhibited severe anxiety, indicating differing degrees of psychological distress. These findings highlight that whereas numerous caregivers encounter mild anxiety symptoms, a smaller yet substantial percentage suffers from moderate to severe anxiety, potentially detrimentally affecting their quality of life and caregiving capacity.

The research indicated a substantial correlation between depression and anxiety disorders in caregivers. A total of 104 participants (11.4%) exhibited both symptoms, with a mean depression score of $M = 8.89$ ($SD = 4.13$) and a mean anxiety score of $M = 8.53$ ($SD = 3.48$). This co-occurrence indicates the increased psychological difficulties encountered by these individuals, as simultaneously managing depression and anxiety might exacerbate their mental health and caregiving abilities. A comprehensive analysis of psychological disorders revealed that 239 participants (26.1%) experienced either depression or anxiety, signifying that over one-quarter of the caregiver population displayed indications of mental health issues. Conversely, the majority (675 participants, 73.9%) did not exhibit symptoms of sadness or anxiety, indicating that some caregivers may demonstrate resilience or benefit from external support systems that mitigate psychological suffering.

Table 2.
Descriptive statistics of depression and anxiety disorders.

Characteristics	**Frequency (n)**	**Percentage (%)**	**M**		**SD**	
Depression						
People with depression	184	20.1	7.92		3.63	
Levels of Depression						
Mild depression	147	16.1				
Moderate depression	24	2.6				
Moderately severe depression	9	1				
Severe depression	4	0.4				
Anxiety Disorder						
People with Anxiety Disorder	159	17.4	7.85		3.15	
Levels of anxiety disorder						
Mild anxiety	122	13.3				
Moderate anxiety	26	2.8				
Severe anxiety	11	1.2				
			M	SD	M	SD
			Depression		Anxiety disorder	
People had depression and anxiety disorder	104	11.4	8.89	4.13	8.53	3.48
People had an anxiety disorder or depression	239	26.1				
People did not have a psychological disorder	675	73.9				

The study sought to investigate the disparities in depression and anxiety disorder scores among caregivers of individuals with disabilities, including significant socio-demographic factors such as gender, alcohol intake, and marital status.

Table 3.
Comparison of depression and anxiety disorder among caregivers of people with disabilities Across Socio-Demographic (n = 914).

		M ± SD	
		Depression	Anxiety Disorder
Gender[a]		p < 0.001	p < 0.001
	Female	0.29 ± 0.41	0.32 ± 0.49
	Male	0.18 ± 0.30	0.19 ± 0.36
Drinking alcohol[a]		p < 0.05	p > 0.05
	Drinking alcohol	0.14 ± 0.22	0.16 ± 0.30
	Not drinking alcohol	0.26 ± 0.39	0.29 ± 0.46
Marital status[b]		p < 0.001	p = 0.002
	Single	0.19 ± 0.34	0.21 ± 0.37
	Married	0.25 ± 0.37	0.28 ± 0.45
	Widow[1]	0.54 ± 0.58	0.51 ± 060
	Separated/Divorce	0.37 ± 0.54	0.40 ± 0.66

Note: [a] T-test. [b] ANOVA with Tukey HSD post-hoc. [1] p < 0.001.

An independent sample t-test and one-way ANOVA were conducted to investigate the effect of social demographics on depression and anxiety disorders. Marked differences were observed in depression and anxiety disorder ratings between female and male caregivers. Female caregivers exhibited elevated mean scores for both depression (M = 0.29, SD = 0.41) and anxiety (M = 0.32, SD = 0.49) in contrast to male caregivers, who demonstrated lower scores for depression (M = 0.18, SD = 0.30) and anxiety (M = 0.19, SD = 0.36). The differences were statistically significant, with both depression ($p < 0.001$) and anxiety disorder ($p < 0.001$) exhibiting elevated levels among female caregivers. The findings indicate that female caregivers may endure a greater psychological load, possibly attributable to the convergence of caregiving duties with other societal expectations and responsibilities that impact their mental well-being.

The study revealed a substantial disparity in depression scores between caregivers who used alcohol and those who abstained, but no difference was observed in anxiety disorder levels. Caregivers who consumed alcohol exhibited lower depression scores (M = 0.14, SD = 0.22) in contrast to those who abstained from alcohol (M = 0.26, SD = 0.39), revealing a statistically significant difference in depression levels ($p < 0.05$). Nonetheless, no substantial difference in anxiety disorder ratings was seen between the two groups ($p > 0.05$). This indicates that alcohol intake may contribute to the alleviation of depressive symptoms among caregivers, but it seems to lack a comparable effect on anxiety, which may necessitate alternative coping strategies or interventions.

Marital status showed strong correlations with scores for both depression and anxiety disorders. The changes were statistically significant for both depression (F(901, 3) = 9.250, $p < 0.001$) and anxiety disorder (F(901, 3) = 4.895, $p = 0.002$). A Tukey HSD post-hoc test showed a significant difference in the mean of depression of widow caregivers (M = 0.54, SD = 0.58) compared to married ($M = 0.25$, $SD = 0.37$), p < 0.001, 95% C.I. = [0.132, 0.453]; as well as widow caregivers (M = 0.54, SD = 0.58) and single caregivers ($M = 0.19$, $SD = 0.34$), p < 0.001, 95% C.I. = [0.168, 0.521]. Besides, Tukey's HSD performed that a difference in the mean of anxiety disorder of widow caregivers (M = 0.51, SD = 0.06) compared to married ($M = 0.28$, $SD = 0.45$), p = 0.010, 95% C.I. = [0.040, 0.424]; as well as widow caregivers (M = 0.51, SD = 0.06) and single caregivers ($M = 0.21$, $SD = 0.37$), p = 0.002, 95% C.I. = [0.084, 0.506].

The elevated incidence of depression and anxiety disorders among widowed and separated/divorced caregivers may reflect the compounded emotional and social difficulties they encounter, including spousal loss, sole caregiving duties, and possible deficiencies in emotional or financial support, which may intensify their psychological distress.

4. Discussion

This study aimed to investigate the factors affecting the mental health of caregivers for individuals with disabilities, specifically concentrating on depression and anxiety disorders. Caregiving is recognized as a profoundly difficult and emotionally demanding role, making it essential to comprehend the socio-demographic aspects that may intensify or mitigate psychological suffering among caregivers. This study's findings underscore the substantial influence of gender, marital status, and alcohol intake on caregivers' mental health. These findings enhance the existing literature on caregiver well-being and underscore the necessity for tailored interventions that may address the distinct issues encountered by various caregiver groups. This discussion examines the implications of these findings in relation to existing research and contemplates new directions for future study.

The observation that female caregivers exhibit markedly elevated levels of melancholy and anxiety compared to male caregivers corresponds with extensive research that has consistently recognized gender as a pivotal component in caregiver stress [33]. Caregiving obligations are frequently allocated disproportionately, with women, especially in several cultures, assuming the predominant share of these duties. The unequal distribution of caregiving responsibilities frequently results in increased psychological stress for women. Alongside the mental and physical challenges of caregiving, women often manage other tasks, such as housework, caregiving, employment, and frequently, the principal emotional support within the family [34-36]. These numerous obligations might generate excessive pressure, resulting in stress, exhaustion, and ultimately, diminished mental health outcomes. Women, especially those in caregiving positions, frequently experience elevated feelings of guilt and anxiety, as they struggle to balance their caregiving responsibilities with other facets of their lives [34, 37, 38]. Caregiving can be more emotionally exhausting for women, as they are more prone to forming profound emotional bonds with those they assist. The intense emotional connection may intensify stress and anxiety, particularly when caregiving evolves into a prolonged obligation lasting years or even decades [19, 39]. Women, as caretakers, are frequently expected to deliver both physical care and emotional support, resulting in an internalized sense of obligation and an intense fear of inadequacy. The sense of obligation, along with gendered expectations of selflessness and nurturance, may increase women's susceptibility to mental health illnesses like depression and anxiety [40].

This study's findings indicate that gendered expectations, along with the emotional and physical burdens of caregiving, may increase the susceptibility to mental health problems in female caregivers. Unlike male caregivers, who may not encounter equivalent societal constraints or emotional expectations, women perceive caregiving as a more demanding, complex duty that necessitates greater emotional labor. Societal norms dictate that women serve as primary caretakers, and their inherent nurturing tendencies frequently result in a situation where they feel obligated to prioritize the needs of others, occasionally to the detriment of their own welfare. The persistent stress from managing caregiving duties alongside personal, professional, and social obligations can result in burnout and, eventually, manifest as anxiety, depression, or other mental health issues [41]. These findings emphasize the significance of acknowledging the distinct challenges encountered by female caregivers and stress the necessity for therapies that properly cater to their psychological requirements. Customized programs emphasizing emotional and psychological support, including stress management strategies, mindfulness training, and counseling services, may be particularly advantageous for female caregivers [42]. These programs can alleviate caregiver burden and equip women with the resources to manage the emotional and physical challenges of their caregiving responsibilities. Furthermore, providing practical support, such as respite care, might afford female caregivers the necessary time and space to rejuvenate, hence potentially mitigating the risk of mental health issues [43]. Due to the unequal effect of caregiving on women's mental health, it is essential for healthcare practitioners and policymakers to address gender-specific requirements when formulating programs and services to support caregivers.

Marital status proved to be a significant determinant affecting the mental health of caregivers, as widowed and separated caregivers exhibited the greatest levels of depression and anxiety disorders. This conclusion aligns with current work that has consistently highlighted the heightened psychological hardship faced by caregivers who are widowed, separated, or divorced. A primary factor contributing to this unhappiness is the lack of emotional and financial support usually afforded by a spouse [44, 45]. Widowed caregivers frequently have a psychological burden intensified by bereavement, which can profoundly impact mental health and amplify feelings of loneliness, despair, and emotional fatigue. The emotional burden of spousal loss can exacerbate the already challenging tasks of caregiving, resulting in the caregiver lacking a partner to share these duties, which may lead to feelings of stress and hopelessness [46, 47]. The absence of a supportive connection is especially detrimental for caregivers, who are already susceptible to the physical and emotional burdens of caregiving, potentially leading them to experience severe depression and anxiety disorders. For separated or divorced caregivers, the emotional burden frequently arises from the dissolution of their primary partnership, in conjunction with the difficulty of independently handling caregiving duties. These caregivers may endure heightened mental stress as they manage the intricacies of co-parenting or contend with the emotional repercussions of a marriage split, all while concurrently caring for a loved one. The lack of a spouse or partner to share caring responsibilities can foster feelings of isolation and substantially elevate the caregiving strain [48, 49]. Separated or divorced caregivers may experience irritation due to the absence of shared duty in caregiving, resulting in increased emotional strain. Moreover, caregivers in these circumstances frequently indicate a deficiency in social support, which is essential for sustaining mental well-being. Social support networks, comprising family, friends, and community resources, are frequently more constrained for individuals who are bereaved or separated. The absence of assistance heightens the risk of caregiver burnout and can severely impede a caregiver's capacity to manage the demands of caregiving [14, 50]. The emotional and practical difficulties encountered by these caregivers, along with the lack of a supportive partner, establish a notably high-risk environment for the onset of depression and anxiety. These findings highlight the necessity of offering specialized support services for caregivers who are bereaved or separated. Interventions must prioritize not just the provision of emotional support to aid caregivers in coping with loss, stress, and isolation, but also the delivery of practical assistance, such as respite care, which affords caregivers a necessary reprieve from their responsibilities. By acknowledging the cumulative stress experienced by widowed and separated caregivers, healthcare providers and policymakers can formulate more effective interventions tailored to their needs, thereby enhancing both their mental health and caregiving abilities.

Notably, whereas alcohol intake correlated with reduced depression ratings, it did not significantly impact anxiety disorder levels. This data indicates that some caregivers may utilize alcohol as a transient coping strategy to alleviate feelings of distress, offering brief respite from the emotional strain of caregiving [51, 52]. Alcohol is frequently regarded as an expedient method for self-soothing and mitigating adverse emotions, such as grief or feelings of being overwhelmed. This effect is likely transient and fails to address the fundamental causes of distress. For caregivers, the alleviation of depressive symptoms through alcohol may be transient, and dependence on alcohol as a coping mechanism might obscure underlying emotional difficulties without addressing the fundamental causes of their anxiety and sadness [53, 54]. Furthermore, although alcohol intake may momentarily dull adverse emotions, it fails to mitigate chronic anxiety, which is typically more widespread and enduring. Anxiety is a multifaceted emotional condition characterized by persistent worry, anxiety, and uncertainty, and unlike depression, it may not be readily alleviated by alcohol use [55]. This study's lack of a notable correlation between alcohol consumption and anxiety disorders indicates that anxiety may necessitate more specialized interventions, such as cognitive behavioral therapy or relaxation techniques, which are more effective in addressing the physiological and cognitive symptoms of anxiety disorders. Moreover, although alcohol consumption may temporarily alleviate depressive symptoms, extended use or abuse can result in adverse long-term effects, such as physical dependence, heightened susceptibility to additional mental health disorders, and declining social and emotional functioning. Caregivers who utilize alcohol as a coping strategy may become ensnared in a self-medication cycle, experiencing temporary alleviation followed by exacerbated psychological discomfort and possible physical health complications, including liver damage or cognitive impairment [56-58]. This highlights the necessity of recognizing healthy coping mechanisms for caregivers, as dependence on alcohol not only neglects the root problems but may also intensify them over time. The absence of a substantial correlation between alcohol consumption and anxiety symptoms suggests that alcohol may not serve as an effective strategy for alleviating the elevated stress experienced by caregivers, especially concerning anxiety, which typically necessitates distinct coping mechanisms addressing its specific physiological and cognitive dimensions.

This study's findings have significant **implications** for both research and practice, especially regarding caretakers of individuals with impairments. Elevated levels of melancholy and anxiety in caregivers highlight the pressing necessity for specific interventions to meet their mental health requirements. Healthcare professionals ought to provide caregivers with access to counseling, stress management training, and support groups specifically designed to address the unique issues of caregiving, including its prolonged duration, physical demands, and emotional impact. These interventions must account for the observed gender disparities, since female caregivers reported markedly elevated levels of depression and anxiety compared to their male counterparts, indicating that gendered expectations for caregiving may exacerbate emotional distress. Therefore, it is essential to develop gender-sensitive interventions that provide female caregivers with resources and support networks, including respite care and peer support groups tailored to their specific concerns. Furthermore, community-based projects that offer social support networks might alleviate the loneliness frequently experienced by female caregivers. The study's results concerning marital status and alcohol consumption provide further understanding of caregiver requirements, indicating that caregivers who are widowed or separated experience elevated levels of depression and anxiety, likely stemming from the emotional and financial difficulties linked to the absence of spousal support. Interventions must also tackle the social and emotional isolation faced by single caregivers, fostering social relationships and offering chances for caregivers to exchange experiences and counsel. Interventions for caregivers who utilize alcohol as a coping mechanism should emphasize healthy alternatives, including mindfulness training, relaxation techniques, or cognitive-behavioral therapy. Considering the detrimental long-term consequences of alcohol consumption, it is imperative to advocate for healthy coping strategies to avert substance use disorders and enhance the overall mental well-being of caregivers. Furthermore, comprehensive caregiving policies must incorporate mental health support as a fundamental component, including financial aid, respite care, and mental health services to alleviate caregiver strain and enhance their ability to deliver care. Enhancing knowledge of the mental health challenges encountered by caregivers and informing them about the significance of self-care might facilitate early intervention and diminish the stigma around mental health concerns. Public health campaigns can significantly encourage caregivers to seek assistance and cultivate an environment where mental health issues are acknowledged and managed prior to escalating in severity. Through the implementation of focused interventions, the promotion of better coping strategies, and the establishment of supportive environments, we can promote mental health outcomes for caregivers and subsequently improve the quality of care they deliver.

This study possesses certain **limitations** that must be acknowledged when analyzing the results. The study's cross-sectional methodology restricts the capacity to establish causality between caring characteristics and mental health outcomes. Although correlations across variables such as gender, marital status, alcohol intake, and mental health were identified, the causality of these interactions remains indeterminate, leaving unclear if alterations in mental health influence caring behaviors or the reverse. Longitudinal studies are essential for elucidating the causative mechanisms and the enduring effects of caring on mental health. Secondly, the self-reported form of the data may result in response bias, as caregivers could underreport or overreport their mental health symptoms due to social desirability, stigma, or a lack of self-awareness regarding their own mental health disorders. Despite attempts to maintain confidentiality, social desirability bias is a prevalent issue in mental health research and may have affected the outcomes. The sample mostly consisted of caregivers from two provinces (Dong Nai and Tay Ninh), perhaps constraining the generalizability of the findings to other regions or countries with distinct caregiving dynamics. Cultural influences, socioeconomic circumstances, and the availability of mental health treatments may differ by location; future studies should aim to reproduce these results in more varied contexts to improve external validity. Moreover, the study failed to evaluate all possible factors that can affect caregivers' mental health, including the degree of the care recipient's condition, the nature of the caregiving relationship, or the accessibility of official support services. These characteristics may offer more detailed insights into the stressors and protective elements affecting caregiver well-being. Finally, although the study investigated alcohol intake as a determinant of mental health, it did not assess alternative coping mechanisms, such as physical activity, social support, or religious engagement, which may also significantly impact caregivers' mental health. Future research should investigate a wider array of coping strategies to uncover supplementary interventions that may assist caregivers. Notwithstanding these constraints, the results offer significant insights into the mental health difficulties encountered by caregivers and underscore the necessity for focused treatments to enhance their well-being.

5. Conclusion

This study underscores the considerable frequency of depression and anxiety among caregivers of individuals with disabilities, highlighting the necessity for specialized mental health interventions to assist this at-risk population. The results demonstrate that gender, marital status, and alcohol consumption significantly affect caregivers' psychological well-being, with female caregivers, widowed caregivers, and alcohol consumers displaying elevated levels of discomfort. These findings highlight the necessity of offering gender-sensitive assistance and mitigating social isolation among single caregivers. The study recommends promoting healthy coping mechanisms to supplant alcohol consumption, which may provide temporary respite but worsen long-term mental health problems. Due to the considerable influence of caregiving on mental health, it is essential to implement policies and programs that offer caregivers access to counseling, respite care, and social support. Additional study is required to investigate the causal linkages and other determinants influencing caregiver well-being in various contexts.

References

[1] A. Parker, "Family, Caregiver," in Encyclopedia of Behavioral Medicine: Springer, 2020, pp. 857-859.

[2] I. M. Campos, "Experiences of Latine Informal Caregivers of Older Adults," Alliant International University, 2024.

[3] M. Victoria Bumagin and K. Hirn, *Caregiving: A guide for those who give care and those who receive it*. Springer Publishing Company, 2006.

[4] K. Blum and D. W. Sherman, "Understanding the experience of caregivers: a focus on transitions," in *Seminars in oncology nursing*, 2010, vol. 26, no. 4: Elsevier, pp. 243-258.

[5] E. Wittenberg, J. Goldsmith, S. L. Ragan, and T. A. Parnell, *Caring for the family caregiver*. Oxford University Press, 2020.

[6] I. R. Okafornta, ""We Matter Too": Need of parents caregivers of children with disabilities and their experiences with the healthcare system," uis, 2020.

[7] M. Mundakir, I. Choliq, S. Sukadiono, V. R. Fitriyani, and F. Firman, "Caregiving experiences among parents of children with physical and intellectual disabilities: a qualitative systematic review," *Jurnal Ners,* vol. 19, no. 3, p. 378, 2024. https://doi.org/10.20473/jn.v19i3.55282

[8] S. N. I. Isa *et al.*, "Health and quality of life among the caregivers of children with disabilities: A review of literature," *Asian Journal of Psychiatry,* vol. 23, pp. 71-77, 2016. https://doi.org/10.1016/j.ajp.2016.07.007

[9] N. A. Murphy, B. Christian, D. A. Caplin, and P. C. Young, "The health of caregivers for children with disabilities: caregiver perspectives," *Child: Care, Health and Development,* vol. 33, no. 2, pp. 180-187, 2007. https://doi.org/10.1111/j.1365-2214.2006.00644.x

[10] F. Khan, J. Pallant, and C. Brand, "Caregiver strain and factors associated with caregiver self-efficacy and quality of life in a community cohort with multiple sclerosis," *Disability and Rehabilitation,* vol. 29, no. 16, pp. 1241-1250, 2007. https://doi.org/10.1080/01443610600964141

[11] H.-Y. Chang, C.-J. Chiou, and N.-S. Chen, "Impact of mental health and caregiver burden on family caregivers' physical health," *Archives of Gerontology and Geriatrics,* vol. 50, no. 3, pp. 267-271, 2010. https://doi.org/10.1016/j.archger.2009.04.006

[12] R. Schulz, P. Visintainer, and G. M. Williamson, "Psychiatric and physical morbidity effects of caregiving," *Journal of Gerontology,* vol. 45, no. 5, pp. P181-P191, 1990. https://doi.org/10.1093/geronj/45.5.P181

[13] A. Hareendran *et al.*, "Quality of life, caregiver burden and mental health disorders in primary caregivers of patients with cirrhosis," *Liver International,* vol. 40, no. 12, pp. 2939-2949, 2020. https://doi.org/10.1111/liv.14614

[14] L. K. McDaniel, "What are the lived experiences of caregivers to adults with intellectual and developmental disabilities," 2023.

[15] Z. Hrefish and M. Hussein, "Psychological Burdens Experienced by Wives of Disabled People; A Focus on Disability-Related Factors," *Iranian Journal of War and Public Health,* vol. 16, no. 2, pp. 143-150, 2024. https://doi.org/10.58209/ijwph.16.2.143

[16] E. A. Perkins and A. Hewitt, "Coping with caregiver stress," in Health Care for People with Intellectual and Developmental Disabilities across the Lifespan: Springer, Cham, 2016, pp. 2165-2183.

[17] R. D. Adelman, L. L. Tmanova, D. Delgado, S. Dion, and M. S. Lachs, "Caregiver burden: a clinical review," *JAMA*, vol. 311, no. 10, pp. 1052-1060, 2014. https://doi.org/10.1001/jama.2014.304

[18] M. Buhse, "Assessment of caregiver burden in families of persons with multiple sclerosis," *Journal of Neuroscience Nursing*, vol. 40, no. 1, pp. 25-31, 2008. https://doi.org/0.1097/01376517-200802000-00005

[19] N. Muller-Kluits and I. Slabbert, "Caregiver burden as depicted by family caregivers of persons with physical disabilities," *Social Work*, vol. 54, no. 4, pp. 493-502, 2018. https://doi.org/10.15270/54-4-676

[20] A. J. Shah, O. Wadoo, and J. Latoo, "Psychological distress in carers of people with mental disorders," *British Journal of Medical Practitioners*, vol. 3, no. 3, 2010. [Online]. Available: http://www.bjmp.org/content/psychological-distress-carers-people-mental-disorders

[21] A. S. Barusch and W. M. Spaid, "Gender differences in caregiving: why do wives report greater burden?," *The Gerontologist*, vol. 29, no. 5, pp. 667-676, 1989. https://doi.org/10.1093/geront/29.5.667

[22] C. Y. Hsiao, "Family demands, social support and caregiver burden in Taiwanese family caregivers living with mental illness: The role of family caregiver gender," *Journal of Clinical Nursing*, vol. 19, no. 23-24, pp. 3494-3503, 2010. https://doi.org/10.1111/j.1365-2702.2010.03315.x

[23] A. Steptoe, A. Shankar, P. Demakakos, and J. Wardle, "Social isolation, loneliness, and all-cause mortality in older men and women," *Proceedings of the National Academy of Sciences*, vol. 110, no. 15, pp. 5797-5801, 2013. https://doi.org/10.1073/pnas.1219686110

[24] J. T. Cacioppo and S. Cacioppo, "Social relationships and health: The toxic effects of perceived social isolation," *Social and Personality Psychology Compass*, vol. 8, no. 2, pp. 58-72, 2014. https://doi.org/10.1111/spc3.12087

[25] J. Donne, "Families and caregivers," in The Psychiatry of Palliative Medicine: The Dying Mind, 2011, p. 39.

[26] M. Nicoll, "Caregiver Role in Alcohol Abuse Treatment for Individuals with Intellectual Disabilities," Walden University, 2020.

[27] J. E. VanDerNagel, N. van Duijvenbode, S. Ruedrich, A. P. Ayu, and A. F. Schellekens, "The perception of substance use disorder among clinicians, caregivers and family members of individuals with intellectual and developmental disabilities," *Journal of Mental Health Research in Intellectual Disabilities*, vol. 11, no. 1, pp. 54-68, 2018. https://doi.org/10.1080/19315864.2017.1390712

[28] C. Montiel-Nava *et al.*, "Implementing the WHO caregivers skills training program with caregivers of autistic children via telehealth in rural communities," *Frontiers in Psychiatry*, vol. 13, p. 909947, 2022. https://doi.org/10.3389/fpsyt.2022.909947

[29] G. MacNeil, J. I. Kosberg, D. W. Durkin, W. K. Dooley, J. DeCoster, and G. M. Williamson, "Caregiver mental health and potentially harmful caregiving behavior: The central role of caregiver anger," *Journal of Gerontology*, vol. 50, no. 1, pp. 76-86, 2010. https://doi.org/10.1093/geront/gnp099

[30] A. Khateeb, "Caregiver Burden, Stigma, and Posttraumatic Growth Among Arab-Israeli Family Caregivers of People with Serious Mental Illness," University of Haifa (Israel), 2020.

[31] R. L. Spitzer, K. Kroenke, J. B. Williams, and B. Löwe, "A brief measure for assessing generalized anxiety disorder: the GAD-7," *Archives of Internal Medicine*, vol. 166, no. 10, pp. 1092-1097, 2006. https://doi.org/10.1001/archinte.166.10.1092

[32] K. Kroenke, R. L. Spitzer, and J. B. Williams, "The PHQ-9: validity of a brief depression severity measure," *Journal of General Internal Medicine*, vol. 16, no. 9, pp. 606-613, 2001. https://doi.org/10.1046/j.1525-1497.2001.016009606.x

[33] G. Ford, K. T. Goode, J. Barrett, L. Harrell, and W. Haley, "Gender roles and caregiving stress: An examination of subjective appraisals of specific primary stressors in Alzheimer's caregivers," *Aging and Mental Health*, vol. 1, no. 2, pp. 158-165, 1997. https://doi.org/10.1080/13607869757254

[34] N. Sharma, S. Chakrabarti, and S. Grover, "Gender differences in caregiving among family-caregivers of people with mental illnesses," *World Journal of Psychiatry*, vol. 6, no. 1, pp. 7-17, 2016. https://doi.org/10.5498/wjp.v6.i1.7

[35] B. R. Grossman and C. E. Webb, "Family support in late life: A review of the literature on aging, disability, and family caregiving," *Journal of Family Social Work*, vol. 19, no. 4, pp. 348-395, 2016. https://doi.org/10.1080/10522158.2016.1233924

[36] N. B. Porter, "Mutual Marginalization: Individuals with Disabilities and Workers with Caregiving Responsibilities," *Florida Law Review*, vol. 66, pp. 1099-1148, 2014.

[37] A. Gutowska, "The care of adults with intellectual disabilities: Informal (family) caregivers' perspectives," *International Journal of Environmental Research*, vol. 19, no. 23, p. 15622, 2022. https://doi.org/10.3390/ijerph192315622

[38] A. Dickson, G. O'Brien, R. Ward, D. Allan, and R. O'Carroll, "The impact of assuming the primary caregiver role following traumatic spinal cord injury: an interpretative phenomenological analysis of the spouse's experience," *Psychology & Health*, vol. 25, no. 9, pp. 1101-1120, 2010. https://doi.org/10.1080/08870440903038949

[39] R. Schulz, S. R. Beach, S. J. Czaja, L. M. Martire, and J. K. Monin, "Family caregiving for older adults," *Annual Review of Psychology*, vol. 71, no. 1, pp. 635-659, 2020. https://doi.org/10.1146/annurev-psych-010419-050754

[40] T. A. Revenson *et al.*, "Gender and caregiving: The costs of caregiving for women," in Caregiving in The Illness Context. London: Palgrave Pivot, 2016, pp. 48-63.

[41] R. T. Penson, F. L. Dignan, G. P. Canellos, C. L. Picard, and T. J. Lynch Jr, "Burnout: caring for the caregivers," *The Oncologist*, vol. 5, no. 5, pp. 425-434, 2000. https://doi.org/10.1634/theoncologist.2000-0425

[42] N. N. Singh, G. E. Lancioni, Y.-S. Hwang, R. E. Myers, K. Townshend, and O. N. Medvedev, "Using Mindfulness to Improve Quality of Life in Caregivers of Individuals with Intellectual Disabilities and Autism Spectrum Disorder: Agency Outcomes for Caregivers and Clients," *Advances in Neurodevelopmental Disorders*, vol. 7, no. 4, pp. 604-615, 2023. https://doi.org/10.1007/s41252-023-00353-2

[43] A. K. Hoffman, "Reimagining the risk of long-term care," *Yale Journal Health Poliy Law and Ethics*, vol. 16, no. 2, pp. 147-232, 2016.

[44] C. E. Ross, J. Mirowsky, K. J. J. o. M. Goldsteen, and t. Family, "The impact of the family on health: The decade in review," vol. 52, no. 4, pp. 1059-1078, 1990.

[45] W. Stroebe and M. S. Stroebe, "Beyond marriage: The impact of partner loss on health," in The emerging field of personal relationships: Routledge, 2021, pp. 203-224.

[46] L. N. Bialon and S. Coke, "A study on caregiver burden: stressors, challenges, and possible solutions," *American Journal of Hospice*

Palliative Medicine, vol. 29, no. 3, pp. 210-218, 2012. https://doi.org/10.1177/1049909111416494

[47] R. Schulz, J. Eden, E. National Academies of Sciences, and Medicine, "Family caregiving roles and impacts," in Families caring for an aging America: National Academies Press (US), 2016.

[48] V. L. Solomi and R. E. Casiday, "In sickness and in health: the strains and gains of caring for a chronically ill or disabled spouse," *Chronic Illness*, vol. 13, no. 2, pp. 75-87, 2017. https://doi.org/10.1177/1742395316664960

[49] D. Carr, J. C. Cornman, and V. A. Freedman, "Disability and activity-related emotion in later life: Are effects buffered by intimate relationship support and strain?," *Journal of Health and Social Behavior*, vol. 58, no. 3, pp. 387-403, 2017. https://doi.org/10.1177/0022146517713551

[50] H. F. Sit, L. Huang, K. Chang, W. I. Chau, and B. J. Hall, "Caregiving burden among informal caregivers of people with disability," *British Journal of Health Psychology*, vol. 25, no. 3, pp. 790-813, 2020. https://doi.org/10.1111/bjhp.12434

[51] B. A. Ayimbire, "Psychological Distress and Coping Strategies of Caregivers of Children with Chronic Conditions in the Ashanti Region of Ghana," University of Cape Coast, 2020.

[52] D. Blazer, *Emotional problems in later life: Intervention strategies for professional caregivers*. Springer Publishing Company, 1998.

[53] D. C. Daley and G. A. Marlatt, *Overcoming your alcohol or drug problem: Effective recovery strategies*. Oxford University Press, 2006.

[54] E. J. Khantzian and M. J. Albanese, *Understanding addiction as self medication: Finding hope behind the pain*. Rowman & Littlefield Publishers, 2008.

[55] V. N. Onaemo and B. Chireh, "Alcohol, Depression, and Anxiety," in Handbook of the Behavior and Psychology of Disease: Springer, 2024, pp. 1-21.

[56] B. D. Marimbe, L. Kajawu, F. Muchirahondo, F. Cowan, and C. Lund, "Perceived burden of care and reported coping strategies and needs for family caregivers of people with mental disorders in Zimbabwe," *African Journal of Disability*, vol. 5, no. 1, pp. 1-9, 2016.

[57] S. Hartley, P. Ojwang, A. Baguwemu, M. Ddamulira, and A. Chavuta, "How do carers of disabled children cope? The Ugandan perspective," *Child: Care, Health and Development*, vol. 31, no. 2, pp. 167-180, 2005. https://doi.org/10.1111/j.1365-2214.2004.00464.x

[58] N. Kate, S. Grover, P. Kulhara, and R. Nehra, "Relationship of caregiver burden with coping strategies, social support, psychological morbidity, and quality of life in the caregivers of schizophrenia," *Asian Journal of Psychiatry*, vol. 6, no. 5, pp. 380-388, 2013. https://doi.org/10.1016/j.ajp.2013.03.014