

Mental Health challenges among individuals with disabilities and their caregivers: A cross-sectional study in Vietnam

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Abstract People with disabilities (PWD) and their caregivers encounter considerable mental health difficulties stemming from physical, psychological, and social pressures. Depression and anxiety are widespread in both demographics, intensified by societal stigma, restricted healthcare access, and financial constraints. Although caregiving offers emotional satisfaction, it also entails psychological and physical burdens, affecting the well-being of both caregivers and persons with disabilities (PWD). This study aims to evaluate the prevalence of depression and anxiety among caregivers and persons with disabilities, emphasizing the psychological burden experienced by both groups. It aims to elucidate the interrelated aspects of their mental health experiences to guide effective interventions and policy suggestions. A cross-sectional study was performed involving 1,847 people from Dong Nai and Tay Ninh provinces in Vietnam. Depression and anxiety levels were assessed utilizing the Vietnamese adaptations of the Generalized Anxiety Disorder-7 (GAD-7) and the Patient Health Questionnaire-9 (PHQ-9). Statistical studies, encompassing independent t-tests, were employed to compare mental health outcomes between caretakers and people with disabilities (PWD). People with disabilities (PWD) demonstrated markedly elevated levels of depression (M = 0.48, SD = 0.54) and anxiety (M = 0.43, SD = 0.57) in contrast to their caregivers, who exhibited reduced scores for depression (M = 0.25, SD = 0.38) and anxiety (M = 0.28, SD = 0.46) ($p < 0.001$). These data suggest that although caregivers endure significant psychological suffering, those with disabilities are disproportionately impacted by mental health issues. The research underscores the immediate necessity for specialized mental health therapies for individuals with disabilities and their caretakers. Enhancing access to specialist mental health services, mitigating stigma, and offering structured caregiver support programs are essential for improving well-being in these populations. Policies must prioritize the integration of mental health care within comprehensive disability support frameworks to foster inclusive and sustainable mental health solutions.

Keywords: people with disability, caregivers, mental health, psychological well-being, Vietnam

1. Introduction

Mental health difficulties are a progressively significant and intricate concern globally, especially among vulnerable and marginalized groups, including those with disabilities and their caregivers. Individuals with disabilities are at an increased risk for mental health disorders, such as depression and anxiety, owing to a complex interaction of biological, psychological, and social factors (Kinderman et al., 2013; Lai, 2023; Senra & McPherson, 2021). Chronic health concerns, physical restrictions, and dependence on others for daily activities can result in enduring stress, which can severely compromise emotional well-being. The obstacles are exacerbated by widespread societal stigma that categorizes individuals with disabilities as less capable or onerous, thereby promoting discriminatory attitudes and actions that alienate them from mainstream society. This stigma obstructs full engagement in education, employment, and social activities, limiting prospects for personal development, autonomy, and economic independence (Corrigan et al., 2014; McClure & Leah, 2021; Pitcher, 2015). The marginalization faced by individuals with disabilities transcends physical obstacles to include psychological aspects, since they frequently internalize adverse stereotypes and prejudicial views. This internalization can diminish self-esteem and self-worth, resulting in feelings of inadequacy and pessimism that further aggravate underlying mental health conditions. Social isolation, prevalent among individuals with impairments, deprives them of crucial emotional support and interaction, rendering them susceptible to loneliness and despair. In educational contexts, students with disabilities frequently face systemic injustices, including inaccessible curriculum and environments, which restrict their academic success and impede social integration. In the workforce, discriminatory hiring practices and insufficient workplace accommodations limit career opportunities, so

reinforcing economic reliance and prolonging cycles of poverty and mental health issues (Dowd, 1989). Cultural perspectives of disability significantly influence the experiences of individuals with disabilities, affecting their self-perception and societal treatment. In numerous cultures, disability is perceived through a perspective of pity or charity, rather than as a condition that demands rights-based inclusion and equity. This viewpoint marginalizes those with impairments, relegating them to the outskirts of social existence and denying them the opportunity to fully achieve their potential. Despite the existence of legislation aimed at fostering the inclusion of individuals with disabilities, implementation deficiencies and societal opposition often diminish their efficacy, resulting in many lacking the necessary support to prosper (Liachowitz, 1988).

Stigma serves as a substantial obstacle to social integration and reinforces structural injustices that significantly restrict access to vital healthcare services for those with disabilities (Fletcher et al., 2023; Gyamfi, 2024). This stigma frequently results in discriminatory attitudes, social marginalization, and the formulation of systems and policies that inadequately address the needs of this demographic. Individuals with disabilities frequently face significant obstacles, including the physical inaccessibility of healthcare facilities, characterized by the absence of ramps, elevators, or assistive devices, hindering their ability to seek care autonomously (Jones, 1997). Moreover, healthcare practitioners in numerous areas lack the requisite specialized training to comprehend and address the distinct requirements of individuals with disabilities, resulting in inadequate or unsuitable care. Despite the availability of healthcare practitioners, communication barriers—such as insufficient sign language interpreters or inaccessible medical information—frequently obstruct efficient treatment, resulting in patients feeling overlooked or misinterpreted. Moreover, structural disparities are perpetuated by insufficient policies that do not emphasize the mental health and well-being of those with disabilities. Numerous health systems lack specialized services to address the convergence of disability and mental health, leading to a substantial treatment gap for those suffering from depression, anxiety, or other psychological disorders (Furber et al., 2015; Kazdin & Rabbitt, 2013; WHO, 2006). This issue is especially evident in low- and middle-income nations, where constrained financial and human resources compel governments to prioritize acute physical health issues above long-term mental health requirements. Mental health services in these areas are frequently subordinated to competing healthcare priorities, such as the management of infectious diseases or maternity health, which are considered more urgent. Mental health services are inadequately integrated into general healthcare systems, resulting in individuals with disabilities often being overlooked in service provision (Doherty et al., 2020; Pinals et al., 2022; Pouls et al., 2022). Economic issues intensify these challenges, as individuals with disabilities are disproportionately prone to poverty, limiting their capacity to finance mental health care expenses. Although services may be ostensibly accessible, indirect expenses such as transportation, medicine, and time away from employment or caregiving duties present formidable barriers for numerous individuals. Cultural stigmas related to mental health and disability can exacerbate economic hurdles, since individuals may experience shame or reluctance to seek assistance due to concerns about judgment or ostracism from their communities. The absence of competent care compels numerous individuals with disabilities to manage their mental health issues independently, depending on informal support systems or personal coping strategies that may prove inadequate or unsustainable.

Caregivers encounter significant and complex obstacles that profoundly impact their mental, physical, and emotional well-being while providing essential support to those with disabilities. Caregivers often endure a substantial load that includes emotional strain, physical fatigue, and financial demands, leading to considerable psychological discomfort. The persistent nature of caring duties increases caregivers' susceptibility to disorders such as depression, anxiety, and burnout (Ahmadi et al., 2021; Kayaalp et al., 2021). Their responsibilities frequently surpass simple physical care, such as bathing, eating, and mobility aid, to include emotional support, financial management, and advocacy within healthcare and social systems. These obligations can rapidly become overwhelming, allowing less time for caregivers to address their personal needs or participate in self-care activities. This imbalance may lead to a deterioration in their mental and physical health, hence intensifying the challenges of their caregiving responsibilities. The lack of adequate external support networks exacerbates the challenges encountered by caregivers, since many function in solitude with limited aid from extended family, community resources, or professional care agencies. The absence of organized support—such as respite care programs, mental health counseling, or financial assistance—frequently results in caregivers feeling inundated and unappreciated. The feeling of isolation is particularly evident in areas where caregiving is perceived as a personal or familial obligation instead than a societal duty, hence imposing the full burden on the individual caregiver (Jarling et al., 2020; Liu et al., 2020). In these settings, caregivers are often anticipated to fulfill their responsibilities without dissent or outside assistance, resulting in an unacknowledged crisis that disregards their mental health and well-being. Cultural norms and societal expectations about caregiving introduce further complexity, especially in collectivist countries where caregiving is frequently perceived as a moral or familial duty. In these situations, caregivers may face significant pressure to prioritize the needs of their care receivers above their own, frequently at the expense of personal aspirations, career prospects, and social connections. This dynamic may induce feelings of guilt or inadequacy in caregivers who fail to fulfill the elevated standards set by cultural expectations, thereby exacerbating their emotional tiredness. Many caregivers experience a sense of captivity due to this pressure, feeling unable to seek assistance or articulate their challenges without fear of judgment or stigma from their communities (Gates, 2019). The financial burden of caregiving presents a considerable obstacle, since numerous caregivers must cut their working hours, resign from their positions, or exhaust personal funds to fulfill the requirements of those they care for. This financial strain is most evident in low-income households or those

where a disabled individual necessitates specialized care, including medical equipment, therapies, or home modifications. The resultant financial strain can exacerbate the emotional and physical burdens of caregiving, establishing a cycle of adversity that is challenging to disrupt without focused interventions and institutional assistance. The ramifications of these problems transcend the particular caregiver, influencing the quality of care they can deliver. Studies demonstrate that elevated stress or mental health issues among caregivers impair their capacity to provide compassionate, patient-centered care, adversely affecting the well-being of individuals with disabilities (Gabriel, 2023; Peake Jr, 2024). In contrast, caregivers who obtain sufficient assistance and resources are more adept at fulfilling their tasks, so cultivating a more positive and loving atmosphere for those in their care. This highlights the significance of prioritizing caregiver well-being as an essential element of comprehensive programs aimed at enhancing outcomes for individuals with disabilities.

The mental health of caregivers dramatically affects their ability to deliver effective, compassionate, and consistent care, which, in turn, greatly influences the emotional and physical well-being of those they assist. Elevated levels of stress, anxiety, or depression in caregivers frequently impair their caregiving abilities, diminishing their patience, attentiveness, and empathy. This may result in a deterioration of care quality, establishing a detrimental feedback loop that intensifies the mental health issues encountered by both caregivers and those with disabilities (Chadda, 2014; Murphy et al., 2007; Shah et al., 2010). Stress or burnout in caregivers can lead to heightened frustration, disregard of caregiving duties, or damaged relationships with the care receiver, so undermining the comprehensive support system essential for the well-being of both individuals. For individuals with disabilities, caring from an overworked or emotionally drained caregiver may exacerbate feelings of dependency, inadequacy, or loneliness, thereby deteriorating their mental health outcomes. Conversely, research consistently shows that when caregivers receive adequate support through structured interventions, including respite care, professional mental health counseling, and robust community resources, they are significantly more capable of managing their caregiving responsibilities effectively and sustainably (Reinhard et al., 2008; Stawnychy et al., 2021). Respite care enables caregivers to temporarily step away from their duties, affording them the chance to rejuvenate both physically and emotionally, so enhancing their caregiving efficacy and emotional fortitude. Access to therapy and support groups allows caregivers to reflect on their experiences, articulate challenges, and cultivate coping strategies in a nurturing setting. Community services, like caregiver training programs and financial aid efforts, mitigate the challenges encountered by caregivers, enhancing their sense of empowerment and agency in their caregiving responsibilities. When caregivers obtain such assistance, it fosters a good and supportive caregiving environment that not only improves their well-being but also promotes the emotional stability and happiness of those in their care (Methi et al., 2024; Nogues & Tremblay, 2022). In addition to the direct dynamics of the caregiver-recipient relationship, structural and cultural factors significantly influence the mental health outcomes of both caregivers and those with disabilities. A major obstacle to enhanced mental health outcomes is the pervasive absence of accessible, affordable, and specialized mental health care. This problem is especially severe in resource-limited environments, where healthcare systems frequently suffer from inadequate funding, and mental health services are relegated to a lower priority compared to urgent physical health emergencies. In these situations, both caregivers and care users face challenges in obtaining necessary professional treatment, resulting in unresolved mental health issues and perpetuating a cycle of untreated psychological anguish. Cultural stigmas associated with mental health and disability exacerbate these issues (Lauber & Rössler, 2007; Song et al., 2018). In numerous communities, recognizing mental health challenges is linked to stigma or frailty, discouraging individuals from pursuing assistance or publicly sharing their problems. This cultural silence isolates caretakers and marginalizes those with disabilities, repeating cycles of social exclusion and emotional maltreatment. Confronting these cultural stigmas is essential for cultivating a more inclusive and supportive community. Public awareness campaigns, community education programs, and policy reforms designed to normalize discussions surrounding mental health and disability can foster circumstances in which individuals feel empowered to seek assistance without apprehension of judgment or prejudice (Stuart, 2016). Furthermore, structural reforms are necessary to provide lasting solutions that address the interrelated mental health requirements of both caregivers and care users. This entails the incorporation of mental health services into primary healthcare systems, the training of healthcare professionals to tackle the distinct challenges encountered by individuals with disabilities and their caregivers, and the formulation of policies that foster work-life balance and provide economic assistance for caregiving families. These approaches enable society to advance towards a more inclusive framework that acknowledges and supports the reciprocal well-being of caregivers and their charges, thereby cultivating healthier and more resilient communities. By addressing these complex issues, we can initiate a cascade of positive change that enhances the caring dynamic and guarantees that both caregivers and individuals with disabilities receive support in attaining an improved quality of life.

This study aims to investigate the prevalence of depression and anxiety in individuals with disabilities and their caregivers, highlighting the distinct and common challenges they encounter. This research seeks to elucidate the interconnectedness of mental health experiences to guide the formulation of tailored interventions and policies that comprehensively address their needs. The study emphasizes the interconnectedness of caregivers' and care recipients' mental health, advocating for a comprehensive and family-oriented approach to mental health care. This strategy underscores the significance of systemic reforms, including enhancing access to integrated care services, mitigating stigma, and cultivating community-based support networks. The study contributes to the expanding evidence in this domain, emphasizing the

necessity for inclusive and equitable mental health treatments that consider the interrelated well-being of individuals with disabilities and their caregivers (Patel et al., 2019).

2. Materials and Methods

2.1. Participants

The survey included 1,847 participants, offering a detailed demographic profile. The gender distribution was rather balanced: 868 participants (47.0%) were male, and 979 participants (53.0%) were female. The participants primarily hailed from two provinces in Vietnam. Dong Nai contributed 804 individuals, representing 43.5% of the sample, whilst Tay Ninh contributed 1,043 individuals, constituting 56.5%. This geographical distribution illustrates the study's emphasis on these two locations. The ethnic makeup indicated that a significant majority of participants, 1,695 persons (91.8%), identified as members of the Kinh ethnic group, the predominant ethnicity in Vietnam. Other ethnic groups were represented to a lesser degree, comprising 66 individuals (3.6%) of Chinese ethnicity, 6 (0.3%) of Tay ethnicity, and 1 (0.1%) of Nung ethnicity. A further 79 people (4.3%) classified themselves as belonging to different ethnicities, showing a degree of variety within the sample. The educational attainment of participants exhibited significant variability. A significant 251 persons (13.6%) were deemed illiterate, whereas 662 participants (35.8%) had attained primary education. Secondary education was attained by 562 persons, constituting 30.4% of the total. High school graduates totaled 299 (16.2%), although a minimal percentage had sought higher education. Specifically, 69 participants (3.7%) possessed an undergraduate or college-level education, whereas only 1 respondent (0.1%) had finished graduate-level studies. The educational attainment of three participants (0.2%) was unspecified, indicating possible flaws in data collection. The marital status of participants indicated that the majority were married, with 1,222 persons (66.2%) affirming this status. Among the participants, 407 were single, representing 22.0%. In the meantime, 131 people (7.1%) were widowed, while 72 (3.9%) indicated they were separated or divorced. Marital status was unspecified or unknown for 15 persons (0.8%). This broad cohort of participants provided significant insights on the demographic, educational, and social attributes of individuals in the examined regions, establishing a solid foundation for the study's conclusions (Table 1).

Table 1 Overview of participants.

Characteristics		Frequency (n)	Percentage (%)
Gender	Male	868	47.0
	Female	979	53.0
Province	Dong Nai	804	43.5
	Tay Ninh	1043	56.5
Ethnics	Kinh	1695	91.8
	Chinese	66	3.6
	Tay	6	0.3
	Nung	1	0.1
	Others	79	4.3
Academic Level	Illiterate	251	13.6
	Primary	662	35.8
	Secondary	562	30.4
	High school	299	16.2
	Undergraduate/College	69	3.7
	Graduate	1	0.1
	Unknown	3	0.2
Marital Status	Single	407	22.0
	Married	1222	66.2
	Widow	131	7.1
	Separated/Divorce	72	3.9
	Unknown	15	0.8
Total		1847	100

2.2. Measurements

This study utilized two standardized self-report instruments to assess the mental health of caregivers for individuals with disabilities and the individuals themselves: 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), developed by Spitzer et al. (2006), is a widely utilized instrument for evaluating the severity of symptoms related to generalized anxiety disorder. The evaluation consists of seven items rated on a 4-point Likert scale, with higher scores indicating greater anxiety. The measure has been validated across numerous languages and populations, demonstrating strong psychometric properties. The Vietnamese version of the GAD-7 exhibits

significant reliability and validity for assessing anxiety symptoms within this cultural context. The Patient Health Questionnaire 9-item scale (PHQ-9), created by Kroenke. (2001), is a recognized tool for screening and evaluating the severity of depression. It consists of nine items based on the DSM-IV diagnostic criteria for depression, assessed using a 4-point scale. The PHQ-9 has been translated and validated in other languages, including Vietnamese, exhibiting remarkable internal consistency and reliability, therefore functioning as an effective tool for assessing depression in Vietnamese populations.

This study employed both measures to assess anxiety and depression symptoms in caregivers of individuals with disabilities, resulting in Cronbach's alpha values of 0.85 for the GAD-7 and 0.83 for the PHQ-9, indicating robust internal consistency and reliability within the sample.

2.3. Procedure

The procedures of this study aimed to assess the mental health of caregivers for individuals with disabilities and the patients themselves, utilizing 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 conducted in compliance with ethical standards and obtained approval from the relevant ethical review board. Participants were recruited from various caregiver support groups, community centers, and disability organizations. The inclusion criteria required participants to be primary caregivers of individuals with impairments and disabilities, aged 18 or older, and able to provide informed consent.

Upon consenting to participate, respondents were provided with a succinct overview of the study and informed consent documents outlining the objectives, the voluntary nature of participation, and confidentiality measures. Following the acquisition of consent, participants filled out the two self-report measures, the GAD-7 and PHQ-9. The GAD-7, consisting of seven items that assess generalized anxiety symptoms, was administered first, followed by the PHQ-9, which includes nine items evaluating depressive symptoms. Each participant independently completed both scales, with instructions provided in Vietnamese to ensure clarity and understanding.

The questionnaires were distributed in either paper or electronic version, according to participant preference. The expected time to complete both questionnaires was around 15 to 20 minutes. Upon completion, participants submitted the questionnaires to the research team, either in person or via a secure online platform. No personal identifiers were recorded, hence maintaining participant anonymity.

Data was later entered into a secure database for analysis. The reliability of the scales was assessed using Cronbach's alpha to verify internal consistency. Descriptive and inferential statistics were employed to evaluate the levels of anxiety and depression in caregivers and individuals with disabilities, as well as to examine potential correlations with sociodemographic characteristics. Concerns regarding participants' mental health identified during the study were alleviated by providing advice to local mental health specialists. Participants were recognized for their involvement and provided with information about 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 adhered to the ethical principles outlined in the Declaration of Helsinki. It complied with the American Psychological Association's standards for research with human beings, ensuring the protection of participant rights, privacy, and welfare. All participants granted informed consent, and their anonymity was maintained. Psychological issues were alleviated by referrals to mental health professionals.

2.5. Data Analysis

Data analysis was performed using statistical software, specifically SPSS (Version 26). Descriptive statistics, including means and standard deviations, were calculated for the GAD-7 and PHQ-9 scores to summarize levels of anxiety and depression. Cronbach's alpha was computed to assess the reliability of the scales. Independent t-tests were utilized to examine differences in mental health symptoms.

3. Results

An independent samples t-test was used to evaluate the levels of depression and anxiety disorders between two groups: caregivers of individuals with disabilities and individuals with disabilities themselves. The investigation sought to ascertain whether substantial variations were present between these two groups regarding their psychological well-being.

The findings indicated that caregivers of individuals with disabilities had a mean score of 0.25 (SD = 0.38), whereas individuals with disabilities exhibited a higher mean score of 0.48 (SD = 0.54). The disparity between these groups was statistically significant ($p < 0.001$), demonstrating that individuals with impairments had markedly higher levels of depression than their caretakers. The elevated mean and standard deviation in the impaired group indicates a higher overall depression level and increased variability in depression levels within this cohort (Table 2).

Table 2 Comparison of depression and anxiety disorder between caregivers of people with disabilities and between caregivers of people with disabilities (n = 1847).

Disabled Group ^a	M ± SD	
	Depression p < 0.001	Anxiety Disorder p < 0.001
Caregivers of people with disabilities	0.25 ± 0.38	0.28 ± 0.46
People with disabilities	0.48 ± 0.54	0.43 ± 0.57

Note:^a T-test.

In the context of anxiety disorders, caregivers of individuals with disabilities reported a mean score of 0.28 (SD = 0.46), whereas the individuals with disabilities themselves had a mean score of 0.43 (SD = 0.57). The difference was statistically significant ($p < 0.001$), indicating that individuals with impairments had markedly greater levels of anxiety disorders than their caretakers. The elevated mean score in the disabled group highlights their increased vulnerability to anxiety, although the bigger standard deviation signifies greater variability in their anxiety levels.

The findings indicate substantial psychological differences between caretakers and individuals with impairments. Although caregivers indicated a degree of anxiety and depression, individuals with impairments demonstrated significantly elevated levels of these psychological disorders. These findings underscore the necessity for specialized mental health interventions to alleviate the heightened emotional strain experienced by individuals with disabilities and to furnish sufficient support for their caregivers to reduce potential secondary stress.

4. Discussion

This study's findings indicate substantial differences in psychological well-being between caregivers of individuals with disabilities and the individuals with disabilities themselves. The findings reveal that individuals with disabilities exhibit significantly elevated levels of depression and anxiety disorders relative to their caretakers, highlighting the considerable psychological burden shouldered by this demographic. This gap underscores the intricate interaction of elements that distinctly influence individuals with disabilities, encompassing physical restrictions, chronic health conditions, and cultural stigma. These difficulties are frequently intricately interconnected, forming a complex terrain of susceptibility. Physical limitations can restrict social interaction and involvement in daily activities, resulting in isolation and feelings of inferiority. Chronic health issues may intensify this burden, as they frequently include enduring pain, exhaustion, and other incapacitating symptoms that substantially reduce quality of life. Experiences of social exclusion and marginalization exacerbate the psychological difficulties encountered by those with disabilities. Restricted access to school, employment, and social engagement might impose further obstacles to personal development and satisfaction. The resultant absence of significant relationships and communal support intensifies feelings of loneliness and isolation, perpetuating a cycle of emotional discomfort. Furthermore, systemic obstacles include insufficient access to mental health treatments, financial limitations, and logistical challenges in accessing healthcare facilities impede the capacity of those with disabilities to obtain timely assistance.

The heightened prevalence of depression and anxiety in individuals with disabilities can be ascribed to various interrelated causes, including their restricted access to mental health care. The absence of access arises from a confluence of institutional and logistical obstacles, such as inadequate mental health infrastructure, a deficiency of qualified specialists in rural and underserved regions, and prolonged waiting periods for appointments in urban areas (Cyr et al., 2019; Magnus & Advincula, 2021). These structural flaws are exacerbated by practical issues, such as transportation obstacles, which particularly hinder persons with mobility disabilities or those residing in remote areas from accessing timely care. Financial limits significantly impact access to mental health services, since the expenses associated with medicine and therapy can be excessively burdensome for many individuals with disabilities, especially those who are unemployed or underemployed owing to their physical or mental impairments (Coombs et al., 2021; Ziller et al., 2010). The absence of cheap or subsidized mental health programs intensifies these issues, leaving numerous individuals without the resources required to meet their psychological requirements (Allan et al., 2021). In addition to these technical and financial obstacles, the internalized stigma related to disability significantly exacerbates the mental health issues faced by this demographic. Adverse societal attitudes about disability frequently result in discrimination and exclusion, significantly impacting an individual's self-image and confidence. This societal stigma may induce feelings of shame in individuals with impairments, deterring them from seeking assistance or freely discussing their mental health challenges. The apprehension of judgment, misinterpretation, or additional marginalization may lead to extended durations of unaddressed mental health issues, as individuals strive to cope with their psychological anguish in solitude (Forbes, 2024). Moreover, social isolation and insufficient community support exacerbate these mental health issues. A multitude of individuals with disabilities express sentiments of isolation and detachment from the wider community, as their physical and social surroundings may not be structured to facilitate their engagement (Currie & Szabo, 2020). The lack of inclusive environments, accessible initiatives, and possibilities for significant engagement with peers and the community can engender a deep sense of isolation. The combination of isolation and persistent stigma fosters a cycle of psychological suffering that is challenging to disrupt without thorough intervention (Khan & Dupont, 2023; Pachankis, 2007).

In contrast, caregivers exhibited reduced levels of despair and anxiety relative to those with impairments, although their scores still reflect a certain degree of psychological suffering. This discovery highlights the complex and frequently conflicting aspects of the caregiving experience. Caregiving can provide a sense of purpose, emotional connection, and fulfillment. Numerous caregivers express a profound sense of purpose and fulfillment gained from assisting their loved ones, which may serve as a protective factor against deterioration in mental health. Caregiving frequently cultivates a profound connection between the caregiver and the care recipient, facilitating emotional intimacy and reciprocal appreciation. The beneficial elements of caregiving can augment resilience, elevate self-esteem, and foster a sense of achievement, as caregivers recognize their contributions to the welfare of someone they profoundly care for (Abulaiti et al., 2022; Methi et al., 2024). Nonetheless, caregiving has considerable problems that can adversely affect mental health. The physical requirements of caregiving, including aiding with everyday tasks, overseeing medication management, and offering mobility assistance, may result in chronic weariness and physical strain. Emotional responsibilities are also substantial, as caregivers frequently encounter feelings of anxiety, remorse, and helplessness, particularly when the health of the care receiver declines or when their caregiving efforts appear inadequate. Financial strain exacerbates these difficulties, since caregiving obligations might hinder work prospects, diminish household income, and elevate out-of-pocket costs for medical care and associated necessities (Costa-Font et al., 2024; Spillman et al., 2021). The aggregate impact of these stresses may result in caregiver burnout, a condition marked by physical, emotional, and mental fatigue, characterized by diminished productivity and sensations of detachment or frustration. These contradictory elements underscore the dual character of caregiving, wherein resilience and pressure coexist. Although the beneficial elements of caring may enhance a caregiver's mental health, the persistent obligations and stressors associated with the role can concurrently undermine it. The caring experience is shaped by several contextual circumstances, including the severity of the care recipient's disease, the availability of external assistance, and the caregiver's coping strategies. Caregivers without access to respite care, peer support groups, or community services may be more susceptible to increased stress and burnout. Cultural and societal expectations might influence the caregiving experience, leading some caregivers to feel compelled to assume these obligations due to familial or societal standards, while lacking the necessary resources or aptitude to perform well (Holroyd, 2003; Zarzycki et al., 2022). The intricate relationship between the benefits and difficulties of caregiving highlights the necessity of offering specialized assistance to caregivers. Interventions designed to mitigate caregiver stress should emphasize the delivery of practical resources, including respite care for temporary reprieve from caregiving responsibilities and financial support programs to alleviate the economic strain. Workshops on stress management, therapeutic sessions, and support groups for caregivers might assist in cultivating coping techniques and alleviating feelings of loneliness by facilitating connections with individuals who have analogous experiences. Moreover, governmental policies that advocate for workplace accommodations, such as flexible working hours or caregiver leave, can assist caregivers in effectively balancing their caring duties with other life commitments, thereby mitigating the risk of burnout and mental health decline.

The connection between the mental health of individuals with disabilities and that of their caregivers underscores the necessity for a systematic and family-centered care approach that acknowledges their mutual well-being. The psychological anguish of one member in the caring dynamic frequently affects the other, resulting in a ripple effect that can either intensify or mitigate mental health issues (Lawrance et al., 2022; Waters et al., 2022). This interaction highlights the necessity of creating comprehensive interventions that concurrently address the distinct and common needs of individuals with disabilities and their caretakers. Studies have consistently demonstrated that therapies aimed at both groups produce superior outcomes, as they offer a more comprehensive framework for support and recovery (Lieberman, 2009; Reinhard et al., 2008). Programs that integrate mental health counseling for individuals with disabilities with stress management training for caregivers can produce a synergistic effect, enhancing communication, understanding, and emotional resilience within the caregiving relationship. A family-centered approach prioritizes the enhancement of the caregiver-care recipient relationship, which frequently acts as a vital source of emotional support for both individuals. Empowered and well-equipped caregivers are more capable of delivering appropriate care, hence alleviating the psychological strain on individuals with disabilities (Gordon, 2022; Sun et al., 2021). Individuals with disabilities who get consistent and compassionate care are more likely to achieve enhanced mental health outcomes, establishing a beneficial feedback loop for both parties in the caring relationship. This method is especially significant in cultural settings that regard caregiving as a collective familial duty, as it corresponds with societal values and utilizes established support networks to improve the efficacy of interventions (Alharbi et al., 2024). Education and training are essential in cultivating a supportive atmosphere. Equipping caregivers with the requisite knowledge and skills to fulfill their duties can bolster their confidence and alleviate feelings of overwhelm, while affording individuals with disabilities the chance to cultivate self-advocacy and coping skills can empower them to actively manage their mental health (Perkins & Haley, 2010). Moreover, public awareness initiatives designed to diminish stigma and foster inclusivity can cultivate a more tolerant culture, wherein the difficulties encountered by individuals with disabilities and their caregivers are addressed with empathy and comprehension (Mackelprang et al., 2021). The interrelated mental health concerns of caregivers and individuals with disabilities necessitate a collaborative and inclusive strategy that transcends addressing their needs in isolation. Through the implementation of systemic changes, the cultivation of emotional connections, and the prioritization of holistic therapies, an

environment can be established wherein both groups may attain improved well-being, resilience, and an elevated quality of life (Manasi et al., 2020).

The results of this study have considerable significance for mental health interventions, public health policy, and community support initiatives. The heightened prevalence of depression and anxiety in individuals with disabilities underscores the critical necessity for accessible, inclusive, and specialized mental health care designed to address the distinct issues encountered by this demographic. Mental health professionals ought to amalgamate psychosocial support with medical care, guaranteeing that individuals with impairments obtain holistic and comprehensive treatment. Interventions must also tackle the stigma associated with mental health and disability, promoting a more welcoming societal perspective that encourages individuals to seek assistance without fear of condemnation. The study highlights the necessity for caregivers to receive focused assistance to alleviate caregiver load and enhance their mental health. Policies that emphasize respite care, financial support, and caregiver-targeted training programs help alleviate stress and avert burnout. Moreover, workplace accommodations, including flexible hours and caregiver leave policies, are essential for enabling caregivers to manage their tasks efficiently while safeguarding their mental health. Community-based programs that promote peer support and social engagement are crucial for individuals with disabilities and their caregivers. Such activities help mitigate feelings of loneliness, enhance resilience, and cultivate a sense of belonging. Moreover, public health initiatives designed to enhance knowledge of the mental health requirements of these populations can foster inclusivity and catalyze systemic transformation. Cooperation among healthcare practitioners, legislators, and community organizations is crucial to establish a supportive framework that meets the psychological and practical requirements of individuals with disabilities and their caregivers.

The study offers significant insights, however it has inherent limits. The cross-sectional design limits the capacity to establish causal inferences regarding the association between caring and mental health outcomes. Longitudinal studies are essential to investigate the evolution of these interactions over time and across different conditions. Secondly, the study depends on self-reported assessments of depression and anxiety, which may be influenced by response bias, including underreporting due to stigma or overreporting stemming from elevated emotional states. Integrating clinical diagnostic instruments and objective evaluations in next research may improve the dependability of results. The sample population constitutes a constraint, since it may not adequately reflect the diversity of individuals with disabilities and caregivers across various geographies, cultural contexts, or socioeconomic backgrounds. Cultural attitudes on caregiving and disability may affect mental health outcomes variably across various communities, hence constraining the generalizability of the findings. The study also fails to consider other factors that may influence mental health, such the severity of impairment, length of caregiving, or accessibility to support systems. Subsequent study should endeavor to integrate these characteristics to yield a more sophisticated comprehension of the issues encountered by these populations. Ultimately, although the study highlights discrepancies in mental health outcomes, it fails to thoroughly examine the specific coping methods or resilience variables that can mitigate psychological discomfort. Investigating these elements in subsequent research may enhance the formulation of more efficient and customized therapies. Notwithstanding these constraints, the results provide a fundamental comprehension of the mental health difficulties encountered by individuals with disabilities and their caregivers, acting as a significant resource for guiding policy and practice.

Although the manuscript cites relevant literature, integrating more recent findings would better contextualize the results within current global trends. Recent studies in mental health and disability, especially in similar low- and middle-income settings, have shown emerging patterns that could further elucidate the challenges faced by caregivers and individuals with disabilities (Patel et al., 2019). One important limitation is the potential for biases in the self-reported data. Given that anxiety and depression were assessed using self-report scales, there is a risk of underreporting or overreporting due to social desirability bias. These biases may affect the accuracy of the reported mental health status of the participants. Future research could benefit from incorporating clinician-administered assessments or employing mixed-method approaches to enhance the robustness of the data and provide a more holistic view of mental health challenges.

5. Conclusions

This study underscores the substantial mental health issues encountered by individuals with disabilities and their caregivers, highlighting the necessity for comprehensive interventions that cater to their distinct and interconnected needs. Increased rates of depression and anxiety in individuals with disabilities highlight systemic obstacles, including restricted access to mental health services, societal stigma, and social isolation, whereas caregivers endure their own psychological challenges due to caregiving demands, financial pressures, and insufficient support. These findings necessitate a comprehensive strategy that encompasses improved access to mental health services, specialized caregiver support programs, community-oriented efforts, and governmental policies that foster inclusion and resilience. By comprehensively addressing these problems and cultivating a supportive atmosphere, it is feasible to enhance the quality of life for individuals with disabilities and their caregivers, thereby contributing to a more inclusive and equitable society.

Ethical considerations

Ethical approval was obtained from the Institutional Review Board of the Traditional Medicine Institute of Ho Chi Minh City on December 7, 2023.

Conflict of Interest

The authors declare no conflicts of interest.

Funding

This research did not receive any financial support.

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