Impact of Caregiving Burden on the Mental Health of Caregivers: A Study of Individuals Caring for Chronically Ill Patients

Musfirah Mazhar¹, Haziq Mahmood^{2*}, Martina Speck³ **Abstract**

The present research aims to investigate the relationship between the caregiving burden and its impact on the mental health of caregivers of chronically sick patients. It was hypothesized that the caregiving burden would be positively associated with higher levels of depression, anxiety, and stress among caregivers of chronically sick patients; and caregiving burden would significantly predict the psychological distress (depression, anxiety, stress) in caregivers of chronically sick patients. A sample of 220 caregivers (n=220) was selected conveniently which comprised of 102 males and 118 females selected from the different hospitals. The study employed a correlational research design to collect data, using two standardized scales, the Depression, Anxiety, and Stress Scale-21 (DASS-21) and Zarit Burden Interview. The data were analyzed by using SPSS to investigate the relationship between the caregiving burden and the caregivers' mental health. The findings showed a significant relationship between caregiving burden and increased psychological distress. This implies that higher caregiving burden leads to higher psychological distress. The findings emphasize the importance of proper interventions and support facilities for caregivers. The study adds to the existing knowledge by addressing the impact of the caregiving burden. Additional research is needed to investigate the potential mediator or moderators of the association between the burden and the mental health outcomes, thereby improving our understanding of the intricacies of caregiving experiences.

Keywords: Caregiver, Caregiving Burden, Caretaker, Chronic Sickness, Mental Health, Psychological Distress

Received: 13 February 2024; Revised Received: 30 April 2024; Accepted: 01 May 2024

^{1*}MPhil Scholar, Department of Applied Psychology, School of Professional Psychology, University of Management & Technology, Lahore, Pakistan.

^{2*}Assistant Professor, Department of Applied Psychology, School of Professional Psychology, University of Management & Technology, Lahore, Pakistan.

³PhD Scholar, Department of Experimental Psychology, University of Ottawa, Canada.

*Corresponding Author Email:

haziqramay@gmail.com

Introduction

This research aims to evaluate the influence of caregiving on the mental health of caregivers who care for patients with chronic illnesses. Caregivers' emotional, psychological, and social well-being contribute to their mental health. These unpleasant feelings can lead to social isolation, lower quality of life, and physical health issues (Ploeg et al., 2017).

Chronic sickness is a long-term health condition that necessitates continuing medical care and treatment and typically has no known cure. Chronic illnesses can impact very important areas of a person's life, including physical, mental, social, and economic well-being. Caring for older persons with chronic illnesses can severely influence caretakers physical, emotional, and social well-being, resulting in high-stress levels, burnout, and depression. Caregivers may also face financial pressure due to the cost of care and combining caregiving responsibilities with work and

This article is distributed under the terms of the Creative Commons Attribution Non Commercial 4.0 International License (https://www.creativecommons.org/licenses/by-nc/4.0/) which permits non-Commercial use, reproduction and distribution of the work without further permission provided the original work is attributed as specified.

© Copyright: The Authors (2024)

other obligations, which can add to stress and fatigue (Faronbi et al., 2019).

The caregiving burden associated with chronic illnesses can have a negative impact on the physical, emotional, and social well-being of caregivers, especially for young caregivers who are still developing their coping mechanisms and identities. In addition, this burden may interfere with the young caretaker's education, social life, and mental health, leading to stress, anxiety, depression, and social isolation (Chikhradze et al., 2017). High levels of caring burden can cause stress, anxiety, depression, social isolation, diminished quality of life, and decreased motivation to provide care. Therefore, the necessity of recognizing and treating the caring load among caretakers as well as offering support and resources to alleviate the negative impact on their mental health and quality of life, is emphasized in the article (Javalkar et al., 2017).

Moreover, existing literature also states how care providers experienced emotional pain due to the caregiving burdens, such as grief, frustration, and rage. Caring for others can be emotionally taxing and demanding, resulting in negative emotions and unhappiness. Caregivers experience anxiety due to worry and fear about the future, as they frequently have to make difficult decisions regarding their loved one's care. Due to the caregiving burden, carers had physical symptoms such as headaches. exhaustion. and sleep disruptions. Caregiving can be physically and mentally draining, and the caregiver's health and well-being can suffer due to the ongoing demands and duties. Moreover, caregivers are socially isolated due to the burden of caregiving, which limits their social activities and relationships, leading to feelings of loneliness and significantly influencing their mental health. Furthermore, the strain reduced caregiver's quality of life. Caregivers had little time for themselves and their interests, which reduced their sense of happiness and life satisfaction. Caregiving can be exhausting,

leaving caregivers with little time and energy to pursue things that offer them joy and fulfillment (Mamom & Daovisan, 2022).

The caregiving burden can cause caregivers physical, emotional, and financial strain. Physical strain can result from physically demanding tasks such as lifting and transferring the person they care for. Emotional strain can stem from guilt, stress, anxietv related to caregiving responsibilities. Furthermore, the caregiving burden can also affect caregivers' social functioning and lead to social isolation and loneliness (Yakubu & Schutte, 2018).

It is a very sad reality that caregivers who lack social connections and emotional support due to social isolation and lack of support may be at greater risk of depression and anxiety. Caregivers who do not have opportunities for respite from caregiving duties may also experience greater stress and burnout. Financial stress caused by the burden of caregiving might result in worry and sadness. Physical difficulties of caregiving, such as lifting and transferring the care recipient, can cause physical strain and pain, further affecting caretaker's mental health. Furthermore, it emphasizes the significance of treating these risk factors to lessen the detrimental impact of caregiver's mental health on the caregiving burden (Lambert et al., 2017).

Other risk factors include the patient's intensity of symptoms, illness length, comorbidities, and level of functional impairment. Caretakers of patients with more severe symptoms, a longer illness duration, and more comorbidities might encounter larger caregiving challenges and are more likely to suffer from sadness and anxiety. Furthermore, caregivers of patients with higher levels of functional impairment may experience increased stress and load due to providing daily care and support. observed were demographic Also characteristics that may contribute to the burden, such as being female, having a lower level of education, and having a

lower income. Inadequate social support and stigma associated with mental illness may also contribute to burden and negatively affect mental health outcomes. Much attention was placed on managing these risk factors to lessen the detrimental influence on the mental health of caregivers due to the caregiving burden (Souza et al., 2017).

Female caregivers are at a greater risk to suffer from mental health issues due to their responsibilities. caring Furthermore. caretakers aged 40-49 are at high risk to suffer from mental health issues as a result of the caregiving strain. Due to the caregiving burden, spouses and parents of patients are at a higher risk of developing mental health disorders. Caregivers of patients with severe mental illness are more likely to experience mental health difficulties due to the caregiving burden (Ayalew et al., 2019).

The patient's age, functional status, level of dependency, caregiver's age, relationship with the patient, and perceived social support are all predictors of burden—the patient's age, dependency level, and burden rise. affecting their everyday all functioning. Furthermore, older caretakers, caretakers for a spouse, and those with lesser social support are more likely to experience a greater caregiving burden, which can further influence their daily functioning. Caregivers who report higher levels of depression and anxiety also have a higher burden of caregiving, which can reduce their engagement in social activities and worsen their daily functioning (Bekdemir & Ilhan, 2019).

Another research highlights the negative impact of the caregiving burden on the mental health and daily functioning of caregivers of stroke patients. The study found that the burden of caregiving was significantly related to the increased levels of anxiety and depression in caregivers. Caregivers who reported a higher burden of caregiving also reported decreased social help/support, which further contributed to their anxiety and depression. The study

suggests that providing appropriate support and resources to caregivers can help reduce the burden they experience and improve their mental health and daily functioning. Overall, the study emphasizes the importance of addressing the burden experienced by caregivers to improve the overall well-being of both the caregiver and the stroke patient (Hu et al., 2018).

According to many research types, a caregiver caring for a patient with a chronic illness affects their well-being because of the health outcomes of a chronic disease and the patient's burden on the caregiver. Depending on the nature of the disease, a caregiver's life is completely disrupted; there is no certainty in their lives because they lose control over it (Siddiqui & Khalid, 2019).

Moreover, other empirical data highlighted that the caregiving burden negatively impacts caregivers' functioning. Caregivers who reported high levels of burden had significantly lower scores on quality of life, social functioning, and physical functioning. This suggests that caregiving responsibilities can interfere with caregivers' daily activities and wellbeing, affecting their ability to fulfill their responsibilities and engage in self-care activities. Therefore, the study emphasizes the importance of providing social support to caregivers to alleviate the burden and enhance their well-being, mental health, and daily functioning (Alizadeh et al., 2019).

Past examinations have found caregivers are more concerned about the future than patients, even when discussing the present. As a result, they value appropriate symptom treatment in the context of an illness and death perception related to their chronically ill family The literature shows members. caregivers of patients with chronic illnesses often are responsible for providing support and care, which can significantly impact their mental and physical well-being. Research suggests how caregivers perceive illness can profoundly impact their stress levels, coping strategies, and overall well-being (Perry et al., 2017)

Method

Research Design

The co-relational research design was used to gather the data. Investigating relationships or associations between variables without implying causation is the goal of co-relational research design.

By using this approach data was collected from various hospitals. By gathering data from caregivers of chronic patients, the study aimed to capture a comprehensive view of caregiving experiences. The corelational research design allowed for efficient data collection at a specific moment in time. The findings from this research design contribute to a better understand of the caregiving stressors and the factors that impact the studied population.

Sampling

The sample size for this study encompassed data collected from a carefully selected sample of 220 caregivers (*N*=220) who look after patients with chronic illnesses. The chosen sampling technique for this research was convenience sampling, a type of non-probability sampling. This technique was selected because it allows for data to be collected from a wide range of caregivers across multiple hospitals, Moreover, relying on the availability of the caregivers at the hospital maximizes the number of participants included in the study.

Measures

Depression Anxiety Stress Scale-21

The depression Anxiety and Stress Scale-21 (DASS-21) was used in the study as a measurement tool. DASS-21 The comprises of 21 items, that are divided into three domains/sub categories: depression, anxiety and stress. Each domain consists of 7 items, with participants rating the intensity of their experience on a Likert scale ranging from 0 (Did not apply to me at all) to 3 (Applied to me most of the time). The total scores were calculated by summing the scores across all the items within each domain, which results in a separate score for depress, anxiety and stress. The results obtained through this scale will provide insight into the participant's depression, anxiety and stress levels. Facilitating a comprehensive understanding of their psychological wellbeing. DASS have strong internal consistency ranging from 0.74-0.86 for Anxiety, 0.77-0.92 for depression and 0.70-0.90 for stress (Ali et al., 2021).

Zarit Burden Interview

The Zarit Burden Interview was used as a measurement tool. This scale consists of 12 items which measures various aspects of caregiving burden. These items were not divided into specific domains. Participants were asked to rate the impact of each item on a Likert scale, ranging from 0 (Not at all burdened) to 4 (Extremely burdened). None of the items in this scale are reversed scored. The total score was calculated by adding the scores of the 12 items, which provides a comprehensive measure of the caregiving burden experienced by the participants. Higher scores indicate a higher burden experienced by caregivers. While lower scores suggest a lower burden. This reliability coefficient of this tool was 0.92 which indicates strong internal consistency (Gratao et al., 2019).

Procedure

The DASS-21 and Zarit Burden Interview are two copyrighted scales that were used in this research after the authors granted permission to use them. After that, the supervisor was consulted regarding the demographics and questionnaire before they were approved. Data collection started as soon as permission was granted.

Hospitals in Lahore were visited in order to gather information from caregivers. The purpose of the initial visit to Lady Wellington Hospital was to collect data from patients' caregivers who were managing long-term gynecological conditions. These conditions included a wide range of medical conditions, including STDs, labor complications, and pregnancy-related conditions.

After this, Jinnah Hospital was visited and collected from caregivers data cardiology patients. The aim was to examine the caregiving burden experienced supporting patients those with cardiology-related conditions. Subsequently, Services Hospital visited to collect data from caregivers of those who suffer from stroke, which led to complete paralysis, heart issues, and chronic brain complications. Later, Farooq Hospital Lahore was also visited to collect data from caregivers.

Results

The main objective of the present research was to see how caregiving burden impacts the mental health of caregivers looking after chronically sick patients at the hospital. The data was examined in three key steps. The sample was collected from various hospitals. In the first phase a reliability analysis was performed for a pilot study (N=40). The Cronbach's alpha was reported on the scales. In the second phase of the study a sample of (N=220) was analyzed and Cronbach's alpha was reported (Table 3). The descriptive statistics of the study variables such as mean, standard deviation, actual/potential range and reliability were computed. In the third phase Pearson-product correlation was used to evaluate the association between the caregiving burden and the mental outcomes of the caregiver. Also, the linear regression was run to predict the impact of caregiving burden on the mental health of caregivers. The result showed significant differences. Table 1 indicates the sample distribution according to gender, age, employment status, marital status, relationship. household income. education level. It has been found that there was a high percentage of males compared to females. Moreover, there has been almost the same percentage of people aged between 18-23 and 24-29. The lowest percentage was people aged between 50 and above. The age groups 30-35, 36-41, and 42-49 had 62 (28.2%), 30 (13.6%), and 12 (5.5%) participants, respectively.

Regarding employment status, the result showed the highest percentage, with a value of 43.6 of those unemployed. 53 (24.1) participants were employed full-time, 36 (16.4) were employed half-time, and 35 (15.9) were students.

Out of a sample of N=220, 120 people were married, with the highest percentage of 54.5. 83 (37.7) out of these people were single and never married, 10 (4.5) were divorced, 4 (1.8) were divorced, and lastly, 3 (1.4) were widowed. Regarding the relationships, the results identified the highest percentage of parents, 40.9%. Following that, 54 (24.5) were spouses, 28 (12.7) were children, and 48 (21.8) were siblings.

In terms of household income, 3 participants (1.4%) reported no income, 55 (25.0%) had an income between PKR 12000-22000, 46 (20.9%) had an income between PKR 25000-50000, 78 (35.5%) had an income between PKR 50000-100000, and 38 (17.3%) had an income of 100000 or more.

It was also found that those participants who had completed their bachelor's degree were greater in number compared with a number 109, denoting 49.5% to those who were in their matric/ O levels (3.2%) and intermediate/ A levels (22.3%). The lowest level of participants was 15 who had completed their graduate level (6.8), followed by seven who had completed less than matric (18.2%).

Table 1Correlation Between Caregiving Burden and Mental Health in Caregivers of Chronically Sick Patients (N=220)

Variables	M	SD	ZBI	DASS-21	Depression	Anxiety	Stress
ZBI	31.9	6.5	-				
DASS21	40.8	8.2	.70**	-			
Depression	13.9	3.5	.67**	.91**	-		
Anxiety	12.2	3.3	.54**	.85**	.71**	-	
Stress	16.1	3.0	.59**	.80**	.63**	.51**	-

Note: *p<.05, **p<.05, ***p<.001, M=Mean, SD= Standard Deviation, ZBI= Zarit Burden Interview

The Pearson moment correlation assessed the relationship between caregiving burden, depression, anxiety, and stress. Firstly, the correlation between ZBI (Zarit Burden Interview) AND DASS-21 (Depression Anxiety Stress Scale 21) was measured to be .70**, indicating a strong positive relationship between caregiving burden and psychological distress.

The results indicated that the correlation between ZBI (Zarit Burden Interview) and depression is .67**, which indicates a strong positive relationship between the caregiving and depressive burden symptoms. The caregiving burden measured by ZBI and anxiety with a value of .54** indicated a moderate yet positive relationship between the caregiving burden and anxiety symptoms. Moreover, the correlation between ZBI and stress is .59**, indicating a moderate positive relationship between caregiving burden and stress symptoms.

Furthermore, the results also indicated a correlation between DASS-21 and the subscale depression to have a strong

positive relationship between overall psychological distress and depressive symptoms with a value of .91**. There is a positive correlation between DASS-21 and anxiety with a value of .85**. Moreover, there is a positive correlation of .80** between DASS-21 and stress.

The results also indicated a correlation between depression and anxiety measures at .71**, showing a strong and positive relation between depressive symptoms and anxiety symptoms. Depression and stress showed a relatively moderate positive relationship with a value of .63**. Lastly, the correlation between anxiety and stress is .51** showing a moderate positive relation. The standard deviation (SD) quantifies the variability within each value. The standard deviation for the ZBI variable is 6.5, meaning that caregiving burden scores vary by around 6.5 units around the mean. Similarly, the SD values for the DASS-21, Depression, Anxiety, and Stress variables reveal the variability in scores for each measure.

Table 2Linear Regression Analysis of Mental Health (N=220)

Model	В	95% <i>CI</i> for B		SEB	В	R^2	
		LL	UL				
				_		0.49	0.49
Caregiving Burden	0.88	0.77	1.00	0.70	0.70		

Note.CI= confidence interval; B= unstandardized Coefficient Beta; LL= Lower limit; UL= Upper limit; SEB= Standardized Error Beta; β = Beta; R^2 = R square; *p<0.05, **p<0.01, ***p<0.001

Table 2 presents a linear regression analysis to examine the relationship between the variables, caregiving burden, and mental health outcomes. In the table above, the independent variable is the caregiving burden, and the dependent variable is mental health. The coefficient for caregiving burden is 0.49, indicating that a

one-unit increase in caregiving burden is associated with a 0.49 increase in the dependent variable. The R-squared value of 0.99 indicates that the caregiving burden explains 49% of the caregivers' mental health variance. The β value of .88 signifies that the caregiving burden has a strong positive effect on mental health.

Table 3

Mean, Standard deviation, Range, Skewness and Kurtosis of the Study Variables (N=220)

Range

Variables	M	SD	α	Potential	Actual	Skewness	Kurtosis
ZBI	31.92	6.53	.86	0-48	13-48	-0.36	-0.22
DASS	40.48	8.22	.84	0-63	13-57	-0.45	0.21
Depression	13.90	3.50	.77	0-21	4-21	-0.23	-0.28
Stress	16.51	3.05	.78	0-21	5-21	-0.94	1.02
Anxiety	12.27	3.31	.54	0-21	2-20	3.31	0.08

Note: M= Mean. SD= Standard Deviation, $\alpha=$ reliability coefficient DASS-21= Depression Anxiety Stress Scale-21, ZBI= Zarit Burden Interview

Discussion

The present study aimed to investigate the impact of the caregiving burden on the mental health (depression, anxiety, and stress) outcomes among caregivers of chronically sick patients. The research question sought to explore the relationship between the caregiving burden and the

caregivers' mental health. This discussion section will summarize the key findings, interpret their implications, compare them to previous research, discuss limitations, and highlight the study's practical implications.

The study's findings demonstrated a significant positive relationship between the caregiving burden and the mental health outcomes of the caregivers. The correlation between caregiving burden and depression was significant. This indicates that as the caregiving burden increases. The caregivers are likely to experience higher levels of depression. Similarly, the results indicated a significant positive relationship between caregiving burden and anxiety as well as between care giving burden and stress. These findings suggest that the caregiving burden poses a higher level of stress and anxiety to caregivers. Moreover, for caregiving burden in relation to the overall mental health (depression, anxiety, and stress) was measured to be the model showed a 40% variance in mental health outcomes. Furthermore, the caregiving burden was positively associated with stress explaining 33% of the variance in stress levels. Similarly, the caregiving burden was positively associated with anxiety showing a 29% variance. Lastly, a positive association between caregiving burden and depressive symptoms was revealed a 44% variance. These results approve the two hypotheses; Caregiving burden will be positively associated with higher levels of depression, anxiety, and stress among caregivers of chronically sick patients.

Caregiving burden will significantly predict the psychological distress (depression, anxiety, stress) of chronically sick patients. The first hypothesis that states that they are giving burden will be positively associated with higher levels of depression, anxiety, and stress among caregivers of chronically sick patients are proved by the exiting researches. The findings are consistent with the existing research highlighting the psychological distress faced by caregivers due to the caregiving burden. Past examinations state that caregiving burdens can lead to an increase in the symptoms of depression and anxiety among caregivers. Moreover, this research states that caregivers looking after chronically sick patients have a low quality of life, harming

their emotional and mental health. (Javalkar et al., 2017). Gouin et al. (2016) also stated that the caregiving burden enhances caregivers' mental, physical, and financial This burden is linked with stress. depression, anxiety, and stress of the negative effects on the caregiver's health as their risk of contracting the long-term illness is increased. Further research also sheds light on the detrimental effects of caregiving stress on caregivers' mental health and daily functioning. This research states that a heavy caregiving burden can to negative consequences like depression and anxiety, and it also states that the lack of social support also worsens the mental ability of a caregiver to operate in a healthy manner. (Yazici et al., 2016). Other researchers state that the caregiving burden massively hinders the daily functioning of a caregiver by stating that the caregiving responsibilities can hinder their daily activities and well-being, increasing psychological distress among caregivers. (Alizadeh et al., 2019). Caregivers also report sleep disturbances which increase their anxiety and depression levels. It also sheds light on how impairments in daily functioning contribute to higher caregiving burdens and increased distress. (Liu et al., 2017). Research indicates that the stress of providing care has a negative impact on the mental health and daily functioning of caregivers. It states that the caregiving burden is extremely emotionally taxing, and the high expectation of the role negatively impacts their daily functioning and mental health (Ribe et al., 2018). Lou et al. (2015) in their research conducted a multiple-regression analysis. Thev demonstrated that the caregiver's symptoms of depression and anxiety were significantly predicted by their caregiving burden, so the greater the burden, the higher the levels of anxiety and depression. Furthermore, studies also show that caregivers, compared to non-caregivers, fulfilled the diagnostic criteria depression in a 40:05 ratios. Moreover, according to the disease's nature, the

caregiver's life is completely affected. So, the caregivers of chronic patients are so adversely affected due to the health outcomes of the chronic disease (Siddiqui & Khalid, 2019).

Zarit and Savla (2016) mention that the stress rate among caregivers is so high it disrupts their daily life and has adverse effects on their mental health, so much so that it leads to high mortality rates among caregivers. Researchers also prove the hypothesis because they state caregivers of chronic patients experience the worst physical draining due to the long hours of care duration (Lee et al., 2021). Furthermore, according to a research by Ruksakulpiwat et al. (2022), a chronic illness impacts a caregiver's mental and physical health and hinders their personal experiences. So, it is clear that a caregiver is adversely affected by a chronic patient's illness. The authors Kuhlen et al. (2020) state that the stress of bearing the financial burden, which forces a caregiver to do work extra impairs their daily functioning and also adversely affects the relationship between a caregiver and a patient because so much burden leads to bad mental health lead to the caregiver overwhelmed with the responsibilities.

The second hypothesis that is that caregiving burden will significantly predict the psychological distress (depression, anxiety, stress) of chronically sick patients is also supported by past researches. Researchers shed light on how caregiving burden cause physical strain which in turn increases the psychological distress. Like Sullivan and Miller (2015) demonstrated that supporting chronic patients lead to physical exhaustion, headaches and muscle pain. These unfavorable outcomes have a very negative toll on the mental health of the caregivers. Another past research states that caregivers looking after chronic psychiatric illness are associated with a high level of stress. The burden affects very important areas of life of a care giver such as: family functioning, social isolation and financial and health problems. Moreover,

past examinations also state that the process of caregiving is usually associated with burden and psychological distress. This research states that females who are looking after very sick patients experience four times more psychological distress. The results of the study showed a 35% of caregivers had a GHQ (General Health Questionnaire) of >3 which signified that psychological distress was significantly associated with the caregiving burden. (Jane et al., 2019). Literature also highlights that caregivers who experience high level of distress have a low quality of life which leads to mental health problems. (Stanley et al., 2017). The negative consequences of caregiving burden on the mental health of caregivers, causing psychological distress has also been evidenced by several other studies. Which states that high scored for depression, anxiety and stress are the factors that predict high psychological distress in caregivers (Gupta et al., 2015; Stanley et al., 2017).

Past researches also state how cultural factors enhance the caregiving burden and in turn affects the mental health levels of caregivers. The author states that filial duty and sense of obligation towards fulfilling the roles of caregiving puts a lot of burden on caregivers, intensifying their stress and anxiety levels (Isac et al., 2021). Further researched state that cultural factors like stigma, lack of awareness and gender roles increase the caregiving burden which poses a higher psychological distress on the caregivers. The stigma around mental health leads to social isolation, exclusion and discrimination. Making it difficult to seek support for it, which intensifies stress levels. Moreover. insufficient understanding on mental disorders among families results in unrealistic expectations. Families of caregivers do not take into account the level of psychological distress which leads. to blame and misunderstanding, adding to the caregiver's stress and anxiety. Lastly cultural norms, maintaining family honor like and concealing mental illnesses were also

identified as factors that contribute quite a lot to caregiving burden (Von Kardorff et al., 2016). Other researches state that cultural expectations of illness and aging contribute to caregiving stress as they may experience the feelings of guilt and shame if they perceive themselves as unable to meet the demands of caregiving. (Balbim et al., 2020).

Past examinations also support how caregiving burden leads to role strain and loss of personal identity affecting the mental health of caregivers of chronic patients negatively. Researches state that the experience of being a caregiver especially for spouses is a mixture of helplessness, anger, isolation and guilt which leads to a loss in one's personal identity. The research also sheds light onto how role strain dimensions lead to personal stress and contribute to life changes like social isolation and declining mental health. (Isac et al., 2021) other researches also state that caregivers caring for chronic illness like an Alzheimer's can result in a loss of personal identity, it is because caregiver prioritize the needs and well beings of the patient above their needs, interests and goals. As a result, caregivers may experience a sense of low self-identity as their life is centered around the care and support of the patient. (Cooper, 2021).

Implications

Understanding the impact of the caregiving burden on the mental health of caregivers looking after chronically sick patients holds significant value for the future. Firstly, it is essential to understand that research in this area can enhance the development of targeted interventions and support facilities mainly designed to address the needs of Identifying caregivers. the factors contributing to the caregiving burden, which causes psychological distress, can create evidence-based strategies to alleviate depression, anxiety, and stress among caregivers. These interventions can include educational resources tailored to the caregivers' challenges, counseling services, and respite care programs.

Secondly, addressing the mental health needs of the caregivers can lead to policy-based interventions on the governmental level. Government institutions can use this research knowledge to create policies that offer flexible work hours for caregivers, financial incentives, and access to affordable healthcare services. This way, policymakers can make supportive policies to help these caregivers.

Thirdly, this kind of research can benefit society at a broader level. Creating awareness about caregiving's challenges can reduce the stigma associated with mental health issues. Moreover, it will also promote empathy and public conversations regarding this area. Furthermore, these findings can influence healthcare practices. Healthcare professionals can understand and address these issues by providing the correct referrals and resources.

In conclusion, targeted interventions and policy changes to improve the healthcare system, alongside increasing social awareness, can ultimately enhance the wellbeing of caregivers.

Limitations

The cross sectional nature of this research does not aptly measure the changing dynamics of caregiving at different points in time. Studies also undermine the coping strategies that caregivers can incorporate to deal with the burden and this has not been considered in this study. Moreover, cultural considerations also 1imit the wider generalizations of the findings. Furthermore, the sample population only consisted of caregivers at the hospitals, thereby excluding the caregivers at home. Despite if these limitations the study deals with a range of variables which are not often explored together and provides an indepth understanding of how caregiving burden impacts three domains; stress, anxiety and depression. It provides an understanding into a topic that is not discussed a lot, that is understanding the mental health outcomes of caregivers is equally important as those of the patients.

Recommendations

Understanding the impact of the caregiving burden on the mental health of caregivers looking after chronically sick patients holds significant value for the future. Firstly, it is very important to understand that research in this area can enhance the development of targeted interventions and support facilities that are mainly designed to address the needs of caregivers. Identifying the factors contributing to the caregiving burden, which causes psychological distress, can create evidence-based strategies to alleviate depression, anxiety, and stress among caregivers. These interventions can include educational resources tailored to the caregivers' challenges, counseling services, and respite care programs.

Secondly, addressing the mental health needs of the caregivers can lead to policy-based interventions on the governmental level. Government institutions can use this research knowledge to create policies that offer flexible work hours for caregivers, financial incentives, and access to affordable healthcare services. This way, policymakers can make supportive policies to help these caregivers.

Thirdly, this kind of research can benefit society at a broader level. Creating awareness about caregiving's challenges can reduce the stigma associated with mental health issues. Moreover, it will also promote empathy and public conversations regarding this area.

In conclusion, targeted interventions and policy changes to improve the healthcare system, alongside increasing social awareness, can ultimately enhance the wellbeing of caregivers.

Conclusion

The research paper aimed to predict and understand the impact of the caregiving burden on the mental health of the caregivers looking after chronically sick patients. The significant results showed a positive correlation between caregiving burden and mental health. Stating that with a rising caregiving burden, the anxiety, stress, and depression levels of caregiver's

increase. Through comprehensive literature, it has become evident that caregivers face many challenges due to the caregiving burden/ role. These challenges also include emotional exhaustion and psychological distress. The results emphasize an urgent need for specially targeted interventions to help caregivers. By doing so, we can mitigate the caregiving burden's negative impact, which causes caregivers psychological distress. This research adds to the existing knowledge by addressing the importance of caregivers' mental health. It gives significance to adopting a holistic approach that considers the caregiver's well-being. However, this research focuses on specific populations and self-report measures. More research can employ longitudinal designs. So in conclusion, this paper sheds light on how the caregiving burden massively causes psychological distress to caregivers looking after chronically sick patients. It is essential to understand that these factors must be eliminated to enhance the caregiver's quality of life and improve their mental health.

Contribution of Authors

Musfirah Mazhar: Conceptualization, Investigation, Methodology, Data Curation, Formal Analysis, Writing – Original Draft Haziq Mahmood: Methodology, Writing – Reviewing & Editing, Supervision Martina Speck: Methodology, Formal

Martina Speck: Methodology, Formal Analysis, Writing - Reviewing & Editing

Conflict of Interest

There is no conflict of interest declared by the authors.

Source of Funding

The authors declared no source of funding. **Data Availability Statement**

The datasets of the current s

The datasets of the current study are not available publicly due to ethical reasons but are available from the corresponding author [H.M.] upon the reasonable request.

References

- Ali, M. A., ALkhamees, A. A., Hori, H., Kim, Y., & Kunugi, H. (2021). The depression anxiety stress scale 21: development and validation of the depression anxiety stress scale 8-item in psychiatric patients and the general public for easier mental health measurement in a post covid-19 world. *International Journal of Environmental Research and Public Health*, 18(19),10142.
- Alizadeh, M., Chehrzad, M. M., Mirzaee, M., & Leyli, E. K. N. (2019). Caregiver burden and related factors in parents of children with Thalassemia. *Journal of Advanced Pharmacy Education & Research*, 9(S2), 35-39.
- Ayalew, M., Workicho, A., Tesfaye, E., Hailesilasie, H., & Abera, M. (2019). Burden among caregivers of people with mental illness at Jimma University Medical Center, Southwest Ethiopia: a cross-sectional study. *Annals of General Psychiatry*, 18(1), 1-11.
- Balbim, G. M., Maldonado, A. M., Early, A., Steinman, L., Harkins, K., & Marquez, D. X. (2020). Evaluation of public health messages promoting early detection dementia among adult latinos with a living older adult parental figure. *Hispanic* Health Care *International*, 18(3), 163-173.
- Bekdemir, A., & Ilhan, N. E. S. R. İ. N. (2019). Predictors of caregiver burden in caregivers of bedridden patients. *The Journal of Nursing Research*, 27(3), e24.
- Chikhradze, N., Knecht, C., & Metzing, S. (2017). Young careers: growing up with chronic illness in the family-a systematic review 2007-2017.

 Journal of Compassionate Health Care, 4(1), 1-16.
- Cooper, R. A. (2021). "I am a caregiver": Sense-making and identity construction through online

- caregiving narratives. *Journal of Family Communication*, 21(2), 77-89
- Faronbi, J. O., Faronbi, G. O., Ayamolowo, S. J., & Olaogun, A. A. (2019). Caring for the seniors with chronic illness: The lived experience of caregivers of older adults. *Archives of Gerontology and Geriatrics*, 82, 8-14.
- Gouin, J. P., Da Estrela, C., Desmarais, K., & Barker, E. T. (2016). The impact of formal and informal support on health in the context of caregiving stress. *Family Relations*, 65(1), 191-206.
- Gratao, A. C. M., Brigola, A. G., Ottaviani, A. C., Souza, E. N., Rossetti, E. S., De, O., Pavarini, S. C. I., Luchesi, B. M., & Terassi, M. (2019). Brief version of zarit burden interview (zbi) for burden assessment in older caregivers. *Dementia***Neuropsychologia*, 13, 122-129.
- Gupta, S., Isherwood, G., Jones, K., Van, Impe K. (2015). Assessing health status in informal schizophrenia caregivers compared with health status in non-caregivers and caregivers of other conditions. *BMC Psychiatry*, 15, 1-11.
- Hu, P., Yang, Q., Kong, L., Hu, L., & Zeng, L. (2018). Relationship between the anxiety/depression and care burden of the major caregiver of stroke patients. *Medicine*, 97(40), 1-6.
- Isac, C., Lee, P., & Arulappan, J. (2021).
 Older adults with chronic illness—caregiver burden in the Asian context: a systematic review. *Patient Education and Counseling*, 104(12), 2912-2921.
- Jane, O. A., Olatunji, A., Bamiso, M. A., Kola, O. J., Ayodele, O. J., & Ideraoluwa, B. O. (2019). Burden of care and psychological distress in primary caregivers of patients with type-2 diabetes mellitus in a tertiary hospital in Nigeria. Ethiopian

- Journal of Health Sciences, 29(6), 697-708.
- Javalkar, K., Rak, E., Phillips, A., Haberman, C., Ferris, M., & Van Tilburg, M. (2017). Predictors of caregiver burden among mothers of children with chronic conditions. *Children*, 4(5), 39.
- Kuhlen, R., Schick, J., Scriba, P., Schmithausen, D., & Winklmair, C. (2020). he effects of the COVID-19 pandemic and lockdown on routine hospital care for other illnesses. *Deutsches Ärzteblatt International*, 117(27-28), 488.
- Lambert, S. D., Bowe, S. J., Livingston, P. M., Heckel, L., Cook, S., K, P., & Orellana, L. (2017). Impact of informal caregiving on older adults' physical and mental health in low-income and middle-income countries: a cross-sectional, secondary analysis based on the WHO's Study on global AGEing and adult health (SAGE). *BMJ Open, 7*(11), e017236.
- Lee, J. J., Tsang, W. N., Yang, S. C., Kwok, J.Y. Y., V, W., & Lau, K. K. (2021). Qualitative study of Chinese stroke caregivers' caregiving experience during the COVID-19 pandemic. *Stroke*, 52(4), 1407-1414.
- Liu, S., Li, C., Shi, Z., Zhou, Y., Liu, S., & Ji, Y. (2017). Caregiver burden and prevalence of depression, anxiety and sleep disturbances in Alzheimer's disease caregivers in China. *Journal of Clinical Nursing*, 26(9-10), 1921-1300.
- Lou, Q., Liu, S., Huo, Y. R., Liu, M., & Ji, Y. (2015). Comprehensive analysis of patient and caregiver predictors for caregiver burden, anxiety and depression in Alzheimer's disease. *Journal of Clinical Nursing*, 24(17-18), 2668-2678.
- Mamom, J., & Daovisan, H. (2022). Listening to caregivers' voices: the informal family caregiver burden of caring for chronically ill bedridden

- elderly patients. International Journal of Environmental Research and Public Health, 19(1), 567.
- Perry, M. A., Mulligan, H., & Smith, C. (2017). How do professional caregivers perceive their health and well-being? *International Journal of Workplace Health Management*, 10(6), 434-449.
- Ploeg, J., Markle-Reid, M., Valaitis, R., McAiney, C., Duggleby, W., Bartholomew, A., & Sherifali, D. (2017). Web-based interventions to improve mental health, general caregiving outcomes, and general health for informal caregivers of adults with chronic conditions living in the community: rapid evidence review. *Journal of Medical Internet Research*, 19(7), e263.
- Ribe, J. M., Salamero, M., Pérez-Testor, C., Mercadal, J., Aguilera, C., & Cleris, M. (2018). Quality of life in family caregivers of schizophrenia patients in Spain: caregiver characteristics, caregiving burden, family functioning, and social and professional support. *International Journal of Psychiatry in Clinical Practice*, 22(1), 25-33.
- Ruksakulpiwat, S., Zhou, W., Phianhasin, L., Benjasirisan, C., Fan, Y., Su, T., & Chiaranai, C. (2022). The experience of caregivers of chronically ill patients during the COVID-19: A Systematic Revie. *Chronic Illness*, 18(3), 488-502.
- Siddiqui, S., & Khalid, J. (2019). Determining the caregivers' burden in caregivers of patients with mental illness. *Pakistan Journal of Medical Sciences*, 35(5), 1329.
- Souza, A. L. R., Guimarães, R. A., de Araújo Vilela, D., de Assis, R. M., de Almeida Cavalcante Oliveira, L. M., Souza, M. R., Nogueira, D. J., & Barbosa, M. A. (2017). Factors associated with the burden of family caregivers of patients with mental

- disorders: a cross-sectional study. *BMC Psychiatry*, 17, 1-10.
- Stanley, S., Balakrishnan, S., & Ilangovan, S. (2017). Psychological distress, perceived burden and quality of life in caregivers of persons with schizophrenia. *Journal of Mental Health*, 26(2), 134-141.
- Sullivan, A. B., & Miller, D. (2015). Who is taking care of the caregiver? *Journal of Patient Experience*, 2(1), 7-12.
- Von Kardorff, E., Soltaninejad, A., Kamali, M., & Eslami Shahrbabaki, M. (2016). Family caregiver burden in mental illnesses: The case of affective disorders and schizophrenia—a qualitative exploratory study. *Nordic Journal of Psychiatry*, 70(4), 248-254.
- Yakubu, Y. A., & Schutte, D. W. (2018). Caregiver attributes and sociodemographic determinants of caregiving burden in selected low-income communities in cape town. South Africa. *Journal of Compassionate Health Care*, 5(1), 1-10.
- Yazici, E., Karabulut, U., Yildiz, M., Tekeş, S. B., Çakir, İ. N. A. N., & Turgut, C. (2016). Burden on caregivers of patients with schizophrenia and related factors. *Nöro Psikiyatri Arşivi*, 53(2), 96.
- Zarit, S. H., & Savla, J. (2016). Caregivers and stress. In *Stress: Concepts, Cognition, Emotion, and Behavior* (pp. 339-344). Academic Press.