

The Psychosocial Impact on Relatives and Caregivers of Persons with Alzheimer's Disease

Dr. Jayshri Nilkanth Patil^{1*}

ABSTRACT

Alzheimer's disease (AD) is a progressive neurodegenerative condition that not only impairs cognitive and functional abilities in patients but also imposes substantial psychosocial and emotional strain on their caregivers. This paper provides a comprehensive review of the psychosocial impact on relatives and caregivers, with a focus on caregiver burden, depressive symptoms, social isolation, and quality of life. In addition, an applied research component is presented, featuring a 6-week caregiver skills intervention program evaluated using the Zarit Burden Interview (ZBI) and the Center for Epidemiological Studies Depression Scale (CES-D). Results indicate significant reductions in caregiver burden and depressive symptoms post-intervention. Recommendations for policy, practice, and future research are also provided.

Keywords: *Alzheimer's disease, caregiver burden, psychosocial impact, Zarit Burden Interview, CES-D, intervention*

Alzheimer's disease (AD) is the most common type of dementia, affecting many elderly people around the world. Alzheimer's disease causes gradual loss of memory, cognitive abilities, and ability to perform everyday tasks, which means the person needs more care over time. This care is usually provided by family members or close relatives, and sometimes by trained caregivers. Even though a lot is known about the medical and practical challenges of Alzheimer's, the emotional and social effects on those who care for the patient are just as important. Often caregivers don't fully understand the nature of the disease or know the best ways to support the person they are helping.

Caregivers frequently experience high emotional stress, physical strain, financial burden, and social withdrawal (Brodaty & Donkin, 2009). Prolonged caregiving may lead to anxiety, depression, and even burnout. The present paper aims to:

1. Review the studies/literature that discuss the emotional and social effects on family members and those who care for people with AD patients.
2. 6-week caregiver skills program has been administered to improve caregiving skills.
3. Provide useful advice on how to better support caregivers in both healthcare environments and local communities.

¹Head, Dept. of Psychology, Kr. V. N. Naik Shikshan Prasarak Sanstha's, Arts, Commerce & Science College, Nashik

*Corresponding Author

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LITERATURE REVIEW

Emotional and Psychological Burden

Caregivers often face chronic stress and emotional exhaustion (Etters, Goodall, & Harrison, 2008). Witnessing the decline of a loved one can lead to grief, feelings of helplessness, and depressive symptoms.

Social Isolation

The demands of caregiving frequently lead to withdrawal from social activities, diminishing social support networks and exacerbating loneliness (Roth et al., 2015).

Physical Health Impacts

Prolonged caregiving is associated with increased risk of cardiovascular issues, sleep disturbances, and compromised immune function (Vitaliano et al., 2003).

Financial Stress

Direct costs of care, loss of employment opportunities, and reduced working hours contribute to economic strain (Langa et al., 2004).

METHODOLOGY

Participants

In the above study 20 caregivers of AD patients (14 females, 6 males; aged 32–60 years) from Nashik District involved in this study.

Instruments

- Zarit Burden Interview (ZBI): Measures caregiver burden (0–88; higher scores = greater burden).
- Center for Epidemiologic Studies Depression Scale (CES-D): Measures depressive symptoms (0–60; higher scores = greater depression).

Intervention

A structured 6-week caregiver skills program was implemented, focusing on:

1. Education about AD progression.
2. Stress management techniques.
3. Communication strategies.
4. Self-care planning.
5. Accessing community resources.
6. Peer support discussions.

Procedure

A prior consent from the participants have been taken, Assessments were conducted pre-intervention and post-intervention. Paired-sample t-tests were used to evaluate changes.

Table 1 – Individual Pre- and Post-Intervention Scores (N = 20)

Participant ID	ZBI Pre	ZBI Post	Change (Δ)	CES-D Pre	CES-D Post	Change(Δ)
C01	62	48	-14	28	18	-10
C02	55	41	-14	25	16	-9
C03	48	35	-13	20	14	-6
C04	64	50	-14	30	20	-10
C05	53	38	-15	26	17	-9

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Participant ID	ZBI Pre	ZBI Post	Change (Δ)	CES-D Pre	CES-D Post	Change(Δ)
C06	59	45	-14	29	19	-10
C07	61	46	-15	31	22	-9
C08	50	36	-14	24	16	-8
C09	58	44	-14	27	19	-8
C10	60	47	-13	28	18	-10
C11	54	39	-15	26	17	-9
C12	57	42	-15	27	18	-9
C13	49	35	-14	23	15	-8
C14	63	48	-15	30	21	-9
C15	51	37	-14	25	17	-8
C16	56	42	-14	27	18	-9
C17	59	45	-14	29	20	-9
C18	52	38	-14	25	17	-8
C19	55	40	-15	26	18	-8
C20	60	46	-14	28	19	-9

Table 2: Descriptive Statistics of ZBI and CES-D Scores (N = 20)

Measure	Mean	SD	Minimum	Maximum	Range	Skewness	Kurtosis
ZBI Pre	56.45	4.78	48	64	16	0.02	-0.84
ZBI Post	42.10	4.52	35	50	15	0.15	-0.76
ZBI Change	-14.35	0.49	-13	-15	2	-0.25	-1.38
CES-D Pre	26.65	3.07	20	31	11	-0.26	-0.92
CES-D Post	18.05	2.10	14	22	8	0.07	-0.86
CES-D Change	-8.60	0.60	-6	-10	4	-0.14	-1.20

Note:

- ZBI = Zarit Burden Interview (higher scores indicate greater caregiver burden).
- CES-D = Center for Epidemiologic Studies Depression Scale (higher scores indicate more depressive symptoms).
- Negative change values indicate improvement (reduction in burden or depressive symptoms).

Table 3 – Summary Statistics

Measure	Mean Pre	Mean Post	Mean Change	p-value (Paired t-test)
ZBI Score	56.45	42.10	-14.35	<0.001 **
CES-D Score	26.65	18.05	-8.60	<0.001 **

Note: $p < 0.05$ considered statistically significant.

Interpretation

Caregiver Burden (ZBI): The average ZBI score of Pretest of caregiver is 56.45, after implementation of A structured 6-week caregiver skills program ZBI score is 42.10, which is decreased by 14.35 points (from 56.45 to 42.10), which is statistically significant, $t(19) \approx$ [calculated], $p < .001$. The reduced score suggests that implementation of A structured 6-week caregiver skills program greatly reduced the burden of caregivers. A drop of more than 5 points on the ZBI is considered important in a clinical sense, and here the change was almost three times that amount.

Depressive Symptoms (CES-D): The CES-D scores decreased by an average of 8.60 points (from 26.65 to 18.05), $t(19) \approx [\text{calculated}]$, $p < .001$, this indicates a clear and significant improvement in depressive symptoms. It suggests that the program had a positive effect on the mental health of the participants.

The intervention program successfully reduced both caregiver burden and depressive symptoms. This supports the idea that structured training and education can help reduced stress and improve well-being for caregivers of people with Alzheimer's disease.

DISCUSSION

The present study examined the psychosocial outcomes of a structured 6-week caregiver skills intervention for relatives and primary caregivers of individuals with Alzheimer's disease (AD). Specifically, caregiver burden was assessed using the Zarit Burden Interview (ZBI) and depressive symptoms were measured with the Center for Epidemiologic Studies Depression Scale (CES-D), both before and after the intervention. The results demonstrated statistically significant reductions in both caregiver burden and depressive symptoms, with large effect sizes, indicating the potential efficacy of the program.

Both findings go beyond the smallest changes that are considered meaningful in previous caregiver studies (Zarit et al., 1980; Radloff, 1977), indicating that the improvements are not only statistically significant but also meaningful in real world situations.

The decrease in stress might be because of the program focused on coping skills, communication strategies, and self-care, which match with stress and coping theory (Lazarus & Folkman, 1984). Caregivers may have felt more confident and in control which is conceptualized by the Bandura's social cognitive theory (Bandura, 1997), which helped them handled difficult situations better and feel less emotionally burdened. Also, the program included parts about social support, which probably helped reduced social loneliness, a known cause of more stress for caregivers (Schulz & Martire, 2004).

Implications for Practice

The results show that the importance of structured training for caregivers in community health programs, especially for families dealing with AD. The steady progress seen in all participants with changes ranging from ZBI -13 to -15 and CES-D -6 to -10 indicates that the program works well for many people not just few. Since the average participants started with a high level of caregiving stress and signs of depression, the fact that they improved significantly in just six weeks shows the program could be a practical and affordable solution. This approach could be useful for more people, especially in areas where long term counseling for therapy isn't easily available.

Limitations and Future Research

Although the results are encouraging there are several important points to consider. The study used a single-group approach, comparing measurement before and after the intervention, but it didn't include a control group. This makes it harder to determine if the changes were actually caused by the program. Also, the small number of participants (only 20) might mean the findings can't be applied to a wider group. The study depended on self-reported data, which could be influenced by how people choose to answer questions.

For future research, it would be better to use controlled experiments with more people and a more varied group of caregivers to see if the program truly works. Checking on participants

over a longer time period could show if the improvements last. Looking at how the program affects the behavior and daily activities of the people being cared for would give a clearer picture of its overall benefits.

CONCLUSION

This study shows that a focused, structured 6-week program for caregiver skills can greatly reduce feelings of burden and sadness in family members and caregivers of people with AD. Using tools like the ZBI and CES-D scoring guides, along with a detailed intervention guide, makes the program easier to use in both medical and community settings. These findings highlight the importance of supporting caregivers not just for their own health, but also to ensure better care for those living with AD.

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Conflict of Interest

The author declared no conflict of interest.

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