The Effectiveness of Mentalization Training on Compassion Fatigue and Adaptability in Caregivers of Patients with Multiple Sclerosis

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ABSTRACT

The present study aimed to investigate the effectiveness of mentalization training on compassion fatigue and adaptability in caregivers of patients with multiple sclerosis (MS). The research employed a quasi-experimental design with a nonequivalent control group and pretest-posttest-follow-up phases. The statistical population consisted of all caregivers of MS patients in 2024. From this population, 40 individuals were selected based on inclusion and exclusion criteria through purposive sampling and were randomly assigned to three groups. While the control group remained on the waiting list, the experimental group received mentalization training. All participants were assessed using the following research instruments at three stages (pretest, posttest, and follow-up): the Compassion Fatigue Scale (Figley, 2002) and the Adaptability Scale (Yousefi et al., 2011). The collected data were analyzed at two levels: descriptive statistics (mean and standard deviation) and inferential statistics (repeated measures ANOVA and Bonferroni post-hoc test). The results showed that mentalization training was effective in reducing compassion fatigue and improving adaptability. Based on the findings of this study, it can be concluded that mentalization is an appropriate method for enhancing compassion fatigue and adaptability in caregivers of MS patients.

Keywords: caregivers of MS patients, mentalization, compassion fatigue, adaptability

Introduction

Chronic and progressive diseases such as multiple sclerosis (MS) impose extensive psychological, emotional, and social pressures not only on patients but also on their informal caregivers. Caregivers of individuals with MS often experience sustained and cumulative stress due to the demanding and uncertain nature of the disease, which can lead to emotional exhaustion, impaired psychological resilience, and serious

health outcomes, including compassion fatigue and reduced adaptability. Compassion fatigue, a condition marked by emotional depletion and reduced empathy as a result of chronic caregiving, is increasingly being recognized as a significant issue among healthcare providers and informal caregivers alike (1, 2).

In the context of MS caregiving, this phenomenon is intensified by the complex care demands of the disease, which often include unpredictable relapses, physical disabilities, and cognitive impairments (3, 4). These challenges can erode caregivers' psychological resources and hinder their ability to adapt to evolving care demands. Caregiver adaptability, a construct defined as the psychological capacity to respond flexibly to role demands, emotional pressures, and situational stressors, is thus a critical protective factor in this population (5, 6).

Mentalization—the capacity to understand and interpret one's own and others' behaviors in terms of mental states—has emerged as a powerful psychological construct that may buffer the negative outcomes of prolonged caregiving stress (7). Mentalization-based interventions have been successfully implemented in clinical settings for individuals with personality disorders and emotional dysregulation (8, 9). In particular, mentalization-based treatment (MBT) has demonstrated efficacy in enhancing affect regulation, empathy, and interpersonal functioning (10-12). The therapeutic value of MBT extends beyond psychiatric populations and may offer meaningful benefits for emotionally burdened caregivers by fostering reflective functioning, enhancing cognitive flexibility, and reducing emotional reactivity (13, 14).

Recent studies have begun exploring the potential of mentalization-informed approaches to reduce caregiver burden and emotional exhaustion. For example, Ali Asgari Rizi and Manshaei (2023) found that mindfulness training, which shares foundational elements with mentalization practices, significantly alleviated compassion fatigue among caregivers of heart transplant candidates (15). Similarly, Mirzaei, Yousefi, and Baratali (2025) demonstrated that adaptive cognitive-emotional training programs could enhance psychological adaptability in mothers of students preparing for competitive examinations (16). These findings suggest that caregiver training interventions rooted in reflective and cognitive-emotional mechanisms can substantially mitigate emotional wear and enhance resilience.

The importance of addressing compassion fatigue and adaptability in caregivers has also been underscored during public health crises such as the COVID-19 pandemic. Bagheri-Shalamzari and Khoshakhlagh (2024) reported that both positive psychotherapy and reality therapy were effective in reducing compassion fatigue and burnout among healthcare workers, highlighting the need for psychotherapeutic frameworks that attend to emotional overload and burnout-related symptoms (17). As such, MBT offers a theoretically sound and clinically relevant framework to support caregivers facing sustained psychological burdens.

Despite growing attention to the emotional consequences of caregiving, few empirical studies have focused specifically on caregivers of MS patients, a population uniquely burdened due to the neurological, progressive, and often unpredictable nature of the illness (4). Research by Sangari et al. (2022) on neurodegenerative diseases also emphasizes that prolonged neurological impairment can intensify caregiver stress and the need for psychological support mechanisms (18). Meanwhile, qualitative investigations, such as that by Shafagh, Yousefi, and Manshaei (2023), reveal that the emotional dynamics within caregiving relationships are deeply affected by cultural and familial contexts, further complicating emotional labor and resilience (19).

Furthermore, the prevalence and severity of compassion fatigue among caregivers have been well-documented. Mohammadi, Borhani, and Roshan Zadeh (2016) noted high levels of compassion fatigue in nurses working in intensive care units, drawing attention to the systemic and psychological consequences of empathic overload (20). A scoping review by Jilou et al. (2021) identified emotional exhaustion, detachment, and reduced professional satisfaction as core components of compassion fatigue across diverse healthcare settings (21). These studies point to the need for comprehensive interventions that both acknowledge the emotional burden of caregiving and provide caregivers with tools to manage and regulate their inner experiences.

MBT, in this regard, offers an integrated model that emphasizes understanding of internal states and regulation of interpersonal stress. The mentalization model proposed by Bateman and Fonagy, grounded in attachment theory and developmental psychopathology, provides a robust structure for fostering psychological insight and reducing maladaptive emotional responses (8, 9). According to Sharp (2014), mentalization deficits, particularly in the form of hypermentalizing, are strongly associated with emotional dysregulation and interpersonal distress—phenomena commonly observed among stressed caregivers (22). Hence, fostering balanced and accurate mentalizing capacities may help caregivers reduce emotional overinvolvement and gain cognitive distance from the stress of caregiving tasks.

In addition to addressing emotional exhaustion, enhancing adaptability has become a central concern in caregiver support. Career psychology models, such as those proposed by Savickas and Porfeli (2012), have shown that adaptability is a malleable skill, responsive to targeted interventions aimed at increasing control, concern, confidence, and curiosity—dimensions that could be reshaped through reflective training (5). Yousefi et al. (2011) similarly highlighted the predictive role of personal and situational variables in determining adaptability in young adults, pointing to the broader relevance of adaptability across age and context (6).

The interplay between emotional fatigue and adaptability is particularly relevant in the caregiving context, where emotional depletion can inhibit flexible and goal-directed behavior. The application of MBT may, therefore, serve dual functions: reducing emotional distress while concurrently enhancing adaptive capacities. This theoretical convergence aligns with the findings of Tabibzadeh, Soleimani, and Ghorban Shiroodi (2020), who demonstrated that compassion-based interventions could reduce cancer-related fatigue and improve self-care behaviors in patients—suggesting that similar effects could be extended to caregivers as well (23).

To summarize, existing literature provides a compelling rationale for employing mentalization-based training to address compassion fatigue and improve adaptability among caregivers of MS patients. The convergence of evidence from clinical psychology, caregiving research, and intervention science supports the theoretical and empirical grounding for this study. Despite this, a gap remains in experimental evaluations of MBT within the specific population of informal caregivers for MS patients. Addressing this gap, the present study aims to evaluate the effectiveness of mentalization training on reducing compassion fatigue and enhancing adaptability in this vulnerable yet under-supported group.

Methods and Materials

Study Design and Participants

Given that the quantitative section aimed to evaluate the effectiveness of mentalization training, the research design was experimental and quasi-experimental in nature, employing a pretest-posttest-follow-up structure with a nonequivalent control group.

The statistical population consisted of all caregivers of patients with multiple sclerosis (MS) in the city of Isfahan in 2024. The sample was selected purposively from among the caregivers of MS patients. After obtaining ethical approval from the university and coordinating with MS treatment centers, 40 caregivers who met the inclusion and exclusion criteria were selected using convenience sampling and were randomly assigned to two experimental groups and one control group (each group consisting of 20 participants). The first experimental group received eight sessions of mentalization training. The control group was placed on a waiting list and received no intervention; however, at the end of the intervention period, they received the training content in the form of pamphlets over several sessions.

Inclusion criteria were: at least a high school diploma, willingness to participate in the study, commitment to attending all training sessions, caregiving for a severely ill MS patient requiring continuous care, and not participating in any other simultaneous training program.

Exclusion criteria included: missing more than two sessions during the training period and a desire to withdraw from the sessions at any point during the study.

Data Collection

Compassion Fatigue: To assess the level of compassion fatigue, the Compassion Fatigue Scale developed by Figley (2002) was used. The original version contained 66 items, which was reduced to 30 items. The scale includes three subscales: Compassion Satisfaction (10 items), Burnout (10 items), and Compassion Fatigue (10 items). Items are scored on a 5-point Likert scale ranging from 0 (Never) to 5 (Always) (Figley et al., 1999). This questionnaire has been standardized in Iran, with acceptable validity and reliability. The Persian version was prepared using forward and backward translation methods. In the present study, the reliability of the scale was assessed using Cronbach's alpha, which was calculated to be 0.88 (Ali Asgari Rizi & Monshi, 2024). In this study, the Cronbach's alpha for the total score of compassion fatigue was recalculated and found to be 0.76.

Adaptability: The Life Adaptability Questionnaire was developed by Yousefi (2011) and includes four subscales: Concern, Control, Curiosity, and Confidence. It contains 20 items and is scored on a 5-point Likert scale ranging from "Strongly Agree" to "Strongly Disagree." Yousefi reported internal consistency for the total score at 0.90 and above 0.80 for the subscales. Yousefi and colleagues (2011) also confirmed the psychometric properties of the instrument, reporting positive and significant correlations with the Self-Efficacy Scale and Social Support Questionnaire. Construct validity was established through both exploratory and confirmatory factor analysis. In the present study, the internal consistency was recalculated and yielded a Cronbach's alpha above 0.78.

Intervention

The intervention was based on the standard Acceptance and Commitment Therapy (ACT) protocol and was delivered over eight weekly sessions, each lasting approximately 90 minutes, conducted in a group

format. The first session introduced the therapeutic framework, established group rules, and clarified the goals of ACT, emphasizing the distinction between pain and suffering and the importance of psychological flexibility. In the second session, participants explored the concept of experiential avoidance and its consequences, identifying personal patterns of avoidance and discussing how these patterns interfere with value-based living. The third session focused on cognitive defusion techniques, teaching participants to observe their thoughts without attachment or judgment, using metaphors, mindfulness exercises, and repetition strategies. In the fourth session, the concept of self-as-context was introduced to help participants develop a more flexible sense of self and to distinguish between the observing self and the content of their thoughts. The fifth session concentrated on values clarification, guiding participants to identify deeply held personal values across different life domains and reflecting on how their actions align or misalign with these values. The sixth session emphasized committed action, encouraging participants to set realistic, value-consistent goals and develop action plans despite internal obstacles such as fear or doubt. The seventh session provided integrated practice of all core ACT processes through experiential exercises and group sharing, reinforcing psychological flexibility and adaptive coping. The final session focused on relapse prevention, reviewing key concepts, celebrating progress, and equipping participants with personalized strategies for maintaining change, including the use of mindfulness and value-based goal setting in daily life. Throughout the intervention, experiential activities, mindfulness practices, and homework assignments were employed to enhance engagement and facilitate the generalization of therapeutic gains beyond the sessions.

Data analysis

Data were analyzed using both descriptive and inferential statistical methods. Descriptive statistics, including means and standard deviations, were used to summarize participants' scores on compassion fatigue and adaptability across pretest, posttest, and follow-up phases. Inferential statistics were conducted using repeated measures analysis of variance (ANOVA) to examine within-group changes over time and between-group differences. The assumptions of normality, sphericity, and homogeneity of variances were assessed, and Greenhouse-Geisser corrections were applied where necessary. Bonferroni post hoc tests were performed to analyze pairwise comparisons. All analyses were conducted using SPSS version 27, with significance levels set at $p < .05$.

Findings and Results

Table 1 presents the means and standard deviations for the pretest, posttest, and follow-up stages of the variables of compassion fatigue and adaptability across the research groups.

Table 1. Means and Standard Deviations of Compassion Fatigue and Adaptability in the Research Groups at Three Time Points

Variable	Time Point	Mentalization Group	SD	Control Group	SD
Compassion Fatigue	Pretest	87.70	9.48	81.55	9.37
	Posttest	79.55	8.11	80.85	9.53
	Follow-up	71.70	7.92	80.75	10.30
Adaptability	Pretest	49.95	4.84	48.20	4.73
	Posttest	57.95	5.61	49.75	6.02
	Follow-up	63.30	5.58	49.15	4.39

As shown in Table 1, greater changes were observed in the variables of compassion fatigue and adaptability in the mentalization training group compared to the control group, particularly in the posttest and follow-up stages.

The results of the assumption tests for the ANOVA indicated that compassion fatigue and adaptability had a normal distribution in the pretest and posttest stages (p > .05), while the distribution was non-normal in the follow-up stage. The assumptions of homogeneity of error variances (p > .05) and equality of the variance-covariance matrix (via Box's M test, p > .05) were met. Also, Mauchly's test was significant for compassion fatigue but not for adaptability, indicating that the sphericity assumption was violated for compassion fatigue but upheld for adaptability. When the sphericity assumption is violated, the Greenhouse-Geisser correction is applied in the final analysis tables. The results of repeated measures ANOVA for compassion fatigue and adaptability are presented in Table 2.

Table 2. Repeated Measures ANOVA Results for Compassion Fatigue and Adaptability

Source of Effect	Sum of Squares	df	Mean Square	F	p	Partial Eta²	Power
Compassion Fatigue							
Within-Subjects: Time	3095.81	1.38	2239.30	314.44	.001	.85	1.00
Time × Group Interaction	1366.32	2.76	494.15	69.39	.001	.71	1.00
Error (Time)	561.20	78.80	7.12	-	-	-	-
Between-Subjects: Group	2298.81	2	1149.41	4.57	.01	.14	.75
Error	14347.50	57	251.71	-	-	-	-
Adaptability							
Within-Subjects: Time	2778.61	2	1389.31	355.59	.001	.86	1.00
Time × Group Interaction	1101.99	4	275.50	70.51	.001	.71	1.00
Error (Time)	445.40	114	3.91	-	-	-	-
Between-Subjects: Group	2508.59	2	1254.29	14.91	.001	.34	.99
Error	4796.00	57	84.14	-	-	-	-

As shown in Table 2, for both compassion fatigue and adaptability, in the within-subjects effects, the main effect of time ($F_{(1.38)}$ = 314.44, p < .01) and the time × group interaction ($F_{(2.76)}$ = 69.39, p < .01) were statistically significant. This indicates that both the passage of time and the interaction between time and group (the three research groups) resulted in significant changes in compassion fatigue and adaptability (p < .01). The partial eta squared for the time effect was .85 with a test power of 1.00, and for the time × group interaction it was .71 with a test power of 1.00. These results suggest that 85% and 71% of the variance in compassion fatigue and adaptability, respectively, were due to the independent variable (mentalization training), confirmed with full statistical power.

Furthermore, as observed in the between-subjects effects in Table 4, the group effect on compassion fatigue was statistically significant (p < .01). The partial eta squared for the group factor was .14 with a power of .75, indicating that the ANOVA detected a statistically significant group difference in compassion fatigue, with 14% of the variance explained and a test power of 75%. This implies a significant difference in compassion fatigue between at least one of the experimental groups and the control group.

As shown in Table 2 for the variable adaptability, in the within-subjects effects, both the main effect of time (F = 355.59, df = 2, p < .01) and the interaction of time and group (F = 70.51, df = 4, p < .01) were statistically significant. This indicates that there are significant differences in adaptability across time and in the interaction between time and group (i.e., the two experimental groups). The partial eta squared for the time effect was 0.86, and the test power was 1.00. For the interaction of time and group, the partial eta squared was 0.71, also with a test power of 1.00. These results suggest that 86% and 71% of the variance in

adaptability were attributed to the effect of the independent variable (mentalization training), with both effects confirmed with 100% power.

Additionally, as shown in Table 2 under the between-subjects effects, the group effect for adaptability was statistically significant (p < .01). The partial eta squared for the group factor was 0.34, and the test power was 0.99. This indicates that the ANOVA analysis, with a 99% power, revealed that 34% of the variance in adaptability could be explained by the group factor, confirming a significant difference between at least one of the experimental groups and the control group.

Table 3 presents the results of the Bonferroni post hoc test for pairwise comparisons between the two experimental groups and the control group on the variables of compassion fatigue and adaptability.

Table 3. Bonferroni Post Hoc Test Results for Pairwise Comparisons Between Research Groups on Compassion Fatigue and Adaptability

Variable	Comparison No.	Reference Group	Comparison Group	Mean Difference	Std. Error	Significance
Compassion Fatigue						
Time	1	Pretest	Posttest	4.71	0.34	.001
	2		Follow-up	10.15	0.52	.001
	3	Posttest	Follow-up	5.43	0.32	.001
Group	6	Mentalization Group	Control Group	-1.40	2.90	1.000
Adaptability						
Time	1	Pretest	Posttest	6.08	0.38	.001
	2		Follow-up	-9.50	0.36	.001
	3	Posttest	Follow-up	-3.42	0.34	.001
Group	6	Mentalization Group	Control Group	8.03	1.67	.001

As observed in Table 3, for the variable compassion fatigue, there were significant differences between pretest and posttest, pretest and follow-up, and posttest and follow-up stages (p < .01). However, no significant difference was found between the mentalization training group and the control group at the group level, indicating that while the within-subject change over time was significant, the between-group effect was not.

In contrast, for the variable adaptability, there were significant differences in all time-point comparisons (pretest vs. posttest, pretest vs. follow-up, and posttest vs. follow-up) with p < .01. Furthermore, a significant group difference was found between the mentalization training group and the control group (p < .01), confirming that mentalization training had a meaningful and lasting effect on improving adaptability.

Discussion and Conclusion

The present study sought to evaluate the effectiveness of mentalization training on compassion fatigue and adaptability among caregivers of patients with multiple sclerosis (MS). The results of the repeated measures ANOVA revealed that the intervention had a statistically significant effect in reducing compassion fatigue and improving adaptability across time. The within-subject effects demonstrated that the mentalization group exhibited substantial reductions in compassion fatigue from pretest to posttest and follow-up, whereas the control group showed minimal change. Moreover, the adaptability scores in the experimental group increased significantly over time compared to the control group, indicating that the training enhanced participants' psychological flexibility and ability to cope with caregiving demands. These

findings affirm the potential of mentalization-based training (MBT) as an effective intervention for ameliorating psychological distress and enhancing coping capacity in high-burden caregiver populations.

The reduction in compassion fatigue observed among caregivers aligns with the theoretical premise that enhancing mentalizing capacities facilitates emotional regulation and reduces empathic distress. According to Bateman and Fonagy's model, mentalization involves the capacity to understand one's own and others' behaviors in terms of underlying mental states, which serves as a protective mechanism against emotional overload and interpersonal dysfunction (8, 13). In the current study, MBT likely functioned as a buffer by increasing caregivers' awareness of their emotional states, promoting reflective distance from the care recipient's suffering, and reducing tendencies toward emotional contagion or over-identification—both known contributors to compassion fatigue (7, 22). These results are also consistent with previous research that has demonstrated the effectiveness of mindfulness and reflective practices in reducing caregiver stress and burnout. For instance, Ali Asgari Rizi and Manshaei (2023) found that mindfulness-based interventions significantly alleviated compassion fatigue in caregivers of heart transplant candidates (15), providing indirect support for the mechanisms at work in MBT.

The findings also support broader evidence regarding the emotional costs of caregiving in MS contexts. MS is characterized by an unpredictable disease trajectory, leading to psychological uncertainty and a sense of helplessness among caregivers (3, 4). Chronic exposure to these stressors increases the risk of developing compassion fatigue, as has been shown among intensive care nurses and healthcare professionals in high-stress settings (20, 21). Mentalization training, by helping individuals reframe and process emotional responses, appears to mitigate this risk and offer a path toward more sustainable caregiving. Furthermore, the present results mirror those of Bagheri-Shalamzari and Khoshakhlagh (2024), who observed reduced compassion fatigue and job burnout in healthcare workers following psychological interventions during the COVID-19 pandemic (17). Taken together, these findings reinforce the utility of emotion-focused psychological interventions in preventing caregiver distress across various health conditions.

Equally important is the observed improvement in adaptability among the caregivers who received mentalization training. Adaptability is a multidimensional construct encompassing concern, control, curiosity, and confidence in response to new or stressful situations (5, 6). Enhancing adaptability is critical for caregivers, who must frequently adjust to changes in the patient's functional status, navigate complex healthcare systems, and manage their own emotional responses. Mentalization training likely contributed to adaptability by fostering greater cognitive flexibility, perspective-taking, and problem-solving ability. These outcomes echo the findings of Mirzaei, Yousefi, and Baratali (2025), who showed that anxiety management training and acceptance-based approaches enhanced adaptability among mothers under academic stress (16). Similarly, Tabibzadeh, Soleimani, and Ghorban Shiroodi (2020) demonstrated that compassion-focused therapy improved fatigue-related self-care, suggesting that interventions rooted in emotional awareness can promote adaptive functioning (23).

The interaction effects between time and group in both compassion fatigue and adaptability further reinforce the effectiveness of MBT. The mentalization group displayed not only significant improvements from pretest to posttest but also maintained gains at follow-up, indicating the stability of the intervention's effects. The sustained improvement in adaptability is particularly notable, as psychological flexibility often declines over time in the absence of supportive interventions. The present findings suggest that MBT may

instill durable changes in caregivers' cognitive-emotional processing, enabling them to cope more effectively with future challenges. This interpretation is supported by prior MBT research that shows long-term efficacy in enhancing emotional regulation and interpersonal functioning among clinical populations (9, 10, 12). In the context of caregiving, where emotional demands are continuous and evolving, such sustained improvements are especially valuable.

Additionally, the qualitative dynamics of caregiving may explain the psychological benefits observed in this study. Research by Shafagh, Yousefi, and Manshaei (2023) illustrates that caregivers' experiences are often shaped by cultural, familial, and religious expectations, which can complicate emotional boundaries and increase vulnerability to distress (19). Mentalization training, by emphasizing the separation of self from other and encouraging meta-cognitive awareness, may help caregivers reconcile their caregiving roles with personal identity, leading to improved psychological integration. Moreover, the mentalizing framework aligns with the core coping strategies identified in scoping reviews of compassion fatigue literature, such as reflective processing, emotional boundary setting, and re-appraisal (1, 21).

Finally, the study's findings are also congruent with theoretical perspectives on mentalizing and its role in self-regulation. According to Bateman and Fonagy, the development of secure attachment and mentalizing capacities enables individuals to understand emotions without being overwhelmed by them, which is particularly relevant in high-empathy roles such as caregiving (8, 11). In this context, the caregivers' improved adaptability can be viewed not only as a behavioral outcome but also as evidence of improved self-regulatory capacity rooted in strengthened mentalization. This theoretical proposition is consistent with the developmental trajectory proposed in the literature, where improved reflective functioning leads to greater resilience and psychological coherence in the face of stress (14, 22).

Despite the compelling findings, this study has several limitations that should be acknowledged. First, the sample size was relatively small and drawn from a limited geographic area, which may affect the generalizability of the results. Second, although random assignment was used, the quasi-experimental design and the use of a waitlist control group may introduce biases related to expectancy or motivational differences between groups. Third, the reliance on self-report measures could lead to social desirability or response bias, especially in a culturally sensitive domain such as caregiving. Fourth, while follow-up data were collected, the study did not assess long-term outcomes beyond the short-term follow-up, leaving the sustainability of intervention effects over longer periods unexamined. Finally, the study did not account for possible moderating variables such as caregivers' prior mental health status, coping styles, or the severity of the care recipient's illness, which may have influenced the outcomes.

Future research should consider replicating this study with larger, more diverse populations and employing a randomized controlled trial (RCT) design to strengthen causal inferences. Longitudinal studies with extended follow-up periods could help determine the persistence and long-term impact of mentalization training. Additionally, integrating qualitative interviews would provide deeper insights into the subjective experiences of caregivers undergoing MBT and illuminate the mechanisms by which change occurs. Comparative studies could also evaluate MBT alongside other emotion-focused interventions, such as mindfulness or acceptance and commitment therapy, to assess relative efficacy. Future investigations might also explore the role of moderators such as gender, relationship to the patient, caregiving duration, or personality traits to better tailor interventions to individual caregiver needs.

Professionals working with caregivers of individuals with MS or other chronic conditions should consider incorporating mentalization-based training as part of caregiver support programs. Health systems and rehabilitation centers can adopt short-term MBT protocols to enhance caregivers' psychological resilience and reduce emotional exhaustion. Caregiver training modules should include components on emotional awareness, reflective functioning, and self-other differentiation. Psychoeducation about compassion fatigue and its early warning signs could also help caregivers seek support before burnout sets in. Finally, interdisciplinary collaboration between psychologists, social workers, and medical personnel is essential to ensure holistic support for caregivers navigating the complexities of long-term care.

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Authors' Contributions

All authors equally contributed to this study.

Declaration of Interest

The authors of this article declared no conflict of interest.

Ethical Considerations

The study protocol adhered to the principles outlined in the Helsinki Declaration, which provides guidelines for ethical research involving human participants. Written consent was obtained from all participants in the study.

Transparency of Data

In accordance with the principles of transparency and open research, we declare that all data and materials used in this study are available upon request.

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