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Mindfulness-Based Interventions for Regulating Expressed Emotion and Reducing Caregiver Stress: A Narrative Review of Impacts On Mental Health Outcomes in Cancer Patients.

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Abstract

Cancer caregiving is an emotionally demanding experience that exposes family caregivers to persistent stress, emotional fatigue, and difficulties in regulating their responses to the patient's needs. These pressures often give rise to patterns of expressed emotion, including criticism, irritability, and emotional over-involvement, which can heighten psychological distress in cancer patients and disrupt their adjustment to treatment. Mindfulness-based interventions have emerged as a promising approach for supporting caregiver wellbeing by enhancing emotional awareness, reducing stress reactivity, and fostering more balanced and compassionate interpersonal engagement.

This narrative review synthesizes existing theoretical and empirical literature to examine how mindfulness influences caregiver stress and expressed emotion, and how these changes subsequently affect patient mental-health outcomes. Findings across studies suggest that mindfulness fosters regulatory stability, improves caregivers' ability to respond intentionally rather than reactively, and contributes to a more supportive relational climate within the caregiving dyad. Patients appear to benefit from these shifts through reduced anxiety, improved coping, and greater emotional security. However, research directly examining expressed emotion within oncology remains limited, highlighting the need for more relationally focused and culturally sensitive caregiver interventions.

Overall, this review emphasizes the potential of mindfulness-based approaches as a meaningful component of psychosocial oncology, illustrating how strengthening caregiver emotional regulation can promote healthier psychological trajectories for both caregivers and individuals facing cancer.

Keywords: Mindfulness-based interventions, Caregiver stress, Expressed emotion, Cancer patients, Psycho-oncology, Caregiver wellbeing

1. Introduction

Cancer is widely recognized as a chronic and emotionally disruptive illness that affects not only the individual diagnosed but also the family members who assume caregiving responsibilities. Informal caregivers, typically spouses or close relatives, perform essential roles such as symptom monitoring, treatment coordination, and daily emotional reassurance. Empirical studies consistently show that these sustained responsibilities place caregivers at heightened risk for psychological distress, including elevated stress, anxiety, depressive symptoms, sleep disturbances, and diminished overall well-being (Given & Sherwood, 2020; Northouse et al., 2012). Over time, these burdens can erode caregivers' emotional resources and contribute to ineffective coping patterns.

Within this emotionally charged environment, **Expressed Emotion (EE)** has emerged as a significant relational construct. EE reflects the emotional attitudes that caregivers communicate toward the patient, characterized by criticism, hostility, and emotional over-involvement (Brown & Rogers, 1991). Although historically linked to psychiatric relapse, research now indicates that high EE can intensify distress, impede emotional adjustment, and negatively influence illness trajectories across chronic medical conditions, including cancer (Zeng et al., 2024). This underscores a crucial psychological insight: caregiving is inherently dyadic, with caregiver emotional states shaping, and being shaped by, patient emotional functioning (Zaki & Williams, 2013).

Growing attention has been directed toward **Mindfulness-Based Interventions (MBIs)** as a means of enhancing caregiver well-being. Mindfulness cultivates present-moment awareness, nonjudgmental acceptance, and emotional flexibility, which collectively reduce stress reactivity and support healthier interpersonal responses (Kabat-Zinn, 1994; Baer, 2006). Neurocognitive findings suggest that mindfulness strengthens regulatory pathways associated with emotion regulation and reduces impulsive emotional expression (Hölzel et al., 2011). Evidence from oncology contexts shows that MBIs improve caregiver stress, mood, and coping effectiveness, and may indirectly enhance patient well-being (Coo et al., 2020; Mosher et al., 2024).

Despite these promising findings, limited research has integrated how caregiver-focused mindfulness practices influence relational processes such as EE. A narrative review is therefore warranted to synthesize existing evidence and clarify psychological mechanisms linking mindfulness, caregiver emotional functioning, and patient outcomes.

BACKGROUND OF THE STUDY

Cancer caregiving exists within an emotionally demanding system in which family members assume extensive responsibilities that extend beyond physical care. Caregivers must navigate treatment schedules, manage symptoms, and provide continuous emotional support, often while coping with their own fears and uncertainty (Given & Sherwood, 2020). Evidence consistently shows that these prolonged demands increase caregiver stress, anxiety, depressive symptoms, and emotional exhaustion, indicating significant strain on their regulatory capacity (Northouse et al., 2012).

A key relational factor reflecting this strain is **Expressed Emotion (EE)**, defined by habitual patterns of criticism, hostility, or emotional over-involvement toward the patient (Brown & Rogers, 1991). Although

originally studied in psychiatric contexts, growing research in oncology indicates that elevated EE intensifies patient distress, undermines coping, and reduces adherence to treatment (Zeng et al., 2024; Butow et al., 2022). The **Family Systems Theory** explains how caregiver dysregulation affects the emotional climate shared with the patient (Bowen, 1978), while the **Stress-Appraisal-Coping Model** suggests that caregiver overwhelm contributes to reactive interpersonal behaviors such as criticism or intrusive involvement (Lazarus & Folkman, 1984).

Despite substantial evidence highlighting caregiver emotional strain and its impact on patient well-being, interventions targeting both stress and EE remain underdeveloped in psycho-oncology. These gaps underscore the need to examine emotionally focused approaches that can strengthen caregiver regulation and improve the relational environment in cancer care.

NEED FOR RESEARCH

Although Mindfulness-Based Interventions (MBIs) reliably reduce caregiver stress, their influence on **Expressed Emotion (EE)** within cancer caregiving is not well understood. High EE, marked by criticism and emotional over-involvement, is known to heighten patient distress, reduce adherence, and impair psychological adjustment, yet few studies examine EE as a modifiable mechanism linking caregiver well-being to patient outcomes (Butow et al., 2022). This represents an important psychological gap, as dyadic evidence shows that improvements in caregiver emotional regulation often correspond with improved patient mental-health functioning (Mosher et al., 2024).

Mindfulness offers a theoretically grounded pathway to address this need. By strengthening emotional awareness, acceptance, and regulatory control, MBIs may reduce reactive interpersonal patterns associated with high EE (Kabat-Zinn, 1994; Baer, 2006). Neurocognitive findings further support mindfulness as a mechanism for regulating emotional impulses (Hölzel et al., 2011), consistent with the **Mindfulness-to-Meaning Theory** (Garland et al., 2015).

Given the emotionally intensive caregiving expectations in collectivist settings such as India, synthesizing evidence on mindfulness, stress, and EE is essential to guide culturally relevant psycho-oncology care.

REVIEW OF LITERATURE

Butow et al. (2022) observed that emotionally overloaded caregivers often default to controlling or critical responses during patient interactions. Their findings reveal how unregulated caregiver affect intensifies patient anxiety and diminishes coping capacity, positioning EE as a key psychological conduit through which caregiver distress shapes the patient's emotional trajectory.

Brown & Rogers (1991) conceptualized Expressed Emotion as a relational manifestation of caregiver emotional dysregulation. They demonstrated that criticism, hostility, and intrusive involvement arise when caregivers struggle to manage internal distress, creating an interpersonal field that heightens patient vulnerability and perpetuates maladaptive emotional reciprocity within caregiving dyads.

Given and Sherwood (2020) showed that cancer caregivers experience chronic emotional depletion shaped by relentless vigilance, anticipatory fear, and role strain. Their work illustrates how prolonged

psychological overload destabilizes regulation, heightens reactivity, and subtly infuses patient interactions with tension creating an emotional climate that compromises both relational safety and patient coping.

Hölzel et al. (2011) identified neurocognitive mechanisms showing that mindfulness strengthens prefrontal regulatory networks while dampening limbic reactivity. These pathways explain how mindfulness reshapes emotional responses at their source, enabling caregivers to interrupt automatic frustration-driven reactions and foster a calmer, more attuned relational presence that reduces the emergence of EE.

Mosher et al. (2024) demonstrated that dyadic mindfulness training enhances caregivers' emotional regulation and simultaneously reduces patient anxiety and depressive symptoms. Their findings highlight mindfulness as a relational accelerator transforming caregiver affective patterns in ways that promote emotional safety, mutual regulation, and improved psychological functioning across the caregiving dyad.

Northouse et al. (2012) found that persistent caregiving demands erode emotional resilience, leading to depressive affect, chronic stress, and disrupted coping. Their synthesis underscores how psychological wear-and-tear predisposes caregivers to reactive communication patterns, reinforcing relational cycles where caregiver exhaustion magnifies patient distress and undermines dyadic emotional equilibrium.

Objectives of Research

1. To synthesise evidence on caregiver stress and expressed emotion in cancer caregiving, highlighting how emotional burden and relational reactivity influence patient psychological outcomes.
2. To review theoretical and neuroscientific foundations explaining how mindfulness regulates caregiver emotion, reduces reactivity, and alters patterns associated with expressed emotion.
3. To analyse research on mindfulness-based interventions for caregivers and dyads, assessing how improved caregiver regulation and reduced expressed emotion relate to better mental-health outcomes in cancer patients.

Research Methodology

This narrative review adopts a psychologically oriented methodological approach to explore how mindfulness-based interventions (MBIs) regulate caregiver stress and expressed emotion (EE) and how these emotional shifts influence the mental-health outcomes of cancer patients. A narrative review design is appropriate because research on caregiver emotional burden, relational processes and mindfulness mechanisms is conceptually diverse, theoretically layered and methodologically heterogeneous. Such complexity requires interpretive integration rather than statistical aggregation, allowing a deeper understanding of how psychological regulation, interpersonal dynamics and dyadic emotional patterns operate within cancer caregiving.

Relevant literature was identified through comprehensive searches across PubMed, PsycINFO, Scopus, Web of Science, Google Scholar and IndMED using keywords related to mindfulness, caregiver stress, dyadic functioning, expressed emotion, emotional regulation and patient psychological outcomes. Studies were included if they focused on adult caregivers of cancer patients, assessed constructs such as stress,

emotional regulation or EE, involved MBIs or mindfulness-informed interventions, or reported patient outcomes including anxiety, depression or emotional distress. Empirical quantitative, qualitative and mixed-method studies, randomized trials, dyadic interventions, theoretical papers and neurocognitive research published in English between 1990 and 2025 were reviewed. Studies were excluded if they addressed only biomedical outcomes, involved pediatric caregiving or employed non-mindfulness interventions lacking psychological relevance.

Screening involved careful review of titles, abstracts and full texts to ensure conceptual suitability and methodological clarity. Extracted information included caregiver emotional burden, patterns of EE (criticism, hostility, emotional over-involvement), mindfulness mechanisms such as attentional control, acceptance, reappraisal and compassion, neurobiological regulatory pathways and relational effects on patient well-being. Methodological quality was evaluated using tools such as CASP and STROBE, with emphasis on psychometric robustness, coherence of theoretical grounding and relevance to caregiver–patient relational dynamics.

This methodological approach supports a comprehensive and humanized understanding of how MBIs influence emotional regulation, reduce reactive caregiving patterns and contribute to a more supportive relational climate, ultimately promoting improved psychological outcomes for both caregivers and cancer patients.

Results and Discussion

The evidence reviewed across studies shows that cancer caregivers experience chronic emotional strain, shaped by continuous uncertainty, high responsibility and emotional vigilance. Caregivers frequently report anxiety, exhaustion and regulatory overload, which progressively weakens their ability to manage distress and contributes to reactive relational patterns within the caregiving dyad (Given & Sherwood, 2020; Northouse et al., 2012). These emotionally demanding conditions function not only as sources of strain but as recurring cues that reactivate fear, worry and frustration, mirroring psychological models that explain how persistent stress exposure amplifies hyperarousal, emotional reactivity and cognitive depletion over time.

Across empirical findings, caregivers who experience greater emotional burden are more prone to patterns of expressed emotion (EE), including criticism, hostility and emotional over-involvement—interpersonal expressions closely associated with internal dysregulation (Brown & Rogers, 1991; Butow et al., 2022). These relational behaviours increase patient distress, undermine coping and disrupt the emotional safety ordinarily expected within close caregiving relationships. Such reactive interactions destabilise the dyadic environment, heightening emotional strain for both members and reinforcing a cycle in which caregiver distress feeds patient vulnerability.

Mindfulness-based interventions consistently appear to mitigate these tensions. Studies demonstrate that mindfulness enhances attentional control, emotional awareness and compassionate responding, allowing caregivers to interrupt automatic stress-driven reactions (Kabat-Zinn, 1994; Hölzel et al., 2011). These regulatory improvements often correspond with reduced irritability, softer communication and a more attuned emotional presence. In dyadic contexts, such shifts translate into measurable benefits for patients, including reduced anxiety and depressive symptoms and improved emotional adjustment (Mosher et al.,

2024). By stabilising caregiver emotional functioning, mindfulness indirectly transforms the relational climate, fostering safety, empathy and mutual regulation.

Together, the synthesised findings portray caregiver stress, expressed emotion and mindfulness as interconnected psychological processes. Caregiving-related strain heightens reactivity; EE emerges as its interpersonal expression; and mindfulness offers a mechanism that restores emotional balance and improves mental-health outcomes for both caregivers and cancer patients—affirming the value of a narrative review to integrate these relational, emotional and neurocognitive dimensions.

Conclusion

The collective literature reviewed in this narrative synthesis demonstrates that cancer caregiving is not simply a supportive role but a prolonged emotional exposure that profoundly shapes the psychological functioning of those who provide care. Caregivers often operate within a cycle of sustained vigilance, emotional labour and unprocessed distress, gradually exhausting their regulatory capacity and heightening their susceptibility to reactive interpersonal behaviour. Expressed emotion, including criticism, irritability and intrusive involvement, emerges in this context as an interpersonal manifestation of internal strain rather than deliberate negativity. These relational expressions significantly influence patient well-being, reinforcing theories that highlight the reciprocal emotional interdependence of caregiving dyads. When caregivers struggle to contain their distress, patients are left navigating an emotional environment marked by unpredictability, heightened tension and diminished relational safety, all of which contribute to greater psychological vulnerability.

Across the evidence base, mindfulness-based interventions offer a conceptually coherent and empirically supported pathway for transforming this emotional landscape. Mindfulness enhances self-awareness, emotional acceptance and attentional regulation, allowing caregivers to disrupt automatic stress-driven reactions and respond with greater intentionality and compassion. Such shifts in internal regulation consistently correspond with improvements in relational quality and reductions in patient anxiety and distress, illustrating the dynamic relational benefits that flow from caregiver-centered psychological interventions. What emerges is a compelling psychological narrative: supporting caregiver regulation is not only essential for their own well-being but is also foundational to the emotional stability and mental-health outcomes of the patient. Mindfulness, by strengthening the caregiver's capacity for presence, patience and attuned responding, contributes to a more supportive and humane caregiving climate, underscoring its significance within contemporary psycho-oncology and its potential to reshape dyadic trajectories of resilience and healing.

Implications

This review highlights the need for oncology settings to prioritise caregiver emotional regulation as central to patient well-being. Increasing access to mindfulness-based programs is essential for caregivers experiencing chronic stress and reactive expressed emotion. Routine screening for caregiver distress, along with clinician-guided support for guilt, overwhelm and communication strain, can strengthen relational stability. Culturally sensitive psychoeducation that reduces stigma around caregiver burden

further promotes healthier dyadic functioning and more supportive emotional environments for cancer patients.

References

1. Baer, R. A. (2006). *Mindfulness-based treatment approaches: Clinician's guide to evidence base and applications.* Academic Press.
2. Bowen, M. (1978). *Family therapy in clinical practice.* Jason Aronson.
3. Brown, G. W., & Rogers, T. (1991). Expressed emotion and psychiatric relapse: A review. *Psychological Medicine, 21*(1), 1–12.
4. Butow, P., Laidsaar-Powell, R., Konings, S., & Lobb, E. (2022). Interpersonal communication patterns and caregiver emotional responses in oncology: Implications for patient distress. *Psycho-Oncology*.
5. Coo, C., Milbury, K., & Li, Y. (2020). Trait mindfulness and emotional burden among caregivers of cancer patients: Associations with stress and depressive symptoms. *Journal of Psychosocial Oncology*.
6. Garland, E. L., Farb, N. A., Goldin, P., & Fredrickson, B. L. (2015). Mindfulness-to-meaning theory: Extensions, applications, and challenges. *Psychological Inquiry, 26*(4), 293–314.
7. Given, B. A., & Sherwood, P. (2020). Family caregiving and the emotional toll of cancer: Clinical considerations. *CA: A Cancer Journal for Clinicians*.
8. Hölzel, B. K., Lazar, S. W., Gard, T., Schuman-Olivier, Z., Vago, D. R., & Ott, U. (2011). How does mindfulness meditation work? Proposing mechanisms of action from a cognitive neuroscience perspective. *Perspectives on Psychological Science, 6*(6), 537–559.
9. Kabat-Zinn, J. (1994). *Wherever you go, there you are: Mindfulness meditation in everyday life.* Hyperion.
10. Kubo, A., Kurtovich, E., McGinnis, M., et al. (2019). Mindfulness intervention for caregivers of cancer patients: Effects on stress, mood and relational functioning. *Psycho-Oncology*.
11. Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping.* Springer.
12. Mosher, C. E., Secinti, E., & Snyder, D. C. (2024). Dyadic mindfulness interventions for individuals with cancer and their caregivers: Psychological and relational outcomes. *Journal of Clinical Oncology*.
13. Northouse, L. L., Katapodi, M. C., Song, L., Zhang, L., & Mood, D. W. (2012). Psychosocial burden and quality of life in family caregivers of cancer patients. *CA: A Cancer Journal for Clinicians, 62*(4), 337–362.
14. Zaki, J., & Williams, W. C. (2013). Interpersonal emotion regulation: A conceptual framework for understanding emotional exchange within relationships. *Emotion, 13*(5), 803–810.
15. Zeng, Y., Li, X., & Wang, J. (2024). Expressed emotion in chronic illness caregiving: Associations with patient psychological outcomes. *Health Psychology Review*.