

The Meaning of Life Behind Stress: A Phenomenological Exploration of Mindfulness Practices among Caregivers of Cancer Patients in East Java

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ABSTRACT

This study examines the high levels of stress experienced by caregivers of cancer patients at the Indonesian Cancer Foundation in East Java, resulting from physical, emotional, and social burdens, as well as the lack of structured psychological support. Employing a qualitative phenomenological approach, this research explores caregivers' subjective experiences through in-depth interviews and participant observation, and analyzes the data using Colaizzi's method. Mindfulness, based on Kabat-Zinn's (2003) theory, was implemented as an intervention, with indicators including present-moment awareness, acceptance, non-judgmental attitude, and self-compassion. The results show that mindfulness training significantly enhances self-awareness, reduces emotional reactivity, and fosters acceptance and self-compassion among caregivers. This intervention strengthens adaptive capacities in coping with stress, improves caregivers' quality of life, and enhances the quality of patient care.

INTRODUCTION

Cancer remains one of the leading causes of death worldwide. Data from the Global Cancer Observatory (Globocan) indicate that in 2020, Indonesia recorded approximately 396,914 new cancer cases and 234,511 cancer-related deaths, making it a complex public health issue that demands serious attention from various sectors (WHO, 2021). The impact of cancer is not only experienced by patients but also by their close relatives who serve as caregivers. Cancer caregivers bear significant responsibilities in providing care and support throughout the patients' long-term treatment process, which is often accompanied by emotional, physical, and social pressures (Stenberg et al., 2010; Bevans & Sternberg, 2012).

Caregivers of cancer patients commonly experience chronic stress due to prolonged exposure to challenging and uncertain situations. They may suffer from fatigue, sleep disturbances, decreased immune function, and even depression as a result of high psychological burdens (Northouse et al., 2012). Previous studies have shown that cancer caregivers are a mentally and emotionally vulnerable group, yet interventions specifically targeting them remain very limited, especially in Indonesia (Rahmawati, 2019). This condition is exacerbated by the lack of community support or preventive and supportive programs designed to enhance caregivers' psychological resilience.

In the context of psychological interventions, the mindfulness approach has emerged as an effective strategy for reducing stress and improving psychological well-being. Mindfulness is defined as full and non-judgmental awareness of present experiences (Kabat-Zinn, 2003). Mindfulness-based interventions have been proven to reduce symptoms of stress, anxiety, and depression, as well as to improve emotional regulation, particularly in groups experiencing high psychological pressure such as caregivers (Brown & Ryan, 2003; Carlson et al., 2013). In Indonesia, the application of mindfulness is still largely limited to individuals in clinical settings and has not been systematically studied in community or social group contexts, such as shelters for cancer patients and their caregivers.

The Indonesian Cancer Foundation (Yayasan Kanker Indonesia, YKI) East Java branch is one of the social institutions providing shelters for cancer patients and caregivers from various regions in Indonesia. Field assessments have found that most caregivers experience high levels of stress, indicated by psychosomatic symptoms such as sleep disturbances, muscle pain, digestive problems, and negative emotional symptoms such as guilt, sadness, anger, and hopelessness (Inayah, 2023). However, the foundation does not yet have a structured psychosocial program to support caregivers, resulting in their tendency to bear heavy responsibilities without adequate psychological assistance.

This study aims to deeply understand and describe the subjective experiences of cancer caregivers in managing stress through mindfulness training during their stay at the shelter provided by the Indonesian Cancer Foundation, East Java branch. There has been limited research on this topic, particularly studies that explore the subjective experiences of cancer caregivers in managing stress through mindfulness training using a qualitative phenomenological approach. Most previous studies have focused on quantitative methods, relying on psychological scales without delving into the deeper meaning and inner dynamics of caregivers' experiences. This study offers a new perspective by thoroughly examining the psychological processes and transformations that occur during mindfulness training, and contributes to the development of community-based psychological interventions that are relevant to the local context in Indonesia.

LITERATURE REVIEW

Stress is a psychophysiological response of individuals to environmental pressures or demands perceived as exceeding their personal capacity to cope. According to Lazarus and Folkman (1984), stress is understood as the result of interactions between individuals and their environment, whereby individuals appraise the demands they face as potentially threatening to their well-being. In the context of cancer caregivers, stress arises not only from the physically demanding activities of patient care but also from emotional pressures, such as feelings of guilt, fatigue, worry about the patient's condition, and role conflicts within the family.

The mindfulness construct proposed by Kabat-Zinn encompasses several key indicators that can serve as a guide for exploring experiences within a phenomenological approach. The first indicator is present moment awareness, which refers to the ability to consciously focus on what is happening in the present. The second is non-judging, or the attitude of accepting experiences without labeling them as good-bad or right-wrong. Third, acceptance, which denotes the willingness to accept reality as it is, without emotional resistance. Fourth, non-reactivity, the ability to observe experiences without immediately reacting automatically. Fifth, letting go, which reflects the capacity to release negative emotions or thoughts that entrap. Sixth, self-compassion, or a loving attitude toward oneself in the face of difficulties (Neff, 2003; Baer et al., 2006). These indicators form a rich theoretical foundation for exploring how cancer caregivers internalize their experiences and how psychological changes occur during mindfulness training.

The selection of mindfulness theory as the framework for this study is also highly compatible with the qualitative phenomenological approach employed. Phenomenological research aims to deeply explore the lived experiences of subjects and to understand the subjective meanings constructed from those experiences (Creswell & Poth, 2018). Mindfulness, in all its dimensions, focuses on awareness of inner experiences, recognition of emotions, and responding to suffering with openness. Thus, mindfulness is not only relevant as a psychological intervention strategy but also serves as an exploratory thematic framework for understanding the psychological dynamics of caregivers. These

mindfulness indicators can be developed into guidelines for in-depth interviews, enabling researchers to identify essential themes from experiences of stress and responses to mindfulness training.

Jon Kabat-Zinn's mindfulness theory not only provides a conceptual understanding of how individuals respond to life's pressures but also offers methodological direction in designing research instruments, conducting data analysis, and interpreting results within a phenomenological approach. In this study, mindfulness theory serves as the primary tool for understanding how caregivers make sense of their experiences in facing suffering, how they develop coping strategies, and how cognitive-affective changes occur as a result of the intervention. This framework is expected to capture the depth of subjective experience while also making theoretical and practical contributions to the development of community-based psychological interventions.

Primayanthi, A. E. (2022). Literature review findings indicate that the application of Mental Health Apps for caregivers of patients requiring long-term care has been proven to reduce the levels of stress and anxiety experienced by caregivers during caregiving. The recommendation from this study is the future development of applications that provide comprehensive services for caregivers.

Munazilah, M., & Hasanat, N. U. (2018). The results show a significant reduction in anxiety among individuals with coronary heart disease, with a Z value of -2.023 and $p=0.043$ ($p<0.05$). Based on these findings, the MBSR program is proven to reduce anxiety in individuals with coronary heart disease. Setiawan, H., Khaerunnisa, R. N., Ariyanto, H., Fitriani, A., Firdaus, F. A., & Nugraha, D. (2021). Cancer patients are advised to engage in self-care through yoga to improve their quality of life. Future research should compare the feasibility of yoga with other interventions.

Meinasty, M. (2023). The study concludes that there is a significant reduction in stress levels after the provision of ACT in the experimental group, while such a reduction was not found in the control group. Kubo, A., Altschuler, A., Kurtovich, E., Hendlish, S., Laurent, C. A., Kolevska, T., & Avins, A. (2018). The findings indicate that app-based online mindfulness interventions are feasible and well accepted by cancer patients and their caregivers in integrated healthcare systems.

Liu, X., Li, J., Zhang, Q., Zhao, Y., & Xu, W. (2021). Mediation analysis shows that higher levels of dispositional mindfulness in breast cancer patients can reduce the perceived burden among caregivers and, in turn, alleviate patients' negative emotions. Dispositional mindfulness benefits both breast cancer patients and their caregivers, indicating that mindfulness-based interventions targeting patient-caregiver dyads would be more effective than interventions for patients alone.

This study is novel in its use of a qualitative phenomenological approach to explore the subjective experiences of cancer caregivers in managing stress through mindfulness training an approach that has rarely, if ever, been deeply investigated in Indonesia. Previous research has generally been quantitative, focusing on measuring intervention effectiveness statistically, without addressing the inner meaning and holistic psychological experiences of individuals. This study offers a new contribution through the personal narratives of caregivers, capturing emotional transformation and the meaning of life throughout mindfulness training. Thus, this research expands the scope of community health psychology and enriches the understanding of mindfulness application in local and community-based contexts.

METHODOLOGY

This study employs a qualitative phenomenological approach to deeply explore the subjective experiences of caregivers of cancer patients in managing stress through mindfulness training. This approach was chosen because phenomenology focuses on understanding the meaning of lived experiences of individuals regarding a particular phenomenon—in this case, experiences of stress and psychological changes following the training (Creswell & Poth, 2018; Moustakas, 1994).

The participants in this study were caregivers residing at the shelter of the Indonesian Cancer Foundation (Yayasan Kanker Indonesia, YKI) East Java branch who had participated in the mindfulness training program. The inclusion criteria were: (1) actively providing care for cancer patients, (2) attending all training sessions, and (3) willingness to participate in in-depth interviews. The number of participants was determined based on the principle of data saturation (Guest et al., 2006), meaning recruitment ceased when no new information or themes emerged from the data. The research was conducted at the YKI shelter, selected for its representation of the natural context in which caregivers carry out their daily activities with patients. This approach enabled the researcher to interact directly with the subjects within their social environment, in accordance with the naturalistic principles of qualitative research (Patton, 2015).

Data were collected through semi-structured in-depth interviews guided by mindfulness indicators according to Kabat-Zinn (2003), such as present moment awareness, acceptance, non-judging, and self-compassion. This technique allowed for the exploration of personal narratives related to stress and experiences following the intervention. The researcher also conducted participant observation to understand the social context and daily interactions. Data were analyzed using Colaizzi's (1978) phenomenological analysis technique, which involves reading transcripts, extracting significant statements, formulating meanings, developing themes, and composing narrative descriptions. Data validation was carried out through source triangulation, member checking, and peer debriefing (Lincoln & Guba, 1985), to ensure the credibility and consistency of the findings.

RESEARCH RESULT

This study demonstrates that mindfulness training has a significant positive impact on the ability of cancer caregivers to cope with the psychological pressures they experience. Through enhanced present moment awareness, non-judgmental acceptance, and the ability to let go of negative emotions, caregivers are able to develop more adaptive coping mechanisms. They become better at recognizing their own limits, managing their emotions more calmly, and providing care with greater empathy without losing their own psychological balance.

Present Moment Awareness

One of the first effects reported by caregivers after participating in mindfulness training is an increased awareness of present experiences. In in-depth interviews, participants described becoming more attuned to bodily fatigue, feelings of anger, sadness, and anxiety that they had previously suppressed or ignored. According to Kabat-Zinn (1990), present moment awareness trains individuals to be fully present with what is happening, rather than being trapped in past regrets or future anxieties. In this context, caregivers reported realizing that much of their stress was caused by excessive worries unrelated to the present moment. By becoming fully aware of their current condition, caregivers began to understand their limits, recognize early signs of fatigue, and take breaks when necessary. This helps prevent the accumulation of stress and creates space for self-care.

Non-Judging

Before the training, most caregivers tended to blame themselves, feel like failures, or believe they were not good enough in caring for the patient. This attitude exacerbated their emotional burden. After the training, a shift in attitude emerged: they began to accept their emotions without judging them. One participant stated, "Now I don't immediately feel guilty when I'm tired. I've learned to accept that feeling tired is normal." Non-judging, as one of the pillars of mindfulness, helps caregivers let go of excessively high internal standards. They learn that experiencing negative emotions is not a sign of weakness, but rather a part of the human experience when caring for loved ones.

Acceptance

Acceptance in mindfulness is not a passive surrender to circumstances, but an open attitude toward reality as it is. For caregivers, this means accepting the patient's cancer diagnosis and all the accompanying uncertainties without emotional resistance or denial. Kabat-Zinn (2003) notes that acceptance paves the way to inner peace, as individuals stop struggling against things they cannot change. In interviews, caregivers reported being more prepared to face the patient's deteriorating condition without extreme emotional outbursts. Acceptance reduces the psychological burden because caregivers no longer feel the need to control everything. They become more realistic and acknowledge that suffering is a part of life.

Letting Go

Letting go is an active process of freeing oneself from attachment to disturbing thoughts and emotions. In this context, caregivers learned to release feelings of guilt, anger toward unhelpful family members, or feelings of failure. One participant shared, “I used to hold on to a lot of anger now I can let it go, I don’t carry it with me anymore.” This ability to let go provides caregivers with mental space to focus more on patient care and emotional needs, without being weighed down by lingering internal conflicts. This is especially important for managing long-term stress.

Non-Reactivity

Prior to training, caregivers tended to react quickly to conflict or pressure, such as getting angry, crying, or withdrawing. After the training, they learned to observe their emotions before responding. This increased their patience and self-control. Mindfulness trains individuals not to be “slaves” to their emotions, but to become conscious observers (Baer et al., 2006). This ability helps maintain caregivers’ social relationships with patients, families, and medical teams, which were often strained by emotional reactivity. It also minimizes conflict and creates a more stable and harmonious care environment.

Self-Compassion

Another important aspect is the increase in self-compassion. Caregivers often feel that their needs are less important than those of the patient. Through mindfulness, they learn that self-care is not selfishness, but an essential part of caring for others. One caregiver said, “I never used to take breaks now I know I have to be healthy, too.” Self-compassion enhances psychological resilience and becomes a new source of strength for caregivers to continue fulfilling their roles with greater emotional stability.

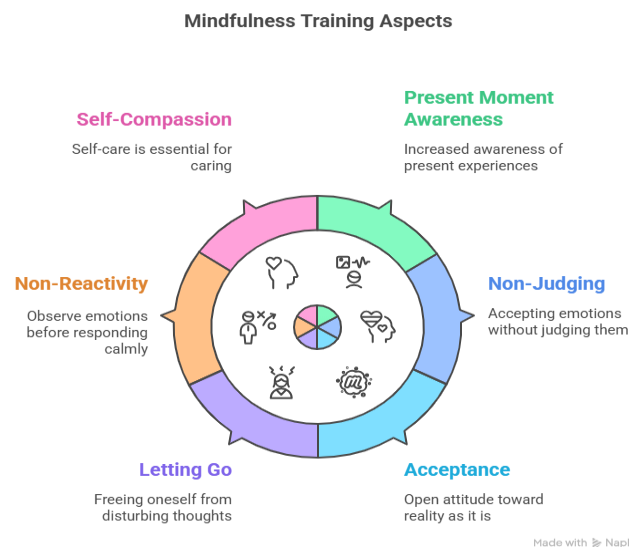


Figure 1. Mindfulness Training for Caregivers of Cancer Patients

Sourcen : Processed by the Researcher

DISCUSSION

This study found that mindfulness training has a significant positive impact on the ability of cancer caregivers to manage stress.

Enhancement of Present Moment Awareness and its Impact on Stress Regulation

The findings confirm that one of the earliest and most profound effects of mindfulness training is the increased awareness caregivers have of their present experiences. Caregivers reported improved ability to identify physical sensations, emotions, and thoughts that arise within themselves. Previously, many tended to suppress or ignore signs of fatigue, anger, sadness, or anxiety. This heightened awareness aligns with the concept of present moment awareness as described by Kabat-Zinn (1990), which emphasizes the importance of focusing attention on what is currently happening rather than being caught up in past regrets or future worries. In the context of cancer caregiving, caregivers are often faced with uncertainty, unexpected changes in patient condition, and high emotional demands. These factors can trigger excessive worry about the patient's prognosis, treatment effectiveness, or their own ability to provide adequate care. Mindfulness training helps caregivers realize that much of the stress they experience stems from excessive worries that are not rooted in present reality. By practicing present moment awareness, they learn to observe their thoughts and emotions without becoming absorbed in them, thus reducing the intensity of their stress responses. Increased self-awareness facilitates the development of more adaptive coping strategies. Caregivers become better at recognizing their own limitations, identifying early signs of physical and emotional exhaustion, and taking action to meet their own needs. These actions may include taking adequate rest, seeking support from others, or engaging in enjoyable activities. By prioritizing self-care, caregivers can prevent the accumulation of chronic stress and maintain their own well-being, ultimately improving the quality of care they provide to patients.

Attitudinal Transformation through Non-Judging and Self-Acceptance

Another important finding is the significant change in caregivers' attitudes toward themselves after mindfulness training. Prior to the training, many caregivers showed a tendency to blame themselves for difficulties encountered, feel like failures in fulfilling their roles, or believe they were not good enough in caring for the patient. This self-critical attitude exacerbated emotional pressure and contributed to feelings of stress and fatigue. Mindfulness training introduced the concept of non-judging, a core pillar of the practice. Non-judging involves accepting emotions and thoughts without labeling them as positive or negative, good or bad. Caregivers learned to observe their emotions including negative ones such as anger, sadness, or frustration without immediately reacting or judging themselves for feeling them. The findings show that internalizing a non-judging attitude has a transformative effect on caregivers' emotional well-being. They began to develop a more compassionate understanding of themselves, realizing that experiencing negative emotions is a normal part of the human experience, especially in challenging contexts such as caring for a loved one with cancer. This self-acceptance helps caregivers let go of unrealistic internal standards and overly high expectations. They learn to accept that they are not

perfect, that they will have good days and bad days, and that they cannot always control the outcomes of the patient's illness. By reducing self-criticism and increasing self-acceptance, caregivers can lessen the negative impact of stress and develop greater emotional resilience.

Acceptance as the Foundation of Emotional Resilience

The findings highlight the importance of acceptance as an adaptive coping mechanism in facing the challenges of cancer caregiving. Acceptance in the context of mindfulness is not a passive attitude or surrender to circumstances, but an active orientation toward life's reality as it is (Kabat-Zinn, 2003). For caregivers, this involves accepting the patient's cancer diagnosis, the uncertainty of prognosis, and the various changes that may occur during the disease journey. A cancer diagnosis often triggers a range of strong and complex emotions in caregivers, including sadness, anger, anxiety, and fear. Denying or trying to suppress or avoid these emotions can exacerbate stress and cause psychological distress. Mindfulness training encourages caregivers to observe their emotions without judgment and to accept them as a natural part of the human experience.

By developing an attitude of acceptance, caregivers learn to stop struggling against things they cannot change. They become better able to adapt to changes in the patient's condition, accept their own limitations, and find inner peace amid uncertainty. Kabat-Zinn (2003) emphasizes that acceptance opens the way to inner peace because individuals stop fighting against unchangeable realities. In interviews, caregivers reported that mindfulness training helped them face a patient's declining condition with greater calm and without extreme emotional outbursts. They became more realistic in their expectations and accepted that suffering is a part of life. Acceptance reduces the psychological burden because caregivers no longer feel responsible for controlling every aspect of the situation or preventing all suffering.

Letting Go as a Process of Emotional Release Another significant finding is the role of letting go as an important mechanism in caregivers' stress management. Letting go in mindfulness refers to the active process of freeing oneself from attachment to disturbing thoughts and feelings. For caregivers, this involves releasing various emotional burdens, such as guilt, anger toward unsupportive family members, or feelings of failure in fulfilling their roles. Caregivers often carry heavy emotional burdens, both from within themselves and from their environment. They may feel guilty for not being able to do more for the patient, angry at others for lack of support, or feel like failures when the patient's condition deteriorates. These emotions can accumulate and create a cycle of chronic stress that disrupts caregivers' physical and mental well-being.

Mindfulness training provides caregivers with tools to identify, observe, and let go of these negative emotions. They learn not to cling to painful thoughts or feelings, but to let them pass without self-judgment or attempts to suppress them. As one participant expressed, "I used to hold on to a lot of anger now I can let it go, I don't carry it with me anymore".

This ability to let go creates mental space for caregivers to focus more on the patient's care and emotional needs. They become more able to be fully present in their interactions with the patient, provide compassionate support, and make appropriate decisions. Letting go also helps caregivers maintain balance in their own lives, enabling them to engage in enjoyable activities and nurture healthy relationships.

Non-Reactivity

A significant finding of this study is the development of non-reactivity in caregivers after mindfulness training. Prior to the training, most caregivers tended to respond to conflict or pressure impulsively, such as with anger, crying, withdrawal, or other forms of emotional reactivity. This commonly occurred due to the high psychological pressure caregivers experienced in their daily routines caring for patients, whether elderly, chronically ill, or mentally ill. However, after mindfulness training, there was a shift in how caregivers handled stressful situations. They began to show the ability to observe their emotions before responding. They no longer reflexively expressed anger or sadness, but instead paused, observed, and responded more consciously and in a controlled manner. In line with Baer et al. (2006), mindfulness helps individuals not to become slaves to their emotions, but to view them as objects of conscious observation.

This non-reactivity has broad implications for the quality of caregivers' interpersonal relationships with patients, patients' families, and medical teams. In caregiving practice, harmonious and stable relationships are crucial for creating a healthy and productive work environment. Prior to training, conflicts arising from emotional reactivity often triggered misunderstandings among team members and worsened relationships between caregivers and patients' families. With increased ability to refrain from immediate emotional reactions, caregivers can manage conflict more wisely and create more open communication. Reduced emotional reactivity also improves the quality of care provided. The care environment becomes more stable, no longer filled with tension from uncontrolled emotional outbursts. Instead, the calm and awareness fostered by mindfulness create a more conducive and collaborative work atmosphere, ultimately supporting holistic patient recovery.

Self-Compassion

In addition to increased non-reactivity, another important aspect emerging from mindfulness training is the development of self-compassion. Many caregivers prior to training believed their personal needs were less important than those of the patient. They tended to neglect their own physical health and psychological well-being in order to continue caring for the patient. Over time, this leads to emotional exhaustion, burnout, and even more serious psychological conditions such as depression. Through mindfulness, caregivers began to understand that self-care is not selfishness, but rather a preventative step that is essential for maintaining the quality of care they provide. Self-compassion becomes the foundation for caregivers to build awareness that they, too, are human, with limits and needs for rest, emotional support, and space to recharge.

One participant in this study stated, "I never used to take breaks now I know I have to be healthy, too." This statement illustrates a significant paradigm shift from self-sacrifice to healthy self-care. Mindfulness teaches that caring for others does not require self-sacrifice, but rather begins with the ability to recognize, accept, and care for oneself first. In the positive psychology literature, self-compassion is closely linked to psychological resilience. Individuals with self-compassion are more likely to endure and recover from difficult conditions, are less prone to self-blame, and are able to develop an optimistic attitude in facing challenges. In other words, self-compassion is an important internal source of strength for caregivers to continue fulfilling their roles in a sustainable and emotionally stable manner.

CONCLUSIONS AND RECOMMENDATIONS

This study confirms that mindfulness training has a significant positive impact on the ability of cancer caregivers to manage stress, enhance emotional well-being, and maintain the quality of care provided. The findings indicate that mindfulness training not only helps caregivers recognize and manage their emotions in a healthier way, but also builds a strong psychological foundation for them to fulfill their roles.

First, the enhancement of present moment awareness serves as a key initial step in the psychological transformation of caregivers. Awareness of present experiences enables them to identify emerging thoughts, emotions, and physical sensations, thereby preventing the accumulation of stress caused by excessive worry or past regrets. Mindfulness allows caregivers to observe without becoming absorbed in emotional responses, thereby strengthening their coping capacity.

Second, mindfulness training transforms how caregivers perceive themselves through the internalization of non-judging and self-acceptance principles. Previously, many caregivers tended to blame themselves and demanded perfection in caring for patients. After the training, they became more accepting of their own limitations and more compassionate toward themselves. Accepting emotions as a natural part of the human experience creates space for emotional recovery and reduces psychological pressure.

Third, acceptance as a pillar of mindfulness becomes a crucial coping mechanism. Caregivers learn to accept the reality of illness and the uncertainty of the patient's condition without rejecting or fighting against situations that cannot be changed. This has a profound effect on fostering inner peace and emotional resilience in facing the dynamic changes in the patient's condition.

Fourth, the practice of letting go becomes an important process in releasing negative emotions. Through mindfulness, caregivers are able to identify and free themselves from emotions such as guilt, anger, or disappointment that often accumulate due to the pressures of their role. This process enhances their focus and emotional presence in relationships with patients and other family members.

Fifth, the ability of non-reactivity, or refraining from automatic responses, increases significantly. Caregivers become more capable of observing emotions without immediately reacting impulsively, which helps maintain harmonious interpersonal relationships, both within the family and with medical teams. This also improves the quality of care and the stability of the caregiving environment.

Sixth, the emergence of self-compassion demonstrates a profound shift in the perception of personal needs. Caregivers recognize the importance of self-care as a preventive measure against emotional exhaustion and burnout. By developing compassion for themselves, caregivers gain internal strength to carry out their roles with greater stability and sustainability.

Based on the findings and conclusions above, several recommendations can be proposed for the development of practice and future research:

1. Integration of Mindfulness Programs in Healthcare Services Healthcare institutions, especially those providing care for cancer patients, are encouraged to integrate structured mindfulness training programs for both formal and informal caregivers. Such programs can become part of a holistic approach to improving caregivers' quality of life and psychological resilience.
2. Longitudinal Research It is recommended to conduct longitudinal studies to evaluate the long-term impact of mindfulness training on caregiver well-being. This is important to assess the sustainability of intervention outcomes and to identify factors that influence the continuation of mindfulness practice.

ADVANCED RESEARCH

Based on the findings of this study, two future research directions are recommended.

1. First, a comparative study could be conducted to examine the effectiveness of different mindfulness-based interventions, such as Mindfulness-Based Stress Reduction (MBSR) versus Acceptance and Commitment Therapy (ACT), in reducing stress and improving emotional well-being among cancer caregivers. This would provide valuable insights into which intervention models are most suitable for the Indonesian context and caregiver population.
2. Second, further research could explore the adaptation and implementation of digital or app-based mindfulness programs for caregivers who have limited access to in-person training. This study could assess user engagement, accessibility, and the impact of digital interventions on caregivers' psychological resilience and quality of care. By expanding research in these areas, future studies can contribute to the development of more accessible, sustainable, and culturally appropriate mindfulness interventions for cancer caregivers in Indonesia.
3. Longitudinal Study Future research may also focus on exploring the long-term effects of mindfulness training on caregiving behavior, caregiver-patient relationship dynamics, and overall mental health. A longitudinal study would provide deeper understanding of the sustainability of

mindfulness benefits and strengthen the scientific evidence for its role in enhancing caregivers' quality of life over time.

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