

# Mindfulness-Based Stress Reduction (MBSR) for Burnout Among Professional Caregivers at the Elderly Social Institution, a Residential Care Facility

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## ABSTRACT

Professional caregivers can experience burnout. According to personal interviews, these caregivers experience stress that leads to burnout because of their high workload. Burnout is a condition of physical, emotional, and mental fatigue caused by stress over long periods of time because of work. Burnout can negatively impact the caregivers' work performance and quality of life. Mindfulness-based stress reduction (MBSR) is one of the interventions to reduce burnout. This intervention is based on mindfulness meditation, which focuses on negative thoughts and feelings within oneself. This ability can help caregivers manage their response to long-term stress or burnout. The present study examined the application of MBSR to reduce caregiver burnout and improve the quality of life of professional caregivers. Six caregivers (three men, three women) participated in four group pre- and post-test sessions and a follow-up session. Burnout was measured via Maslach Burnout Inventory, and quality of life was measured via the World Health Organization Quality of Life-BREF scale. Qualitative data were also collected through unstructured interviews. Results showed that MBSR can reduce caregivers' burnout scores: mean scores in the emotional domain of exhaustion and depersonalization decreased, whereas mean scores in the personal accomplishment domain increased. This intervention can also improve caregivers' quality of life, as the mean scores within all domains increased. All participants reported knowing how to manage their stress with MBSR to have a positive impact on their life.

**Keywords:** *burnout, mindfulness-based stress reduction, professional caregivers, quality of life.*

## 1. INTRODUCTION

*Burnout* is defined as a condition of physical, emotional, and mental fatigue caused by stress over long periods of time because of work (Maslach, 1982). Burnout is common in practitioners who work in the health field (De Valk & Ostrom, 2007), such as professional caregivers who take care of older adults or geriatric patients. Research found that professional caretaking for geriatric clients or clients

with functional impairment felt burdensome to caregivers and caused depression. Because they dedicated themselves to client care, they tended to neglect their own needs and to not recognize their signs of fatigue, stress, or burnout (Okoye & Asa, 2011). This phenomenon is also seen in residential care facilities for older adults, such as Elderly Social Institution Budi Mulia 3 in

Jakarta, Indonesia, which is one of the Indonesian government's social institutions that specifically accommodates abandoned older adults.

Observations of professional caregivers in Elderly Social Institution Budi Mulia 3 show that they usually handle a group of at least 10 or more clients. Ideally, a professional caregiver handles just five clients (DEPSOS RI, 1995). However, in reality, they often handle twice the number of clients than the ideal because whereas the number of clients is large, the number of professional caregivers is small. Furthermore, professional caregivers are also responsible for taking care of the clients' administrative needs and for accompanying the clients to the hospital for regular check-ups. According to a brief interview conducted with 17 professional caregivers, they have experienced stress that leads to burnout because of the high workload. Furthermore, some clients have a psychotic disorder, so their behaviors are difficult to regulate, and these clients sometimes yell or hit the caregivers. This behavior often makes the professional caregivers feel angry enough to cry. Research shows that the high workloads and high demands from clients often lead caregivers to experience stress or burnout, both directly and indirectly (Pinquart & Sorensen, 2003; Kraft, 2006).

Professional caregivers have reported that the experience of stress can negatively impact their performance to the point at which they do not provide optimal care of their clients. Stress also impacts the caregivers' personal lives, such as resulting in less time to rest and eat. Some caregivers also said that their families are often affected by their negative attitudes,

such as them being angry for no reason. These caregivers usually devote themselves to taking care of others, so they do not recognize the signs of their own fatigue and stress (Okoye & Asa, 2011). Some negative impacts of caregiver burnout include emotional fatigue and anxiety, decreased work satisfaction, and disruption of personal life (Shapiro et al., 2007). Burnout also has an impact on caregivers' perceptions of their quality of life and on taking care of clients who have a negative affect (Takai et al, 2009). Based on the impact of burnout on professional caregivers' quality of life and work performance, it is very important for caregivers to know how to reduce stress and pay more attention to their quality of life.

Mindfulness-based stress reduction (MBSR) is one of the interventions to reduce stress and burnout. This approach is a systematically structured intervention based on mindfulness meditation, which focuses on negative thoughts and feelings within oneself in an effort to reduce stress and physical symptoms (Grossman et al., 2004). *Mindfulness* refers to a particular type of attention that focuses on the present moment, of awareness without judgment, and of accepting an experience with an openness and curiosity. Participants are encouraged to observe their thoughts and feelings and to let these pass without judgment or without becoming trapped in them. The practice of mindfulness can improve coping skills through self-observation and self-reflection (Baer, 2003, cited in Whitebird et al., 2012). Mindfulness can also reduce recurring thoughts about past or future events and help focus on current awareness and accept it (Borders et al.,

2010; Jain et al., 2007 cited in Whitebird et al., 2012). This ability can help caregivers manage their stress over the long term (Whitebird, 2012). The approach of MBSR has been used in several contexts. Clinical research over the past 25 years has shown that MBSR can reduce stress and improve the well-being of individuals with a variety of medical and psychiatric conditions. Furthermore, MBSR has benefits in reducing burnout for professional caregivers and nurses in healthcare (Shapiro et al., 1998, cited in Shapiro et al., 2007).

This study aimed to examine the use of MBSR in reducing burnout and improving the quality of life of professional caregivers. Their responsibility in taking care for older adult clients makes them unaware of their own conditions, in terms

## 2. METHODS

### 2.1. Sample

Participants in this group intervention were five caregivers chosen based on the following characteristics: (1) works as a professional caregiver at Elderly Social Institution Budi Mulia 3 (hereafter referred to as *the institution*); (2) has a burnout score that is classified as low, medium, or high measured via the Maslach Burnout Inventory (MBI) (Maslach et al, 1996); (3) is willing to take part in four intervention sessions. The research team chose professional caregivers at this institution based on observations and interviews, and it was concluded that these caregivers experienced burnout because of their workload, which had an impact on both their work performance and their personal life. Recruitment of participants was the result of collaboration between the therapist and this institution, which

of both physical and mental health. This lack of awareness makes it difficult for them to love themselves and to take care for their clients, leading them to view their clients as objects. The approach of MBSR uses many mindfulness principles and techniques. It makes participants more aware of their conditions and promotes acceptance of thoughts, emotions, and behaviors. Practitioners of MBSR can also regulate their thoughts and improve their coping skills, so their burnout can decrease. This practice also increases the values of kindness, such as increasing empathy, forgiveness, patience, and the spread love to oneself and others. Therefore, this research team chose MBSR to be applied in this intervention.

recommended seven caregivers as participants based on their work performance assessment for work quality and initiative. After this recommendation, the therapist contacted the seven caregivers to ask about their willingness to participate in the group intervention.

### 2.2. Research Design

The present study used a nonrandomized pre- and post-test intervention design. The selection of participants was not randomized because the institution already recommended seven caregivers to become participants. A pre-test was administered before intervention and a post-test after intervention.

### 2.3. Procedure

Of the seven caregivers recommended, only six were willing and had time to participate in group interventions. Quantitative evaluation for the present

study was done by examining whether changes occurred in the levels of burnout and the quality of life for each participant. These changes were assessed by scores measured via the MBI and World Health Organization Quality of Life-BREF (WHOQOL-BREF) scale, which the participants completed during pre- and post-intervention and follow-up assessments. The MBI and WHOQOL-BREF scale are the most often used questionnaires to assess the risk of experiencing burnout and to assess the individual's quality of life. The WHOQOL-BREF scale is the short version of the WHOQOL-100. Therefore, therapist chose MBI and WHOQOL-BREF scale to measure participants' burnout and quality of life.

Qualitative evaluation was conducted through semi-structured interviews. The therapist asked the participants some questions, such as to describe their experience during the intervention, the changes they felt after this intervention, which activities were most memorable and applicable, and their overall evaluation of this intervention. Then, the therapist further probed participants' answers. The participants were expected to be able to describe the changes they had experienced, if any, and how they felt after the intervention. The module used in this group intervention is a module adapted from a master's thesis by Putri (2017) by making some adjustments such as modifying the time of each activity and the sequence of activities. This group intervention consisted of four sessions (held twice a week), including pre- and post-test sessions, and each session lasted for 2.5 h. The follow-up session was

conducted 4 weeks after the final post-test session.

In Session 1, participants completed pre-test assessment and gave their informed consent and participated in group forming, problem sharing, mindfulness check-in, the closing of the session, and homework. In Session 2, the activities were psychoeducation about stress, habitual thinking, and MBSR; homework review; mindful breathing practice and mindful self-inquiry; psychoeducation about inner rules and exploration of the inner rules; closing of the session; and homework. In Session 3, the activities were games, homework review, practicing loving kindness meditation, reflection on others and whether their own bodies were happy, closing the session, and homework. In Session 4, the activities were games, homework review, practicing some techniques from previous session, sharing what is learned, making commitments, completing the post-test, and termination of the sessions. In the follow-up session, participants completed the burnout and quality-of-life questionnaire.

## 2.4. Measurements

### 2.4.1. Maslach Burnout Inventory

Burnout levels for the participants were measured using the MBI (Maslach et al., 1996). This inventory consists of 22 items, divided into three domains: (1) emotional exhaustion, (2) depersonalization, and (3) personal accomplishment. A six-point Likert scale is used ranging from 0 to indicate *never*; 1, *several times a year*; 2, *once a month*; 3, *several times a month*; 4, *once a week*; 5, *several times a week*; and 6, *every day*. Interpretation of the scores varies within each domain. In the emotional exhaustion

domain, the total score of  $\leq 17$  indicates *low burnout*, 18–29 indicates *moderate burnout*, and  $\geq 30$  indicates *high burnout*. In the depersonalization domain, the total score of  $\leq 5$  indicates low burnout, 6–11 indicates moderate burnout, and  $\geq 12$  indicates high burnout. In the personal accomplishment domain, the total score of  $\leq 33$  indicates high burnout, 34–39 indicates moderate burnout, and  $\geq 40$  indicates low burnout.

2.4.2. WHOQOL-BREF

Quality-of-life levels for each participant were measured by the WHOQOL-BREF scale (WHOQOL Group, 1995). The WHOQOL-BREF scale consists of 26 items, divided into four domains: (1) physical health (seven items), (2) psychological (six items), (3) social relations (three items), and (4) environment (eight items). In interpreting

the score, the items in each domain are added up to obtain the raw score in each domain. Items Q3, Q4, and Q26 scores are reversed on the scale. In the physical health domain, the total score of 7–16 indicates *low quality of life*, 17–26 indicates *moderate quality of life*, and 27–35 indicates *high quality of life*. In the psychological domain, the total score of 6–14 indicates low quality of life, 15–22 indicates moderate quality of life, and 22–30 indicates high quality of life. In the social relations domain, the total score of 3–7 indicates low quality of life, 8–11 indicates moderate quality of life, and 12–15 indicates high quality of life. In the environmental domain, the total score 8–18 indicates low quality of life, 19–29 indicates moderate quality of life, and 30–40 indicates high quality of life.

3. RESULTS

The demographic information for the six participants is presented in **Table 1**.

**Table 1.** Demographic Information for Participants

Name	Age	Sex	Educational background	Marital status	Duration of work
GH	28	Male	Bachelor of Social Welfare	Single	9 months
AA	24	Male	Vocational High School	Single	9 months
M	25	Male	Vocational High School	Single	3 years
DS	37	Female	Vocational High School	Married	19 years
NS	24	Female	Bachelor of Nursing	Married	5 years
AD	21	Female	Bachelor of Social Welfare	Single	3 years

**3.1. Individual Results**

The course of the intervention went smoothly and according to plan. The changes in the scores for the participants

obtained from pre- and post-test using the MBI and WHOQOL-BREF scale are presented in **Table 2**.

**Table 2.** Change in the Scores Between Pre- and Post-Test

Name	Burnout			Quality of life			
	EE	DP	PA	1	2	3	4
GH	-3	0	0	2	0	0	2
AA	-4	-5	8	2	4	3	9
M	-3	2	-9	1	0	0	1
DS	-1	-3	6	1	2	2	2
NS	-4	-6	6	3	0	0	0
AD	-8	-2	2	3	1	0	1

DP, depersonalization; EE, emotional exhaustion; PA, personal accomplishment.

GH said that working at institution was like being a robot. Caregivers, especially the three men, are asked to accompany the clients to the hospital until midnight or to just check the clients' room at midnight. Furthermore, they only have one day off from work each week. GH also said that workload was quite heavy in the barracks, where the very old clients and some clients with psychotic disorder lived. The clients were very difficult to manage, making GH angry and sometimes shout at the clients. After intervention, in GH's burnout variable in the post-test score in the emotional exhaustion domain decreased by 3 points, and the follow-up score decreased by 11 points. In the depersonalization domain, post-test scores did not change, but follow-up score decreased by 2 points. In the personal accomplishment domain, the post-test score did not change, but the follow-up score increased by 2 points. In the quality-of-life variable, the post-test score in the physical health domain increased by 2 points, but the follow-up score did not change. Scores in the psychological domain and social relations did not

change, both during post-test and follow-up. In the environmental domain, the post-test score increased by 2 points, but follow-up did not change. Qualitatively, GH said that group intervention has been beneficial to him, including being able to calm himself when facing various problems. GH also felt his burden to be lifted and his mind felt "empty." Such feeling made him more motivated to become better.

AA said at this time the problem that made him very stressed was the problem of his parents' divorce. The workload to take care of clients also made him stressed and easily irritated. When AA felt angry, he often acted out the anger on his clients. AA also said that he often felt tired but had difficulty sleeping at night. Lack of sleep made him late to wake up and late to go to work, so he received a warning from his supervisor. After intervention, AA's burnout variable in the emotional exhaustion domain score, both during the post-test and follow-up, decreased by 4 points. In the depersonalization domain, the post-test score decreased by 5 points, and the follow-up score decreased by 1

point. In the personal accomplishment domain, the post-test score increased by 8 points, but the follow-up score decreased by 8 points. On the quality-of-life variable, the post-test score in the physical health domain increased by 2 points, but the follow-up score did not change. In the psychological domain, the post-test score increased by 4 points, but the follow-up score did not change. In the domain of social relations, the post-test score increased by 3 points, and the follow-up score increased by 1 point. In the environmental domain, the post-test score increased by 9 points, but the follow-up score did not change. Qualitatively, AA said that after the intervention he found it easy for him to sleep. Furthermore, he could reduce his negative thoughts. AA said the most memorable session in this intervention was Session 3 (reflecting on others), because after that activity AA wanted to be close to his mother.

M said male caregivers are usually given additional work, such as accompanying clients to the hospital and standing guard at the institution at midnight. M admitted that sometimes the clients' behaviors were difficult to manage, and it made him angry. M said that when he was tired, he did not work optimally. After intervention, in the burnout variable for M in the post-test score in the emotional exhaustion domain decreased by 3 points, but the follow-up score increased by 4 points. In the depersonalization domain, the post-test score increased by 2 points, but the follow-up score decreased by 1 point. In personal accomplishment domain, the post-test score decreased by 9 points, but the follow-up score increased by 20 points. In the quality-of-life variable, both the post-

test and follow-up scores in the physical health domain increased by 1 point. In the psychological domain, the post-test score did not change, and the follow-up score decreased by 2 points. In the domain of social relations, both of the post-test score and the follow-up score did not change. In the environmental domain, the post-test score increased by 1 point, and the follow-up score increased by 2 points. Qualitatively, M said that he gained knowledge about stress and learned how to manage stress well. Even though his depersonalization score did not decrease and personal accomplishment score did not increase in post-test score, M reported that he felt calmer and happier after intervention.

DS said she often felt angry because of the workload. DS also felt that her supervisor did not pay attention to caregivers' psychological condition, whereas caregivers' psyche was easily exhausted because the clients were difficult to manage and the supervisor often scolded caregivers. DS said that the stress she experienced often had an impact on her personal life. When she felt angry and stressed, she would manifest her anger on her children by scolding them. After intervention, in the burnout variable for DS, the post-test score in the emotional exhaustion domain decreased by 1 point, and the follow-up score decreased by 4 points. In the depersonalization domain, the post-test score decreased by 3 points, and the follow-up score decreased by 1 point. In the personal accomplishment domain, the post-test score increased by 6 points, and the follow-up score increased by 4 points. On the quality-of-life variable, the post-test score in the physical health domain increased by 1 point, and the

follow-up score increased by 2 points. In the psychological domain, the post-test score increased by 2 points, and the follow-up score increased by 1 point. In the domain of social relations, the post-test score increased by 2 points, but the follow-up score did not change. In the environmental domain, both the post-test and follow-up scores increased by 2 points. Qualitatively, DS said she gained knowledge about what made her stressful. She also said that the techniques taught in this intervention could be used to handle her stress and meditation and that they made her feelings and mind calmer.

NS said she was often given additional jobs to do besides her main job, such as doing administrative tasks. The caregivers are required to do their job immediately, even exceeding their work hours. NS said sometimes the caregivers could not take their break and used their work hours to eat instead. High workload made her less than optimal in doing her job. Sometimes she vented her negative emotions to her clients. After intervention, in the burnout variable of NS on the post-test score in the emotional exhaustion domain decreased by 4 points, and the follow-up score decreased by 3 points. In the depersonalization domain, the post-test score decreased by 6 points, and the follow-up score did not change. In the personal accomplishment domain, the post-test score increased by 6 points, and the follow-up score increased by 3 points. On the quality-of-life variable, the post-test score in the physical health domain increased by 3 points, but the follow-up score did not change. In the psychological domain and social relations, both the post-test score and the follow-up did not change. In the environmental domain, the

post-test scores did not change, but the follow-up scores increased by 3 points. Qualitatively, after intervention NS said she now knew about stress and how to manage it. After meditation, she felt relaxed, and she could practice the techniques taught in this intervention independently.

AD said when she started working as a caregiver at this institution, she often cried because she was often scolded by clients for no reason. During those times, she felt very stressed to see clients. AD also said her workload as caregiver was quite high, especially because she was working and studying at the same time. Sometimes, it was difficult for her to split her time between work and studying. When she felt tired at work, it made her work less than optimal to take care of clients. After intervention, in the burnout variable for AD, the post-test score in the emotional exhaustion domain decreased by 8 points, and the follow-up score decreased by 2 points. In the depersonalization domain, the post-test score decreased by 2 points, and the follow-up score decreased by 1 point. In the personal accomplishment domain, the post-test score increased by 2 points, but the follow-up score decreased by 2 points. On the quality-of-life variable, the post-test score in the physical health domain increased by 3 points, but the follow-up score did not change. In the psychological domain, the post-test score increased by 1 point, and the follow-up score increased by 2 points. In the domain of social relations, the post-test score did not change, and the follow-up score decreased by 1 point. In the environmental domain, the post-test score increased by 1 point, and the follow-up score increased by 3 points. Qualitatively, after intervention

AD said she learned how to manage her stress. AD also felt more love toward herself and her surroundings. She felt more relaxed and peaceful after intervention.

### 3.2. Group Results

The mean score changes were obtained from pre-test, post-test, and follow-up by the MBI and WHOQOL-BREF scale. In the burnout variable, the mean score of post-test in the emotional exhaustion domain decreased by 3.8 points, and the mean score of follow-up decreased by 3.3 points. In the depersonalization domain, the mean score of post-test decreased by 2.4 points, and the mean score of follow-up decreased by 1 point. In the personal accomplishment, the mean score of post-test increased by 2.2 points, and the mean score of follow-up increased by 3.2 points. In the quality-of-life variable, the mean score of post-test in the physical health domain increased by 2 points, and the mean score of follow-up increased by 0.5 point. In the psychological domain, the mean score of post-test increased by 1.1 points, and the mean score of follow-up increased by 0.2 point. In the social relations domain, the mean score of post-test increased by 0.8 point, and the mean score of follow-up did not change. In the environmental domain, the mean score of post-test increased by 2.5 points, and the mean score of follow-up increased by 1.7 points.

These results show that group intervention reduced the level of burnout and improved the level of quality of life for professional caregivers at the Elderly Social Institution Budi Mulia 3, and that this improvement lasted up to 2 weeks after the intervention was given. Qualitatively, all participants reported that

after intervention they were more aware of their stress triggers and had learned how to manage stress well. They were more able to control their emotions, especially negative emotions. They were also becoming more relaxed and calmer, especially in their thoughts and feelings.

## 4. DISCUSSION

Based on all the participants' scores, a decrease in the burnout score was observed. This finding shows that group intervention using MBSR can effectively reduce professional caregivers' burnout. These results are consistent with those of the research by Shapiro et al. (2007), which showed that MBSR can reduce caregiver burnout. However, when looking at each domain, in the post-test there is one participant (participant M) who showed an increase in depersonalization domain score and a decrease in personal accomplishment domain score. Based on the observations, in the fourth session some participants were remarking to each other because their supervisor asked participants to work overtime on Saturdays when they should have had the day off. Among all the participants, only participant M was seen expressing his frustration at being asked to work overtime; throughout that session, M seemed to not be in a good mood, which may have affected his post-test results. Based on the observations, participant DS was the most prone to burnout among the group because DS was the participant with the longest tenure of working at the institution. Furthermore, DS had an educational background of vocational high school. Research has shown that professional caregivers with low education levels and those who do not have an educational background for caregiving

experience high stress compared with caregivers who have a higher education (Okoye & Asa, 2011). The length of work also affects the level of caregivers' burnout, such that caregivers who have worked longer in the field are more prone to experience burnout (Maslach et al., 2001).

Furthermore, the results of the follow-up show that there is one participant who did not show any decrease in emotional exhaustion scores, and there are three participants who did not show any increase in personal accomplishment scores. These findings may be influenced by the participant's subjective experience after the intervention or by the mood of the participant when the test was given. All participants also showed an increase in the quality-of-life scores. These results are consistent with the research of Shapiro et al. (2005), which showed that the MBSR program can reduce stress effectively and improve quality of life for people who work in the health care sector.

Qualitatively, the study results also showed that the participants gained a positive impact from this group intervention. However, looking at each domain, there are participants whose scores increase only in some domains and who did not show any changes in score or did not show any decreases in the scores in other domains. Although all participants' scores showed that this group intervention succeeded in increasing participants' quality of life, the interventions may not influence some domains of quality of life significantly, depending on the subjective experience of the participants.

The present study has some limitations in the implementation of this group

intervention. The first limitation is the participants' selection because the participants were selected by the institution based on assessment of their work performance. This approach made the therapist unable to directly screen and select participants for the group intervention. The second limitation is the time constraint given by the institution, which resulted in the time between sessions being too close. This compressed time span resulted in the participants having less time to practice the techniques independently at home, and the participants' time to do their homework was also limited. Furthermore, the limited time given by the institution and caregiver's work hours also limited the duration of each session. For future study, therapist can aim for better coordination with the social institutions, especially for selection of participants and the schedule for each session. The therapist could also select participants by screening their burnout scores for a future study. During the assessments, therapist could probe more deeply about burnout and the participants' overall quality of life.

## **5. CONCLUSION**

Professional caregivers' burnout is not only caused by the burden of taking care of clients but also because of the high workload from the employer, in this case, the social institution. Quantitatively, group interventions with the MBSR approach can reduce caregivers' burnout scores. This result can be seen from the comparison of pre-test, post-test, and follow-up scores, in which the mean scores in the emotional domain of exhaustion and depersonalization have decreased, and the mean scores in the personal

accomplishment domain have increased. Group interventions can also improve caregivers' quality of life. This result can be seen from the comparison of pre-test, post-test, and follow-up scores, in which the mean scores of the physical health, psychological, social, and environmental domain have increased. Qualitatively, all participants felt that group interventions had positive impact, such as participants being more aware of themselves, being aware of their stress triggers, and learning how to manage stress well. Furthermore, all participants were able to reduce negative thoughts and were more able to control their emotions, especially negative emotions. The techniques taught in this

intervention could be practiced independently at home, especially when they felt stressed. Finally, this intervention had a positive impact on the participant's life, such as allowing them to become more relaxed and calmer, especially in their thoughts and feelings, finding it easier to sleep, and being more loving toward themselves and the people around them.

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