

# Development of Anger Management Mindfulness Program and Effects on Mental Health and Fatigue of Psychiatric Nurses

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## Abstract

Psychiatric nurses in hospitals seemed to confront stress and anger in nursing during COVID-19 pandemic, because there were many limitations in the ward. The purposes of this research were, 1) to develop Anger Management Mindfulness program including psychological education about anger management and mindfulness yoga practice, 2) to investigate the effects of the program on mental health, fatigue (physical, mental, total), resilience, and self-compassion of psychiatric nurses. Participants were 6 psychiatric nurses in 3 hospitals in Western Japan. We made movie of the Anger Management Mindfulness and send to participants. A participant conducted the program at home individually once a week, totally 3 times. The participant completed questionnaires of the General Health Questionnaire (GHQ) to measure mental health, fatigue diagnosis scale, resilience scale, and self-compassion scale pre and post the program. Moreover they described the impression of the program. After the program, he sent back questionnaires to the researcher. This study was approved by the committee of ethics in Daiichi University of Pharmacy. Results showed the followings. The physical fatigue decreased from 7.33 to 4.50, but not significant. The mental fatigue significantly decreased from 10.2 to 6.7. Total fatigue also significantly decreased from 17.5 to 11.0. The GHQ score significantly decreased from 18.5 to 12.3. About resilience and self-compassion, there was no significant difference between pre and post score. Some participants said that the program was useful to keep their normal feelings. These results suggested that the Anger Management Mindfulness was effective on mental fatigue, total fatigue, and mental health. Aspect of psychological education to control their anger or emotion might affect their knowledge and emotional aspect and mindfulness yoga also might affect their mental and total fatigue.

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## Keywords

Anger Management, Mindfulness, Psychiatric Nurses, Mental Health, Mental Fatigue

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## 1. Introduction

In 2021, COVID-19 was prevalent worldwide and many nurses worked very hard coping with prevention in various situations. Clinical nurses who work directly with COVID-19 patients feel severe stress and developed mental and psychological issues (Labrague, 2021). Some factors seemed to be related to mental health such as resilience, fatigue, and self-compassion. Lara-Cabrera, et al (2021) showed that the nurses self-reported moderate levels of perceived stress, considerable psychological distress and high resilience. Labrague (2021) showed resilience particularly mediated the relationship between Pandemic Fatigue (PF) and mental health. Pandemic Fatigue is an emerging health concern among individuals during the COVID-19. PF, which is defined as physical and mental tiredness, may occur during a pandemic as a consequence of the interpretations in the usual routines and activities of an individual due to various measures implemented to decrease virus transmission by World Health Organization (2020). Neff (2003a) showed the importance of self-compassion to mental health. Self-compassion involves being open to and moved by one's own suffering, experiencing feelings of caring and kindness toward oneself, taking an understanding; nonjudgmental attitude toward one's own experience is part of the common human experience. Self-compassion is positively related with life satisfaction and negatively with depression or anxiety (Neff, 2003b).

To promote mental health, mindfulness is one of the useful care. Mindfulness is a type of mental, psychological, or physical care. Kabat-Zinn (1990) developed the Mindfulness-Based Stress Reduction (MBSR) program, which is based on the principle of mindfulness, defined as moment-to-moment, present-centered, purposive non-judgmental awareness. Mindfulness practice decreases anxiety, depression, and stress by Shapiro & Carlson (2009). Penque (2019) showed effects of the MBSR on mindfulness, self-compassion, serenity, and burnout of nurses. Orellana-Rios (2018) demonstrated effects of Mindfulness and compassion-oriented practices on burnout, anxiety, stress, and emotional regulation of nurses in palliative care teams. Participants were nurses in general hospital, critical care, or palliative care, but not psychiatric nurses.

Lantta et al. (2016) or Yada et al. (2015) showed that working in emergency and psychiatry ward may provide setting for experiencing high job stress and predispose nurses to aggressive behaviors. That is, nurses in psychiatry wards may be confronted with high job stress to understand their words or behaviors. Moreover Mosadeghrad (2013) demonstrated occupational stress that is closely related aggression, job satisfaction and turnover is highly influenced by coping

strategies. And Maxwell and Siu (2008) showed coping strategy influences significantly the control of anger and aggression. That is, coping strategy for aggression is important factor for stress.

The anger management program mainly consisted of understanding the causes and emotional of anger, rational thinking practice, and anger management skills training by Avci & Kelleci (2016) or Willner et al. (2013). After applying anger management program to nurses, psychological resilience and job satisfaction was observed. This is because as nurses learn assertiveness and problem-solving skills, they become less frustrated with anger situation and improve their coping skills by Farahani & Zare (2018) or Turan (2021). Yun & Yoo (2021) demonstrated effects of anger management on levels of anger, state anger, job stress, and psychological well-being using pre-post design.

Then we think that anger management may be affective on knowledge aspect about assertiveness and problem solving skills. And Mindfulness may be affective on emotional aspect through body. So we developed the Anger Management oriented Mindfulness, we call Anger Management Mindfulness after that. This program consisted of mindfulness yoga and anger managements. Particularly in the present study, we conducted for psychiatric nurses, because psychiatric nurses may experience anger or empathy fatigue in order to care for patients with mental illness. Particularly at COVID-19 pandemic, there were many limitations to prevent infection, although some patients were hard to understand needs of prevention. Moreover, resilience and self-compassion might be effective in severe situation.

Then the purpose of the present study was to develop Anger Management Mindfulness and investigate effects of the program on mental health, fatigue, resilience, and self-compassion of psychiatric nurses.

## 2. Method

### 2.1. Participants

Participants were 6 psychiatric nurses in 2 hospitals in Japan (Table 1). We conducted a questionnaire survey before and we recruited participants for a next study about mindfulness research. In the questionnaire survey, six nurses hoped to participate in the present study.

The researcher sent a sheet of paper about mindfulness study and got informed consent by mail.

### 2.2. Anger Management Mindfulness program

We developed the Anger Management Mindfulness oriented program in which a researcher explained anger management as a psychological education and a yoga instructor practice mindfulness yoga to relax of physical and mental fatigue (Table 2). We call this program “Anger Management Mindfulness.” Next we made movie of the program. Even though participants couldn’t receive the program in a group in COVID-19 pandemic, they could receive it in a home by movie through YouTube.

**Table 1.** Background of participants.

	Age	Gender	Duration as a nurse
ID 1	40 years	Female	10 years
ID 2	50 years	Female	35 years
ID 3	30 years	Male	10 years
ID 4	50 years	Female	21 years
ID 5	40 years	Male	20 years
ID 6	40 years	Male	11 years

**Table 2.** Anger management oriented mindfulness program.

	Contents in detail
1. Anger management	1) Education of anger 2) Control of impulse 3) Control of thinking 4) Control of behavior
2. Mindfulness:	5) Breathing 6) Looking at own thoughts 7) Hands stretch 8) Neck rotation 9) Sticking out one's chest 10) Ankle rotation 11) Lifting a leg by both hands 12) Body scan

### 2.3. Questionnaire

1) General Health Questionnaire 12 (GHQ12) (Nakagawa & Daibo, 2013) was used to measure mental health of nurses.

2) The Self-diagnosis fatigue checklist (Fatigue Science laboratory Inc., 2022) was used to fatigue. It consisted of physical fatigue, mental fatigue, and total fatigue.

3) The Resilience scale for nurse (Ogata et al., 2010) was used to measure resilience.

4) Self-compassion scale (Arimitsu, 2014) was used to measure nurses' self-compassion.

### 2.4. Procedure

We firstly conducted another questionnaire research about stress and we recruited participants for the present study. Six nurses showed the consent and we sent the questionnaires and movie. They enter QR code by smart phone and see YouTube of the movie. Participants conducted the Anger Management Mindfulness once a week for about 30 minutes, totally 3 times. The participants completed questionnaires before and after the research.

### 2.5. Data Analysis

We calculated basic statistic and mean score about each questionnaire. Wilcoxon

statistic was performed on the mean score between pre and post intervention.

## 2.6. Ethics

This study is approved by the ethical committee at Daiichi University of Pharmacy.

## 3. Results

We showed the results of Wilcoxon statistic in **Table 3**.

The mental fatigue significantly decreased from 10.2 to 6.7. Total fatigue also significantly decreased from 17.5 to 11.0. The physical fatigue decreased from 7.33 to 4.50, but not significant.

The GHQ score significantly decreased from 18.5 to 12.3. About resilience and self-compassion, there was no significant difference between pre and post score. We also added the impression of the Anger Management Mindfulness program (**Table 4**).

## 4. Discussion

The Anger Management Mindfulness was useful to promote general mental health from increase of the GHQ score. The reason of this promotion was caused from both effects of mindfulness and anger management. A participant described

**Table 3.** Results of intervention of the anger management mindfulness.

	Pre	Post	<i>P</i> value
GHQ	12.5 (5.3)	12.3 (5.4)	<i>p</i> = .03
Physical Fatigue	7.30 (9.1)	4.5 (5.4)	n.s.
Mental Fatigue	10.2 (4.7)	6.7 (4.4)	<i>p</i> = .04
Total Fatigue	17.5 (12.9)	11.0 (8.3)	<i>p</i> = .04
Resilience	81.2 (14.6)	82.3 (15.6)	n.s.
Self-Compassion	77.5 (27.8)	75.2 (27.6)	n.s.

**Table 4.** Impression for the anger management mindfulness.

- 1) I began to positive behavior to control my emotion such as buying books.
- 2) I began to cherish my schedule or goal chart.
- 3) I began to feel itself with mind or attention.
- 4) I could look at my character and feel about my week points.
- 5) I could find my stress, though I intended to manage.
- 6) The program was very enjoyable.
- 7) I could learn relaxation method.
- 8) I recognized the importance such that I had various thinking and cope with stress.
- 9) My mood changed drastic in these days because of patients' death or critical care.
- 10) The program was useful for me to have normal feeling.
- 11) Through the program, I found my thinking streams such that I keep my mood calm after recognize my present states of mood.

impression of this program such that she could reflect her own emotion and mind in fearful COVID-19 situation, and she could care to patients with mental illness. Another participant described impression such that the program was useful to have normal feeling. The program might be effective to keep their emotion normally. From literature review by [Riet et al. \(2018\)](#), mindfulness meditation has a positive impact on nurses' stress, anxiety, depression, burnout, and sense of well-being. Thus mindfulness part affects nurses' stress. On the other hand, nurses could manage their anger. [Ando \(2021\)](#) demonstrated that psychiatric nurses recognized patients' stress caused by infection prevention or limitation of their behavior. Nurses sometimes experienced anger from these ward situation and patients' irritated words and behaviors. Then anger management gives nurses knowledge and coping with their anger. It is supported by [Maxwell and Siu \(2008\)](#) in which the kind of coping strategy influenced the control of anger and aggression. Anger management might be useful for anger of nurses such that Cognitive-Behavior Anger Management Training was effective on aggression and job-satisfaction on psychiatric nurses by [Farahani & Zare \(2018\)](#). Then the Anger Management Mindfulness of the present study was effective on mental health for psychiatric nurses.

Moreover the Anger Management Mindfulness was effective on total fatigue and mental fatigue. There are very few studies which showed effects on fatigue, thus our finding may be important. During the COVID-19 pandemic, nurses worked at frontline caring patients. The reason why this program was effective was the following. In the mindfulness parts in this program we included "Breathing (hand in and out breathing)", "Looking at your thoughts", "Neck rotation", "Isometric Aldacati", or "Body scan." Movement was slow which leads to slow movement of brain and parasympathetic dominance. These elements might be effective mental fatigue. Moreover, to reduce total fatigue the number of staff is important. [Labrague \(2021\)](#) showed that adequate staffing as an important predictor of pandemic fatigue highlights the importance of ensuring a sufficient workforce, particularly in COVID-19-designated units.

Lastly, the Anger Management Mindfulness was not effective on self-compassion and resilience. The reason of this no effectiveness may be duration of intervention. About self-compassion, the duration of the Anger Management Mindfulness was about 3 weeks once a week, and about 30 minutes per session. However, duration of the MBRS by [Penque \(2019\)](#) was 8 weeks, about 2 hours per class. Also, about resilience, the duration of the Mindfulness-based wellness and resilience intervention for a primary care team was 8 weeks ([Colgan et al., 2019](#)). Since the present study was conducted at the COVID-19 widespread situation, the duration or session times were little to get feasibility. For the future, we add the long duration and session times, our program may be useful for self-compassion or resilience.

## 5. Clinical Implication

Since the number of participants was small, it may be difficult to generalize ef-

fects of mental health and fatigue. However, this data may represent the effects of the program, because the impression of the program is almost all positive and said usefulness of it.

The Anger Management Mindfulness is effective to promote mental health and decrease fatigue of psychiatric nurses. After confirming the utility including much more participants, we will make movie with professional and propose it on YouTube or DVD to enhance this significance.

## Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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