

The Effectiveness of Mindfulness Therapy on Declining Anxiety Level on Patients With Chronic Diseases

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ABSTRACT

Introduction

Anxiety is an emotional mental disorder that constantly shows an increase in the percentage of cases. This increase occurs not only in the upper middle class or prosperous, but also found in people in the category of developing countries like Indonesia. Complementary therapy based on mindfulness is increasing in management case of mental health disorder by declining anxiety level on patients.

Methods

This literature review conducted by searching and analyzing all eligible literature studies over the period of 2007-2017 from electronic databases, review articles and other relevant research references. The databases used from reviews and researches, mainly in ProQuest, PubMed data base and Elsevier. The search emphasized on articles discussing the effectiveness of mindfulness among patients.

Results

Six studies or research articles were analyzed including 4 quantitative and 2 qualitative studies. The result revealed that there was positive and significant changes in patients after receiving intervention of mindfulness. Type of mindfulness therapy used such as Mindfulness Based Stress Reduction (MBSR) and Mindfulness Based Cognitive Therapy (MBCT) therapies.

Conclusion

The overall goal of mindfulness therapy is to help patient or individual in decreasing anxiety level and achieving optimal health. Furthermore, more comprehensive research is needed to explore the effective application of mindfulness among patients and their families.

Keywords

Mindfulness Therapy; Anxiety; Chronic Diseases

BACKGROUND

There has been a considerable surge in recent events against the incidence of anxiety behavior in the community and has shown alarming symptoms both in quality and quantity. From 87 studies in 44 countries, the prevalence estimates of anxiety disorders now range between 0.9% and 28.3% and the prevalence of past between 2.4% and 29.8% [1].

Anxiety is a part of everyday life and always present in our lives. Anxiety involves a person's physical, self-perception, and relationship with others, making anxiety as a basic concept in human behavior and the delivery of health services. A person with anxiety disorders will

experience damage to quality and function of life. In the Stuart's book, which Giacobbe's quotes states that it is estimated that only one quarter of the population of anxiety disorders receive treatment [2]. However, people with anxiety are consumers who use a lot of health care services because they seek treatment for various symptoms caused by anxiety, such as palpitations, chest pain, shortness of breath, and dizziness.

Individuals suffering from illness will often experience tremendous anxiety. According to Peplau in Stuart's book says that anxiety has several levels, namely mild anxiety that occurs during the strain of daily life, moderate anxiety, where one focuses only on the important, severe anxiety marked by decrease which is significant in the field of perception, and panic associated with fear and terror, some people who experiences panic can not do anything though with direction. Prolonged panic conditions will result in fatigue and even death [2]. However, panic can be treated safely and effectively.

Mindfulness therapy is very effective for patients who experience disturbances in psychiatric conditions. Excerpts in the Elizabeth A. Hoge literature says that intervention using therapeutic mindfulness has increased in recent years and some core components of mindfulness have been integrated into a variety of behavioral interventions, including acceptance and commitment therapy, dialectical behavioral therapy, and mindfulness-based stress reduction [3].

Mindfulness therapy, adapted from the practice of Buddhist meditation, which teaches individuals to raise awareness of current experiences, including thoughts, emotions, and physical sensations, with gentle and accepting attitudes [4]. Mindfulness therapy has been shown to reduce the symptoms of anxiety [5], depression [6,7].

Mindfulness therapy includes three core exercises, namely scanning body, sitting meditation and mind movement with shorter training time. Previous studies have shown that MBSR has a clinically significant positive effect on stress, chronic pain, sexual function, skin disorders, irritable bowel disorders and sleep disturbances [8]. In addition, people with chronic anxiety disorder may increase the likelihood of misinterpreting ambiguous environmental information as a threat.

Initially, Mindfulness Based Stress Reduction (MBSR) was designed to treat chronic or chronic pain in the medical sphere [9]. The implementation of mindfulness therapy is group-based, and generally consists of 20 to 30 people. The duration of the execution is usually done as much as 8 or 10 weeks with a session of 2 hours to 2.5 hours, by combining individual discussions about stress reactions, instruction on session activities, and active meditation skills training. The MBSR therapy also includes a 45-minute 'body scan' exercise, in which individuals are taught to direct their attention to body parts and observe sensations in each area. Although 'body scanning' is similar to the progressive muscle relaxation technique (PMR), there is no conscious control of the involved muscles and instead is more focused and directed towards natural sensations. . The reason behind this 'body scan' technique, is based on the assumption that individuals with high levels of arousal and stress

are likely to experience physiological symptoms (such as muscle tension), by paying attention to these symptoms while maintaining an individual's frame of mind to judge will reduce this physical tension [9].

METHODS

Study Design

Research was conducted on several literature with custom range of year 2007-2017 and poured in the form of systematic review. The database of literature sought and analyzed is the relevant literature with several inclusion and exclusion criteria as well as keywords. A review of some literature was analyzed to determine articles that could be used in this study.

Inclusion criteria and exclusion criteria

The inclusion criteria of this study is the literature of articles involving patients suffering from illness and applying mindfulness interventions of therapy.

Exclusion criteria are literature that does not have full text of pdf format, and respondents who do not have inclusion criteria.

Search Literature Strategy

A systematic review that includes several scientific literature which gives a description of the effectiveness of applying mindfulness to a decrease in the level of anxiety in patients. The search of the database literature used through ProQuest, PubMed and Elsevier with limited time span of the last 10 years from 2007 to 2017. Obtained literature 6 International Journal which then analyzed in the form of systematic review in the six journals.

Table 1. Literature Search Strategy

Search Tools	ProQuest	PubMed	Elsevier
Results	1314	1134	102
Full text pdf 2007-2017	55	35	27
Similar titles	23	5	-
Eligible	4	1	1
The literature analyzed by 6 literatures			

RESULTS

In a literature search related to the effectiveness of therapeutic mindfulness on reducing anxiety levels, there were 4 quantitative studies and 2 qualitative studies. Mindfulness intervention in quantitative research for 8 weeks, while for qualitative research the intervention was longer, around 3-13 months. Of the 6 studies, 5 of them use MBSR techniques and the rest with MBCT. MBCT is a continuation of MBSR technique that focuses on cognitive therapy.

Table 2. Result from articles

Authors	Study design	Population	Control	Intervention	Outcomes Analyzed	Results
Zoe Thomas et al, 2017 (1)	Randomized controlled	N = 21 (patients in an urban hemodialysis unit nursing)	N = 21	The intervention group received an 8-week individual chair side meditation for lasting 10–15 minutes three times a week during hemodialysis	PHQ-9 and GAD-7	<i>Mindfulness</i> appears to be feasible and well tolerated in patients on hemodialysis with anxiety
Elizabeth A. Hoge, 2014 (2)	RCT	N = 50 (individuals age >18 y/o with Generalized Anxiety Disorder)	N = 38	The MBSR is an 8-week group daily home practice guided by audio recordings	FFMQ, PSWQ-PW, BAI and SME. Using STATA version 12.1	MBSR reduces worry through an increase in <i>mindfulness</i> , specifically by increases in awareness and no reactivity. Improvements in GAD symptoms resulting from MBSR are in part explained by increased levels of decentering.
Jenny van Son, 2014 (3)	Cross sectional data	N = 666 (national online survey among adults with diabetes (type 1 and 2))	Control—nothing	Filling Questioner per respondents	FFMQ-SF, PHQ-9, and GAD-7	<i>Mindfulness</i> was associated with lower levels of depression and anxiety in people with diabetes, and particular the <i>mindfulness</i> facets acting with awareness, non-reacting and non-judging.

Laurence McKenna et al, 2017 (4)	2 group of RCT (Chronic Tinnitus patients)	N = 75	N=39 with MBCT (<i>Mindfulness Based Cognitive Therapy</i>) intervention. N=36 with Relaxation Therapy (RT) intervention	MBCT involved 75 minutes, once/week for eight weeks gp instruction and 20 minutes individual home med/day X eight weeks. MBSR involved teaching MF med, body scan and breathing-based yoga and cognitive curriculum After week 4 shifted from guided to self-med.	TQ, and CORE-OM	MBCT is effective in reducing tinnitus severity in chronic tinnitus patients compared to intensive RT. It also reduces psychological distress and disability
Birgitta Peilot et al, 2014 (5)	Qualitative (Interviewing)	N = 10	Control- nothing	MBCT duration of the therapy was 7-13 months with individual sessions every second week. Therapist focused on the patients' experiences and were encouraged to narrate and their illness experiences and their life stories	BP, AS, and AJS	The study concluded that the therapy and the process of interaction with the therapist were meaningful for the patients' well-being and for a better management of pain.
Desiree G. M. van den Hurk et al, 2015 (6)	Qualitative combination with semi structured interviews	N=19 lung cancer patients and 16 partners participated in the MBSR training	Control- nothing	3 months the <i>Mindfulness-Based Stress Reduction</i> training	Good Reporting of a Mixed Method Study (GRAMMS) guideline	MBSR is a feasible intervention for lung cancer patients and partners, in future should set up a RCT to examine the effectiveness of MBSR for patients

DISCUSSION

Mindfulness therapy has been very effective in its application to patients with psychiatric disorders and is also effective in chronic physical illness. A significant picture can be seen in the six literature that have been analyzed with results showing that mindfulness provides significant changes in reducing / overcoming the level of patient anxiety.

Zoe Thomas said this study is the first to examine the intervention of mindfulness therapy in hemodialysis patients with symptoms of depression and anxiety [10]. Patients feel relaxed and pleasant despite some systemic constraints. . The level of retention is faced with interventions from other psychotherapy. It remembering the patient has several factors related to friction, such as older age, comorbidity, and poor physical health. The results of the study illustrate that cognitive elements may be therapeutic components that are important for effective psychological intervention in hemodialysis patients. The strength of this study is to include hemodialysis patients with severe medical illness [10].

Similar thing was also expressed by Elizabeth A. Hoge, MBSR can reduce feelings of worry through increased awareness and specifically by increasing the level of awareness. Changes appear to be significant enough to improve the patients of Generalized Anxiety Disorder after MBSR intervention. In this study, samples of respondents are few so should be more careful in interpreting the results of data [3].

In line with other studies Jenny van Son, proves patients with diabetes experience an anxiety changes after intervention from mindfulness therapy [11]. This is evidenced by the aspect of mindfulness that has a moderate effect on the relationship between life events that are full of stress and anxiety with a value of $p < 0.01$. The weakness and what needs to be discussed in this study are cross sectional data which cannot explore the causes of mindfulness result in decreasing of anxiety. In addition, all reporting actions are based on their own reporting of data such as type of diabetes, BMI, HBA1C, so it is feared could have potential bias reporting [11].

Likewise with Laurence McKenna who conducted mindfulness intervention research in patients suffering from Chronic Tinnitus. The use of MBCT interventions can focus on changing the cognitive patients who experience anxiety. Researchers compared the effectiveness of MBCT therapy with relaxation of therapy to a reduction in the level of patient anxiety. On the result was found that MBCT more effective and significant for reducing anxiety for chronic tinnitus patients. The strength of this study is that the most respondents to date in the MBCT trial have low friction rates. In addition, the respondents are patients who usually were seen taking treatment at the tinnitus clinic so all patients report psychological levels of clinical disorders, and many patients have similar morbidity such as hearing loss, migraine, hyperacus, balance problems, and meneire disease [12].

Another study of patients suffering from chronic pain, performed by Birgitta peilot in qualitative research. The result researchers concluded that therapy and the process of interaction with the therapist is very meaningful for the well-being of patients and for better

pain management. The strength of this study, there is not much research conducted on a group of special patients with chronic pain and the results are supported by existing knowledge about the treatment of patients with trauma and vulnerability. For the weakness of this study, it was a long period of intervention around 7-13 months [13].

At the last literature analyzed is research conducted by Desiree G. M. van den Hurk. It is qualitative research. This study also has a number of strengths. Only from several studies that examined the feasibility and effectiveness of psychosocial interventions in lung cancer patients. Furthermore, this is the first study that also involves partners of lung cancer patients in a study of psychosocial interventions. At the results of the study conclude that therapy and the process of interaction with the therapist are very meaningful for the well-being of patients and for better management of pain. This study also involves partners / relatives of patients with the hope that the patient's relatives can also have a positive influence on lung cancer patients. The involvement of partners / relatives of patients is needed especially for cases of palliative diseases such as cancer cases. The application of mindfulness therapy is combined with health education based on patient care in families so that follow-up of patients and their relatives is highly recommended [14].

CONCLUSIONS

From the results of this systemic review, can be concluded that complementary therapies such as mindfulness, can be an alternative choice in providing health services. The type of mindfulness that is often given to the patient is Mindfulness Based Stress Reduction (MBSR) performed for 10-20 minutes for 8 weeks. In addition to the use of MBSR, therapists have also practiced MBCT in which this technique as an MBSR derivative is focused on cognitive therapy. And ultimately it is desirable for more comprehensive, continuous follow-up and research involving all other health teams, so that the resulting output can be truly beneficial for patients and other communities at large.

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