

Massage Therapy for Anxiety Reduction: A Systematic Review

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ABSTRACT

Massage therapy frequently applied for different types of disorders and symptoms. A variety of massage intervention have been used among hospitalized patients with different disorder and public in order to decrease the anxiety level. The aim of this systematic review was to find the evidence of the effectiveness of massage therapy in anxiety reduction. Abstract of all articles identified from electronic searches were read. Articles clearly not meeting the inclusion criteria were filtered out. From the 1022 papers, 1006 studies were excluded. The remaining 16 papers were included in this systematic review to prove that massage therapy is effective in anxiety reduction. The finding of the review of 16 studies proving that massage therapy helps to reduce anxiety. In conclusion, massage helps a person to relieving discomfort and providing physical and psychological benefits.

Keywords: massage therapy, anxiety reduction, psychological

INTRODUCTION

Hundreds of thousands of patients undergo anxiety. Anxiety can lead to stress and it affect the sympatho-adreno-medullary system, sweating, hyperventilation, increasing pulse rate and blood pressure. In addition, anxiety can cause mental, emotional, behavioural and health problems (Kim, Cho, Woo, & Kim, 2001). Previous studies stated that massage therapy can be the best intervention to treat anxiety. Massage therapy known as a functional therapy in preventing prematurity, reducing stress, depression, pain, aggression, motor problems and enhancing immune function (Field, Diego, & Hernandez-Reif, 2007).

There are some notable studies proven that massage therapy is the type of therapy which mainly used by professionals who were dealing with patients such as doctors, social workers, nurses, priest and psychotherapist (Jaworska-Burzyńska, Sekulowicz, Cieślík, Kowalska, & Szczepańska-Gieracha, 2017).

The pressure and movement of massage therapy helps to relieve pain, anxiety and depression. Previous studies stated that massage have the

potential to relieve muscle spasm, increasing physical activity, self-comforting, promote relaxation and relieve pain (McCaffery, Beebe, Latham, & Ball, 1994). The aim of this systematic review is to find the evidence of the effectiveness of massage therapy in anxiety reduction.

METHODOLOGY

Study Selection

Abstract of all articles identified from electronic searches were read. Articles clearly not meeting the inclusion criteria were filtered out. Papers were included if they were check the anxiety levels directly after the massage therapy activity and met the criteria of research question. The following papers were excluded: the papers do not meet the criteria of the research question; non-English language papers; animal studies; the title and abstract which does not meet the research question. A total 16 articles (4 quasi-experimental; 4 randomized control trial design; 3 randomized controlled clinical trial; 2 experimental; 1 qualitative; 1 questionnaire; 1 randomized controlled and single blind trial) met the criteria and evidence of the research

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question. Of the 16 primary studies 14 studies carried out with adults and 2 with children. The databases were searched from the year 1992 to 2018. Data were extracted in standardized and prespecified way (Table 1)

Search Strategy

An electronic search was conducted by using 3 databases (ScienceDirect, IEEE Xplore and

Web of Science). The details of journal selection procedure are presented in Figure1.

Inclusion and Exclusion Criteria

This systematic review includes the studies which meet the criteria of anxiety reduction from massage therapy. The studies excluded because it does not meet the criteria of research question

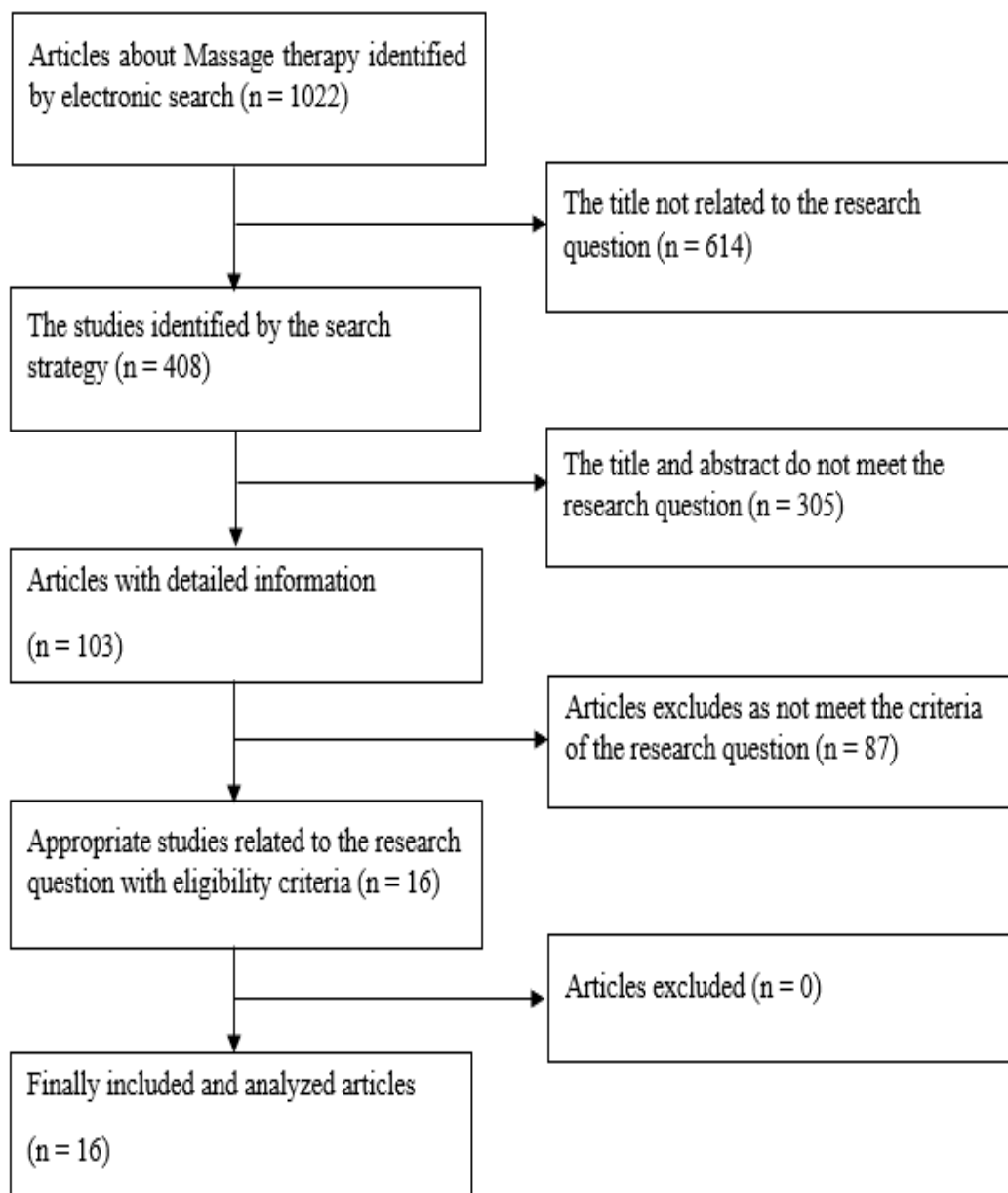


Figure1

RESULT

The search strategy is illustrated in figure 1. From the 1022 papers, 1006 studies were excluded. The remaining 16 papers were included in this systematic review. These 16 studies met the evidence that massage therapy reduces the level of anxiety. The participants were randomly selected who have different

disorders and symptoms. Majority of them are patients who are in ICU, patients with surgery, cancer, burn injury, caesarean and HIV. Participants who have psychological and burnout symptom in working place also were selected in these studies. The result of each trial group, intervention category according disorder and symptoms are presented in Table 1

Table1. The result of the studies

Study	Design of study	Massage therapy detail	Participants	Outcome measurement	Result	Conclusion (pvalue/questionnaire)
(Jane, Wilkie, Gallucci, Beaton, & Huang, 2009)	Quasi-experimental study	Full body massage	30 Taiwanese patients with metastatic bone pain	Visual Analog Scale (VAS)	Massage therapy reduced anxiety	Reduction in anxiety (p <0.001)
(Cutshall et al., 2010)	Randomized control trial design	20 minutes massage	58 patients who undergoing cardiovascular surgical procedure	Visual Analog Scale (VAS)	Massage therapy effective in reducing anxiety	Reduction in anxiety (p <0.001)
(Bauer et al., 2010)	Randomized controlled clinical trial	Massage therapy	51 patients with cardiac surgery	Visual Analog Scale (VAS)	Massage therapy had significant decreased in anxiety	Reduction in anxiety (p <0.001)
(Braun et al., 2012)	Randomized trial	Massage at 2 points	Cardiac surgery patients	Visual Analog Scale (VAS)	Massage therapy produced a significantly greater reduction in anxiety	Reduction in anxiety (p <0.0001)
(da Cunha Batalha & Mota, 2013)	Randomized controlled and single blinded	20-30 minutes massage therapy	52 children with cancer	Visual Analog Scale (VSA)	Massage therapy is useful intervention in anxiety	Reduction in anxiety (p <0.001)
(Çelebioğlu, Gürol, Yildirim, & Büyükcavci, 2015)	Quasi-experimental study	Massage therapy	25 children with bone marrow cancer	Visual Analog Scale (VAS)	Massage therapy reduced pain and anxiety among the children with cancer	Reduction in anxiety (p <0.001)
(Brand, Munroe, & Gavin, 2013)	Quasi-experimental study	Hand massage	276 ambulatory surgery patients	Visual Analog Scale (VAS)	Best improvement in anxiety in overall ambulatory patients	Reduction in anxiety (p <0.0001)
(Saatsaz, Rezaei, Alipour, & Beheshti, 2016)	Randomized controlled and single blinded	Petrissage Kneading Friction	156 primiparous women	Visual Analog Scale (VSA)	Massage reduced post-caesarean anxiety level	Reduction in anxiety (p <0.001)
(Parlak Gürol, Polat, & Nuran Akçay, 2010)	Experimental study	Oil massage with moderate pressure and pressing movement	63 adolescents with burn	State trait anxiety inventory (STAI)	The participants showed significant decreased in anxiety level	Reduction in anxiety (p <0.001)
(da Silva, Schujmann, da Silveira, Caromano, & Fu, 2017)	Quasi-experimental study	Swedish massage for 30 minutes	48 ICU patients	State trait anxiety inventory (STAI)	Swedish massage reduced anxiety of ICU patients	Reduction in anxiety (p <0.001)
(Jaworska-Burzyńska et al., 2017)	Experimental study	Traditional massage in sitting and lying position	48 employees who undergone risk of burnout	State trait anxiety inventory (STAI)	Massage in both lying and sitting position contribute in reduction in burnout and anxiety level	Reduction in anxiety (p <0.001)

(Ghezaljah & Ardebili, 2018)	Randomized controlled clinical trial	Swedish massage with preferred music	240 hospitalized burn patients	State trait anxiety inventory (STAI)	Combining both Swedish massage and preferred music more effective in reducing anticipatory anxiety in burn patients	Reduction in anxiety (p <0.001)
(Dreyer et al., 2015)	Randomized control trial design	Swedish massage	27 patients	Numeric rating scale	Increased patient perception of pain and anxiety	Reduction in anxiety (p <0.001)
(Gregory et al., 2017)	Randomized control study	Trigger point massage	HIV patients	Hospital Anxiety and Depression Scale	Positive impact of massage therapy in anxiety reduction	Reduction in anxiety (p <0.01)
(Billhult & Määttä, 2009)	Qualitative study	Effleurage Pettrissage Friction Vibration	9 patients with severe anxiety	Interview and General Experience	Positive impact of massage therapy in anxiety reduction	Reduction in anxiety
(Armstrong, Dixon, May, & Patricolo, 2014)	Two-part study involving questionnaire data and chart review data	Massage therapy	55 in and out patients	10-point Analog scale	Massage with or without guided imagery immediately reduced self-reported anxiety	Reduction in anxiety (p <0.0001)

DISCUSSION

This review aimed to find the evidence of the effectiveness of massage therapy in anxiety reduction. The finding of our review of 16 proving that massage therapy helps to reduce anxiety.

The studies (Jane, Wilkie, Galluci, Beaton, & Huang, 2009 and da Silva, Schujmann, da Silveria, Caramonono & Fu, 2017) stated that anxiety was reduced immediately after 20 to 30 minutes. Meanwhile (Dreyer et al., 2015) stated that, participants who assigned to the massage therapy had significant change in anxiety level on day2. The other study (Braun et al., 2010 and Beuer et al., 2010) mention that the participants who received massage had significant change in anxiety on day 3.

These studies prove that, massage therapy can reduce anxiety. The result of these studies also suggested that, Massage therapy will be more beneficial when combine with preferred music and aromatherapy. Furthermore, these 16 studies used different types of massage techniques. All the types of massage are beneficial in anxiety reduction. The massage therapy techniques such as petrissage, kneading, friction, oil massage, hand massage and Swedish massage shown the same benefits on anxiety. Other than reduce the anxiety level, massage therapy has also reduced

tension, pain, blood pressure and high heart rate level.

CONCLUSION

This review shows that, massage therapy can reduce anxiety. These 16 studies indicated that massage therapy is an effective treatment for anxiety. This critical evaluation demonstrates the evidence that massage therapy can reduce anxiety. In conclusion, massage helps a person to relieving discomfort and providing physical and psychological benefits. Moreover, massage therapy is an effective method, easy to use and economic.

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