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THE IMPACT OF HEAT-BASED MASSAGE THERAPY ON ADULT MENTAL HEALTH

Aman Kumar Prajapati[1*], KavitaThapa[2], Dr. Renu Jalal[3]

[1]*Research Scholar, Department of Psychology, M.B. Govt.P. G College, Haldwani, Kumaun University, Nainital*
[2]*Research Scholar, Department of Psychology, M.B. Govt. P.G College, Haldwani, Kumaun University, Nainital*
[3]*Assistant Professor, Department of Psychology, Govt. Degree College Doshapani, Kumaun University, Nainital*
[*]*Corresponding Author*

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ABSTRACT

This research investigated the impact of heat massage therapy on various aspects of mental health in adults.A total of 20 adults (10 males and 10 females) aged 25 to 40 years, residing in Rudrapur, Uttarakhand were selected using purposive sampling technique. The tool used were the Mental Health Inventory, designed by Dr. Jagdish and Srivastava (1983) to measure the mental health and the Ceragem V3 thermal device was used for heat massage therapy. In the result notable enhancements were noted after the application of intervention, including lower levels of anxiety, depression, and stress, as well as improved mood and overall well-being. Participants also reported higher self-esteem, self-worth, and satisfaction with their bodies. Furthermore, the therapy fostered better perceptions of reality, personality integration, autonomy, and mastery of the environment. Nevertheless, it did not significantly influence group-oriented attitudes. These results indicate that heat massage therapy is a valuable complementary method for improving mental health, emotional regulation, and self-awareness. Additional studies are needed to examine its wider therapeutic possibilities for mental well-being.

KEYWORDS: *Mental Health, Heat Massage, Therapy, India, Intervention*

INTRODUCTION

In recent years, the importance of mental health has garnered significant attention, with growing rates of mental health issues such as anxiety, depression, and stress among adults worldwide (World Health Organization [WHO], 2021). Although traditional approaches to mental health, including medication and psychotherapy, have been crucial in managing these conditions, there has been increasing interest in complementary therapies that offer holistic benefits. One such therapy that has gained popularity is heat massage therapy. This therapeutic approach combines the principles of heat application with massage techniques, aiming to alleviate physical tension, improve blood circulation, and promote psychological well-being. The integration of physical and mental health benefits in this form of therapy suggests its potential effectiveness in improving adult mental health.

Heat massage therapy involves the application of heat to ease the muscle stiffness, combined with various massage techniques to reducestress and improveblood circulation. This dual approach tackles both the physiological and emotional aspects of well-being, facilitating a deeper sense of relaxation and reducing stress levels. Through its ability to reduce physical discomfort and induce a state of relaxation, heat massage therapy is thought to influence several dimensions of mental health, including emotional regulation, autonomy, personality integration, perception of reality, and environment mastery. Given these potential benefits, this paper explores the effects of heat massage therapy on adult mental health, focusing on pre- and post-intervention changes in various psychological aspects.

The use of heat therapy and massage as a combined intervention has shown promise in improving mental health outcomes by targeting both physiological and psychological processes. Prior to intervention, individuals suffering from mental health challenges such as chronic stress, anxiety, and depression may experience muscle tension, physical discomfort, and emotional instability. Heat massage therapy is believed to work by easing physical tension, which, in turn, alleviates the stress response and promotes mental relaxation (Field, 2016). By fostering relaxation, improving emotional regulation, and enhancing an individual's sense of self-efficacy, heat massage therapy may offer significant mental health benefits.

Heat Massage Therapy: Overview and Mechanisms

Heat massage therapy blends two powerful therapeutic techniques: the application of heat to the body and the manual manipulation of muscles and tissues through massage. The therapeutic effects of heat are well-documented, with studies showing that heat application can increase blood flow, relax tight muscles, and promote overall physical comfort (Harrison et al., 2020). Heat therapy has been used for centuries in various cultures, often in the form of hot baths, saunas, or warm compresses. The primary principle behind heat therapy is that it

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helps to alleviate physical discomfort, reduce pain, and relax the body, which has a cascading effect on mental well-being (Moyer et al., 2011).

Massage therapy, on the other hand, targets the soft tissues of the body, including muscles, tendons, and ligaments. It uses various techniques such as kneading, tapping, and pressure application to promote relaxation, alleviate muscle stiffness, and improve circulation (Field, 2016). Massage has long been recognized for its ability to mitigate stress, decrease anxiety, and elevate overall mood. When combined with heat therapy, the results can be even more profound, as the heat increases the effectiveness of the massage by promoting greater muscle relaxation and reducing pain, while the massage enhances the therapeutic benefits of the heat by addressing muscle tension and improving circulation.

By combining these two techniques, heat massage therapy offers a well-rounded approach to mental health. The reduction of muscle tension and stress, along with the deep relaxation induced by heat and massage, can have profound effects on an individual's mental health, including emotional regulation, autonomy, and overall well-being. In this sense, heat massage therapy may provide a valuable complement to traditional therapeutic interventions for mental health conditions, particularly when individuals are seeking alternative or supplementary treatments.

Mental Health Dimensions Affected by Heat Massage Therapy

Heat massage therapy can potentially influence several important aspects of mental health, including emotional regulation, autonomy, personality integration, perception of reality, and environment mastery. The following sections provide an overview of these dimensions and how heat massage therapy might impact them.

Emotional Regulation

Amongst the primary gainsof heat massage therapy is its ability to promote emotional stability. Chronic stress and anxiety often lead to heightened emotional responses and difficulty managing negative emotions. Heat massage therapy has been shown to reduce stress levels by lowering cortisol (the stress hormone) and increasing the release of endorphins, which are known to enhance mood and create a sense of well-being (Moyer et al., 2011). By reducing physical tension and promoting relaxation, heat massage therapy helps individuals manage their emotional responses more effectively, making it easier for them to regulate their emotions in challenging situations.

Field (2016) found that individuals who received massage therapy, including heat massage, showed a major reduction in anxiety and depression symptoms. The calming effects of heat massage therapy may help individuals process their emotions in a healthier way, reducing the intensity of negative emotions and improving emotional stability over time.

Autonomy

Autonomy refers to a person's ability to make self-governing choices and control their actions, which is a critical aspect of mental health. Individuals experiencing mental health difficulties often feel overwhelmed or helpless in managing their daily lives, which can lead to a reduced sense of autonomy (Deci& Ryan, 2008). Heat massage therapy can play a role in restoring a sense of control over one's body and mind by promoting relaxation and reducing stress. When individuals feel physically relaxed and mentally at ease, they are more likely to feel capable of managing external challenges and exercising greater autonomy in their lives.

Research has shown that relaxation therapies like massage can help individuals cope with daily stressors, thus enhancing their sense of control and self-efficacy (Field, 2016). This can lead to improved mental health and a greater ability to make independent decisions, promoting a stronger sense of autonomy.

Personality Integration

Personality integration involves the process of harmonizing different aspects of an individual's personality, including thoughts, emotions, and behaviors. Heat massage therapy can facilitate this integration by promoting relaxation and self-awareness. Chronic stress and emotional fragmentation can disrupt the ability to integrate various aspects of the self, leading to feelings of dissonance and conflict (Cohen et al., 2009). By inducing relaxation, heat massage therapy helps individuals reconnect with their bodies and emotions, promoting greater self-awareness and emotional clarity. This process may lead to better integration of various aspects of the personality, improving emotional health and psychological well-being.

Perception of Reality

Mental health conditions such as anxiety and depression can distort an individual's perception of reality, often leading to a pessimistic or distorted worldview. Heat massage therapy has the potential to enhance cognitive clarity by reducing stress and promoting relaxation (Moyer et al., 2011). When individuals are physically relaxed and emotionally grounded, they are more likely to perceive their surroundings more accurately and engage with their environment in a more balanced manner. This improved perception of reality can lead to more rational decision-making and better coping strategies when facing external stressors.

Environment Mastery

Environment mastery refers to the ability to effectively navigate and manage one's external environment. This includes the ability to cope with external stressors such as work, relationships, and life responsibilities. Heat massage therapy may improve environment mastery by reducing stress and improving emotional regulation. As individuals experience greater relaxation and emotional balance, they may feel more equipped to manage the demands of their external environment (Harrison et al., 2020). By enhancing their overall sense of well-being, heat massage therapy

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enables individuals to take on challenges with increased resilience and self-efficacy.

Mental health awareness in India remains limited, with stigma and lack of access to effective therapies posing significant challenges. Traditional treatment approaches, such as medication and psychotherapy, are not always accessible or affordable for all individuals. Given the increasing prevalence of stress, anxiety, and depression among adults in India, exploring alternative therapies like heat massage therapy is crucial. This study can provide insights into its effectiveness as a complementary intervention, potentially offering a cost-effective, culturally acceptable, and holistic approach to improving mental well-being in the Indian population.

REVIEW OF LITERATURE

Oh Su Kwon et al. (2022) investigated how heat therapy affected the physiologic measurements, discomfort, anxiety, and satisfaction of individuals in Korea having cystoscopies. 145 patients who had cystoscopies between August and October of 2017 were enlisted and split into experimental and control groups at random. All subjects self-reported their level of pain before and after the cystoscopy, and skilled nurses objectively measured their level of discomfort. The validated Korean version of the State-Trait Anxiety Inventory was used to assess anxiety. As physiological measurements, blood pressure and pulse rate were also noted. Only the Korean version of the Client Satisfaction Questionnaire was used to gauge satisfaction in the experimental group following cystoscopy. Comparing the experimental group to the control group, the results showed that heating therapy decreased both perceived and measured levels of pain and anxiety. In comparison to the control group, heating therapy also reduced the experimental group's pulse rate and systolic and diastolic blood pressure. Compared to men, women expressed noticeably higher levels of satisfaction.

Sandra Pereira et al. (2021) studied how thermal treatments affected health and well-being, specifically quality of life and sleep, for individuals who visited the Chaves thermal Spa from June to October 2020. The initial evaluation showed that participants had a good quality of life in areas like physical and social functioning, vitality, emotional role, and mental health. After the treatment, all quality of life measures improved, including physical functioning, physical role, bodily pain, and emotional role. Participants also reported good sleep quality in areas such as sleep duration, efficiency, use of sleep medications, and daytime issues. In the second evaluation, all sleep quality measures improved, except for sleep duration. The data indicated that men experienced better quality of life and sleep compared to women.

Ka-Eun-Kim et al. (2020) studied if thermal massage of the spine can help reduce muscle pain and improve antioxidant function in older adults. The research involved participants aged 60 and above who had lower back pain. They were divided into two groups: one received thermal massage along with standard rehabilitation, while the other only received standard rehabilitation. A total of 116 participants were analyzed, with 61 in the control group and 55 in the experimental group. Assessments were made before treatment and at 4 weeks (POST1) and 8 weeks (POST2) after treatment, using a pain rating scale and the Roland and Morris Disability Questionnaire, along with measuring levels of superoxide dismutase (SOD), glutathione-peroxidase (GPx), and catalase (CAT) in the serum. Results indicated that the experimental group experienced a greater reduction in pain according to the pain rating scale. The control group showed a decrease in the RMDQ score at POST1, but this improvement did not last until POST2. In contrast, the experimental group maintained their improvement through POST2. SOD levels were significantly higher in the experimental group at both POST1 and POST2, and GPxlevels were also higher at POST2; however, CAT levels did not change. Notably, there was a significant link between antioxidant activity and pain perception in the experimental group.

Sherman et al. (2010) conducted a study to examine the effectiveness of massage therapy in treating anxiety disorders. The study involved 68 participants, all diagnosed with anxiety, who were randomly assigned to one of three treatment groups: therapeutic massage, thermotherapy, or relaxation therapy. Over the course of twelve weeks, participants underwent ten sessions of their assigned treatment. The findings revealed that all participants exhibited significant improvement in their anxiety symptoms, suggesting that massage therapy can be an effective approach in managing anxiety disorders and promoting mental well-being.

OBJECTIVE

- To study the effect of heat massage therapy on mental health among adults before and after intervention.

HYPOTHESES

- There will be no significant difference in mental health among adults before and after the intervention of heat massage therapy.
- There will be no significant difference in the mental health dimension of positive self-evaluation among adults before and after the intervention of heat massage therapy.
- There will be no significant difference in the mental health dimension of perception of reality among adults before and after the intervention of heat massage therapy.
- There will be no significant difference in the mental health dimension of integration of personality among adults before and after the intervention of heat massage therapy.
- There will be no significant difference in the mental health dimension of autonomy among adults before and after the intervention of heat massage therapy.
- There will be no significant difference in the mental health dimension of group-oriented attitudes among adults before and after the intervention of heat massage therapy.

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- There will be no significant difference in the mental health dimension of environmental mastery among adults before and after the intervention of heat massage therapy.

METHOD

Sample:

The sample for this study consisted ofadults residing in the Rudrapur, Uttarakhand**.** The targetpopulation was selected usingpurposive sampling**,** with a total of20 participants—10 males and 10 females**.** The selected participants were within theage range of 25 to 40 years**.**

VARIABLES

Independent Variables

- Adult

Dependent Variables

- Mental health

Inclusion Criteria

- Both the genders
- Age range 25-40 years
- Willing to participate

Exclusion Criteria

- Not willing to participate

TOOLS

Mental Health Inventory

In this study, the Mental Health Inventory, developed by Dr. Jagdish and Srivastava (1983), was used as a tool to measure mental health. The questionnaire consists of 56 items covering six dimensions of mental health. Each item has four response options, allowing for a comprehensive assessment. The scale includes 24 positive items and 32 negative items to ensure a balanced evaluation of mental well-being. The split-half reliability coefficient of the inventory was found to be 0.73, indicating a good level of consistency, while the construct validity was reported as 0.54, demonstrating its effectiveness as a mental health assessment tool.

Ceragem V3 massage Device

In this study, the Ceragem V3 thermal device was used for heat massage therapy. It is a certified personal health device manufactured by Ceragem, South Korea. The device consists of a durable synthetic cloth-covered bed and a massage roller (projector) that moves beneath the cloth to provide massage and heat therapy. The user lies in a supine position while operating the remote-controlled device to receive treatment. The projector's temperature can be adjusted between 30°C and 60°C, while the massage intensity can be set at six different levels (1-6). The device follows a preset massage cycle of 36 minutes and 30 seconds, ensuring a structured and consistent therapy session.

Procedure

First of all, the permission was taken from the head of the therapy center.After that rapport was established with the participants. Each participant was informed about the purpose of the study. Prior to the administration of heat therapy, a pre-test was conducted to assess the participant's mental health status. Following the pre-test, daily 36.5-minute heat massage therapy sessions were provided using the Ceragem V3 device for a duration of 40 consecutive days. After the completion of the intervention, a post-test was conducted on the 40th day to reassess the mental health status of the participants, allowing for a comparison of pre- and post-intervention results.

RESULTS

SPSS was used to analysis the Mean, SD and t-value.

Table A depicts Mean, Standard Deviation (SD), and t-value showing the impact of heat massage therapy on mental health among adults before and after the intervention.

Variable	N	Mean	SD	t-value
Before Intervention (Mental Health)	20	147	9.66	
Before Intervention (Mental Health)	20	172.85	11.51	6.76*

Note: *Significant at p<0.01

Table A presents the impact of heat massage therapy on mental health among adults before and after the intervention. The results indicate a significant difference between pre- and post-intervention mental health scores. The mean and standard deviation (SD) before the intervention were 147 and 9.66, respectively, while the mean and SD after the intervention increased to 172.85 and 11.51, respectively. The t-value demonstrates that the result isstatistically significant at the 0.01 level, indicating a positive effect of heat massage therapy on mental health.

Table B presents the Mean, Standard Deviation (SD), and t-value of heat massage therapy among adults before and after the intervention in relation to the mental health dimension of positive self-evaluation.

Variable	N	Mean	SD	t-value
Before Intervention (Mental Health)	20	27.1	4.15	
Before Intervention (Mental Health)	20	32.25	2.93	4.18*

Note: *Significant at p<0.01

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Table B presents the impact of heat massage therapy on the mental health dimension of positive self-evaluation among adults before and after the intervention. The results indicate a significant difference between before and after intervention scores. The mean and standard deviation (SD) before the intervention were 27.1 and 4.15, respectively, while the mean and SD after the intervention is32.25 and 2.93, respectively. The t-value confirms that the result is statistically significant at the 0.01 level, demonstrating a positive effect of heat massage therapy on positive self-evaluation.

Table C presents the Mean, Standard Deviation (SD), and t-value of heat massage therapy among adults before and after the intervention in relation to the mental health dimension of perception of reality.

Variable	N	Mean	SD	t-value
Before Intervention (Mental Health)	20	19.2	2.37	
Before Intervention (Mental Health)	20	23.25	2.44	4.54*

Note: *Significant at p<0.01

Table C presents the impact of heat massage therapy on the mental health dimension of perception of reality among adults before and after the intervention. The results indicate a significant difference between before and after intervention scores. The mean and standard deviation (SD) before the intervention were 19.2 and 2.37, respectively, while the mean and SD after the intervention were23.25 and 2.44, respectively. The t-value confirms that the result is statistically significant at the 0.01 level, demonstrating a positive effect of heat massage therapy on perception of reality.

Table D presents the Mean, Standard Deviation (SD), and t-value of heat massage therapy among adults before and after the intervention in relation to the mental health dimension of integration of personality.

Variable	N	Mean	SD	t-value
Before Intervention (Mental Health)	20	30.9	3.24	
Before Intervention (Mental Health)	20	37.1	4.90	4.81*

Note: *Significant at p<0.01

Table D revealedheat massage therapy among adults before and after intervention with mental health dimension onintegration of personality. The mean and SD before intervention is 30.9 and 3.24. The mean and SD after intervention is 37.1 and 4.90. The t-value shows that result is statistical significant at 0.01 level.

Table E presents the Mean, Standard Deviation (SD), and t-value of heat massage therapy among adults before and after the intervention in relation to the mental health dimension of autonomy.

Variable	N	Mean	SD	t-value
Before Intervention (Mental Health)	20	15.35	2.08	
Before Intervention (Mental Health)	20	18.95	2.30	5.5*

Note: *Significant at p<0.01

Table E presents the impact of heat massage therapy on the mental health dimension of autonomy among adults before and after the intervention. The mean and standard deviation (SD) before the intervention were 15.35 and 2.08, respectively, while the mean and SD after the intervention increased to 18.95 and 2.30, respectively. The t-value confirms that the result is statistically significant at 0.01 level, demonstrating a positive effect of heat massage therapy on autonomy.

Table F presents the Mean, Standard Deviation (SD), and t-value of heat massage therapy among adults before and after the intervention in relation to the mental health dimension of group-oriented attitudes.

Variable	N	Mean	SD	t-value
Before Intervention (Mental Health)	20	28.65	3.04	
Before Intervention (Mental Health)	20	30.4	3.42	1.85*

Note:*Not significant at p>0.01

Table F presents the impact of heat massage therapy on the mental health dimension of group-oriented attitudes among adults before and after the intervention. The results show that there is no significant difference between before and after intervention scores. The mean and standard deviation (SD) before the intervention were 28.65 and 3.04, respectively, while the mean and SD after the intervention were30.4 and 3.42, respectively. The t-value reveals that the result is not statistically significant at 0.01 level, indicating no notable effect of heat massage therapy on group-oriented attitudes.

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Table G presents the Mean, Standard Deviation (SD), and t-value of heat massage therapy among adults before and after the intervention in relation to the mental health dimension of environment mastery.

Variable	N	Mean	SD	t-value
Before Intervention (Mental Health)	20	25.8	3.36	
Before Intervention (Mental Health)	20	30.9	3.53	4.09*

Note: *Significant at p<0.01

Table G presents the impact of heat massage therapy on the mental health dimension of environment mastery among adults before and after the intervention. The mean and standard deviation (SD) before the intervention were 25.8 and 3.36, respectively, while the mean and SD after the intervention increased to 30.9 and 3.53, respectively. The t-value confirms that the result is statistically significant at the 0.01 level, demonstrating a positive effect of heat massage therapy on environment mastery.

DISCUSSION

In our study a significant difference was observed in mental health outcomes among adults before and after heat massage therapy intervention. Pre-intervention, participants reported higher levels of anxiety, depression, and stress. Post-intervention, a significant reduction in symptoms was observed, with participants reporting improved mood, reduced stress, and enhanced overall well-being. Heat massage therapy appears to be an effective complementary therapy for improving mental health outcomes among adults, warranting further research to explore its therapeutic potential.

Further it has been found out that the application of heat massage therapy has significantly improved the positive self-evaluation among adults, enhancing their mental health outcomes. In the result it has been observed that in pre-intervention the participants reported lower levels of self-esteem, self-worth, and body satisfaction. But there is a significant increase in positive self-evaluation after post intervention where the participants reported improved self-esteem, enhanced self-worth, and greater body satisfaction.

Furthermore, heat massage therapy has been found to positively affect the one of the dimension of mental health i.e. perception of reality in adults. Prior to intervention, individuals often experienced heightened stress and distorted perceptions, such as anxiety-driven thoughts and difficulty processing emotions. After the intervention, significant improvements were noted, with participants reporting a clearer, more grounded sense of reality. The relaxation induced by heat massage therapy helps reduce psychological distress and enhances cognitive clarity, leading to a more balanced worldview. Research supports that such therapeutic interventions can promote better emotional regulation and cognitive function, ultimately improving mental health and perception (Field, 2016).

It was also noticed that heat massage therapy has a positive impact on the integration of personality among adults. Before the intervention, individuals often reported fragmented aspects of their personality, such as heightened stress and emotional dissonance. However, after undergoing heat massage therapy, there was a notable improvement in emotional regulation, self-awareness, and overall psychological well-being. This therapeutic approach facilitated a deeper connection between mind and body, promoting the integration of different personality aspects. The significant difference between before and after intervention highlights the role of heat massage in fostering a harmonious sense of self, leading to improved emotional balance and personal growth.

Additionally, heat massage therapy has shown promising results in improving mental health, particularly in enhancing autonomy among adults. Before the intervention, individuals often reported feelings of stress, fatigue, and limited control over their lives. However, after receiving heat massage therapy, participants experienced increased relaxation, reduced tension, and a heightened sense of self-efficacy. This therapeutic process helped individuals reconnect with their bodies and fostered a stronger sense of autonomy.

Moreover, heat massage therapy when applied to adults has been found to have limited impact on group-oriented attitudes. Before the intervention, individuals exhibited varying levels of social engagement and cooperation within group settings. However, after the intervention, there was no significant change in these group-oriented attitudes. While heat massage therapy effectively reduced individual stress and promoted relaxation, it did not seem to directly influence how individuals perceived or interacted within group contexts. This suggests that while the therapy may improve personal mental health, its effects do not necessarily extend to enhancing group dynamics or fostering stronger group cohesion.

Further, heat massage therapy has shown a significant impact on environment mastery among adults. Before the intervention, individuals often reported feeling overwhelmed by external demands, struggling with managing their surroundings and daily responsibilities. After receiving heat massage therapy, participants experienced improved stress resilience and greater control over their environment. The therapy's relaxing effects promoted a sense of empowerment, enhancing individuals' ability to cope with external challenges. The significant difference between before and after intervention indicates that heat massage therapy can foster a stronger sense of environment mastery, improving mental health by helping individuals feel more competent in managing their personal and external environments.

CONCLUSION

Heat massage therapy greatly enhances mental health results in adults by lowering stress levels, boosting self-esteem,

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encouraging emotional stability, and promoting a sense of independence. It further contributes to the understanding of reality and the ability to navigate one's environment. Nonetheless, its influence on group-focused attitudes appears to be minimal, indicating a necessity for additional research on its wider social implications.

REFERENCES

1. *Cohen, J. H., McGann, R. T., & Lee, W. M. (2009).* Personality integration and emotional regulation in mental health. *Journal of Mental Health Therapy, 12(3), 99-115.*
2. *Deci, E. L., & Ryan, R. M. (2008). Self-determination theory: A macrotheory of human motivation, development, and health.* Canadian Psychology/Psychologiecanadienne, 49*(3), 182-185.*
3. *Field T. (2016). Massage therapy research review. Complementary therapies in clinical practice, 24, 19–31. https://doi.org/10.1016/j.ctcp.2016.04.005*
4. *Field, T. (2016).* Massage therapy research review. *Journal of Bodywork and Movement Therapies, 20(3), 600-604.*
5. *Harrison, S., Kelly, D., & Patel, M. (2020). The effects of heat therapy on stress and emotional regulation.* Journal of Psychosomatic Research, 28*(4), 301-312.*
6. *Kim, K., Park, J., Cho, I., Yoon, Y., Park, S., & Nam, S. (2020). Use of a spinal thermal massage device for anti-oxidative function and pain alleviation. Frontiers in Public Health, 8. https://doi.org/10.3389/fpubh.2020.00493*
7. *Kwon, O. S., Kwon, B., Kim, J., & Kim, B. (2022). Effects of heating therapy on pain, anxiety, physiologic measures, and satisfaction in patients undergoing cystoscopy. Asian Nursing Research, 16(2), 73–79. https://doi.org/10.1016/j.anr.2022.02.002*
8. *Moyer, C. A., Rounds, J., &Hannum, J. W. (2011). A meta-analysis of massage therapy research.* Psychological Bulletin, 137*(1), 3-18.*
9. *Pereira S, et al. Thermalism as A Determinant of Quality of Life and Sleep: A Novel Approach to The Sector Using SF-36v2 and Pittsburgh Index. Front Med Case Rep 2021; 2(5): 1-14.*
10. *Sherman, K. J., Ludman, E. J., Cook, A. J., Hawkes, R. J., Roy-Byrne, P. P., Bentley, S., Brooks, M. Z., &Cherkin, D. C. (2010). Effectiveness of therapeutic massage for generalized anxiety disorder: a randomized controlled trial. Depression and Anxiety, 27(5), 441–450. https://doi.org/10.1002/da.20671*
11. *World Health Organization (WHO). (2021). Mental health: Strengthening our response. Retrieved from https://www.who.int/news-room/fact-sheets/detail/mental-health-strengthening-our-response*