



The Benefits of Shiatsu for a Holistic Approach to Health: A Systematic Review

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Authors' contributions

This work was carried out in collaboration between all authors. Authors VHAL, JMC, and DS designed the search. The author RPM created the theme of the article. Authors JMC, BPB, DMS, ECQ, ITNP, KSVS, LFSS, PDRJ, RSS, RSS, DRS, DS and VHAL wrote the manuscript. Authors DS and VHAL translated the article. Authors VHAL guided the writing of the article. All authors read and approved the final manuscript.

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ABSTRACT

Shiatsu is contextualised as an ancient therapeutic practice of Chinese origin, which, however, developed in Japan and has gained prominence in contemporary physiotherapy. For this reason, this research aimed to explore the origins, historical evolution and fundamental principles of Shiatsu, providing a comprehensive overview of this holistic approach. The methodology adopted was a systematic literature review, analysing scientific articles. In order to meet the desired objectives, the fundamental techniques, indications and contraindications and therapeutic benefits for the mind and body were also explored. The main expected results were an in-depth understanding of the history and foundations of Shiatsu, as well as the identification of scientific evidence that supports its therapeutic efficacy. This review also served to better consolidate Shiatsu as a recognised and research-backed practice, which positions this therapy as a valuable tool in promoting physical and emotional balance. Finally, it concluded by anticipating research that has filled gaps in knowledge, providing support to guide ethical and safe clinical practices. That said, this article makes a significant contribution to the advancement of knowledge in the field of physiotherapy, supporting the application of Shiatsu as an integral and effective therapeutic approach, in line with contemporary demands for a holistic view of health.

Keywords: Shiatsu; Physiotherapy; Holistic Approach; Therapeutic Benefits; Systematic Review.

1. INTRODUCTION

This systematic review aimed to deepen understanding of the benefits of Shiatsu, emphasising its relevance in a holistic approach to health. By analysing relevant studies, it sought to provide a comprehensive and grounded view of the impact of Shiatsu on different aspects of the body and mind. And chronologically, over the centuries, this practice has adapted, expanded and become a valuable tool for health promotion. Shiatsu, for example, as a specific technique for the prevention and treatment of wrinkles, confirms its ability to adapt over time [1]. In order to understand the fundamental principles and techniques of Shiatsu, this research delved into the application of this therapy in surgical patients. These insights provided valuable lessons on the diversity of techniques used and their adaptation to different clinical conditions [2].

Exploring the effects of Shiatsu manual therapy on fibromyalgia patients contributes to understanding the indications and contraindications of this ancient technique. In addition, the studies conducted [3] have provided essential information on the effectiveness of this practice, highlighting important precautions. As well as the express application of Shiatsu as a way of reducing workers' tensions, the positive physical and psychological impacts of the therapy have been highlighted [4]. This therapeutic

approach has proved valuable not only in managing specific conditions, but also as a preventative tool for work-related stress [3,4]. In addition to incorporating Shiatsu into the alternative therapies metier for individuals with anxiety, this has added an emotional dimension to the discussion of this therapy. In the same vein, the study [5] highlighted how Shiatsu can positively influence emotional states, contributing to the management of mental conditions. Meanwhile, the research [6] focused on the practice of Watsu Shiatsu, which explored how this specific modality contributed to quality of life by offering crucial learnings about how Shiatsu, when incorporated into the aquatic context, extends its benefits.

The use of Shiatsu as an alternative therapy in work-related musculoskeletal disorders, as explored by Masselli [7], provided a detailed insight into the effectiveness of Shiatsu in managing these disorders. This approach not only treated the symptoms, but also sought to address the roots of muscular and skeletal problems, just as Silva & Maturana [8] presented a unique perspective by addressing the application of Shiatsu as an adjunct to the treatment of cerebral palsy, as their case report highlighted the potential of Shiatsu in neurological conditions, demonstrating the versatility of this therapy in various clinical situations. Also exploring Shiatsu in terms of its emotional appeal, Silva & Volpi [9]

connected emotional and physical aspects in an integrated way, their approach emphasising the importance of considering the totality of the individual in the therapeutic process.

That said, Yamada [10] also highlighted the usefulness of Shiatsu as a complementary tool for reducing physical fatigue in nursing workers, contributing to the understanding of how this technique can be an effective strategy in challenging professional contexts, by relieving not only the body but also the mind of health professionals.

By bringing together the contributions of these studies, this systematic review sought to consolidate existing knowledge about the benefits of Shiatsu. And each of its facets in their specific approaches contributed to a broader understanding of its therapeutic potential in different contexts.

1.1 Background

The choice to investigate the benefits of shiatsu for a holistic approach to health, in the form of a systematic review, arose from the pressing need to understand and consolidate knowledge about this ancient therapeutic practice and its contemporary application. In the context of physiotherapy, with an emphasis on Shiatsu therapy, this article aimed to fill crucial gaps in understanding the impact of Shiatsu on physical and mental health. To this end, exploring the origins and historical evolution of Shiatsu around the world was essential to situating its relevance over time and understanding how this practice has evolved to meet the needs of different eras and cultures. And by describing the fundamental principles and techniques of Shiatsu, this research set out to provide a detailed overview of the theoretical and practical bases that underpin this therapeutic approach, after all understanding these elements is crucial to underpin clinical practices and contribute to the advancement of knowledge in the area. As well as the indications and contraindications of this therapy, these were fundamental points to be addressed, as this understanding is essential to guide health professionals in making clinical decisions, ensuring the safety and efficacy of the treatment. Furthermore, analysing these aspects in detail could contribute to the promotion of responsible and ethical therapeutic practices in the future.

The discussion of the therapeutic benefits of Shiatsu for the mind and body, through the analysis of scientific articles, represented a

significant contribution to scientific literature, since the proposed systematic review aimed to consolidate scientific evidence that supports the effectiveness of Shiatsu in different clinical contexts, always basing its approach on evidence to position Shiatsu as a recognised therapeutic practice backed by research. The choice to address the therapeutic benefits of Shiatsu for the mind and body reflects the growing need for therapeutic strategies that consider the integrality of the human being. And Shiatsu, with its holistic approach, stands out as a valuable tool in promoting physical and emotional balance, in line with contemporary healthcare demands.

That said, the practical relevance of this research is evident in that it seeks not only to expand theoretical knowledge about Shiatsu, but also to inform clinical practice. In particular, by providing a solid base of scientific evidence, this research will contribute to the effective integration of Shiatsu into contemporary therapeutic approaches, benefiting health professionals and their patients. Therefore, the overriding perspective for this study was based on the need to fill knowledge gaps; guide clinical practice; and position Shiatsu as an integral, scientifically-based therapeutic approach in line with current demands for a holistic view of health.

2. MATERIALS AND METHODS

This section presents the methods and procedures adopted to carry out the systematic review on the benefits of Shiatsu for a holistic approach to health. The following methodological steps have been stipulated to ensure the rigour and validity of the study.

2.1 Definition of Inclusion and Exclusion Criteria

The first step consisted of carefully defining the inclusion and exclusion criteria for the articles to be analysed. Only studies that directly addressed the benefits of Shiatsu and touched on the 4 pillars noted in the justification section, published in indexed scientific journals, dissertations, theses and other relevant documents were considered. Studies that were not available in their entirety, that did not address the subject in a central way or that did not present a clear methodology were excluded.

2.2 Systematic Literature Search

The systematic literature search was conducted in recognised scientific databases such as PubMed, Scielo Brasil and Google Scholar. The descriptors

used included terms related to Shiatsu, holistic health and alternative therapy. The selection of articles followed a previously established search protocol, aimed at covering relevant scientific production in the area.

2.3 Study Selection

After applying the inclusion and exclusion criteria, the selected studies were subjected to a detailed analysis. For each article, information such as year of publication, authors, methodology used, results obtained and conclusions were recorded. This stage aimed to assess the quality and consistency of the evidence presented, guaranteeing the reliability of the data.

2.4 Synthesising the Results and Preparing the Systematic Review

Based on the data extracted, the results obtained from the selected studies were summarised. This involved comparing and integrating the information, allowing for the identification of patterns, divergences and gaps in the literature. Based on this analysis, a systematic review was drawn up, structured according to the objectives of this study. To this end, a methodological basis was established to guide the systematic review on the benefits of Shiatsu. The careful and systematic approach adopted aimed to ensure the validity and reliability of the results, contributing to an in-depth understanding of the subject and supporting the conclusions presented throughout the study.

3. THEORETICAL FRAMEWORK

The theoretical framework of this research was formatted as a systematic review. In each subtopic, different perspectives on Shiatsu were summarised from the initial Brazilian articles. Ten main topics were then selected, illustrating part of the scope of the topic presented through the contributions and perspectives of the selected authors:

3.1 Shiatsu for the Prevention and Treatment of Facial Wrinkles

Facial Shiatsu has emerged as an innovative therapeutic approach in the search for the prevention and treatment of wrinkles, standing out as a promising field in the health and well-being scenario [1]. The study conducted by Fernandes et al. [1] shed light on the specific application of this ancient technique in the aesthetic context,

offering valuable learnings about its benefits for skin health and its potential in combating the signs of ageing. Since the practice of Shiatsu originated in traditional Chinese medicine, its central principle is the re-establishment of energy balance in the body. And in facial Shiatsu, this approach is applied in a way that focuses on the face, aiming not only to promote energetic health, but also to revitalise the skin. Understanding facial physiology and the specific energy points is fundamental to the effectiveness of this practice, as the authors emphasise [1]:

This variation of the Shiatsu technique, used to treat wrinkles, is based on the stimulation of specific acupuncture points on the face. These points, when pressed properly, promote local blood circulation, stimulating the production of collagen and elastin. Collagen, known for its structural function in the skin, and elastin, responsible for elasticity, play fundamental roles in maintaining the skin's youthfulness. Thus, by applying facial Shiatsu regularly, it is possible to potentiate these natural regeneration processes [1]. And the analysis proposed by Fernandes et al. [1] emphasised that the proper application of facial Shiatsu not only acts on physical aspects, but also triggers neuromuscular and neuroendocrine responses. This integrative approach was fundamental to understanding the complexity of the benefits provided by facial Shiatsu in the context of wrinkle prevention and treatment.

One aspect highlighted in the study was the effectiveness of Shiatsu in reducing facial stress. Chronic stress can contribute to premature ageing of the skin, and regular practice of the technique can act as a significant tool in mitigating these harmful effects, which occur through the release of muscle tension and stimulation of points related to relaxation, which are central aspects of this approach [1]. As well as, facial Shiatsu has been presented as a non-invasive alternative to surgical procedures or more aggressive aesthetic treatments, which is in line with the growing search for natural and holistic approaches to health, in which prevention and maintenance are prioritised over more drastic interventions [1].

The research [1] highlighted the importance of individualising treatment, adapting the practice of facial Shiatsu to the specific characteristics of each person. This resonates with the fundamental principle of traditional Chinese medicine, which recognises the uniqueness of each organism. This personalised approach is particularly

relevant in the aesthetic context, considering the different needs and skin conditions of each individual [1]. And this proposal by Fernandes et al. [1] has contributed to the consolidation of facial Shiatsu as a legitimate therapeutic modality, capable of integrating physical and energetic aspects in the search for skin health and beauty. While the systematic approach presented in the study suggested that regular incorporation of facial Shiatsu into the routine can be an effective and holistic strategy for the prevention and treatment of wrinkles.

Facial Shiatsu has therefore emerged as a promising, non-invasive tool for promoting skin health and treating wrinkles. And with the eagerness to deepen our understanding of the effectiveness of this ancient practice, as proposed by Fernandes [1], new horizons have been opened up for more natural aesthetic interventions in line with the contemporary search for holistic approaches to caring for the body and mind.

3.2 The Application of Shiatsu in Surgical Patients

The application of Shiatsu in the surgical context was highlighted in the review carried out by Kamei [2], offering an in-depth look at how this ancient practice can be integrated as a complementary tool in post-operative care. By exploring the research [2], one is led to a more holistic understanding of Shiatsu and its specific benefits for patients who have undergone surgical procedures. Kamei's research [2] emphasised that Shiatsu, when applied appropriately and adapted to the patient's conditions, contributed to post-surgical recovery. And one of the main points addressed was Shiatsu's ability to promote muscle relaxation and relieve tension, essential factors for patients who may face discomfort and stiffness after a surgical procedure [2]. His analysis also highlights that Shiatsu can positively influence the autonomic nervous system, promoting a balance between the sympathetic and parasympathetic states [2]. This balance is fundamental for optimising the body's responses to surgery and favouring an internal environment conducive to healing and recovery [2].

The review also emphasised the importance of a personalised approach to the use of Shiatsu in surgical patients, taking into account the specificities of each intervention and individual health conditions [2]. And when taking post-operative pain into account, it was highlighted that Shiatsu can be a valuable tool in managing this

symptom [2]. Because the stimulation of specific points and the promotion of vital energy circulation, as recommended by Shiatsu, can contribute to a reduction in the perception of pain and, consequently, to a more peaceful recovery [2]. In addition, their research proposed that the application of Shiatsu in surgical patients goes beyond the physical benefits, reaching emotional and psychological aspects. Since the therapist-patient interaction and the promotion of a calmer mental state can positively influence post-operative coping and the patient's quality of life [2].

Kamei's proposal [2] contributed significantly to understanding Shiatsu as a valuable intervention in integrative medicine, and his review highlighted not only the physiological benefits, but also the positive impacts on the patient's overall experience in the surgical context.

Therefore, his review [2] offered a comprehensive view of the application of Shiatsu in surgical patients. Mainly by considering its physical, emotional and psychological benefits, opening up space for the effective integration of Shiatsu as a complementary practice in post-operative care, and providing a more complete and humanised approach to surgical recovery.

3.3 Effects of Shiatsu Manual Therapy on Fibromyalgia

Fibromyalgia is a condition characterised by generalised pain and tenderness in the muscles, tendons and ligaments. The study by Kimura et al. [3] looked at the application of Shiatsu as a manual therapy for patients with fibromyalgia, highlighting the positive effects of this ancient technique in improving the symptoms associated with this pain syndrome.

Because fibromyalgia is a challenging condition to treat, conventional methods often have limitations. However, Shiatsu, as discussed [3], has emerged as a promising alternative, as it is a manual therapy based on pressure and manipulation of specific points, proving effective in reducing pain and increasing quality of life for fibromyalgia patients. Since its authors highlighted case studies that illustrated the beneficial effects of Shiatsu in fibromyalgia, and showed results that indicated a significant improvement in pain, sleep quality and the functional capacity of patients. This holistic approach, advocated by the authors, highlighted the fundamental role of Shiatsu not only in pain

management, but in promoting the overall well-being of individuals affected by fibromyalgia [3].

This pathology, often associated with a cycle of persistent pain, leads to emotional and mental complications, and Shiatsu, as addressed by the study [3], not only relieved physical pain, but also positively influenced the patients' emotional state. What's more, its integrative components have made it, as a therapeutic technique, a valuable option for addressing the multifaceted aspects of fibromyalgia. And by incorporating the Shiatsu approach into the treatment of fibromyalgia, healthcare professionals offer a complementary alternative to conventional methods, since specific manual pressure on meridian points, as proposed by Kimura et al. [3] stimulated not only the physical response, but also promoted a sense of relaxation and balance, essential for patients facing persistent challenges.

That said, the research [3] has highlighted the beneficial effects of Shiatsu on fibromyalgia, offering a valuable perspective for the management of this complex condition, mainly by integrating Shiatsu manual therapy into treatment protocols, which allows healthcare professionals to explore a broader and more integrative approach to improving the quality of life of their fibromyalgia patients. This technique, as evidenced in this study [3], not only treated physical symptoms, but also promoted emotional well-being, proving to be a valuable tool in the context of holistic physiotherapy.

3.4 Shiatsu Expressed as a Way of Reducing Workers' Tensions

Express Shiatsu, as studied by Liberato [4], was presented as a specific Shiatsu modality aimed at reducing tension in workers. Contemporary life, marked by intense demands and a fast pace, often results in occupational stress, negatively impacting the physical and mental health of professionals [4]. The research [4] explored how this quick and efficient form of Shiatsu can be applied as a strategy to relieve tension arising from the work environment, highlighting the effectiveness of the technique as a practical and accessible intervention to promote relaxation and relieve stress associated with the work environment [4]. By focussing on specific points during short sessions, this approach has allowed Shiatsu to be efficiently integrated into the occupational routine, without demanding a significant amount of time from workers.

Liberato [4] also pointed out that Express Shiatsu not only provided physical benefits, such as

reducing muscle tension, but also positively influenced the mental state of the workers, and its rapid application during breaks, as proposed in the study, offered a valuable moment of relaxation, contributing to improving the overall well-being of the professionals. Furthermore, the research showed that the implementation of Shiatsu Expresso may have had a positive impact on the dynamics of the work environment [4]. Above all, by offering an effective strategy for relieving tension, organisations have created a healthier and more productive environment. And this aspect was particularly relevant in contexts where occupational stress led to a decrease in performance and job satisfaction.

By incorporating Express Shiatsu as a regular practice, workers were able to experience not only immediate relief from tension, but also cumulative benefits over time [4]. This preventative approach highlighted the importance of considering Shiatsu not just as a reactive therapy, but as a proactive tool in the promotion of occupational health [4].

Finally, the research [4] emphasised Express Shiatsu as an effective strategy for reducing occupational stress, where it provides both physical and mental benefits. This specific Shiatsu modality stood out as a practical and viable approach for integrating therapeutic principles into the challenging context of the contemporary workplace. Express Shiatsu has therefore emerged as a valuable tool for promoting the health and well-being of workers, demonstrating its relevance in the field of physiotherapy [4].

3.5 Applying Energetic and Shiatsu Therapies to an Individual with Anxiety

The study [5] explored the combined application of energy therapy and Shiatsu as an innovative approach for individuals facing anxiety. Since anxiety is a prevalent condition in contemporary society, the search for effective therapeutic interventions is constant. And in this context, research [5] has offered valuable learnings about the effectiveness of this particular combination of therapeutic approaches. Firstly, in the holistic approach to energy therapy, such as that cited by the study, in which its focus on manipulating and channelling the body's energy to promote internal balance was highlighted [5]. And secondly, by combining this practice with Shiatsu, which is a therapeutic technique based on pressure on specific points, which aims to address both the physical and energetic aspects related to anxiety. Lima & Cardoso [5] point out that combining these

therapies can have a synergistic effect, maximising the individual benefits of each approach. Since energy manipulation, combined with the precise application of Shiatsu pressure, aims to unblock stagnant energy flows, providing a sense of balance and relaxation.

The research also emphasised that anxiety is sometimes associated with autonomic and energetic imbalances in the body [5]. Therefore, a joint application of energy and Shiatsu therapies would aim to restore this balance, positively influencing anxiety-related symptoms, making this holistic approach fundamental to understanding and addressing the complexities of anxiety, going beyond the purely physical aspects [5].

Another relevant point explored [5] was the adaptation of therapies according to the patient's needs, through personalised treatment, taking into account specific symptoms and responses, but always standing out as a distinctive feature of this combined therapeutic approach. This personalisation is fundamental, especially when dealing with complex conditions such as anxiety. Furthermore, the research emphasised the importance of integrating these therapies into broader mental health care approaches, and also proposed that this therapeutic combination should not be seen as an isolated solution, but rather as an integral part of a comprehensive care plan, which can include medical, psychological and lifestyle interventions [5].

In this vein, the study [5] highlighted the effectiveness of the joint application of energy therapies and Shiatsu in the treatment of anxiety, as this innovative approach offered a valuable perspective for physiotherapy professionals, emphasising the importance of considering different therapeutic modalities and their combination to address complex conditions such as anxiety.

3.6 The Benefits of Watsu Shiatsu for Quality of Life

The article [6] highlighted the benefits of the practice of Watsu Shiatsu in improving quality of life, as a therapeutic modality combined between elements of hydrotherapy and the principles of Shiatsu, in order to propose a unique and promising approach to promoting general well-being. Their review [6] emphasised the importance of the aquatic environment, due to its comforting and gentle nature, which provides a favourable setting for therapeutic practice, favouring the release of physical and emotional tensions, and for creating an environment that

facilitates mobility and reduces impact on the joints, making it especially beneficial for those facing physical challenges.

Machado [6] emphasised that combining aquatic therapy with the principles of Shiatsu would enhance the therapeutic effects, as contact with water allows greater freedom of movement and enables the application of specific Shiatsu techniques in a more fluid and relaxing way. And that this integration of aquatic elements with the pressure on specific points characteristic of Shiatsu would aim to promote a deep state of relaxation.

In addition, their review pointed to the positive effects of Watsu Shiatsu in relieving chronic pain, especially in cases of musculoskeletal conditions [6], especially by combining floating in water with specific manipulation of pressure points during the Watsu Shiatsu session to contribute to reducing muscle tension and promoting blood circulation, relieving painful symptoms, as well as associating it with emotional benefits, highlighting that immersion in water and the application of Shiatsu can result in a reduction in stress and anxiety [6]. The relaxing nature of the aquatic environment, combined with the therapeutic techniques of Shiatsu, create a holistic experience that addresses both physical and emotional aspects.

Machado [6] also stressed the importance of physiotherapy professionals considering Watsu Shiatsu as a therapeutic alternative, especially for those looking for innovative and integrative approaches, suggesting that including the technique in rehabilitation and health promotion programmes could expand the therapeutic options available, benefiting different audiences.

Therefore, the review [6] highlighted the numerous benefits of the practice of Watsu Shiatsu for quality of life, highlighting the effectiveness of this integrative approach, as well as emphasising the relevance of considering and adapting different therapeutic methods, such as Watsu and Shiatsu, in the context of physiotherapy, to provide more comprehensive and promising views and techniques for professionals and patients.

3.7 Shiatsu as an Alternative Therapy for Work-Related Musculoskeletal Disorders

Masselli [7] conducted a significant study evaluating the role of Shiatsu as an alternative

therapy for sufferers of work-related musculoskeletal disorders, which revealed an important gap in exploring non-conventional approaches to treating conditions related to work-related illnesses, in order to broaden the therapeutic options available for this specific group of patients. In addition to highlighting their effectiveness in improving the quality of life of individuals facing musculoskeletal disorders, often associated with work activities. Because its application, such as pressure on key points, has shown positive results in relieving pain and increasing the physical functionality of these patients [7]. He also observed that Shiatsu, by acting directly on points of tension and muscle imbalances, contributed to restoring the body's homeostasis, emphasising the importance of considering holistic approaches, such as Shiatsu, not only to treat specific symptoms, but also to promote the general balance of the organism [7].

His research [7] also emphasised the preventative nature of Shiatsu in relation to work-related musculoskeletal disorders. By suggesting the integration of Shiatsu as part of occupational prevention programmes, workers could benefit from an approach that aims to reduce the incidence of injuries and discomfort associated with specific work demands. As well as pointing out the positive effects of Shiatsu in promoting relaxation and reducing stress in workers who have faced these challenging labour conditions, since the emotional dimension of treatment is fundamental, especially when chronic stress can contribute to the aggravation of musculoskeletal disorders. This is why the inclusion of Shiatsu as an alternative therapy was recommended by Masselli [7] not only for individuals already affected by musculoskeletal disorders, but also as a preventative measure in work environments prone to these conditions, emphasising the importance of a comprehensive approach that considers not only the physical manifestation of the disorders, but also emotional and preventative factors.

Therefore, the study [7] made a significant contribution to understanding the role of Shiatsu as an alternative therapy in occupational contexts, as it highlighted the relevance of considering non-conventional therapeutic approaches in health promotion and the prevention of work-related musculoskeletal disorders, emphasising the potential of Shiatsu as a valuable tool in this specific scenario.

3.8 Application of Shiatsu as an Adjunct in the Treatment of Cerebral Palsy

The authors of the study [8] explored the application of Shiatsu as an adjunct in the treatment of cerebral palsy, highlighting an unconventional approach to dealing with this complex neurological condition, offering valuable observations on how Shiatsu therapy can play a significant role in supporting the traditional treatment of cerebral palsy, and in order to contribute to a more comprehensive and integrative approach. With this research having observed the utmost value in considering complementary therapies in the context of cerebral palsy treatment, recognising the unique challenges these patients face, highlighting Shiatsu's ability to promote energy balance and improve the quality of life of these individuals by offering an innovative perspective in the field of neurological rehabilitation [8].

When addressing cerebral palsy, Silva & Maturana [8] observed that Shiatsu can be integrated as part of a broader treatment plan, since specific Shiatsu techniques, such as pressure on key points and gentle manipulations, were explored as ways to relieve discomfort, improve blood circulation and promote a general sense of well-being, emphasising the importance of a personalised approach when applying Shiatsu in the context of cerebral palsy. In such a way that it is understood in this treatment system that each patient has a unique demand, especially when pointing out the need to adapt Shiatsu techniques according to the specific characteristics of each case, considering the severity of symptoms and individual needs [8].

The research also showed that by integrating Shiatsu as an adjunct therapy, it was possible to improve the functional and emotional aspects of patients with cerebral palsy, emphasising that this approach is not intended to replace conventional methods, but rather to complement them, providing additional benefits that can contribute to a better quality of life [8]. It also points to the positive effects of Shiatsu in reducing stress and promoting relaxation, fundamental aspects for individuals with cerebral palsy, who often face significant emotional challenges. For this reason, the inclusion of Shiatsu as part of the treatment sought to address not only the physical aspects, but also the emotional aspects of this neurological condition [8].

Thus, the study by Silva & Maturana [8] highlighted the relevance of Shiatsu as an adjunct therapy in the treatment of cerebral palsy, offering an integrative and comprehensive perspective, mainly by highlighting its importance in considering non-conventional approaches to enrich existing treatment plans, recognising the potential of Shiatsu as a valuable tool in promoting well-being and improving the quality of life of patients with cerebral palsy.

3.9 Emotional Shiatsu Applied to Reichian Body Levels

In their research, the authors [9] offered a unique perspective by exploring emotional Shiatsu and its application to Reichian body levels, highlighting the interconnection between emotions and the body's physical responses, and proposing therapeutic approaches aimed at harmonising these aspects. In order to investigate the principles of Reichian therapy, an effective integration of this with Shiatsu practices was proposed to promote the emotional and physical balance of patients [9]. Emotional Shiatsu is based on understanding emotions as bodily manifestations, and its techniques are then aimed at releasing emotional blockages, promoting greater bodily awareness and emotional well-being [9]. This is why his research emphasised the importance of addressing not only physical symptoms, but also the emotional roots of imbalances, in line with the fundamental principles of Reichian therapy.

His research [9] also emphasised the need for a holistic assessment when applying emotional Shiatsu, considering not only the physical aspects but also the patient's emotional states. This is guided by an approach that aims not just to treat specific symptoms, but to promote an integral transformation, recognising the interdependence between body and emotions [9]. And by integrating Reichian body principles with Shiatsu practices is proposed an approach that aims to unblock emotional patterns that can manifest as physical tensions. This synergy between therapies offers a unique opportunity to work with the body as a whole, considering the physical and emotional dimensions in an integrated way [9].

The research also highlighted practical cases in which emotional Shiatsu was applied to Reichian body levels, and in which it had a positive impact on promoting emotional and physical balance. Silva & Volpi [9] also present case studies that

illustrate how this approach can be effective in reducing stress, promoting self-awareness and improving quality of life.

In this way, the study [9] offered an innovative vision by exploring emotional Shiatsu and its integration with Reichian body levels, through research that highlighted the importance of considering emotional dimensions in the context of physical treatment, contributing to a more comprehensive and integrative therapeutic approach.

3.10 The Use of Shiatsu as a Complementary Tool for Reducing Physical Fatigue in Nursing Workers

According to Yamada [10] there is a specific look at the application of Shiatsu as a complementary tool for reducing physical fatigue in nursing workers, and in his research he addressed the physical and emotional demands faced by these professionals, proposing Shiatsu as an effective strategy for relieving fatigue and promoting well-being, as he recognised the particularities of the working environment of nursing professionals, highlighting the physical challenges arising from long working hours and intense activities. In her study, she highlighted the potential of Shiatsu as a support tool to relieve muscle tension, improve blood circulation and reduce the physical fatigue associated with work activities [10]. To this end, he proposed applying Shiatsu as a complementary tool, in an effort to emphasise the importance of considering the specific needs of nursing workers, and, in this vein, Shiatsu techniques were adapted to meet the demands of the hospital environment, providing effective relief from fatigue and promoting a general feeling of relaxation [10].

That said, his research highlighted the relevance of Shiatsu not only as a therapeutic approach, but also as a preventative measure. And by integrating Shiatsu into the regular practices of nursing professionals, it suggested that it is possible to reduce the impact of physical fatigue in the long term, in order to contribute to the sustainability of the health of these workers [10]. In addition, the study highlighted the positive effects of Shiatsu in reducing emotional stress, an additional factor that contributes to physical fatigue. It also noted how Shiatsu can positively influence the psychological well-being of nursing professionals by creating a holistic approach that considers both physical and emotional aspects.

Therefore, the research [10] highlighted the specific application of Shiatsu as a complementary tool for reducing physical fatigue in nursing workers, and managed to obtain, through its study, valuable learnings about how Shiatsu can be integrated into daily practices to promote the health and well-being of these professionals, contributing to a comprehensive approach to fatigue management in the working environment of this profession.

As a result, the 10 subtopics in this session formed an initial basis for building a comprehensive theoretical framework, highlighting some of the diversity of Shiatsu's applications and its contributions to holistic approaches to health. Since each selected national study offered a unique perspective, together with the other international studies cited in the results and discussions below, they contributed to a more complete understanding of the benefits of Shiatsu in different contexts.

4. RESULTS

We identified 42 studies using the expression "Shiatsu" on the PubMed portal, as well as on the Scielo Brasil and Google Scholar databases. Of the 42 studies, 19 were related to Scielo Brasil, 13 to PubMed and 10 to Google Scholar. The criterion of complete reading was established only for articles published between 2004 and 2023 which dealt with the subject of Shiatsu.

After a thorough analysis of these publications and the application of exclusion criteria, 8 articles were selected from Scielo Brazil, 8 from PubMed and 4 from Google Scholar, totalling 10 titles of interest. As for the methodology used, 4 were Systematic Reviews, 1 was a Case Analysis, 7 were Case Studies, 2 were Literature Reviews, 1 was a Randomised Pilot Study and a Cross-over Study, 1 was a Non-Randomised Controlled Study, 1 was a Quantitative Study and 3 were a Cross-Sectional Quantitative Study (see Table 1). Within the scope of this study, there was a significant concentration of research on Shiatsu in the south-east (6) and south (5) regions. Furthermore, of the 11 studies selected, 8 were scientific articles and 3 were specialised monographs, while the 9 international scientific articles were distributed in Indonesia (1); France (1); Canada (2); Austria (2); England (3); Spain (1) and Taiwan (1), so that 1 of the articles covered 3 countries at the same time.

All this research centred on the polynomial that converged on the benefits of shiatsu for a holistic

approach to health; the origin and historical evolution of shiatsu in the world; the fundamental principles and techniques of shiatsu; the indications and contraindications of shiatsu therapy and the therapeutic benefits of shiatsu for the mind and body. It was also observed that the majority of publications related to this theme occurred in the years 2004 (2), 2005 (1), 2008 (1), 2009 (1), 2010 (1), 2011 (1), 2012 (2), 2013 (1), 2014 (1), 2018 (2), 2021 (2), 2022 (3) and 2023 (2), as shown in Table 1.

Based on Table 1, it can be analysed that in the systematic review carried out [2] on the application of Shiatsu in surgical patients, there was an emphasis on reducing stress and preoperative anxiety, as well as highlighting Shiatsu's ability to promote muscle relaxation and stimulate blood circulation, crucial aspects for improving patients' general well-being. Silva & Maturana [8] corroborated these results when they reported a case of Shiatsu being used as an adjunct in the treatment of cerebral palsy, showing a reduction in stress and an increase in the feeling of well-being in patients with complex neurological conditions.

However, Masselli [7] highlighted the impact of occupational stress on sufferers of work-related musculoskeletal disorders, presenting Shiatsu as an effective alternative therapy in these cases, as his research pointed to Shiatsu's ability to relieve muscle tension and promote the release of accumulated toxins, resulting in a significant improvement in the quality of life of workers. While Lima & Cardoso [5] discussed the application of energy therapies, including Shiatsu, in individuals with anxiety, who emphasised the importance of energy balance in the body for reducing stress and anxiety, noting that Shiatsu plays a fundamental role in promoting this balance, resulting in a general feeling of relaxation and tranquillity.

In line with these findings, Yamada [10] emphasised the role of Shiatsu as a complementary tool for reducing the physical fatigue of nursing workers in a hospital unit, as his research highlighted Shiatsu's ability to restore energy balance and improve blood circulation, which in turn contributed to reducing physical and emotional stress, especially in healthcare workers subject to high levels of demand and pressure. On the other hand, Fernandes et al. [1] addressed the use of facial Shiatsu for the prevention and treatment of wrinkles. Although their main focus was not directly related to overall stress, they

Table 1. Presentation of scientific publications on Shiatsu with authors' names, years of publication, journal names, methodological approaches and main findings (continued)

Author	Year	Source	Type of publication	Study site	Relationship with the research objectives	Methodological approach	Main findings
Maria et al. [14]	2023	Jurnal Kesmas Asclepius	Article	Lubuklinggau (Indonesia)	Yes	Cross-sectional/ Quantitative study.	The aim was to determine the effectiveness of shiatsu therapy on postoperative anxiety in menopausal women.
Bernardinelli et al. [16]	2023	Rheumatol T. Journal	Article	Orleans, France	Yes	Pilot randomised cross-over study.	It evaluated the effectiveness of Shiatsu on fatigue in patients diagnosed with Axial Spondyloarthritis
Machado [6]	2022	Federal University of Ouro Preto	Monograph	Minas Gerais	Yes	Systematic Review	He emphasised the influence of Watsu Shiatsu on the quality of life of practitioners.
Silva & Volpi [9]	2022	25th Brazilian Congress of Body Psychotherapies	Article	Paraná	Yes	Case Analysis	It showed the impact of emotional Shiatsu on Reichian body aspects.
Yamada [10]	2022	Federal University of Santa Catarina	Article	Santa Catarina	Yes	Case Studies	It showed the effectiveness of Shiatsu in reducing physical fatigue in nursing workers.
Brown et al. [13]	2021	Journal of Military, Veteran and Family Health	Article	Toronto and Alberta (Canada)	Yes	Non-Randomised Controlled Study	It examined the prescribed intervention of HSS (Hand self-shiatsu) to improve sleep.
Kimmel & Irran [15]	2021	Phenomenology and the Cognitive Sciences	Article	Vienna (Austria)	Yes	Literature Review	Shiatsu was seen as a multidirectional, large-scale mediation and illustrated a systemic multiplex network of tools that can interpenetrate, modulate and complement each other in alliances.
Cabo et al. [11]	2018	International Journal of Therapeutic Massage and Bodywork	Article	London (England) and Toronto (Canada)	Yes	Systematic Review	It questioned the appropriateness of using acupressure studies as evidence of shiatsu's effectiveness. And the understanding of the effectiveness of shiatsu.
Fernandes et al. [1]	2018	Health in Focus Magazine	Article	Minas Gerais	Yes	Literature Review	He presented the use of facial Shiatsu to prevent and treat wrinkles.
Kamei [2]	2014	University of São Paulo School of Nursing	Monograph	São Paulo	Yes	Systematic Review	He emphasised the use of Shiatsu in surgical patients.

Table 1. Presentation of scientific publications on Shiatsu with authors' names, years of publication, journal names, methodological approaches and main findings (continued)

Author	Year	Source	Type of publication	Study site	Relationship with the research objectives	Methodological approach	Main findings
Yuan et al. [18]	2013	Journal of Manipulative and Physiological Therapeutics	Article	São Paulo	Yes	Cross-sectional/ Quantitative study.	It demonstrated the potential of Shiatsu to improve pain intensity, sleep quality and the impact of symptoms on the health of fibromyalgia patients. As well as proposing Shiatsu as a viable treatment protocol that is well accepted by patients.
Kimura et al. [3]	2012	Cesumar, Maringá - Paraná	Article	Paraná	Yes	Case Studies	To demonstrate the beneficial effects of Shiatsu on fibromyalgia through case studies.
Lima & Cardoso [5]	2012	Dr Otávio Martins de Toledo Magazine	Article	São Paulo	Yes	Case Studies	It showed the application of energy therapies and Shiatsu in individuals with anxiety.
Robinson et al. [12]	2011	BMC Complementary and Alternative Medicine	Article	London (England)	No	Systematic Review	The evidence for shiatsu as a therapy is improving in quantity, quality and reporting.
Masselli [7]	2010	Pain Magazine. São Paulo	Article	São Paulo	Yes	Case Studies	He presented Shiatsu as a therapeutic alternative for work-related musculoskeletal disorders.
Long et al. [19]	2009	Complementary Therapies in Medicine	Article	Austria, Spain and England	Yes	Case Study	By applying typology in their trans-European shiatsu study, they found that shiatsu is a safe modality.
Yeh et al. [20]	2008	Journal of Manipulative and Physiological Therapeutics	Article	Taipei (Taiwan)	Yes	Case Study	The cases analysed suggest that CMAT acupressure therapy of the collateral meridian (shiatsu) can be effective in reducing post-LC shoulder tip pain without medication. Observed through a reduction in pain associated with painful shoulder skin temperature with CMAT.
Ingram et al. [17]	2005	Complementary Therapies in Medicine	Article	Bristol (England)	yes	Quantitative study.	It showed that post-term women who used shiatsu were significantly more likely to labour spontaneously than those who did not.
Liberato [4]	2004	Federal University of Paraná	Monograph	Paraná	Yes	Cross-sectional/ Quantitative study.	He emphasised Express Shiatsu as a way of reducing the number of workers.
Silva & Maturana [8]	2004	North University of Paraná	Article	Paraná	Yes	Case Study	She described the use of Shiatsu as an adjunct in the treatment of cerebral palsy.

highlighted Shiatsu's ability to promote facial relaxation and improve local circulation, aspects that were indirectly contributory to reducing physical and emotional stress.

This research into the benefits of Shiatsu for a holistic approach to health has also revealed a wealth of perspectives among the various authors, each of whom has made a unique contribution to understanding this therapeutic practice. Initially, Cabo et al. [11] questioned the appropriateness of using acupressure studies as evidence of Shiatsu's effectiveness, emphasising the need for a more in-depth understanding of this therapy. Meanwhile, Robinson et al. [12] through a systematic review, strengthened the evidence for Shiatsu as a therapy, noting quantitative and qualitative improvements over time. And Brown et al. [13] in a non-randomised controlled study, examined the prescribed intervention of Hand Self-Shiatsu (HSS) for sleep improvement, expanding the practical applications of Shiatsu. Maria et al. [14] in a cross-sectional/quantitative study, focussed on the effectiveness of Shiatsu on post-operative anxiety in menopausal women, reinforcing the applicability of this technique in specific contexts. Kimmel & Irran [15], in a literature review, saw Shiatsu as a multidirectional mediation, illustrating a systemic multiplex network of tools that can interpenetrate and complement therapeutic alliances. Furthermore, Bernardinelli et al. [16] through a randomised, crossover pilot study, evaluated the effectiveness of Shiatsu on fatigue in patients with Axial Spondyloarthritis, providing specific evidence on the clinical applicability of this technique in rheumatological conditions.

Along the same lines, Yuan et al. [17] in an article in the Journal of Manipulative and Physiological Therapeutics, demonstrated the potential of Shiatsu to improve pain intensity, sleep quality and symptom impact in fibromyalgia patients, proposing Shiatsu as a viable treatment protocol. Also, Long et al. [18] in an article in Complementary Therapies in Medicine, applied typology in their trans-European study of Shiatsu, concluding that Shiatsu was a safe modality, broadening the understanding of the safety aspects of this technique. Furthermore, Yeh et al. [19] in an article in the Journal of Manipulative and Physiological Therapeutics, suggested that collateral meridian acupressure therapy (Shiatsu) can be effective in reducing post-CL pain, providing a valuable perspective on the effectiveness of Shiatsu in specific contexts. Furthermore, Ingram et al. [20] in an article in

Complementary Therapies in Medicine, show that post-term women who used Shiatsu were significantly more likely to labour spontaneously than those who did not, highlighting the application of Shiatsu in obstetric contexts.

In conclusion, analysing these studies together revealed a convergence of perspectives on the benefits of Shiatsu for a holistic approach to health. The authors, although diverse in their methodological approaches and specific themes, shared the view that Shiatsu not only offers short-term benefits, but also encompasses a holistic approach in the quest for skin health and beauty. Since Shiatsu's clinical application extends from specific conditions, such as fibromyalgia and Axial Spondyloarthritis, to emotional and aesthetic aspects. This convergence of perspectives reinforces the validity of the authors' proposal regarding the consolidation of Shiatsu as an effective and integral therapeutic practice [1-20]. Taken together, the studies reviewed presented a unanimous view of Shiatsu's ability to promote relaxation, energy balance and general well-being, suggesting that this therapy can be a valuable holistic approach to mitigating stress and other human pathologies caused or not by it. The variety of contexts in which Shiatsu has been shown to be effective emphasises its adaptability and versatility as a complementary therapy in various health scenarios [1-20].

5. DISCUSSION

For the discussion of this research, it was borne in mind that the analysis of Shiatsu therapy proposed in this work is multifactorial and has several prisms, which are extremely relevant to the problem analysed. This being the case, in this section, the different categories have been analysed: the origin and historical evolution of Shiatsu in the world; the fundamental principles and techniques of Shiatsu; the indications and contraindications of Shiatsu therapy, as well as the therapeutic benefits of Shiatsu for the mind and body, as can be seen in each of the four subsections below:

5.1 The Origin and Historical Evolution of Shiatsu in the World

The origin and historical evolution of Shiatsu around the world is a milestone in understanding the philosophical basis and development of this ancient therapeutic practice. Among the authors cited, Fernandes et al. [1] addressed facial Shiatsu, highlighting the application of this specific

technique, which dates back to ancestral healing practices in the Far East, and also emphasised the cultural and traditional heritage associated with Shiatsu therapy, recognising its deep roots in Japanese culture. Kamei [2] highlighted in his systematic review the historical origin of Shiatsu as a form of manual therapy that has its roots in traditional Chinese medicine and Japanese anma massage, and discussed the evolution of Shiatsu over the centuries, emphasising its adaptation and integration into various contemporary therapeutic practices. Similarly, Kimura et al. [3] contextualised the historical origins of this manual therapy technique and its evolution as an effective pain relief practice, and also stressed the importance of Shiatsu's historical foundations in understanding its effectiveness in treating chronic conditions. In addition, Liberato [4] referred to the historical origin of Shiatsu as a traditional therapy and suggested that the practice of Shiatsu is rooted in ancient oriental healing and relaxation traditions. In turn, he emphasised the evolution of Shiatsu to adapt to new techniques and current therapeutic approaches, demonstrating its versatility and contemporary applicability. In addition, Maselli [7] presented Shiatsu as part of a holistic healthcare system with roots in traditional Chinese medicine, emphasising the continuity of Shiatsu practices throughout the ages and its role in promoting health and well-being today. As well as this, Silva & Maturana [8] address the ancestry of Shiatsu as a manual therapy based on principles of energy balance, highlighting its evolution as a current practice that complements conventional medical treatment. Silva & Volpi [9] also emphasised Shiatsu's historical roots in the Eastern understanding of the body and mind as an interconnected system. And Yamada [10] emphasised the importance of Shiatsu's history in understanding its contemporary applications as a complementary therapy that promotes relaxation and physical revitalisation, based on its historical origins as an energy balancing practice.

As can also be seen, this is a topic that is approached comprehensively by the authors, with each one offering a valuable perspective that has contributed to understanding this ancient therapeutic method. As can be seen from the findings of Maria et al. [14] in contributing a cross-sectional/quantitative study, which provided learnings about the effectiveness of Shiatsu on post-operative anxiety, connecting historical evolution with the contemporary demands of the practice; and Kimmel & Irran [15], in their literature review, who saw Shiatsu as a multidirectional

mediation, illustrating a systemic multiplex network of tools that have evolved over time to become a holistic approach. While Yuan et al. [17] in a cross-sectional/quantitative study, demonstrated the potential of Shiatsu to improve pain intensity, connecting the historical evolution of Shiatsu with the growing understanding of its effectiveness in specific conditions. Furthermore, Long et al. [18] applying typology in their trans-European study of Shiatsu, found that Shiatsu was a safe modality, highlighting the historical evolution of Shiatsu as a practice that has come to be recognised for its safety. Yeh et al. [19] in a case study, provided a historical overview of the application of Shiatsu in specific clinical contexts. As Morales et al. [21] by exploring the application of Shiatsu as an adjunct in the treatment of cerebral palsy, offered a contemporary perspective on the evolution of Shiatsu in the neurological field.

This joint analysis of studies revealed that the origins and historical evolution of Shiatsu are intrinsically linked to its adaptation over time, ranging from its traditional roots to its modern application in various health conditions. And this evolution has been marked by the constant search for evidence, methodological updates and a deeper understanding of Shiatsu as an integral therapeutic practice. Therefore, the analysis of the various studies indicated that the benefits of Shiatsu are intrinsically linked to an in-depth understanding of its historical origins and evolution over time. And the convergence of opinions among the authors emphasised the relevance of considering Shiatsu not only as a contemporary therapeutic practice, but also as a cultural legacy rooted in ancient traditions of healing and energy balancing.

5.2 The Fundamental Principles and Techniques of Shiatsu

The fundamental principles and techniques of Shiatsu form an essential basis for understanding the effectiveness and application of this ancient therapy. When reviewing the works of the aforementioned authors, it was possible to see a convergence of opinions regarding the central elements that define Shiatsu as a distinct therapeutic practice. In their review [1] on facial Shiatsu, they emphasised the importance of pressure and manipulation of the acupuncture points on the face to promote energy balance and stimulate blood circulation, highlighting the application of specific Shiatsu techniques in the aesthetic context. Similarly, Kamei [2], when

reviewing the application of Shiatsu in surgical patients, highlighted the importance of applying pressure to the meridians and specific points on the body to relieve pain, promote muscle relaxation and stimulate the circulatory system, emphasising the practical application of the fundamental principles of Shiatsu in the post-operative context. In line with these points, Kimura et al. [3] discussed the therapeutic effects of Shiatsu in fibromyalgia, emphasising the application of pressure and gentle stretches to restore energy balance and relieve chronic pain symptoms, highlighting the importance of Shiatsu principles in addressing complex musculoskeletal conditions. In the same vein, Liberato [4] when discussing Shiatsu expressed as a way of reducing strain on workers, emphasised the importance of Shiatsu's specific pressure and manipulation techniques to relieve muscle tension and promote a feeling of relaxation and well-being, demonstrating the practical application of Shiatsu's fundamental principles in the occupational context. Machado [6], in his review of the benefits of Watsu Shiatsu, emphasised the application of stretching, floating and pressure techniques in water to promote muscle relaxation and stimulate blood circulation, demonstrating the stimulation and adaptability of Shiatsu principles in therapeutic aquatic environments. Maselli [7], when discussing Shiatsu as a therapeutic alternative for work-related musculoskeletal disorders, emphasised the application of pressure and manipulation techniques to restore energy balance and relieve symptoms of pain and muscle tension, highlighting the importance of Shiatsu principles in addressing occupational conditions. In addition, Silva & Maturana [8], when describing the application of Shiatsu as an adjunct in the treatment of cerebral palsy, addressed the importance of applying pressure and manipulation to specific points on the body to stimulate energy balance and promote improved neuromuscular function, demonstrating the practical application of the fundamental principles of Shiatsu in complex neurological conditions. Similarly, Silva & Volpi [9], when discussing emotional Shiatsu applied to Reichian body levels, emphasised the importance of therapeutic manipulation to release emotional and energetic blockages, highlighting the application of the fundamental principles of Shiatsu in the context of psychosomatic therapy. Ratifying these findings, Yamada [10], when addressing the use of Shiatsu as a complementary tool for reducing physical fatigue in nursing workers, highlighted the application of pressure and stretching techniques to promote physical revitalisation and the relief of muscular

tension, emphasising the application of the practice of the fundamental principles of Shiatsu in the context of healthcare.

The fundamental principles and techniques of Shiatsu are also thoroughly covered by renowned international authors, providing an in-depth understanding of this oriental therapy. Since Cabo et al. [11] by questioning the appropriateness of using acupuncture studies as evidence of Shiatsu's efficacy, shed light on the importance of basing Shiatsu practices on solid principles. As well as Robinson et al. [12] in their systematic review, contributed by highlighting the technical evolution of Shiatsu over time, emphasising its practical application and the need for constant improvement. Brown et al. [13] explored the prescribed intervention of Hand Self-Shiatsu (HSS) to improve sleep, outlining specific techniques and applied principles, highlighting the clinical relevance of these fundamentals. And Maria et al. [14] in their cross-sectional/quantitative study, enriched the discussion by individualising treatment, connecting to the principles of traditional Chinese medicine and reinforcing the importance of personalisation in Shiatsu. Additionally, Kimmel & Irran [15], in their literature review, considered Shiatsu as a multidirectional mediation, illustrating a systemic multiplex network of tools that make up the foundations of this therapeutic practice. Like Bernardinelli et al. [16] by carrying out a randomised, cross-over pilot study, provided learnings on specific techniques applied in the context of patients with Axial Spondyloarthritis, highlighting the adaptation of Shiatsu to different clinical needs. In addition, Ingram et al. [20] in a quantitative study, offered evidence on the effectiveness of Shiatsu in promoting spontaneous labour, illustrating how Shiatsu techniques can have practical application in specific contexts. And Yuan et al. [17] in their cross-sectional/quantitative study, demonstrated the potential of Shiatsu to improve pain intensity, linking specific techniques to the therapeutic benefits observed. On the other hand, Long et al. [18] by applying typology in their trans-European Shiatsu study, explore the existing technical variations, enriching the understanding of Shiatsu principles in different cultural contexts. Furthermore, Yeh et al. [19] in a case study, suggested the effectiveness of collateral meridian acupuncture therapy (Shiatsu) in reducing post-CL pain, highlighting a specific application of these techniques in specific clinical cases. Similarly, Morales et al. [21] by exploring the application of Shiatsu as an adjunct in the

treatment of cerebral palsy, offered a practical understanding of how the fundamental principles of Shiatsu can be adapted for neurological conditions.

This joint analysis of studies has highlighted the richness and diversity of approaches to the fundamental principles and techniques of Shiatsu, emphasising its flexibility and adaptability in different clinical contexts. This variety of perspectives enriches the understanding of Shiatsu as a holistic therapeutic practice, supported by solid principles and techniques that can be adapted to the individual needs of patients. Thus, by analysing the perspectives of the different authors, it was possible to see agreement on the importance of pressure, manipulation and alteration techniques as the fundamental pillars of Shiatsu, demonstrating its applicability in a variety of therapeutic contexts in physiotherapy and traditional Chinese medicine.

5.3 Indications and Contraindications for Shiatsu Therapy

When discussing the indications and contraindications of Shiatsu therapy, the authors presented a comprehensive and detailed view of the applicability of this therapeutic practice: Fernandes et al. [1] discussed the effectiveness of this technique in preventing and treating wrinkles, highlighting the indication of Shiatsu as a non-invasive and natural approach to promoting skin health, with no significant contraindications; while Kamei [2], emphasised its effectiveness in promoting relaxation and pain relief, highlighting the indication of Shiatsu as a complementary therapy that can be applied in conjunction with other conventional treatments, as long as it is properly monitored by trained professionals; as well as Kimura et al. [3] who emphasised the importance of this therapy in reducing chronic pain and improving quality of life, noting that Shiatsu is an effective therapeutic option for patients with this condition, as long as it is adapted to the individual needs of each patient. Similarly, Liberato [4], highlighted the application of Shiatsu as a quick and effective relaxation technique, especially in stressful occupational environments, emphasising its indication for reducing muscle tension and promoting the general well-being of workers; Machado [6] in his review of the benefits of Watsu Shiatsu, highlighted the effectiveness of this therapeutic practice in promoting relaxation and improving quality of life, emphasising its indication for relieving stress and promoting emotional balance, especially in therapeutic

aquatic environments; and Maselli [7] emphasised the indication of Shiatsu as a non-invasive and safe therapeutic option for relieving pain and muscle tension in workers, provided it is applied by trained professionals.

Silva & Maturana [8] discussed the indication of Shiatsu as a complementary therapy that can help improve motor function and the general well-being of patients, as long as it is supervised by qualified professionals. Silva & Volpi [9] emphasised the importance of Shiatsu as a therapeutic technique that can promote the release of emotional and energetic blockages, favouring the mental and emotional balance of individuals. The same applies to Yamada [10], who emphasised the use of Shiatsu as an effective therapeutic approach for relieving stress and muscle fatigue, helping to promote the physical and mental well-being of healthcare professionals.

Another view of the indications and contraindications of Shiatsu therapy is comprehensively addressed by other international authors, providing an even more comprehensive view of the clinical application of this ancient technique. As reported by Robinson et al. [12] reported, in their systematic review, the growing evidence on the indications for Shiatsu, highlighting its applicability in various clinical conditions, while Ingram et al. [20] reinforced, through a quantitative study, that Shiatsu can be indicated for post-term women, favouring spontaneous labour. Brown et al. [13] when exploring the prescribed intervention of Hand Self-Shiatsu (HSS) to improve sleep, offered observations on specific indications for this technique, especially in the context of sleep disorders. As well as Maria et al. [14] who contributed by highlighting the individualisation of treatment, connecting to the principles of traditional Chinese medicine, which suggested that personalisation is crucial in facial Shiatsu indications. Additionally, Kimmel & Irran [15], viewed Shiatsu as a multidirectional mediation, addressing its application in various clinical situations, enriching the discussion on Shiatsu indications. At the same time, Bernardinelli et al. [16] by conducting a randomised, cross-over pilot study, provided insights into the specific indications of Shiatsu in the context of patients with Axial Spondyloarthritis, highlighting its application in rheumatic conditions. Confirming this trend, Yuan et al. [17] in their cross-sectional/quantitative study, demonstrated the potential of Shiatsu to improve pain intensity, linking specific indications to the therapeutic

benefits observed in patients with fibromyalgia. Like Long et al. [18] applied typology in their trans-European study of Shiatsu, enriching the discussion by exploring the indications for Shiatsu in different cultural contexts. Furthermore, Yeh et al. [19] in a case study, suggested that acupressure therapy of the collateral meridian (Shiatsu) may be indicated for reducing post-CL pain, providing a specific view of indication in diverse clinical cases. Morales et al. [21] who explored the application of Shiatsu as an adjunct in the treatment of cerebral palsy, offering a unique perspective on indications in neurological conditions.

And a comprehensive analysis of these studies has enabled a deeper understanding of the indications and contraindications of Shiatsu therapy, highlighting its versatility and adaptability to different clinical situations. This variety of perspectives enriches the understanding of Shiatsu as a holistic approach that can be customised to meet patients' individual needs. And in this sense, it was clear that, although the authors highlight the indications for Shiatsu in different therapeutic contexts at home and abroad, it was essential to consider the individualised assessment of each case and the supervision of qualified professionals to guarantee the safety and efficacy of this therapy.

5.4 The Therapeutic Benefits of Shiatsu for Mind and Body

The authors highlighted the therapeutic benefits of Shiatsu for the mind and body, emphasising its positive effects in different clinical and therapeutic contexts. Firstly, Fernandes et al. [1] addressed the beneficial effects of this technique in promoting skin health, highlighting its potential to stimulate blood circulation and promote facial muscle relaxation, which contributes to the reduction of wrinkles and expression lines, resulting in an improvement in the overall appearance of the skin; As well as Kamei [2] highlighted the positive effects of Shiatsu in promoting relaxation and reducing preoperative anxiety, emphasising its ability to promote emotional and physical well-being, which can contribute to a more peaceful and effective recovery after the surgical procedure; as well as Kimura et al. [3] emphasised the effectiveness of this therapy in reducing chronic pain and improving patients' quality of life, highlighting its positive effects in reducing fatigue and increasing the feeling of relaxation, which contributes to individuals' physical and mental well-being; and

Liberato [4] who highlighted the therapeutic benefits of Shiatsu in promoting relaxation and stress relief, highlighting its ability to improve alertness and promote a feeling of general well-being, which can contribute to reducing muscular and emotional tension. Machado [6] also highlighted the positive therapeutic effects of this practice in promoting relaxation and relieving muscle tension, emphasising its ability to promote emotional balance and contribute to a feeling of calm and tranquillity, which can be especially beneficial for individuals with high levels of stress. Maselli [7] emphasised the therapeutic effects of Shiatsu in reducing pain and improving joint mobility, highlighting its ability to promote muscle relaxation and relieve tension associated with musculoskeletal disorders. Complementary,

Silva & Maturana [8] emphasised the therapeutic benefits of Shiatsu in promoting motor function and improving postural balance, highlighting its ability to stimulate blood circulation and promote a feeling of relaxation and comfort. In this vein, Silva & Volpi [9] emphasised the therapeutic benefits of Shiatsu in promoting energetic and emotional balance, highlighting its ability to promote the release of emotional blockages and contribute to relieving stress and anxiety. At the same time, Yamada [10] emphasised the therapeutic effects of Shiatsu in promoting relaxation and improving physical and mental well-being, highlighting its ability to relieve muscle tension and contribute to reducing the stress associated with the work environment.

The therapeutic benefits of Shiatsu for the mind and body have also been addressed and discussed by renowned international researchers, offering a comprehensive view of the positive impact of this ancient practice on holistic health. As can be seen in the findings of Robinson et al. [12] who, when conducting a systematic review, highlighted the growing body of evidence supporting the benefits of Shiatsu as a complementary therapy, contributing to improved mental and physical health. Similarly, Brown et al. [13], when exploring the prescribed intervention of Hand Self-Shiatsu (HSS) to improve sleep, offered a specific perspective on the therapeutic benefits of Shiatsu for sleep quality, directly connecting the effects of this practice on the individual's mind. Furthermore, Kimmel & Irran [15] enrich the discussion by viewing Shiatsu as a multidirectional mediation, illustrating how this practice can modulate and complement cognitive and emotional aspects, contributing to a holistic approach to health. Bernardinelli et al. [16] by

carrying out a randomised, crossover pilot study, provided valuable conclusions about the therapeutic benefits of Shiatsu in the context of patients with Axial Spondyloarthritis, corroborating the idea that this therapy can positively impact both the mind and the body. Yuan et al. [17] by conducting a cross-sectional/quantitative study, demonstrated the potential of Shiatsu to improve pain intensity, sleep quality and the impact of symptoms on the mental health of fibromyalgia patients. In this sense, Long et al. [18] reinforced the safety of this therapeutic modality, contributing to the mental well-being of practitioners. Similarly, Yeh et al. [19] in a case study, suggested that acupressure therapy of the collateral meridian (Shiatsu) can be effective in reducing pain associated with mental health, highlighting how pain relief can positively influence the emotional state. And confirming the other authors, Morales et al. [21] by exploring the application of Shiatsu as an adjunct in the treatment of cerebral palsy, contributed to understanding the benefits for both mind and body in specific populations.

That said, it is known that the synthesis of these perspectives strengthens the understanding of the therapeutic benefits of Shiatsu, highlighting its effectiveness in promoting mental and physical well-being, consolidating it as a valuable therapeutic practice in the holistic approach to health. Particularly when considering these points of view, it was evident that Shiatsu has shown the potential to provide a range of benefits by promoting relaxation, stress relief and improved physical and emotional wellbeing. In such a way that its positive effects were especially relevant when dealing with the challenges faced in its various applied therapeutic situations, offering a holistic approach that optimised both the physical and mental health of patients.

6. CONCLUSION

After carefully analysing the scientific articles reviewed, it became clear that Shiatsu plays a fundamental role in promoting health and well-being, addressing not only physical issues, but also the emotional and mental ones of individuals. Knowledge of Shiatsu's origins and historical evolution provided a solid basis for understanding the cultural and philosophical richness underlying this ancient therapeutic practice, while the description of Shiatsu's fundamental principles and techniques allowed us to understand its practical application and underlying theoretical foundations. In addition, the discussion of

Shiatsu's indications and contraindications helped to identify the clinical scenarios in which this therapy can be particularly beneficial, ensuring that it is applied safely and effectively. And by deepening the understanding of Shiatsu's therapeutic benefits for the mind and body, as observed in the studies reviewed, it reinforced the importance of this treatment in reducing stress, relieving muscle tension and enhancing individuals' emotional well-being. The systematic review carried out in this research showed that Shiatsu has a wide range of therapeutic benefits, from improving blood circulation and muscle flexibility to reducing fatigue, stress and anxiety. The results indicated that the application of Shiatsu can be considered a holistic and integrative approach to promoting overall health and balance of body and mind. Therefore, when considering the findings discussed and cited in the various scientific articles analysed, it can be concluded that Shiatsu represents a valuable and effective tool in the context of physiotherapy and holistic health. Its ability to address both the physical and psychological aspects of individuals has highlighted the importance of integrating this therapy into wider healthcare practices. And the in-depth understanding of the fundamentals and benefits of Shiatsu have provided a solid basis for future research and clinical applications aimed at improving the quality of life and well-being of diverse populations.

CONSENT

It is not applicable.

ETHICAL APPROVAL

It is not applicable.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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