The use of integrative and complementary practices in the treatment of occupational stress: an integrative review
Uso de práticas integrativas e complementares no tratamento de estresse ocupacional: uma revisão integrativa
Uso de prácticas integradas y complementarias en el tratamiento del estrés ocupacional: una revisió integradora

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Keywords: Complementary Therapies; Professional exhaustion; Mind-Body Therapies
Palavras chave: Tera piас complementares; Esgotamento profissional; Terapias mente-cuerpo.
Palabras clave: Terapias Complementarias; Agotamiento Profesional; Terapias Mente-Cuerpo.

ABSTRACT

Objective: To synthesize the knowledge production related to the use of Integrative and Complementary Practices (PIC) in the treatment of occupational stress.

Method: Integrative Review, which had as its guiding question: what is the production of knowledge related to the use of PIC in the treatment of occupational stress published between 2003 and 2013?. The data was collected in the Lilacs and Medline databases using combinations of the following descriptors: "stress" with "complementary therapies", "floral medicines", "mind-body therapies", "sensory therapies through arts", "spiritual therapies, and "therapies under study".

Results: 48 articles were selected. The sorting of titles, summaries, reading assessment, and evaluation of complete texts were subsequently performed in stages. Out of all selected articles, 07 articles were analyzed and the following categories built: PIC as stress reducing therapies and other diseases; The use of PIC in the treatment of occupational stress; and Credibility in the use of PIC.

Conclusions: The integrative complementary practices have been used not only to reduce stress but also in reducing levels of anxiety and depressive symptoms, and relief of pain and binge eating. The
main PIC mentioned were: MSBR, CBRS, Kouk Sun Do, acupuncture, meditation, controlled breathing, yoga, and polarity therapy. The major cited reasons for its use were: reaching spiritual well-being and serenity, mood and sleep improvement, and compassion for others.

RESUMO

Objetivo: Sintetizar a produção do conhecimento relacionada à utilização das Práticas Integrativas e Complementares (PIC) no tratamento de estresse ocupacional.

Método: Revisão integrativa, que teve como questão norteadora: qual é a produção do conhecimento relacionada à utilização das PIC no tratamento de estresse ocupacional no período 2003 a 2013?. Para a coleta de dados utilizou-se as bases de dados: Lilacs e Medline, utilizando a combinação dos descritores “estresse” com “terapias complementares”, “medicamentos florais”, “terapias mente-corpo”, “terapias sensoriais através das artes”, “terapias espirituais” e “terapias em estudo”.

Resultados: 48 artigos foram selecionados. Posteriormente realizada, por etapas, a triagem dos títulos dos artigos, a avaliação dos resumos e a leitura e avaliação dos textos completos. Do total, 07 artigos foram analisados e construídas as categorias: As PIC como terapias redutoras de estresse e outras doenças; O uso das PIC no tratamento de estresse ocupacional e a Credibilidade no uso das PIC.


RESUMEN

Objetivo: Sintetizar la producción de conocimiento relacionado al uso de Prácticas Integradas y Complementarias (PIC) en el tratamiento del estrés laboral.

Método: Revisión integradora, que tuvo como pregunta guía: ¿cuál es la producción del conocimiento de las PIC relacionada al tratamiento del estrés laboral en el período de 2003 a 2013?. Para recolectar los datos se utilizaron las bases de datos Lilacs y Medline, utilizando la combinación de los descriptores “estrés” con “terapias complementarias”, “medicamentos florales”, “terapias mente-cuerpo”, “terapias sensoriales a través de las artes”, “terapia espiritual” y “terapias en estudio.”

Resultados: Se seleccionaron 48 artículos. Posteriormente se realizó por etapas la selección por los títulos de los artículos, evaluación de los resúmenes y el análisis y lectura de los textos completos. Del total, 07 artículos fueron analizados y construidas las categorías: Las PIC como tratamientos para reducir el estrés y otras enfermedades; El uso de las PIC en el tratamiento del estrés y La credibilidad en el uso de las PIC.

Conclusiones: Las PIC vienen siendo utilizadas no sólo para reducir el estrés, sino también en la reducción de los niveles de ansiedad, síntomas depresivos, alivio del dolor y en la compulsión alimentaria. Las principales PIC mencionado fueron: MSBR, CBRS, Kouk Sun Do, la acupuntura, la meditación, respiración controlada, el yoga y la terapia de polaridad. Citadas como las principales razones de su uso: el alcance del bienestar espiritual, serenidad, mejor estado de ánimo, la compasión por los demás y para mejorar el sueño.

INTRODUCTION

Since the origin of life, human beings and the environment live through incredible changes and alterations, which predispose to states of stress that are perceived as challenging, threatening, or harmful to the eco-human-work dynamic balance\(^1\). The word stress has been associated with feelings of discomfort and increasing numbers of people who define themselves with this disease. Conceptually, occupational stress is a process of stressors-responses in which workers experience demands of work as
stressors that are excessive to their coping skills, causing negative reactions\(^2\) and harm to the overall performance of individuals\(^3-5\).

Special attention has been given to the so-called occupational stressors, or referred to as tensors, arising from the exercise of a professional activity, resulting from the inability to cope with the sources of pressure at work, and bringing consequences to physical (hypertension, ulcers, and other diseases) and mental health, and job satisfaction problems\(^6,7\).

Fatigue, hypertension, discouragement, lack of appetite, weight loss, and loss of regular sleeping patterns are considered the main symptoms that can expand to mental anguish, depression, and extroversion. Individuals in this condition begin to neglect their families, decrease the pace at work, and have mood and behavior swings\(^8,9\).

Therefore, the need to develop coping strategies emerges with the purpose of providing improvement in the quality of life of individuals in situations of stress\(^10\).

Thus, the construction of the National Policy of Integrative and Complementary Practices within the Unified Health System\(^11\), which originated from the document *Traditional Medicine Strategy 2002-2005*, from the World Health Organization\(^12\), aims to combat the biomedical tecno-assistential rationalism through the following goals: (i) prevention of diseases and health promotion and recovery with emphasis on primary health care, based on continued, humanized, and integral health care; (ii) contribution to the increased resolution and expansion of access, guaranteeing quality, effectiveness, efficiency, and safety in its use; (iii) promotion and rationalization of health actions; and (iv) stimuli to actions of social control/participation promoting responsible and continued involvement of users, managers, and health workers.

Therefore, the Integrative and Complementary Practices (PIC) have been providing a possibility for improvement in the quality of life of individuals affected by several diseases, including stress, through various therapies with emphasis on homeopathy, phytotherapy, immunotherapy, touch therapy, Reiki, unlocking/alignment of chakras, artistic therapy, curative euritmia, relaxation, visualization, group exchange of coexistence experiences, meditation, and anthroposophical biographical work\(^12\). However, future studies are needed to strengthen the use of such therapies and exploration of their relationship with stress.

Hence, considering the growing concern around this problem, there is a need to seek scientific evidences that demonstrate forms of treatment for occupational stress and successful coping strategies. Thus, this study aims to synthesize the production of knowledge related to the use of Integrative and Complementary Practices in the treatment of occupational stress, published between 2003 and 2013.

**MATERIAL AND METHODS**

This was an integrative review type study based on six steps: drafting the guiding question; searching or sampling in the literature; data collection; critical analysis of included studies; discussion of results; and presentation of the integrative review. The sequence of these steps enabled the construction of conclusions through the synthesis of several studies for the understanding of the analyzed phenomenon\(^13\).
The guiding question for the development of this research was: what is the production of knowledge related to the use of Integrative and Complementary Practices for the treatment of occupational stress published between 2003 and 2013?

The eligibility criteria provided the inclusion of studies that focused on Integrative and Complementary Practices and studies with individuals over the age of 18 years who used PIC in the treatment of occupational stress, published between 2003 and 2013, and written in English, Spanish, and Portuguese. In order to reduce possible bias in the research results, studies presented as bibliographical revision, editorials, and reflexive theoretical studies that did not present research results were excluded.

Articles were searched at the Latin American and Caribbean Health Sciences Literature (Lilacs) and Medical Literature Analysis and Retrieval System on-line (Medline) databases through the Virtual Health Library – BVS access using the combination of the descriptor "stress" with the boolean operator and followed by each of the following descriptors: "complementary therapies", "floral medicines", "mind-body therapies", "sensory therapies through arts", "spiritual therapies, and "therapies under study", in English, Spanish, and Portuguese.

Table 1 shows the 48 articles found with their percentages.

**Table 1.** Percentages of articles in the databases of the Virtual Health Library-BVS. Aracaju Sergipe/2014.

<table>
<thead>
<tr>
<th>Descriptors</th>
<th>MEDLINE</th>
<th>%</th>
<th>LILACS</th>
<th>%</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mind-body and stress therapies</td>
<td>30</td>
<td>81.08</td>
<td>0</td>
<td>0</td>
<td>30</td>
<td>62.50</td>
</tr>
<tr>
<td>Complementary and stress therapies</td>
<td>1</td>
<td>2.70</td>
<td>8</td>
<td>72.73</td>
<td>9</td>
<td>18.75</td>
</tr>
<tr>
<td>Therapies under study and stress</td>
<td>1</td>
<td>2.70</td>
<td>1</td>
<td>9.09</td>
<td>2</td>
<td>4.17</td>
</tr>
<tr>
<td>Sensory therapies through arts and stress</td>
<td>1</td>
<td>2.70</td>
<td>1</td>
<td>9.09</td>
<td>2</td>
<td>4.17</td>
</tr>
<tr>
<td>Spiritual therapies and stress</td>
<td>4</td>
<td>10.81</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>8.33</td>
</tr>
<tr>
<td>Floral medicines and stress</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>9.09</td>
<td>1</td>
<td>2.08</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>37</td>
<td>100</td>
<td>11</td>
<td>100</td>
<td>48</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: research data
Subsequently, following the steps of the integrative review, the total number of articles were analyzed through titles sorting, abstracts assessment, and reading and evaluation of complete texts.

An instrument of the checklist type was used in the triage of titles, named as a screenplay for the selection of studies, composed of two parts: the first containing general data from each article (title of study, language, journal title, and year of publication), and the second part consisting of eight questions. These questions represent one of the following nomenclatures: Holistic health, complementary therapies, floral medications, Mind-body Therapies, Sensory therapies, therapies through arts, Spiritual Therapies, Therapies under studied?; Does it cite other types of complementary integrative practice?; Does it investigate the theme of nursing intervention in occupational stress using integrative complementary practices?; Does it mention the experiences or expectations of nurses on new integrative practices for reducing stress?; Does it approach complementary integrative practices such as: Reiki, massage therapy, auriculotherapy, acupuncture?; Does it describe new integrative complementary practices?; Does it offer integrative complementary practices that may be used in adults with a diagnosis of occupational stress?; and, Does it present samples of significant results?

This group of questions allowed the initial selection of articles; the selection criteria established that the title must answer to at least one of the questions described above. Thus, 40 articles were selected and 08 studies were excluded. In order to avoid erroneous exclusions, the studies with titles that did not fit completely the inclusion criteria were included. At that time, repeated studies were also removed.

In the second part, the analysis of abstracts, the checklist was reused to confirm the inclusion of articles in the study. Only abstracts that confirmed at least two questions were considered; 29 articles were eliminated and 11 were selected to participate in the next evaluative phase.

Four studies were excluded after reading and evaluating the 11 studies in full. The main rationale for this exclusion was that these studies showed no association between PIC and occupational stress.

Thus, the final sample was composed of 07 articles that complied with the guiding question and eligibility questions (Figure 1).
Figure 1. Flowchart of participants through the selection process.

1st Stage: Triage of titles
48 articles included

2nd Stage: Analysis of abstracts
40 articles included

3rd Stage: Reading and evaluation of complete texts: 11

Final sample: 07

It should be noted that, two nurses and one nursing student participated in the three evaluative moments for sample selection as reviewers of the selection and critical evaluation phases. These reviewers were trained at the beginning of the research through a pilot collection of studies concerning bibliographical production in the year 2002 to ensure homogeneous interpretations. In cases of disagreement among peers, consensual discussions were conducted between reviewers and researchers.

An already validated instrument\(^{14}\), named data collection form, was used for data collection and analysis; this instrument was essential to guide the collection of information sought in the selected studies. The instrument covers the following items: identification of the original study: article title; periodical title, general author (s) data, country of publication, language, year of publication; institution where the study was conducted; type of publication; methodological characteristics of the study (research approach and outline; objective or research question; sample; data processing; interventions; results; analysis; implications; level of evidence); and evaluation of methodological rigor.

The selected articles were cataloged to favor an initial approximation of the subject. As a result, the articles were re-read with the purpose of performing an interpretive analysis directed by the guiding question. Finally, three thematic categories were created for data analysis.
RESULTS

Table 2 shows the results of the analysis, which presents the summary of characteristics of the 07 studies about production of knowledge related to the use of Integrative and Complementary Practices in the treatment of occupational stress, published between 2003 and 2013.

Table 2. Characteristics of articles included in the integrative review of the literature.

<table>
<thead>
<tr>
<th>Title</th>
<th>Author(s)</th>
<th>Year/Country</th>
<th>Study outline</th>
<th>Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>The pilot study examining the effects of Kouk Sun Do on university</td>
<td>Kim JH, Yang H, Schoeppe S.</td>
<td>2013/United States</td>
<td>Qualitative</td>
<td>The effects of auto-induced relaxation through the use of KSD can lead to a reduction in anxiety and depressive symptoms.</td>
</tr>
<tr>
<td>students with anxiety symptoms.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Applicability of auriculotherapy with needles or seeds for</td>
<td>Kurebayashi LFS, Gnatia JR, Borges TP, Belisse G, Coca S, Minami A, Sharma TM, Silva MJP.</td>
<td>2012/Brazil</td>
<td>Quantitative</td>
<td>The auriculotherapy treatment with needles and seeds reduced stress levels, with best results using needles, particularly when the individual presented a high score of stress.</td>
</tr>
<tr>
<td>reducing stress in nursing professionals.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A Randomized Trial of a CAM Therapy for Stress Reduction in American</td>
<td>Korn L, Logsdon RG, Polissar NL, Gomez-Beloz The, Waters T, R. Ryser</td>
<td>2009/United States</td>
<td>Quantitative</td>
<td>The study indicates that the polarity therapy is a practice of alternative complementary medicine effective for reducing stress, with the potential to improve the health and well-being of family caregivers of native Americans and Alaskan natives.</td>
</tr>
<tr>
<td>Indian and Alaskan Native Family Caregivers.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nurses' experiences, expectations, and preferences for mind-body</td>
<td>Kemper K, Bulla S, Krueger D, Ott MJ, McCool JA, Gardiner P.</td>
<td>2011/United States</td>
<td>Quantitative</td>
<td>The study concludes that nurses experience high levels of occupational stress and have personal experience with mind-body practices. The most commonly used practices to manage stress include prayer, meditation focused on breathing, and therapeutic touch.</td>
</tr>
<tr>
<td>practices to reduce stress.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Source: research data.
Note: KSD = Kouk Sun Do; CAM = alternative complementary medicine; MBSR = stress reduction based on attention; CBSR = Cognitive-Behavioral Stress Reduction.

**DISCUSSION**

The Ministry of Health, through the National Policy of Integrative and Complementary Practices, recognizes acupuncture, homeopathy, phytotherapy, reiki, and lian gong as prevalent integrative and complementary practices. It adds that the use of these practices in several states in Brazil, through public health services, complement the scientific knowledge of allopathic medicine with positive results on the population’s health\(^{(11)}\).

After the critical analysis of the selected 07 articles, it was possible to build three thematic categories: PIC as stress reducing therapies and other diseases; the use of PIC in the treatment of occupational stress; and Credibility in the use of PIC.
Category 1: Integrative and Complementary Practices as stress reducing therapies and other diseases

The World Health Organization (WHO) through the document *Traditional Medicine Strategy 2002-2005* addresses the Traditional Medicine as a term encompassing the use of medicinal therapies (medicinal herb, animal parts, and minerals) and non-medicinal therapies (acupuncture, manual and spiritual therapies), which can be used as complementary to allopathic medicine in the treatment of several diseases\(^{(12)}\).

Several nomenclatures historically emerged in Brazil in replacement of the word "Medicine" by "Practice" or "Therapy", and "alternative" by "complementary" or "integrative"; the outcome of these terms was set with the creation of decree 971, from May 2006, with approval by the Ministry of Health at the national level of the Policy of Integrative and Complementary Practices\(^{(11)}\). These practices call for a holistic vision in the care of the individual, with particular attention to health-oriented psychosocial-biological-emotional and spiritual aspects favoring the quality of life of the user of the Brazilian health system\(^{(15)}\).

According to the reviewed studies, the use of PIC is increasing significantly in the treatment of several diseases. Researches show positive results in reducing levels of anxiety, depressive symptoms, stress, pain, and binge eating\(^{(16-21)}\). Research participants pointed out the following therapy programs used in the control of these diseases: Mindfulness Based Stress Reduction (MSBR), and Cognitive-Behavioral Stress Reduction (CBRS), and the therapies Sun, Kouk, acupuncture, meditation, controlled breathing, yoga, imagination, and polarity therapy\(^{(16,18-20)}\).


Occupational stress depends on how the individual experiences everyday events at work as well as his ability to deal with them\(^2\). In this analytical perspective, this study discusses PIC in the treatment of occupational stress citing the use of intercessional prayer, meditation focused on breathing, healing or therapeutic touch, Yoga, Tai Chi Chuan, Chi Kung (Qi Gong), and meditation based on attention (Mindfulness). The research conducted with American nurses showed that 99% of respondents reported using at least one PIC for occupational stress reduction\(^{(21)}\).

Similarly, a study about treated and treatable diseases by PIC showed that acupuncture had satisfactory results in the treatment of stress, being more effective when using needles\(^{(20)}\). This result was corroborated by the statement of nurses from a health network when they indicated acupuncture as the main form of treatment for occupational stress\(^{(22)}\).

Category 3: Credibility in the use of Integrative and Complementary Practices

Among other reasons, the use of Integrative and Complementary Practices in health has persisted because of the difficulty in access health care by users of the Unified Health System, demands and unmet or partially met needs, and personal choice\(^{(23)}\).

According to the reviewed studies, the main reasons that led to the use of these integrative practices were: reaching spiritual well-being and serenity, mood and sleep improvement, and compassion for others. In addition, the following were also cited as
major factors that prompted the use of PIC: credibility, convenience of use for the disease or symptom, the practice’s reputation, and scientific evidences on the effectiveness of the method\(^{(21)}\).

**CONCLUSION**

This study allowed the conclusion that Integrative and Complementary Practices are being increasingly used, helping not only in stress reduction but in reducing levels of anxiety, depressive symptoms, pain relief, and binge eating. These are cited among the main used PIC: Kouk Sun Do, acupuncture, meditation, controlled breathing, yoga, and polarity therapy, and as therapy programs, *Mindfulness-Based Stress Reduction* (MSBR) and *Cognitive-Behavioral Stress Reduction* (CBSR).

The main reasons that led to the use of Integrative and Complementary Practices were access to spiritual well-being and serenity, mood and sleep improvement, and compassion for others.

Regardless of the scientific studies that prove the benefits of Integrative and Complementary Practices in treating diseases, future studies need to be performed for further substantiation and credibility on the part of the scientific community.

**REFERENCES**


Received: January 14, 2014; Accepted: February 10, 2014