REIKI IN THE RELIEF OF CHEMOTHERAPY-RELATED BIOPSYCHOEMOTIONAL SIGNS AND SYMPTOMS

Sieglinder Larissa Beulke¹, Luciana Vannucci², Léia Fortes Salles³, Ruth Natalia Teresa Turrini⁴

ABSTRACT
Objective: verify the use of Reiki in the relief of chemotherapy-related biopsychosocial-emotional signs and symptoms.
Method: integrative review guided by the question: Can the use of Reiki relieve some chemotherapy-induced signs and symptoms? The search was undertaken in the databases Virtual Health Library (VHL), CINAHL, Cochrane, Embase, PubMed and Scopus without a restriction period until September 2018. Seven articles complied with the inclusion criteria.
Results: four clinical trials, two quasi-experimental studies and one case study were reviewed. The most frequent signs and symptoms mentioned were anxiety, pain, fatigue, stress, depression, mood and well-being. The patients who received Reiki reported improved general well-being, quality of life, pain, depression, anxiety, fatigue and mood in comparison with the control group.
Conclusions: the studies presented evidence that Reiki can exert beneficial effects in the relief of the side effects of chemotherapy, contributing with yet another tool to relieve the effects of the chemotherapy.

DESCRIPTORS: Nursing Care; Review; Oncology; Therapeutic Touch; Complementary Therapies.

HOW TO REFERENCE THIS ARTICLE:
Beulke SL, Vannucci L, Salles LF, Turrini RNT. Reiki in the relief of chemotherapy-related biopsychosocial-emotional signs and symptoms. Cogitare enferm. [Internet]. 2019 [access “insert day, month and year”]; 24. Available at: http://dx.doi.org/10.5380/ce.v24i0.56694.

This work is licensed under a Creative Commons Attribution 4.0 International License.
REIKI NO ALÍVIO DE SINAIS E SINTOMAS BIOPSICOEMOCIONAIS RELACIONADOS À QUIMIOTERAPIA

RESUMO
Objetivo: verificar o uso do Reiki no alívio dos sinais e dos sintomas biopsicoemocionais relacionados à quimioterapia.
Conclusões: as pesquisas analisadas apresentam evidências que o Reiki pode ser benéfico no alívio dos efeitos colaterais da quimioterapia, o que contribui para mais uma ferramenta para o alívio dos efeitos da quimioterapia.

DESCRITORES: Cuidados de Enfermagem; Revisão; Oncologia; Toque Terapêutico; Terapias Complementares.

REIKI EN EL ALIVIO DE SEÑALES Y SÍNTOMAS BIOPSICOEMOCIONALES RELACIONADOS A LA QUIMIOTERAPIA

RESUMEN:
Objetivo: verificar el uso del Reiki en el alivio de los señales y síntomas biopsicoemocionales relacionados a la quimioterapia.
Método: revisión integradora orientada por la pregunta: ¿La utilización del Reiki logra aliviar algunos señales y síntomas inducidos por la quimioterapia? La búsqueda fue ejecutada en las bases de datos Biblioteca Virtual en Salud (BVS), CINAHL, Cochrane, Embase, PubMed y Scopus sin período de restricción hasta septiembre de 2018. Siete artículos cumplieron con los criterios de inclusión.
Resultados: fueron revisados cuatro ensayos clínicos, dos casi-experimentales y un estudio de caso. Los señales y síntomas más estudiados fueron ansiedad, dolor, fatiga, estrés, depresión, humor y bienestar. Pacientes que recibieron Reiki relataron mejora del bienestar general, calidad de vida, dolor, depresión, ansiedad, fatigue y humor cuando comparados al grupo de control.
Conclusiones: las investigaciones analizadas presentan evidencias de que el Reiki puede ser benéfico en el alivio de los efectos colaterales de la quimioterapia, lo que contribuye hacia una herramienta adicional para aliviar los efectos de la quimioterapia.

DESCRIPTORES: Atención de Enfermería; Revisión; Oncología; Tacto Terapéutico; Terapias Complementarias.
INTRODUCTION

The different pathologies grouped under the name cancer have stood out in recent times due to the increasing aging of the global population. As a result of the improvement in quality of life deriving from medical advances, a greater number of people around the world achieve greater longevity. Consequently, more and more people reach ages at which the risk of cancer is higher.\(^1\)

Diseases caused by cell mutations, such as cancer, require a long treatment, often based on more than one method. Chemotherapy (CT) is the usual treatment of choice for this condition, being a non-specific systemic treatment, based on the use of combined chemical agents, aiming to destroy the cancer cells of the carrier. As the treatment is not selective, however, it can also affect healthy cells, leading to adverse effects.\(^2\-^3\)

CT can be used together with treatments such as surgery and radiotherapy. The application techniques, taking into account these other treatments, are: curative, when CT is the only treatment in search of cure; adjuvant, when QT is the treatment indicated post-surgery; neoadjuvant or prior, with the purpose of partially reducing the tumor, allowing the execution of the surgery, and palliative, indicated to improve the patient’s survival, without the possibility of cure. Depending on the technique chosen, the recommended dosage changes, causing several side effects.\(^3\-^4\)

In addition to the common effects of the cancer diagnosis (stress, anxiety, depression and fear of death), some possible side effects related to chemotherapy are: pain, fatigue, nausea and vomiting, constipation or diarrhea, mucositis, dry skin and hair loss.\(^5\-^6\) In order to minimize or alleviate some of these side effects, several patients make use of Complementary and Integrative Health (CIH) Practices which, together with conventional treatment, can provide a better quality of life for the patients.\(^6\-^7\)

In Brazil, complementary and integrative practices were integrated into the Unified Health System (SUS) in 2006 through the National Policy on Complementary and Integrative Practices (PNPIC). Reiki was only included as a complementary practice in health in Ministry of Health Ordinance 849/2017 though.\(^8\)

Acupuncture, Aromatherapy, Chromotherapy, Herbal Medicine, Flower Essence Therapy, Music Therapy, Reiki and Yoga therapies are the therapies CT patients use most commonly as a way to alleviate the adverse effects caused by treatment.\(^6\) In this integrative literature review, we decided to choose the use of Reiki in reducing the side effects of CT.

Reiki is a holistic therapy based on the concept of vital energy (Rei means universal and Ki life force). Devised by Mikao Usui in the early 20th century, Reiki consists of stimulating the patient’s energy channels by placing the practitioner’s hands in various positions on or slightly above the patient’s body. It is a biofield technique used to correct the patient’s vital energy imbalances because it is not invasive and does not require special facilities. Because it is considered a low risk intervention, it grows in popularity and use in several hospitals around the world.\(^9\)

The literature cites studies involving Reiki applications in several situations, including stress/relaxation, wound healing by improvement of the immune system, pain reduction, reduction of anxiety, insomnia and side effects of aggressive treatments, among others.\(^10\) Its use by nursing adds new possibilities of care in a non-invasive, simple and safe manner.

The application period of Reiki is a moment that favors a better interpersonal relationship between the nurse and the client because, as the verbal language is not used, it allows other forms of communication or perception that will offer relevant contributions to that person’s treatment and well-being.

Given the possibility of using Reiki as a nursing intervention, this research aims to verify the use of Reiki in relieving chemotherapy-related signs and biopsychosocial symptoms by means of an integrative literature review.
METHOD

This integrative literature review included the following stages: identification of the theme and formulation of the research question; establishment of criteria for study selection and literature search; categorization of studies; interpretation of results and knowledge synthesis\(^{12}\).

The theme of the review is related to cancer patients’ increasing use of CIH practices and how this practice is seen today. The guiding question chosen for this study was: “Can the use of Reiki relieve the symptoms induced by chemotherapy?”

We searched the databases: Virtual Health Library (VHL), The Cumulative Index to Nursing and Allied Health Literature (CINAHL), Cochrane, Embase, PubMed and Scopus, with no restriction period, until September 2018. The keywords were: *quimioterapia* (chemotherapy); *câncer* (cancer) and Reiki (Reiki). These terms were combined in the search to obtain the results. The term “*toque terapêutico*” (touch therapy) was excluded from the search because this energy technique differs from Reiki. The search expression was defined as follows: (chemotherapy AND cancer AND Reiki) NOT (touch therapy).

RESULTS

From the selected databases, 123 articles were obtained, 27 of which were repeated. After considering the respective titles and abstracts, another 71 were excluded. Of the remaining 25, 18 were excluded for the following reasons: comment on article that had been excluded, no conclusion about Reiki efficiency, approach of different conditions beyond cancer or different treatments besides CT, use of Reiki as palliative without focus on its effects, and one article was not found. Figure 1 displays the flowchart of the selection process of the articles that were included in the study.
Seven articles were selected to analyze the use of Reiki in relieving the CT-related biopsychosocial signs and symptoms. Of these, four studies (57.1%) were conducted in the United States of America, one in Canada (14.3%), one in Italy (14.3%) and one in Turkey (14.3%). All studies were carried out in the last ten years, the oldest publication dating back to 2007.

Among the types of research, six (86%) articles reported on experimental research, four studies being clinical trials and two others with a before and after design. In one article (14%), an observational study (case study) was performed without the presence of a control group (Table 1). Among the study designs, all were quantitative and one of them also presented a qualitative analysis.

Table 1 – Studies included according to author, research design, sample size and main outcomes. São Paulo, SP, Brazil, 2018 (continues)
We highlight the range of symptoms studied, as well as the different types of cancer, age groups, sample sizes, number and length of Reiki sessions of the selected studies.

The most investigated CT-related symptoms were: fatigue, pain, stress, anxiety, confusion, depression, well-being, mood and peripheral neuropathy, the first three being the most investigated. Fatigue figured in five (71%) of the seven articles examined and anxiety and pain in four articles (57%).

Among the different types of cancer considered, the main one was breast cancer (N=4; 57%). Other types were colorectal, pulmonary, leukemia and genitourinary cancers. Two studies did not specify the type of cancer.

Sample sizes ranged from 16 to 213 participants, including studies with samples of more than 180, 118 and studies with a small number of participants, less than 40. The predominant age group is over 60 years of age, the overall mean age of the study participants being 65 years (the youngest age reported in the studies was 33 years old and the oldest 84 years).

In Table 2, a synthesis of the information about the Reiki techniques used in the sessions is shown, as well as about the knowledge level of the practitioners who applied the techniques and the mean length of the therapy sessions offered to the study participants.
Table 2 – Additional information about the Reiki intervention in the selected studies. São Paulo, SP, Brazil, 2018

<table>
<thead>
<tr>
<th>Authors</th>
<th>Practitioner’s Level</th>
<th>Practitioner’s Experience</th>
<th>No. sessions</th>
<th>Mean length of session</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fleisher KA, Mackenzie ER, Frankes ES, Casarett D, Mao JJ, (13)</td>
<td>Reiki Master-Practitioner - Level 2</td>
<td>assessment of skills and training</td>
<td>1 to 11</td>
<td>10 to 30 min</td>
</tr>
<tr>
<td>Orsak G, Stevens AM, BrufskyA, Kajumba M, DougallAL, (14)</td>
<td>Reiki Master-Practitioner - Level 2</td>
<td>-</td>
<td>-</td>
<td>30 min</td>
</tr>
<tr>
<td>Catlin A, Taylor-Ford RL, (15)</td>
<td>Reiki Master</td>
<td>experienced and trained</td>
<td>-</td>
<td>20 min</td>
</tr>
<tr>
<td>Birocco N, Guillame C, Storto S, Ritorto G, Catino C, Gir N et al, (16)</td>
<td>-</td>
<td>2 years</td>
<td>1 to 4</td>
<td>30 min</td>
</tr>
<tr>
<td>Clark PG, Cortese-Jimenez G, Cohen E, (17)</td>
<td>Reiki Master</td>
<td>-</td>
<td>6</td>
<td>60 min</td>
</tr>
<tr>
<td>Tsang KL, Carlson LE, Olson K, (18)</td>
<td>Reiki Master</td>
<td>10 years</td>
<td>7</td>
<td>45 min</td>
</tr>
<tr>
<td>Demir M, Can G, Kelam A, AydinerA, (19)</td>
<td>Reiki Practitioners - Level 2</td>
<td>4 years</td>
<td>5</td>
<td>30 min</td>
</tr>
</tbody>
</table>

The number of Reiki sessions ranged from 1 to 11 and the length of the sessions from 10 to 60 minutes, but two studies did not mention the number of Reiki sessions (14-15) No uniformity was found in the studies either concerning the descriptive details about the Reiki practitioners.

**DISCUSSION**

All experimental studies used existing questionnaire models to assess the use of Reiki in relieving CT-related biopsychosocial signs and symptoms. In addition, 62.5% of the studies had a control group to compare the results of the Reiki application to the patients. Although they used different variables, research tools and data evaluation methods, all evaluated the effects of Reiki considering the participants’ responses in the CT period, before and after the sessions. Sociodemographic assessments were undertaken to verify if there was any difference in the groups considered in these studies. No statistical difference was observed (14-19).

The study (15) that applied the Reiki and Sham-Reiki (placebo: nurse at the patient’s side) intervention to compare them to the control group included a considerable number of participants (N=63 per group) and used the Healing Touch Comfort Questionnaire (HTCQ) and the Well-Being Analog Scale (WBAS) to evaluate the outcome of the intervention. As a general effect, Sham-Reiki and Reiki showed improvement in the patients’ general well-being and comfort compared to the control group. There was no noticeable difference between them though. As a general result, the authors concluded that the presence of a nurse, even without touching the patient, benefits the patients’ comfort and general well-being.

Three studies (14,17-18) used versions of the Functional Assessment of Cancer Therapy scale, which includes functional aspects and quality of life variables to evaluate the effects of Reiki. One of them (14) used the Functional Assessment of Cancer Therapy: Breast Cancer Version, FACT-B, a version for people with breast cancer, in addition to the Symptom
Distress Scale (SDS), the Profile of Mood States - Short Form Questionnaire (POMS-SF) and questions for those who received the Reiki intervention, such as “Was the intervention relaxing?” and “Any problem resulting from the Reiki therapy?” Significant differences were observed in the quality of life scale and the general mood scale, and for the confusion domain of POMS-SF, when considering the interaction with time (number of CT sessions), with better results for the Reiki group and the Companions group compared to the control group. The Companions group presented better results than the Reiki group.

Authors[17] used a control group and a Reiki group with seven participants and analyzed variables such as: anguish by the Brief Symptom Inventory (BSI); quality of life or neurotoxicity by the Functional Assessment of Cancer Therapies - Gynecologic Oncology Group-Neurotoxicity Scale (FACT / GOG-Ntx) and the Mindful Attention Awareness Scale (MAAS). The results obtained positively indicated the use of Reiki in the treatment of CT-induced peripheral neuropathies. The use of Reiki offered physical and psychological benefits to the participants who underwent this therapy.

The investigation[18] on the effect of Reiki on fatigue, pain and anxiety in individuals submitted to CT used quality of life measures: Functional Assessment of Cancer Therapy: Fatigue - FACT -F/Functional Assessment of Cancer Therapies - General - FACT-G and analog scales for pain, fatigue and anxiety. The experimental group underwent seven sessions of Reiki and the control group the same number of rest sessions. All participants answered the assessment instruments before and after each intervention. There was a significant difference between the results of the two groups, with greater decreases in fatigue, pain and anxiety and improvement of the quality of life in the experimental group in relation to the control group.

A Visual Analog Scale was used to assess pain and anxiety at the end of one of the research sessions[16]. The participants described the physical symptoms experienced during the session (heat or cold, relaxation or tension, well-being or discomfort) and their location in the body. Everyone underwent at least one session of Reiki (range from two to four). The effects observed were: decreased pain and anxiety, and reports such as: helps in well-being, relaxation, pain relief, sleep quality and reduction of anxiety. The sessions were considered useful for improving relaxation, well-being and anxiety, with proportions of 70% or more, and less than 50% of improvement in physical conditions such as pain and sleep.

In the randomized and controlled study[19], the effect of 30 minutes of Reiki distance therapy on the fatigue, pain and stress of patients admitted to an oncology service and receiving chemotherapy was evaluated. The control group received only the usual care. At the end of the intervention, pain, stress and fatigue levels increased in the control group and decreased in the experimental group, with significant results.

In the case study[13] with one or more Reiki sessions, a modified version of the Distress Thermometer (DT) was used, with the Likert-type question “How distressed did you feel during the last week including today?” The DT scale was also expanded to include the assessment of depression, anxiety, pain and fatigue as well as distress. The authors observed a decline by at least 50% in distress, anxiety, depression, pain and fatigue, and the content analysis of the open question showed that Reiki induces relaxation and enhances spiritual well-being. It is worth noting that the answer to the open question was not recorded and that the DT scale has not been completely validated for studies of temporary changes in distress followed by the intervention.

The studies analyzed[13-19] evidenced that Reiki can be beneficial in the treatment of chemotherapy-induced biopsychosocial signs and symptoms because it is a non-invasive and easily applicable method that does not require special facilities. Stricter and more replicable methods are needed though, with randomized trials and better description of their interventions and providers of alternative and complementary therapies.

The studies included presented some limitations, such as: the heterogeneity of the articles analyzed in relation to the method, type of cancer and signs and symptoms investigated, sample size, age of participants and number and duration of Reiki sessions.
The placebo effect and the presence of a person to comfort the participant should be better investigated and, also, no studies were found in the literature that showed the effect of Reiki in adolescents and children.

**CONCLUSION**

The studies analyzed present evidence that Reiki can exert beneficial effects in the relief of chemotherapy-related side effects. The patients who received the treatment using Reiki reported improvements in general well-being and in some symptoms, but not all clinical trials present significant results. The improvement of signs and symptoms such as pain, fatigue, stress and anxiety suggest that this practice can be introduced in care or recommended to patients submitted to outpatient chemotherapy.

**REFERENCES**


13. Fleisher KA, Mackenzie ER, Frankes ES, Casarett D, Mao JJ. Integrative Reiki for cancer patients: a


Received: 04/12/2017
Finalized: 17/12/2018

Corresponding author:
Léia Fortes Salles
Universidade de São Paulo
R. Faustolo, 656 - 05041-000 - São Paulo, SP, Brasil.
E-mail: leia.salles@usp.br

Role of Authors:
Substantial contributions to the conception or design of the work; or the acquisition, analysis, or interpretation of data for the work - SLB, LV, LFS, RNTT
Drafting the work or revising it critically for important intellectual content - LV, LFS
Final approval of the version to be published - LV, LFS, RNTT