



The Effect of Reiki Therapy on Cancer Pain Management in Palliative Care Patients: A Systematic Review

Palyatif Bakım Hastalarında Reiki Uygulamasının Kansere Ağrısı Yönetimine Etkisi: Bir Sistemik Derleme

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ABSTRACT

This systematic review was conducted to demonstrate the effectiveness of the use of reiki therapy in cancer pain management and to draw attention to the availability of this application in palliative care units. The studies on cancer pain management, both in English and Turkish, of which full text versions were accessible, were systematically analyzed, and the studies without full text and ongoing studies were not included. The study was conducted by reviewing Cumulative Index to Nursing and Allied Health Literature, EBSCOhost, MEDLINE, ScienceDirect, Ovid, ProQuest, Web of Science, and ULAKBİM National DataBases. There were no year restrictions in screening. Keywords such as “cancer pain”, “cancer pain management”, “reiki” and “palliative care” were used to access the studies. Nineteen research papers were accessed and 5 of them were found to be compatible with the inclusion criteria of our study. Cochrane was established as the guideline to determine levels of evidence. Of the included studies, one was a randomized controlled study, three were experimental studies, the other one was a systematic review. In our day, randomized controlled studies examining the effect of reiki therapy on pain in cancer patients who receive palliative care are limited. In particular, studies have shown that reiki is even more effective in reducing pain when used in addition to pharmacological treatment and conventional nursing care. It is observed that the studies are carried out with a small sample number and generally with a single group. Pain assessments are usually performed with visual scale and numeric scale, reiki sessions are performed in the range of 10-90 minutes and 2-6 sessions per week.

ÖZ

Palyatif bakımda tedavi gören hastalarda reiki uygulamasının kanser ağrısı yönetimine etkisini değerlendiren çalışmaların incelenmesidir. Kansere ağrısı yönetimine ilişkin Türkçe ve İngilizce tam metnine ulaşılabilen araştırmalar sistemik inceleme kapsamına alınmış, tam metin olmayan ve devam eden çalışmalar kapsam dışı bırakılmıştır. Çalışma Hemşirelik ve Yardımcı Sağlık Literatürü Kümülatif İndeksi, EBSCOhost MEDLINE, ScienceDirect, Ovid, ProQuest, Web of Science ULAKBİM Ulusal Veri Tabanları taranarak yürütülmüştür. Taramada yıl kısıtlaması yapılmamıştır. Çalışmalara ulaşmak için “kansere ağrısı”, “kansere ağrısı yönetimi”, “reiki”, “palyatif bakım” anahtar kelimeleri kullanılmıştır. On dokuz araştırma makalesine ulaşılmış, bu çalışmaların 5 tanesinin araştırmaya dahil edilme kriterlerine uygun olduğu belirlenmiştir. Bu çalışmalar araştırmacılar tarafından ayrı ayrı incelenmiş ve kanıt düzeyleri belirlenmiştir. Kanıt düzeylerini belirlemede Cochrane rehberi temel alınmıştır. Dahil edilen çalışmalardan bir randomize kontrollü çalışma, üçü deneysel çalışma, biri ise sistemik derleme idi. Palyatif bakım alan kansere hastalarında reiki terapinin ağrıya etkisini inceleyen randomize kontrollü çalışmalar günümüzde sınırlı sayıda olmasına karşın yapılan çalışmalar, ağrı şiddetini azaltmada olumlu etkisinin olduğunu göstermektedir. Çalışmaların küçük örneklem sayısı ve genellikle tek grupta yapıldığı gözlemlenmektedir. Ağrı değerlendirilmelerinin genellikle görsel skala ve numerik skala ile yapıldığı, reiki seanslarının 24-90 dakika aralığında yapıldığı, haftada 2-6 seans şeklinde yapıldığı görülmektedir. Palyatif bakımda tedavi gören kansere hastalarında

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When we examine the effect of reiki on physical and psychological recovery in cancer patients treated in palliative care, it is reported that reiki has a positive effect on reducing pain. However, there are gaps in matters such as which hand position to use in reiki therapy, the duration and frequency of the reiki session, and the application period. For this reason, it is recommended to conduct randomized controlled studies with a large sample group.

Keywords: Cancer pain, cancer pain management, reiki, palliative care

fiziksel ve psikolojik iyileşmede reikin etkisi incelendiğinde, reikin ağrıyı azaltmada olumlu etkisi olduğu bildirilmektedir. Ancak reiki terapide hangi el pozisyonunun kullanılacağı, reiki oturumunun süresi ve hangi sıklıkla yapılacağı, uygulama süresi gibi konularda boşluklar bulunmaktadır. Bu nedenle büyük örneklem grubuyla yapılacak randomize kontrollü çalışmaların yapılması önerilir.

Anahtar Sözcükler: Kanser ağrısı, kanser ağrısı yönetimi, reiki, palyatif bakım

Introduction

Many causes, such as the increase in cancer incidence and life expectancy of individuals with cancer, and aggressive treatments administered at the end of patient's life have increased the need for palliative care. Because it is important to manage cancer-related symptoms such as pain in palliative care. Pain often seen in palliative care patients is a condition that patients with cancer fear the most and has been described as "scarier than death itself" (1). There are many causes of cancer-related pain. It may be associated with the duration of disease or may develop due to the treatment and procedures administered. Pain due to the duration of disease may develop due to nerve pressure, bone metastasis, local inflammation and thrombophlebitis, usually caused by the primary tumor. Pain associated with the diagnosis and treatment process may be due to biopsy, surgical interventions, inadequate opioid use, extravasation, peripheral neuropathy, or grade 3-4 mucosity (2,3). The incidence of pain varies depending on the type and cause of cancer. The incidence of pain in patients treated with a diagnosis of head and neck cancer is reported to be 70%, in gynecologic cancers it is 60% and in gastrointestinal cancers it is 59% (4). In addition, some studies have shown that one-third of patients with cancer who receive active treatment and 60-90% of patients with advanced cancer experience moderate or severe pain, and 75% of patients experience pain 2 or 3 times a day with a severity of 5 points or more (5). Medical treatment and nonpharmacological methods are used in the management of cancer pain. Nowadays, one of the methods developed to deal with cancer pain is reiki. Reiki therapy is an energy therapy method performed by the therapist with or without light touch, and it can reduce pain. When held in certain positions, energy is transferred via hands according to the person's needs. Reiki energy provides strength, harmony and balance. It protects physical, emotional, mental and spiritual health. Reiki therapy, which is used in many countries, is usually a reliable, noninvasive and cost effective method with no adverse effect on current treatment and known serious side effects. It can be applied anytime and anywhere, as it does not require special supplies and materials. It is suitable for hospital environment (6,7). Studies indicate that reiki touch therapy is an effective intervention to relieve pain (8,9). A study conducted with women diagnosed as having breast cancer concluded that reiki reduced the experience of physical symptoms such as pain (10). In a study comparing the effectiveness of reiki, massage and yoga, reiki was more effective in reducing cancer pain (11) but it was stressed that

there was not sufficient level of evidence regarding the effect of reiki in symptom management of patients with cancer (12). This systematic review was conducted to demonstrate the effectiveness of the use of reiki therapy in cancer pain management in the light of the literature, and to draw attention to the availability of this application in palliative care units.

Methods

This study was conducted as a systematic review. The following steps were followed during the study process:

1. The problem was identified, then the objective was identified.
2. A comprehensive screening of all the studies published by the researchers was carried out.
3. Elimination was carried out according to the inclusion criteria.
4. It was determined which studies would be included in the review.
5. The findings in the studies included were synthesized in the review.

Inclusion and Exclusion Criteria

Studies in Turkish and English that evaluated the effect of reiki on cancer pain in palliative care patients were included. The literature review was conducted independently to assess eligibility criteria by the authors. Discrepancies and disagreements regarding eligibility were resolved by discussion. Articles about palliative care in patients with cancer, of which full texts were not accessible, and ongoing studies were excluded from the review.

Data Collection and Analysis

The study was conducted by reviewing Cumulative Index to Nursing and Allied Health Literature, EBSCOhost MEDLINE, ScienceDirect, Ovid, ProQuest, Web of Science, and ULAKBİM National Data Bases. There were no year restrictions in screening and studies of which publication dates were up until February 2020, were examined. The MESH keywords such as "cancer pain", "cancer pain management", "reiki", "palliative care" were used to access the studies. Also, the reference list of all randomized clinical trials and review papers were checked to find suitable studies that were not identified by electronic search. After the abstracts of the papers were scanned, 19 papers were reached. It was determined that 5 of these studies met the criteria of inclusion in the research. These studies were analyzed separately

by academicians and their levels of evidence were determined. Cochrane was established as the guideline to determine the levels of evidence.

Assessment of Levels of Evidence

Levels of evidence of the studies were evaluated by researchers according to Melnyk and Overholt's guideline. The researchers evaluated each study individually and then combined results. Levels of evidence are evaluated as follows;

Level I evidence:	Evidence that is generated from systematic reviews or meta-analyses of all relevant randomized controlled trials.
Level II evidence:	Evidence that is generated from at least one well-designed randomized controlled trial.
Level III evidence:	Evidence that is generated from well-designed controlled trials without randomization.
Level IV evidence:	Evidence from well-designed case-control and cohort studies.
Level V evidence:	Evidence from systematic reviews of descriptive and qualitative studies.
Level VI evidence:	Evidence from a single descriptive and qualitative study.
Level VII evidence:	Evidence from the opinion of authorities and/or reports of expert committees (13).

Results

The overall process of article selection is illustrated with the Preferred Reporting Items for Systematic Reviews flow diagram. In the initial screening, 826 studies were identified. This systematic review included studies examining the effect of reiki on cancer pain in palliative care patients. Following the initial screening of unrelated titles and elimination of duplications, 324 potentially eligible papers were remaining. After the abstracts of the papers were screened, 19 articles of which full texts were accessible were remaining. After the elimination of duplications and other reasons, 5 eligible articles were scrutinized for inclusion in this review (Figure 1).

One of the research included in the systematic review is a randomized controlled study, three is an experimental study, and one is a systematic review (Table 1).

It is noteworthy that all the studies were carried out with patients with mixed cancer diagnoses. All study results report that reiki is effective in reducing cancer pain in palliative care patients (14-18). When the studies are examined, it is observed that reiki application is performed 1-2 times a week with 10-90 minute sessions (7,15-18). Patients' pain scores were evaluated mostly according to the Visual Analogue Scale (VAS) (7,16) and Numerical Scale (18). Studies have shown that reiki therapy practice is more effective in reducing pain when used in conjunction with opioid therapy and nursing care, especially it increases its effectiveness in the 1st and 4th days of therapy (16).

The systematic review included in the study not only examined the effect of reiki therapy on cancer pain, but also evaluated the effect of reiki therapy on other chronic pain types (17).

Discussion

This study focuses on the relationship between reiki therapy and cancer pain in palliative care patients. All of the studies has shown that reiki therapy reduces cancer pain and has a positive effect on palliative care patients.

Randomized controlled studies examining the effect of reiki therapy on pain in cancer patients receiving palliative care are today limited. However, existing studies have shown that it has a positive effect on reducing pain intensity. Studies are observed to be conducted with a small sample group and usually with a single group (15-17).

The studies included in the systematic review were analyzed. The pilot study which was conducted to determine the effect of reiki therapy on symptom management in children in palliative care units, only one group undergoing pre-post testing was included. Pediatric patients (n=16) had 24 minutes long, 2 reiki sessions in their houses. At each reiki session, the children put on comfortable clothes, practised 12 hand positions during 2 minutes for each position. Prior to each session, the pre-post test assessed pain with VAS and a significant reduction in pain intensity was found (15) (Level of evidence III). In the study which was conducted with 25 patients receiving palliative care, the patients were divided into 2 groups. One group underwent opioid therapy (analgesia administration of 2-5 doses) for pain treatment, while the other group underwent opioid therapy and 1.5 hours of reiki practice as well. Patients and their VAS scores were recorded and followed up for 7 days, and pain intensity was recorded to reduce drastically in the reiki group in 1st and 4th days (16) (Level of evidence II). In order to evaluate the results of the reiki therapy program in patients with cancer, patients received 10-30 minutes long reiki sessions for at least 3 hours per week, by reiki specialists. During the sessions, specialists applied 3-5 basic hand positions, usually on the head, torso, arms, legs and feet of the patients individually. Pain was assessed with Numerical Rating Scale before and after each session. As a result, the pain score decreased from 2.5 points to 1.2 points (18) (Level of evidence III). The study was conducted with one group to determine the effect of reiki therapy on pain and anxiety in oncology patients in ambulatory and infusion units. Every session was conducted while patients sitting on a chair or lying in bed for 30 minutes. During sessions, therapists hovered their hands from head to toe on the patient's body where the pain or disease was located or gently touched patients' body, focusing on the patient's energy centers. A total of 4 sessions were performed, pain scores decreased by 50% after each session (7) (Level of evidence III). In the systematic review which was conducted to determine whether reiki was beneficial in pain management or not, 2 randomized controlled trial studies were analyzed, and statistically significant decrease in pain was reported when reiki was administered in addition to opioid therapy, resting or conventional nursing care (17) (Level of evidence V).

Table 1. Summary of the research that was included in the study

Study	Design	Sample	Intervention that was administered	Conclusion	Level of evidence
Thrane et al. (15)	Experimental study mixed phase and mixed cancer diagnosis.	E n=16	Pediatric patients (n=200) had 24 minutes long, 2 reiki sessions in their houses. At each reiki session, the children put on comfortable clothes, practised 12 hand positions during 2 minutes for each position. Before each session, pain was assessed with pre-post testing and VAS.	Significant reduction in pain intensity was recorded. However, the fact that there was only a small sample group reduced the statistical significance of the results.	III
Olson et al. (16)	RCT advanced mixed cancer diagnosis.	E n=13	Opioid therapy for pain treatment in a group (administration of analgesia between 2-5 doses)	Pain intensity was evaluated with VAS, 30 mins after the sessions. A significant decrease in pain in the music group was found in the post test compared to the control group.	II
		C n=11	Opioid therapy and additional 1.5 hours of reiki practice		
Fleisher et al. (18)	Experimental study mixed cancer diagnosis. phase not specified.	Single group n=213	10-30 minutes long reiki sessions were carried out by specialists in total 3 hours per week. Specialists applied 3-5 basic hand positions, usually on the head, torso, arms, legs and feet of the patients individually.	Pain was assessed before and after sessions with NRS. The pain score decreased from 2.5 points to 1.2 points in patients.	III
Birocco et al. (7)	Semi-experimental mixed cancer diagnosis. phase not specified.	Single group n=118	Each session was administered for 30 minutes while patients were sitting in chairs or lying in bed. Therapists hovered over the patient's painful or discomfort areas from head to toe or gently touching their body, focusing on the patient's energy centers. A total of 4 sessions were held.	Pain was assessed before and after sessions according to VAS. Pain scores decreased by 50%.	III
Lee et al. (17)	Systematic review mixed phase and mixed cancer diagnosis.	-	-	When 2 randomized controlled trials were analyzed, it was seen that when reiki was administered during 30 minutes for 4 sessions, in addition to opioid therapy, resting or conventional nursing care, statistically significant reduction in pain was recorded.	V

RCT: Randomized controlled trial, E: Experimental group, C: Control group, VAS: Visual analogue scale

Study Limitations

There were several limitations to this study. The restriction of this review to English language may have resulted in language bias with potentially relevant studies published in other languages being missed. This review also did not include unpublished abstracts from relevant cancer, pain, reiki or complementary therapies conferences. In addition, since some of the investigated studies were conducted with a small sample group, they had methodological limitations.

Conclusion

In conclusion, reiki has a positive effect on reducing pain. The administration of this method to all patients experiencing pain, including patients in palliative care units, can contribute positively to patients' pain management. However, in reiki therapy, randomized controlled trials with a large sample group are needed. The questions such as; which hand position to use for different diseases, the duration of the reiki session and how

often it will be practiced, the duration of the practice, and the training of the reiki practitioner, need to be answered (7,17).

Peer-review: Externally and internally peer-reviewed.

Authorship Contributions

Concept: D.Y., M.E., Design: D.Y., M.E., Data Collection or Processing: M.E., D.Y. Analysis: D.Y., M.E., Literature Search: M.E., D.Y., Writing: D.Y., M.E.

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