Effect of Implementing Acupressure on Quality of Sleep among Patients with Breast Cancer

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ABSTRACT

Background: An important fitness issue that affects people of all racial and ethnic backgrounds is sleep disturbance. Cancer patients may experience sleep disturbances due to a variety of factors, including cancer treatment-related metabolic abnormalities. Sleep difficulties, such as difficulty getting asleep, difficulty staying asleep, poor sleep efficiency, early awakenings, and excessive daytime sleepiness are common in cancer patients. **Aim of study**: Evaluate the effect of implementing acupressure on quality of sleep among patients with breast cancer. **Subjects and method : Design:** A quasi-experimental research design was utilized in this study. **Setting:** The study was applied in Oncology Department at Mansoura University Hospitals. **Subjects:** A purposive sample of 60 adult females' patients with breast cancer. **Tool of data collection:** The data collected using the following tools: Structured interview and Sleep Scale. **The results**: The study found that once acupressure was applied, there was an improvement in the quality of sleep for the study pattern rather than the control group (p value =. 0.001). **Conclusion:** This study found that using acupressure improve sleep quality inpatients with breast cancer. **Recommendations:** Encourage cancer treatment facilities to use acupressure as a therapeutic option to enhance sleep quality. In order to generalize the findings, additional studies with a high sample size are also required.

*Keywords***:** Acupressure, Breast cancer, Quality of sleep

INTRODUCTION

Breast cancer continues to be the second most common type of cancer worldwide and the most common type of cancer among women. According to information from the present day, in 2021, there were 2.1 million new cases and 684, 996 deaths due to breast cancer in 2020. (Siegel et al., 2021). Today, surgical operation for most cancers remedy is more and more more popular, so it's miles expected that most cancers-associated surgical procedures will growth from 9, 065, 000 surgical procedures in 2018 to extra than 13, 821, 000 surgical procedures in 2040, breast most cancers surgical operation is finished in each partial (lumpectomy) and complete (mastectomy) forms (Perera et al., 2021).

Sleep disturbance is common and increases the morbidity of cancer patients by a significant amount. Polysomnography has been used to demonstrate that rates of sleep disturbance in cancer patients are higher than those in the general population1. Patients with heterogeneous superior tumours reported sleep disturbance in 72% of cases, with common symptoms including difficulty falling asleep, difficulty staying asleep, difficulty feeling refreshed in the morning, and daytime weariness. Chemotherapy has been linked to noticeably worsened sleep quality and daytime drowsiness. Fatigue and disturbed sleep are frequently reported symptoms of breast cancer. Up to 80% of breast most cancers sufferers document sleep disturbance (e.g., trouble starting up or keeping sleep, waking up in advance than preferred and being not able to fall returned to sleep, and immoderate sunlight hours sleepiness) (Kwak, Jacobs, Haggett, Jimenez & Peppercorn, 2020).

Most studies on sleep-related cancer patients have focused, to now, on young women with breast cancer, many of whom report significant difficulties sleeping normally after chemotherapy. However, such studies might not be applicable to the management of symptoms and sleep disturbance in other cancer groups. Acupuncture and related therapies have been investigated in conventional Chinese medicine (TCM) as a potential treatment for most cancers-related illnesses. Acupoint stimulation can help with sleep issues by applying direct pressure or focused pressure, but further research is required before acupoint stimulation is used in medical practise (Fox et al., 2020).

Acupressure is a tool that promotes energy flow and stability inside the body. It works by applying physical pressure to certain points on the body's surface when there is discomfort. A painless, simple, effective, and inexpensive method that comes from

traditional Chinese medicine is acupressure. Similar to acupuncture, it is performed on channels wearing energy within the body, namely with the hands and palms, has no side effects, is simple to understand and execute, and may be performed even by patients themselves after receiving the proper training (Israel et al., 2021).

The researchers previously demonstrated the effectiveness of two significant acupressure recipes for reducing fatigue: pleasant acupressure (a TCM formulation for improving sleep), and stimulating acupressure (a TCM formulation for enhancing energy). Only the pleasant acupressure established increase in sleep quality, indicating some specificity for acupressure factor stimulation. The effects of various acupressure techniques on BCS sufferers' depressed symptoms, anxiety, or chronic pain are unclear. Additionally, it is unclear whether the existence of one or more indications affects the likelihood that acupressure will relieve co-occurring symptoms (moderators) or whether improvements in those symptoms are the mechanism (mediators) by which self-acupressure operates (Zick et al., 2018).

Significance of the study:

In fact, cancer frequently co-occurs with fatigue and sleeplessness, which together account for one of the most common symptom clusters among breast cancer patients and cancer survivors across all malignancies. A higher level of symptom control is required given the frequent onset and unresolved symptoms among most cancer patients. Polysomnography has shown that rates of sleep disturbance in cancer patients are lower than those in the general population1. Patients with heterogeneous superior tumors reported sleep disturbance in 72% of cases, with common complaints including issues with sleep start and maintenance, not feeling rested in the morning, and daytime weariness. In order to improve sleep quality, and generate support, it is crucial to promote more knowledge of non-pharmacological treatment and provide more effective and accessible (Fox et al., 2020).

AIM OF THE STUDY:

The aim of this study is to evaluate the effect of implementing acupressure on quality of sleep among breast cancer patients. This aim was achieved through:

1. Assess quality of sleep (pre – post) acupressure among patients with breast cancer.

2. Implement acupressure for patients with breast cancer.

3. Evaluate the effect of implementing acupressure on quality of sleep among patients with breast cancer.

Research hypotheses:

Patients who practice the acupressure technique (the study group) will improve in the quality of their sleep compared to patients who don't practice it (control group).

SUBJECTS AND METHOD:

A. Technical design

Study design

A quasi-experimental research design was used in this study.

Study setting:

The study was carried out at the oncology department of Egypt's Mansoura University Hospitals. The environment is thought to be appropriate for people with breast cancer. It has five levels, with the first and second floors used for X-ray and CT scans, the third floors for lectures, and the fifth floor containing the nuclear medicine department.

Study subjects:

A purposive sample of 60 adult female patients will be chosen at random and divided into two equal groups: 30 subjects will get acupressure treatment in the study group and 30 subjects will receive standard hospital care for sleep disturbance. patients who met sampling criteria recruited for this study was calculated by statistical equation; using EPI info program version 6.02 after taking into consideration the clinical incidence of 33.3 breast cancer patients from the hospital record with the study power 80%, confidence interval of 95% and relative precision 15 %, it is divided into 30 subjects in the study group and 30 subjects in control group (Ibrahim et al., 2020)

Inclusion criteria:

- Adult female with breast cancer aged from 21 to 60 years old.

- Adult female after mastectomy with grade I, II cancer

- Consciously, and able to communicate.

- Free from other causes of sleep disturbance

Exclusion criteria:

- Suffering from severe visual or hearing disorders
- Suffering from skin disorder (such as rash and ulcer on acupressure points)

Tools for Data Collection:

Data were collected using the following tools:

TOOL (I): Structured interview questionnaire: It was developed by the researcher after reviewing of recent related literature (Miller, Patel, Symanowski, Edelen & Walsh, 2019) ; (Mills ,Nicolson & Smith, 2019). It included three parts as the following:

Part 1: Demographic Data, was compromised of five close ended questions about patients' demographic data as age, sex, level of education, employment, and marital status.

Part 2: Patients' medical history, involved six questions about patients' past and present medical history such as admission date, hospital stays, chief complaint, previous treatment, current treatment, and family medical history for breast cancer.

TOOL (II): Sleep Scale:

It was developed by Snyder-Halpern and Verran (1987), and modified by Call-Schmidt (2003). It is used to assess quality of the previous night's sleep.

The scale is composed from a16-items as the following: -

Each of their 15 items is measured using a visual analogue scale and a pencil and paper; the total score ranges from 0 to 150.

These 15-items categorized into three parts for measuring:

Part 1: Effectiveness of sleep, it comprises five items to measure quality i.e., restfulness and depth of sleep-in addition length i.e., hours of sleep while in bed.

Part 2: Sleep disturbance, it includes seven items for measuring the interruption of sleep and delay in getting to sleep.

Part 3: Supplementation for sleep, it contains three items about naps and falling back asleep after morning awakenings.

Scoring system:

Regarding effectiveness of sleep, ranged from 0 to 50. zero refers to poor effectiveness of sleep while 50 refers to higher better effectiveness of sleep.

Regarding Sleep disturbance, ranged from 0 to 70. zero refers to higher presence in sleep disturbance while 70 refers to absent asleep disturbance.

Regarding Supplementation for sleep, ranged from 0 to 30. zero refers to high sleep supplementation, and 30 refers to absent of sleep supplementation.

B. Operational design:

1-Preparatory Phase:

A review of the relevant past and present literature covering many aspects of the issue using all reputable websites like PubMed, Google Scholar, available medical books, papers, periodicals, and magazines to understand the research problem.

2- **(A) Validity:** Nine experts in medical-surgical fields from the faculties of nursing and medicine at the universities of Port Said and Mansoura evaluated the tool's content validity, comprehensiveness, and application, and improvements were made in response to their feedback.

(B) Reliability: To evaluate the tool's internal consistency, split-half methods and the Cronbach alpha coefficient were used. Both methods demonstrated a high degree of tool final version reliability. (Alpha =0, 85).

Pilot study

The Oncology Department at Mansoura University Hospitals conducted a pilot study on 10% (6 patients) of the total number of breast cancer patients to see if the data collection tools were simple, functional, and easy to use. The researcher was able to adapt the equipment thanks to the outcomes of the information from the pilot examination: devices were changed or added as necessary. As a result, modifications had been made and the final form had been created. The patients covered by the pilot study were not included in the main sample under investigation.

Field work:

1- The examination was conducted for nine months, from the beginning of March 2021 until the end of August (2021). It began with the researcher interviewing the patients who took part in the study and, in my opinion, met the criteria for inclusion. This

was done in the previously mentioned environment. The following stages were used to complete the assessment:

2- Preparatory phase

3- A review of the historical and current literature covering many aspects of the issue using all reliable websites such as PubMed, Google Scholar, available medical books, journals, periodicals, and magazines to familiarize oneself with the research issue. The researcher attended training sessions in the use of acupressure for four months, three days per week, and eventually received training from an acupressure expert. Additionally, academic films downloaded from the internet were used to further educate the researcher.

4- Assessment phase (for both groups)

The purpose of this section was to collect baseline data by using the device (1) to record demographic and medical history. Tool (II) to assess the quality of the previous night's sleep. Depending on the patient's knowledge and training, it was completed in 30 to 45 minutes. This interview lasted roughly 45 minutes, and it served as an evaluation section. Additionally, the 0.33 interview and the second interview were completed on the middle and final day of the clinic live to assess the effect of acupressure on sleep quality through the use of device II. Each interview took about (30 - 45 minutes). It is an essential to do not forget that the medical institution live turned into decided ten days that turned into taken into consideration the not unusual place medical institution live for almost all of the sufferers so equalize the medical institution live for all sufferers who take part on this observe to 10 days. So, the primary day of hospitalization turned into taken into consideration the primary day of admission, 5th day turned into taken into consideration the midst day of hospitalization and the 10th day turned into taken into consideration the modern day of hospitalization so the sufferers who had much less than ten days excluded however sufferers who enlarge lengthy that the medical institution live reduce off in 10th day of hospitalization.

5- Implementation phase (for study group only)

Each study group that receives acupressure is separated into three groups, each of which has 20 patients. The method's duration depends on the patients.

Every consultation lasts 10 minutes for each person who is affected, and the researcher adheres to the norms of acupressure. Three acupressure sessions were implemented according to the weeks in the trials. The publication that the researcher created was provided to each patient or his/her caregiver inside the practice institution, along with a caregiver who was watched with the patient and who is able to read and write while waiting for the consultation.

Each study group receiving acupressure is divided into 3 groups, each with 20 patients. The duration of the method depends on the patients.

Each session lasts 10 minutes for each person afflicted, and the researcher follows standard acupressure practices. Three acupressure sessions were conducted in accordance with the weeks of the experiments. Every patient or his or her caregiver received the book the researcher wrote within the educational facility, along with a caregiver who was watched with the patient and who is able to read and write while awaiting the session.

Regarding acupressure technique

- When applying acupressure factors, you can easily sit down or lie down. Breathe deeply and keep your eyes close (Dupuis, 2010). Use deep corporate tension to convey each component.
- Acupressure factors are typically more sensitive than the immediate environment.
- The message period that is shown with the factor description is merely an estimate. Message each element until numbness is felt.
- Can repeat the message from energetic factor as often as desired. There is no restriction on the kinds of physical activities that can be done each day.
- When using intense stress, it is expected that the energetic element will suffer damage first. In this case, reduce the tension to a barely painful level and continue messaging the energetic factor. Because the initial stinging sensation begins to fade, increase the stress. Keep sending the message until you start to feel numb.

<u>Acupressure points for relieve sleep disturbance:</u>

The Spirit Gate (p6) and the Inner Gate are the two acupressure spots that have historically been used to treat insomnia (H7). Both are easily accessible because they are

both on the inside wrist. Sahm and Kofen (1997) and Hmwe, Browne, Mollart, Allanson, and Chan (2020) provide examples to support their views.

- **P6- Inner Gate:** three finger widths up from the wrist line, near the middle of the inner side of the forearm. These sites can be acupressured to reduce nausea, heart palpitations, and anxiety.

- **H7- Spirit Gate:** situated parallel to the inner arm's little finger, on the inside of the wrist crease. helpful for easing anxiety, fear, and emotional instability

6- Evaluative phase (for both groups):

In order to evaluate the impact of implemented acupressure on sleep quality using tool II, the second and third interviews were conducted in the middle and on the last day of the hospital stay. The mean value was recorded in accordance with the acquired levels of knowledge.

C-Administrative design:

By submitting a valid letter from the vice dean of the Faculty of Nursing at Port Said University, the administrative staff at Mansoura University Hospital was able to obtain reliable permission for records collection. Meetings and conversations between the researcher and nursing administration staff were held in order to make them aware of the goals and objectives of the study and to obtain better collaboration during the research's implementation phase. Additionally, oral agreement from patients was obtained prior to the start of the record-keeping series.

Ethical Considerations:

The studies ethics committee of the nursing college at the port-said university can provide approval. After explaining the purpose of the study, health facility administrators might also be asked for permission to participate in the study. In order for each participant to understand the importance of her participation, an approval can be obtained after the study goal and element information series method have been clarified. Additionally, patients who are certain that the information they provided would be kept private and utilized only for the purposes of the study might be given a brief and detailed explanation of the study. The participants in the study (those who are suffering) might be informed that their participation is voluntary and that they have the right to terminate the study at any time and without explanation. Additionally, all data gathered from the issues under study can be handled in total secrecy. Additionally, the way information is presented will no longer interfere with the harmony of the care delivered in the abovementioned setting.

D-Statistical design:

The gathered information was put into order, reviewed, tabulated, stored, and then examined using distributions of numbers and percentages. Statistical Package of Social Science version 18 was used on a computer to perform the statistical analysis. To ascertain whether there was a statistically significant difference between the study's variables, appropriate statistical tests were applied. Tables and figures were used to present the data. A p-value of less than 0.05 indicates that the result is not significant, although significance level values are taken into account when the p-value is less than 0.05.

RESULTS:

Table (1): Shows that, 63.3% and 40.0% of the study and control groups respectively at age group 45 to less than 55 years old. Regarding educational level, 43.7% and 46.7% respective were read and write. As regards occupation, 60.0% and 53.3% of the study and control groups respectively were not working and, 100% and 93.3% respectively were married. No statistically significant differences were found between study and control group regarding sociodemographic data.

Table (2): Shows that, there were 73.3% and 86.7% of the study and control group respectively had symptom as (pain & vomiting), no member of family had the same disease for both study and control group, had a disease from 4 to 5 years ago, there were 53.3 % and 50.0% of the study and control group respectively treated with chemotherapy and a radiotherapy after surgery. No significant differences between study and control groups regarding medical history.

Table (3): Shows that, knowledge before implementation, there were 90% and 66.7% of study and control group respectively had unsatisfaction knowledge about sleep. Although, after intervention implementation, there were 73.3% of study group had satisfaction knowledge about sleep and 66.3% of control group had unsatisfaction knowledge about pain. So, there were significant statistical differences between study and control groups regarding knowledge of cancer pain before and after intervention.

Table (4): As regards to sleep effectiveness, there were significantly higher mean values of sleep effectiveness at the midst, and last day of hospitalization, the mean values

were changed from 31.19±0.88 and 17.23±1.68 to 48.9±1.65 and 33.1±0.71 respectively and also, in sleep disturbance, there were significantly higher mean values of sleep disturbance at the midst, and last day of hospitalization, the mean values were changed from (42.15±1.99 and 24.17±0.59) to 66.19±2.95 and 44.93±1.64 respectively. Similar to above mentioned items, sleep supplementation, there were significantly higher mean values of sleep supplementation at the midst, and last day of hospitalization for both study and control group, the mean values were changed from 18.55±0.98 and 11.57±0.97 to (26.50±0.77 and 20.7±0.88 respectively at the midst and last day of hospitalization. Finally, there were significantly statistically differences concerning the previous mentioned items throughout midst and last day of hospitalization for both study and control group except in first day of hospitalization.

Table (5): Shows that there was a statistically negative correlation between total pain scores and quality of sleep among study and control group at first day of hospitalization. While, there was a statistically highly negative significant correlation between total pain scores and quality of sleep at midst and latest day of hospitalization among study group.

(1): Demographic characteristics of both study and control group:

Demographic data	Study group (n=30)		Control group (n=30)		X2 Value	P Value
	No	**%**	**No**	**%**		
Age (years)						
• 20 < 35	6	20.0	5	16.7		
• 35 < 45	7	23.3	9	30.0	0.78	> 0.05
• 45 < 55	11	63.3	12	40.0		
• 55 – 60	6	20.0	4	133		
(mean ±SD)	45.63±8.77		44.37±7.93		0.59*	>0.05
Educational levels						
• Illiterate	11	36.3	10	33.3		
• Read & Write	13	43.7	14	46.7	0.08	> 0.05
• Secondary	4	14.3	4	13.3		
• University & post graduate	2	6.7	2	6.7		
Occupation						
• Working	12	40.0	14	46.7	1.07	> 0.05
• Not work	18	60.0	16	53.3		
Marital status						
• Married	30	100	28	93.3	2.07	> 0.05
• Not married	0	00.0	2	6.7		

Table (2): Medical history of both study and control group.

Medical history	Study group (n=30)		Control group (n=30)		X2 Value	P Value
	No	%	No	%		
Causes of hospitalization:						
• Complete treatment	8	26.7	4	13.3	1.67	>0.05
•Presence of symptoms as (pain & vomiting)	22	73.3	26	86.7		
Hospital stays in days (mean ±SD)	10.73 ± 6.8		12.43 ± 6.4		0.94*	> 0.05
Duration of disease						
• 6 month -	6	20.0	4	13.3		
• 1 year -	5	16.7	6	20.0		
• 2 years -	3	10.0	2	6.7	2.47	> 0.05
• 3 years -	5	16.7	4	13.3		
• 4 years -	8	26.7	7	23.3		
• 5 years – More	3	10.0	7	23.3		
Family history of cancer						
• Yes	5	16.7	4	13.3	0.13	> 0.05
• NO	25	83.3	26	86.7		
Current treatment modalities:						
• Chemotherapy	0	0	0	0		
• Radiotherapy	0	0	0	0		
• Hormonal	5	16.7	4	13.3		
• Surgery and Radiotherapy	5	16.7	5	16.7	0.54	> 0.05
• Surgery and Chemotherapy	16	53.3	15	50.0		
• Surgery and Chemotherapy and Radiotherapy	4	13.3	6	20.0		

* = t-test

Table (3): Patients' knowledge about sleep among both study and control group before and after implementation of acupressure.

Patients' knowledge about sleep	Study group (n=30)				Control group (n=30)				X2 Value	X2 Value
	Satisfaction		Unsatisfaction		Satisfaction		Unsatisfaction			
	No	%	No	%	No	%	No	%		
Before implementation	3	10	27	90	10	33.3	20	66.7	4.812	0.028*
After implementation	22	73.3	8	26.7	10	33.3	20	66.7	9.643	0.002*

Table (4): Sleep quality as presented by patients of both study and control group at three times intervals (first, midst, and last) day of hospitalization.

Sleep quality	Study group (n=30	Control group (n=30)	t-test	P value
Sleep effectiveness				
• First day	6.72±2.10	6.8+2.2	0.14	>0.05
• Midst day	31.19±0.88	17.23+1.68	40.32	< 0.001
• Last day	48.9±1.65	33.1+0.71	48.18	< 0.001
Sleep disturbance				
• First day	14.10i4.18	14+2.72	0.11	>0.05
• Midst day	42.15±1.99	24.17+0.59	47.45	< 0.001
• Last day	66.19±2.95	44.93+1.64	34.50	< 0.001
Sleep supplementation				
• First day	6.10±1.90	5.9+1.77	0.42	>0.05
• Midst day	18.55±0.98	11.57+0.97	27.73	< 0.001
• Last day	26.50+0.77	20.7+0.88	27.17	<0.001
Sleep disturbance plus supplementation				
• First day	20.2+6.08	18.53+2.78 >|	1.37	>0.05
• Midst day	60.7+2.97	35.73+1.48	41.22	< 0.001
• Last day	92.69+3.72	65.63+1.38	37.35	< 0.001

Table (5): Correlation between acupressure and quality of sleep among both study and control group at three times interval (first, midst, and latest) day of hospitalization.

Acupressure	Quality of sleep			
	Study group		Control group	
	R	P	r	P
First day of hospitalization	- 0,223	0,216	- 0.183	0. 332
Midst day of hospitalization	- 0.937**	0.000	- 0.246	0.190
Latest day of hospitalization	-0,949***	0.000	-0,377*	0.040

r= Pearson correlation coefficient

significant (p ≤0.05)

DISCUSSION:

According to estimates from the National Cancer Institute and the Surveillance, Epidemiology, and End Results Program, breast cancer (BC) will be the most frequently diagnosed malignant tumour in women worldwide in 2019. These cases will make up between 15 and 30 percent of all new cases of cancer in women, depending on the data sources (National Cancer Institute, 2020; Siegel, Miller& Jemal, 2019).

When compared to the general population, cancer patients are more likely to experience sleep disturbances, especially those with breast and lung cancer. There is evidence in traditional Chinese medicine that auricular factor acupressure enhances sleep. However, nothing is known about the effect of APA on sleep disturbance in breast cancer patients (Wang, Wu, Li & Zhou , 2020).

According to the results of the current study, there were no statistically significant changes in the demographic information of the patients between the study and control groups in terms of age, education level, occupation, or marital status. Most members of the study and control groups were between the ages of 45 and 55 in terms of age. Less than half of the study and control groups could read and write, according to educational level. Most members of the study and control groups were married and unemployed in terms of occupation.

The results of this study confirmed that the majority of each study and control group had symptoms such as pain and vomiting, and that chemotherapy and radiotherapy had been administered to half of the sample after surgery. These findings are supported by the use of (Ghosh, 2019). said that treatment decisions are made with the help of the patient and the doctor after consideration of the best treatment option available for the level and organic characteristics of the cancer, the patient's age and preferences, and the risks and benefits associated with each treatment protocol.

In terms of a family history of breast cancer, the current study indicated that the majority of the sample had none. According to (DeSantis et al., 2019), who stressed that the majority of the study group had family history, these results are inconsistent with their findings.

In relation to patient's knowledge of breast cancer of study and control group, before intervention, there was no statistically significant difference between both groups, as mostly of the study group and control group had unsatisfaction knowledge regarding to quality of sleep. This result is agreement with (Sayed et al., 2019) whose study sample had poor knowledge regarding to breast cancer disease, pain as well as sleep. Unsatisfaction level of knowledge before intervention may be due to lack of their education level, lack of educational program and training background about the breast cancer disease, lack of their awareness due to there haven't family history for the same disease.

While post implementation the intervention, patients' knowledge regarding to breast cancer disease and quality of sleep has improved for study group rather than the control group. These results consistent with (Alem, Ansari, Hajigholami, 2021) ; (Fasching , Yadav & Hu, 2021) who reported that accurate and appropriate education and information for patients with cancer related pain and their caregivers are an essential aspect of comprehensive pain management. Patients' knowledge about cancer pain can positively affect its management and quality of sleep.

The most recent study indicated that there were considerably greater levels of sleep rating but that there were no statistically significant differences in sleep quality between the study and management organisation prior to intervention and subsequent to

intervention. The results of the current study were consistent with those of (Cheatle, Falcone, Dhingra, & Lerman, 2020), who found that for subjects who received intervention, the mean ratings for sleep were good, those for pain and discomfort were worse than baseline, and interactions between pain and discomfort and sleep were statistically significant when compared to control groups.

This finding of the study was highlighted by (Wu et al., 2018), who validated that popularity of complementary ache control techniques has contributed to the improved ability to control pain and the effectiveness and safety of acupressure for insomnia. The modern study found that there were no statistically significant differences between the observe and manipulate institutions regarding sleep rating prior to acupressure as opposed to after acupressure. These results will provide guidance to medical professionals and patients regarding the use of acupressure for sleep disorders.

CONCLUSION:

In the light of the present study finding was concluded that:

Many breast cancer patients experience multiple co-occurring symptoms that persist long after cancer treatments end. These symptoms include chronic pain which negatively effect on quality of sleep. Therefore, it is extremely important to provide pain control in these patients. Numerous evidence-based pharmacological and nonpharmacological methods are used for effective pain management. The most widely accepted pharmacological algorithm is the method of analgesic ladder treatment developed by the World Health Organization but causes many side effects for patients.

Acupressure is an application that provides the energy circulation and balance in the body and is performed by applying physical pressure on different points on the body surface in case of pain. Acupressure is a painless, easy-to-apply, safe, efficient, and affordable method that originates from the traditional Chinese medicine, has no side effects, is easy to learn and apply, and can be applied even by patients themselves after receiving proper training. The essential characteristic of this method is to eliminate symptoms or help the management of the disease by using the body's own possibilities and without taking any external substance into the organism.

According to the results of the current study, using acupressure improved the study group's sleep quality more than the control group, who received standard medical treatment.

RECOMMENDATIONS:

1. A comprehensive, easy-to-understand Arabic booklet that will be distributed to all patients in the oncology department and contain advice to improve sleep quality

2. Creating a training program for nurses on how to enhance breast cancer patients' sleep quality.

3. Promote the use of acupressure as a therapy option in oncology hospitals to enhance sleep quality.

4. Additional studies are required to explore the impact of acupressure on sleep quality in a community of breast cancer patients in order to generalize the findings.

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تأثير تطبيق العلاج بالضغط على جودة النوم لدى مرضى سرطان الثدى

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الـخـلاصـة

اضطراب النوم مشكلة صحية كبيرة تحدث في الناس من جميع الأعراق. بالنسبة لمرضى السرطان ، يتأثر النوم بمجموعة متنوعة من العوامل مثل التغيرات الكيميائية الحيوية لعلاج السرطان. اضطرابات النوم ، مثل صعوبة النوم مشاكل في الحفاظ على النوم ، وضعف كفاءة النوم ، والاستيقاظ المبكر ، والنعاس المفرط أثناء النهار. وقد اجريت الدراسة فى أقسام الاورام بمستشفيات جامعة المنصورة ،وقد شاركت فى هذة الرسالة (٦٠) مريضة الاتى تتوافر فيهم الشروط اللازمة لاجراء الدراسة وتم تقسيمهم الي مجموعتين متساويتان بحيث مجموعة تتلقى العلاج بالضغط والمجموعة الاخرى تتلقى العلاج الروتينى للمستشفى. وقد تم استخدام أداتين لجمع البيانات، **الاولى:** استمارة استبيان المعلومات وتشمل المعلومات الديموجرافية والتاريخ المرضى **والثانية:** مقياس النوم لسندر هاليبرن وفيران لسنة ١٩٨٧ ولقد كشفت النتائج أن هناك تاثير لتطبيق العلاج بالضغط على جودة النوم. واوصت هذة الدراسة تطوير برنامج تعليمى للمرضات حول كيفية تحسين جودة النوم لمرضى سرطان الثدى وكذلك تشجيع مستشفيات الأورام علي تطبيق العلاج بالضغط على تحسين جودة النوم .

الكلمات المرشدة: العلاج بالضغط ،جودة النوم ،سرطان الثدى