# AROMATHERAPY AS AN ALTERNATIVE OF IMPROVEMENT IN THE QUALITY OF LIFE OF PATIENTS WITH BREAST CANCER

Alexandra Patricia Coquel Bru<sup>1</sup>, Ciro César Alvear Sedán<sup>2</sup>, Carlos Alberto Severiche Sierra<sup>1</sup>, Sandra Viviana Caceres Matta<sup>1</sup>, Carlos Ramón Vidal Tovar<sup>3</sup>, Mery Rocío Ruiz Cabezas<sup>4</sup>, Mercedes Elena Martínez Zabaleta<sup>5</sup> & Angelica Margarita García Moreno<sup>6</sup>

<sup>1</sup>Corporación Universitaria Rafael Nuñez. Cartagena de indias, Bolivar, Colombia. alejandra.coquel@curnvirtual.edu.co; carlos.severiche@curnvirtual.edu.co; sandra.caceres@curnvirtual.edu.co

<sup>2</sup>Universidad de Cartagena. Cartagena de indias, Bolívar, Colombia. <u>cicealse@yahoo.es</u>
 <sup>3</sup>Universidad del Santander. Valledupar, Cesar, Colombia. <u>car.vidal@mail.udes.edu.co</u>
 <sup>4</sup>Universidad del Magdalena. Santa Marta, Magdalena, Colombia. ruimeri@gmail.com.
 <sup>5</sup>Universidad Cooperativa de Colombia. Santa Marta, Magdalena, Colombia. mercemar10@yahoo.es

<sup>6</sup>Universidad Simon Bolívar. Barranquilla, Atlántico, Colombia. agarcia87@unisimonbolivar.edu.co

# **ABSTRACT**

We sought to identify the effects of the use of aromatherapy in patients with breast cancer. The Colombian validation questionnaire of the FACT-B scale was carried out to measure the quality of life of 35 patients with breast cancer of the Fundación Mujeres Por Tus Senos. Emotional state the item "I feel sad" in the pre-therapy survey 62% answered a little, in the post-therapy survey 75% answered the option nothing. General physical state of health, in the item in the item "I feel sick" in the pre-therapy survey 50% answered the option nothing, a remaining answered a little and in the post-therapy survey 63% answered the option nothing. Family and social environment in the item "I am satisfied with the way my family communicates" in the pre-therapy survey 50% answered the option very much, in the post-therapy survey 75% answered the option very much. Personal functioning capacity, in the item "I am satisfied with my current quality of life" in the pre-therapy survey 38% answered the option very much, in the post-therapy survey 38% responded to the option very much.

**Key words:** Aromatherapy; Breast cancer; Quality of life; Essential oils.

## INTRODUCTION

Cancer is a major public health problem throughout the world, as it represents the second leading cause of death in the United States (Dorvar & Arab, 2016; Siegel et al., 2016). Breast cancer is one of the most diagnosed pathologies in the United States and the leading cause of mortality in women worldwide (Ghongade & Wakde, 2017; Vanderpool et al., 2017). Given its high prevalence, breast cancer is one of the pathological processes that cause more affectations in women, especially at the level of their daily activities, their family, social and emotional environment, recognizing as a public health problem (Farnaz, 2016; Olasolo et al., 2012; Shibamoto et al., 2010).



Due to the serious alterations produced by breast cancer in the quality of life of women who suffer from it, at the level of their emotional state, in their capacity for personal functioning, in the family, social and in the general physical state of health, is where the importance of this study, which seeks to improve the quality of life of women with cancer, through the implementation of complementary and alternative medicine, in this case aromatherapy, which will be used as a coadjuvant in the physical and emotional improvement of patients with breast cancer (Wutsga & Setiadi, 2017; Bar-Sela et al., 2014; Lopez, 2004).

Although complementary and alternative medicine are methods that are not well known in our culture compared to those proposed by allopathic medicine, their use has increased every day as an additional option to conventional treatments, due to the impact that this has on the quality of life and the reduction of symptoms such as depression, anxiety and fatigue in patients with cancer, in which it has been implemented (Mourelle et al., 2013; Sanchez et al., 2012). The purpose of this study is to determine if aromatherapy improves the quality of life of breast cancer patients of the Women for Your Breasts Foundation, in the period between February 2017 to November 2017.

The feasibility of the study lies in demonstrating whether aromatherapy manages to reverse or significantly improve the behavior of the side effects that occur after treatment with either radiotherapy and / or chemotherapy in women with breast cancer and the symptoms produced by the disease itself. , since the results on the symptomatology presented by the patients are benefits, it could be suggested the implementation of these alternative therapies, not only in a patient with breast cancer, but in any type of cancer, in order to offer an option to improve their quality of life in the course of their illness.

## MATERIAL AND METHODS

*Type of study:* 

Descriptive-Observational cohort.

It seeks to describe the effects of the use of Aromatherapy in a pathology (breast cancer) that is evident in a specific population in which an aesthetic protocol based on alternative therapies (aromatherapy) is established.

The present work was carried out in a descriptive - observational cohort, where initially there was a population of 35 patients diagnosed with breast cancer belonging to the foundation women for your breasts, in Cartagena, in the period from February 2017 to November of 2017. For the selection of the population to be studied, it was based on the following criteria:

Inclusion criteria:

- Women diagnosed with breast cancer at any stage, of legal age.
- Women whose native language is Spanish



- Women who are not illiterate (who can read and understand the content of the questionnaire)
- Women who agree to participate in the study.

## Exclusion criteria:

- Patients with more frequent cutaneous lesions in oncology contemplated in the dermatological care guide of the oncological patient (because within the side effects of the essential oils applied in the form of massages could cause exacerbation of the symptomatology, bringing with it a worsening of the affectation), among these Alterations of mucous membranes (oral mucositis), cutaneous itching, ulcerations, desquamative dermatosis, reactive erythema, Sweet syndrome, deposit disease.

In order to apply the measurement instrument, an informed consent form was used, in which the persons related to the investigation were explained in a clear and understandable manner, the risks were explained and the object of study of the investigation was explained. , the people who agreed to be part of the project and affirmed to see clearly understood the processes, they were asked what they would put in writing with their signature the informed consent, format that was also provided to them and which was left as an annex, to then apply the survey and determine the state in which each patient is; Based on the data obtained later, the most appropriate therapy (aromatherapy) for each patient was determined.

# Collection techniques:

We worked with information collected with Colombian Validation of the FACT-B scale to measure the quality of life of patients with breast cancer. (30) adapted for the implementation of aromatherapy in the well-being of oncological patients of the women's foundation for your breasts. Before and after therapy

*Techniques and procedures for collecting information:* 

Primary Source. Survey conducted with specific questions about the workplace, level of educational training, marital status, occupation, attaching the Fact-B Questionnaire: For patients with breast cancer.

# Bioethical Aspects:

In the handling of personal and numerical information about patients, due confidentiality, respect and anonymity were maintained. The informed consent was endorsed by the ethics committee of the Rafael Núñez university corporation. The project describes a scientific research on risk-free human subjects that will be subject to the provisions of resolution 8430 of 1993 of the Ministry of Health of Colombia.

## RESULTS AND DISCUSSION



The total population was 8 surveyed, 44% had the university level as shown in Figure 1, 50% corresponded to socioeconomic stratum II and the other 50% to socioeconomic stratum III, see Figure 2. The average age It was 53.12 years.

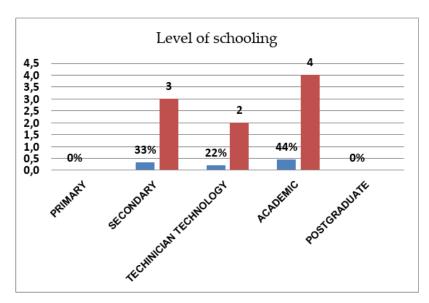


Figure 1. Level of schooling

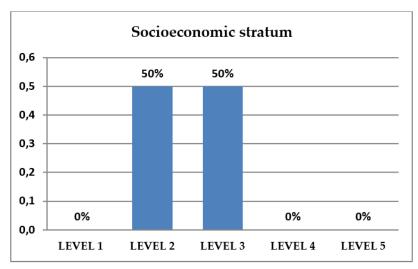


Figure 2. Socioeconomic stratum

The results obtained in each of the dimensions of the pre-therapy and post-therapy instrument were the following:



Emotional state: As for the item "I feel sad" in the pre-therapy survey, 62% responded a little, in the post-therapy survey 75% answered the option nothing. In the item "I am satisfied with how I am facing my illness" in the pre-therapy survey 25% answered the option nothing, 25% very much and another 25% very much, in the post-therapy survey 75% answered nothing. In the item "I'm losing hope in the fight against my disease" in the pre-therapy survey 100% answered the option nothing, in the post-therapy survey 75% answered the same option. In the item "I feel nervous" in the pre-therapy survey 63%

		Noth	ing	g		A L	ittl	le	5	Som	eth	ing	-   -	N	Iuc	h		Very	M	uch
Emotional State	]	Pre	P	os	F	Pre	P	os	F	re	]	Pos		Pre		Pos		Pre		Pos
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
I feel sad	0	0	6	75	5	62	1	12	0	0	1	12	3	38	0	0	0	0	0	0
I am satisfied with how I am facing my illness	2	25	6	75	1	13	1	12	1	13	1	12	2	25	0	0	2	25	0	0
I'm losing hope in the fight against my disease	8	100	6	75	0	0	1	12	0	0	1	12	0	0	0	0	0	0	0	0
I feel nervous	5	63	6	75	3	38	1	12	0	0	1	12	0	0	0	0	0	0	0	0
I'm worried about dying	7	88	6	75	2	12	1	12	0	0	1	12	0	0	0	0	0	0	0	0
I worry that my	6	75	6	75	2	25	1	12	0	0	1	12	0	0	0	0	0	0	0	0

answered the option nothing, in the post-therapy survey 75% answered nothing. In the item "I am worried about dying" in the pre-therapy survey, 88% answered the option nothing, in the post-therapy survey 75% answered nothing. Regarding the item in Table 1, "I am worried that my disease gets worse" in the pre-therapy survey, 75% answered the option, nothing in the post-therapy survey, 75% answered nothing.

Table 1. Emotional state



disease will get										
worse										

General physical state of health: Regarding the item "I lack energy" in the pre-therapy survey, 50% answered the option nothing, in the post-therapy survey 63% answered the option nothing. In the item "I have nausea" in the pre-therapy survey 88% answered the option nothing, in the post-therapy survey 63% answered the option nothing. In the item "due to my physical condition, I have difficulty meeting the needs of my family" in the pre-therapy survey 75% answered the option nothing, in the post-therapy survey 63% answered the option nothing. In the item "I have pain" in the pre-therapy survey 50% answered the option nothing. In the item "I am bothered by the side effects of treatment" in the pre-therapy survey 63% answered the option a little in the post-therapy survey 63% answered the option nothing. In the item "I feel sick" in the pre-therapy survey, 50% answered the option "nothing", a remaining one answered a little and in the post-therapy survey 63% answered the "nothing" option. In the item "I have to spend time lying down" in the pre-therapy survey 100% answered the option nothing, in the post-therapy survey 75% answered the option nothing, see Table 2.

Table 2. General physical condition of health

General Physical	1	Noth	nin	g		A Li	ittle		So	ome	eth 3	in		Μι	ıch	<u> </u>		Ve Mı	ery ach	
State Of	P	re	Po	os	P	re	Po	os	P	re	Po	os	P	re	P	os	P	re	P	os
Health	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
I lack energy	4	5 0	5	6	2	2 5	1	1 3	2	2 5	1	1 3	0	0	1	1 3	0	0	0	0
I have nausea	7	8 8	5	6	1	1 3	1	1 3	0	0	1	1 3	0	0	1	1 3	0	0	0	0
Due to my physical condition, I have difficulty meeting the needs of my family	6	7 5	5	6 3	1	1 3	0	0	0	0	1	1 3	0	0	0	0	1	1 3	2	2 5
I have pain	4	5 0	4	5 0	2	2 5	2	2 5	1	1 3	2	2 5	1	1 3	0	0	0	0	0	0
I am bothered by the side effects of the treatment	2	2 5	5	6 3	5	6 3	1	1 3	0	0	1	1 3	1	1 3	1	1 3	0	0	0	0
I feel sick	4	5 0	5	6	4	5 0	2	2 5	0	0	2	1 3	0	0	0	0	0	0	0	0



I have to spend time	8	1 0	6	7 5	0	0	1	1 3	0	0	0	0	0	0	1	1 3	0	0	0	0	
lying down		0																			

Family and social environment: Regarding the item "I feel close to my friends" in the pretherapy survey 50% answered the option very much, in the post-therapy survey 50% answered the option very much. In the item "I receive emotional support from my family" in the pre-therapy survey, 50% answered the option very much, in the post-therapy survey 63% answered a lot. The item "I receive support from my friends" in the pre-therapy survey 50% answered the option very much, in the post-therapy survey 63% answered the option very much. In the item "my family has accepted my disease" in the pre-therapy survey, 50% answered the option very much, in the post-therapy survey 50% answered the option very much. In the item "I am satisfied with the way my family communicates" in the pretherapy survey, 50% answered the option very much, in the post-therapy survey 75% answered the option very much. In the item "I feel close to my partner (or the person who is my main support)" in the pre-therapy survey 38% answered the option very much, in the post-therapy survey 63% answered the option very much. In the item "I am satisfied with my sex life" in the pre-therapy survey 25% answered nothing, the next 25% much, another 25% very much and in the post-therapy survey 38% answered the option nothing, see Table 3.

Table 3. Family and social environment

Family And Social		Not	hin	g		A L	ittle	e	S	ome	thi	ng		Mı	uch		_	Very	M	uch
Environment	F	re	P	os	P	re	P	OS	P	re	P	os	P	re	F	os		Pre		Pos
Liiviioiiiieiit	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
I feel close to my friends	2	25	0	0	0	0	1	13	1	13	0	0	1	13	3	38	4	50	4	50
I receive emotional support from my family	2	25	0	0	0	0	1	13	1	13	0	0	1	13	2	25	4	50	5	63
I receive support from my friends	2	25	0	0	0	0	0	0	1	13	0	0	1	13	3	38	4	50	5	63
My family has accepted my illness	2	25	1	13	0	0	1	13	1	13	0	0	1	13	2	25	4	50	4	50
I am satisfied with the way my family communicates	2	25	0	0	0	0	1	13	1	13	0	0	1	13	1	13	4	50	6	75
I feel close to my partner (or the person who is my	2	25	3	38	0	0	0	0	2	25	0	0	1	13	0	0	3	38	5	63



main support)																				
I'm satisfied with my sex life	2	25	3	38	1	13	0	0	1	13	2	25	2	25	1	13	2	25	2	25

Personal functioning capacity: as shown in Taba 4, Regarding the item "I can work (include work in the home)" in the pre-therapy survey 50% answered the option a lot, in the post-therapy survey the 38 % responded the option very much. In the item "my work satisfies me (include work at home)" in the pre-therapy survey 38% answered the option very much, in the post-therapy survey 38% answered the option very much. In the item "I can enjoy life" in the pre-therapy survey 50% answered the option very much, in the post-therapy survey 38% answered the option very much. In the item "I accepted my illness" in the pre-therapy survey, 50% answered the option very much, in the post-therapy survey 38% responded to the option very much. In the item "I sleep well" in the pre-therapy survey, 50% answered the option somewhat, in the post-therapy survey 38% responded to the option very much. In the item "I enjoy my usual hobbies" in the pre-therapy survey 38% answered the option very much, in the post-therapy survey 38% responded to the option very much. In the item "I am satisfied with my current quality of life" in the pre-therapy survey 38% answered the option very much, in the post-therapy survey 38% responded to the option very much.

Table 4. Dimension of personal functioning capacity

Personal Functioning Capacity		Not	hin	g		ΑL	ittle	e	S	ome	ethir	ng_		Mu	ıch		V	ery	Mu	ch_
	P	re	P	os	P	re	P	os	P	re	P	os	P	re	P	os	P	re	P	os
	n	ı %		%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
I can work (include work at home)	1	13	1	13	1	13	1	13	1	13	1	13	4	50	2	25	1	13	3	38
My work satisfies me (include work at home)	1	13	1	13	1	13	1	13	2	25	1	13	3	38	2	25	1	13	3	38
I can enjoy life	0	0	1	13	2	25	1	13	1	13	1	13	1	13	2	25	4	50	3	38
I have accepted my disease	0	0	1	13	1	13	1	13	1	13	1	13	2	25	2	25	4	50	3	38
I sleep well	0	0	1	13	2	25	1	13	4	50	1	13	1	13	2	25	1	13	3	38
I enjoy my usual hobbies	0	0	1	13	1	13	1	13	1	13	1	13	3	38	2	25	3	38	3	38
I am satisfied with my current quality of life	1	13	1	13	1	13	1	13	0	0	1	13	3	38	2	25	3	38	3	38



Based on the results of the present investigation, it can be deduced that in the emotional state dimension, only improvement is shown in the item "I feel nervous" and unfavorable effects in the items "I feel sad", "I am satisfied with how I feel I am facing my illness "," I am losing hope in the fight against my illness "," I am worried about dying after therapy ". The general physical health dimension, showed improvement in the items "I lack energy", "I am bothered by the side effects of treatment", "I feel sick" and worse in the items "I have nausea", "due to my physical condition, I have difficulty attending to the needs of my family "," I have pain "and" I have to spend time lying down ". In the family and social environment dimension, with respect to the items "I receive emotional support from my family", "I receive support from my friends", "I am satisfied with the way my family communicates", "I feel close to my partner "are the items that post-therapy improvement was observed. And in the dimension of personal functioning capacity, total partial improvement was evidenced in the items evaluated in this section.

Previous studies that covered the same topic concluded the following: Wilkinson et al. (2007), concluded that aromatherapy massage does not seem to confer long-term benefits to anxiety and / or depression in cancer patients, but it is associated with clinically important benefits up to 2 weeks after the intervention. Bar-Sela et al. (2015), I conclude, cancer patients who completed six weekly CAM sessions improved significantly, reduced anxiety, depression, fatigue and quality of life in the experimental group from moderate to low levels. In another study, Boehm et al. (2012), in its meta-analysis, I conclude; Cancer patients can use aromatherapy / essential oils safely for a short-term benefit with regard to reducing symptoms of anxiety and depression and to increase sleep patterns and well-being.

## **CONCLUSIONS**

From the results presented, from their discussion and from the background of the literature exposed through the article, the following main conclusions can be obtained:

It is demonstrated that aromatherapy has little influence and few positive effects to improve the quality of life and signs and symptoms product of the treatment of cancer in this study population, this is evidenced by the worsening of several of the items evaluated in each of the dimensions of the measurement instrument, but it is related to the clinical improvement after 3 months of therapy.

It should be noted that the application time of aromatherapy was not the indicated one (3 months) compared to the one suggested by the studies that have been carried out with previous alternative therapies, since there is talk of a minimum time of 6 months. The sample obtained for the application of the therapies does not have a significant number of population, which is why these two variables become an



important bias for the application and interpretation of the study, suggesting that future studies have a sample of greater number of patients and a minimum therapy application time of six months.

Of the essential oils used in this study, (peppermint oil, rosemary, lemon verbena, orange and rose) rose essential oil was the most used, because thanks to its therapeutic properties, it was the most suitable to work in all dimensions, because it covered most of the symptoms that afflicted patients, as they were; nervousness, anxiety, depression, decreased libido, among others.

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