



# Long-term yoga enhances the quality of life and symptomatic scale in breast cancer patients undergoing treatment

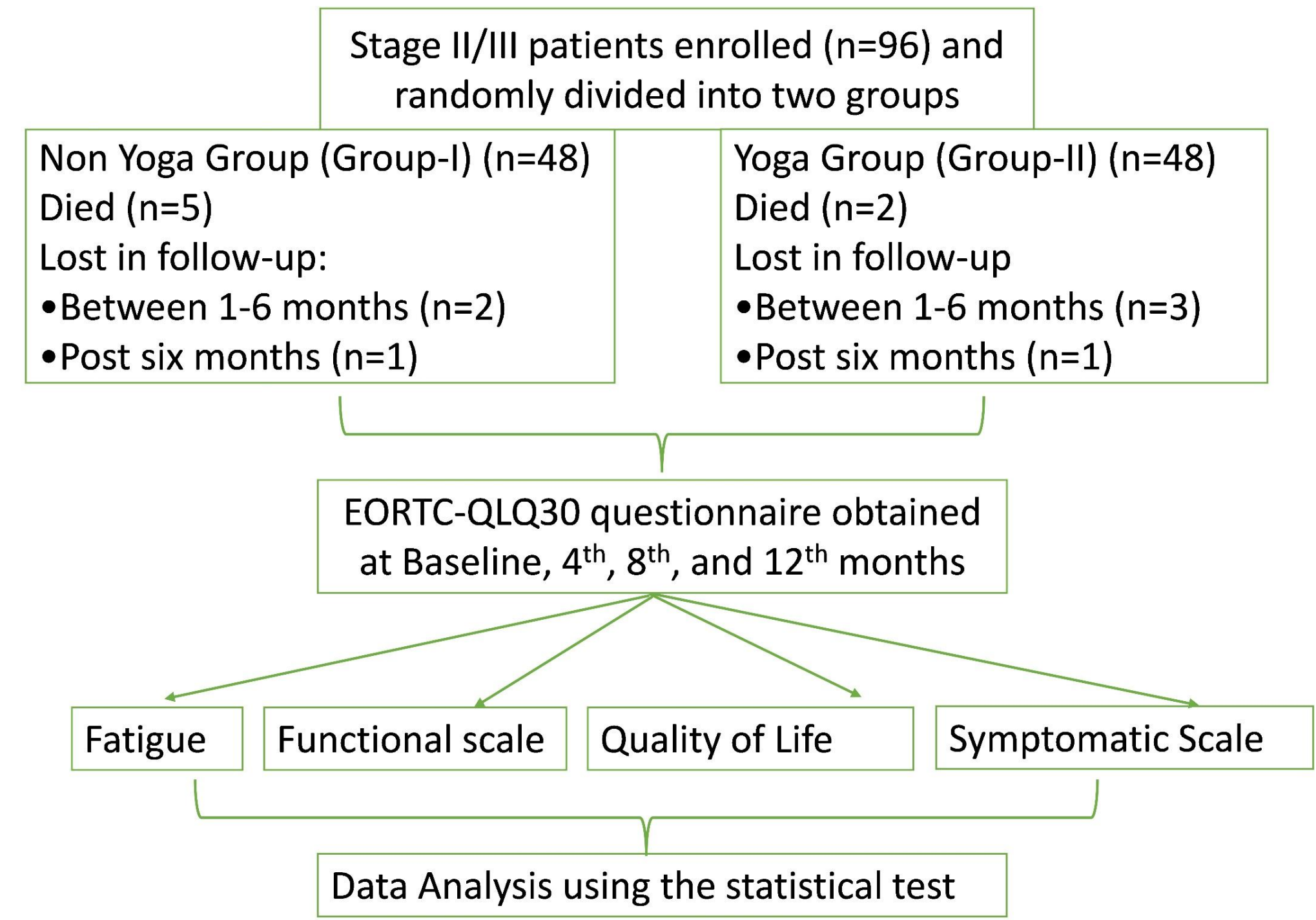
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## Introduction

- Yoga is one of the oldest therapies and has been practiced for millennia to promote physical and mental health.
- Yoga decreased cancer-related symptoms and treatment-related adverse effects, such as fatigue and nausea, and enhanced general well-being and quality of life.
- However, the duration of the yoga intervention in these investigations was maximum of six months.
- In this study, the yoga intervention was given for one year.

## Material and Methods



### Yoga Asanas

Yoga Practices	Time (Min)
Sukshma Vyayama (Loosening exercises)	7 Min
<div><div>✓ Neck rolls</div><div>✓ Shoulder rotation</div><div>✓ Arm rotation</div><div>✓ Elbow movements</div><div>✓ Wrist movements</div></div> <div><div>✓ Finger movements</div><div>✓ Waist movements</div><div>✓ Knee movement</div><div>✓ Ankle rotation</div><div>✓ Toe movements</div></div>	
Asanas (Postures)	15 Min
<div>✓ Tadasana (mountain)</div> <div>✓ Tiryaka Tadasan (Swaying Palm Tree Pose)</div> <div>✓ Kati Chakrasana (lateral arc pose)</div> <div>✓ Padadhirasana (standing forward bend)</div> <div>✓ Gomukhasana (cow-face pose)</div>	
Relaxation Posture	3 Min
<div>✓ Shavasana (corpse) (5 Min)</div>	
Pranayama (breathing practices)	8 Min
<div>✓ Nadi Shodhan Pranayama (alternate-nostril breath)</div> <div>✓ Ujjayi Pranayama (Ocean Breath)</div> <div>✓ Bhramari Pranayama (bee breath)</div>	
Hridaya Mudra (Heart Gesture)	2 Min
Humming in meditative posture	10 Min
Meditation / Om Chanting	
Yoga Nidra (Alternate days)	30 Min

## Results

- In both groups total of 70% of patients were infiltrating ductal carcinoma and the remaining 30% were others.
- The mean age in the control group was 47.67±11.68 and in the yoga group 43.11±9.39.

### ❖ Effect of Yoga on Functional Scale:

In group II functional scale was improved from the baseline to 4<sup>th</sup>, 8<sup>th</sup>, and 12<sup>th</sup> months were 44.49±2.31, 55.64±2.09, 60.8±1.96, 72.14±1.79 respectively. Whereas in group I overall little improvement was also recorded from baseline 46.27±1.76 to 12<sup>th</sup> months 54.43±2.38.

### ❖ Effect of Yoga on Fatigue Scale:

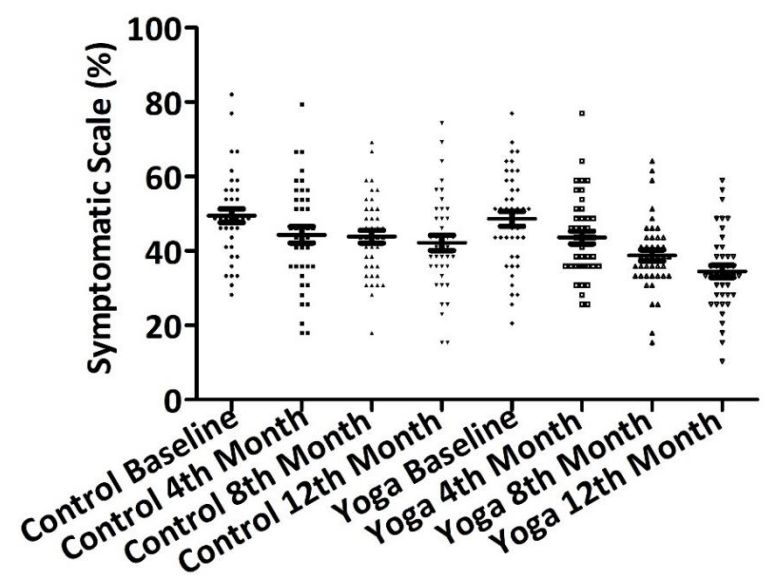
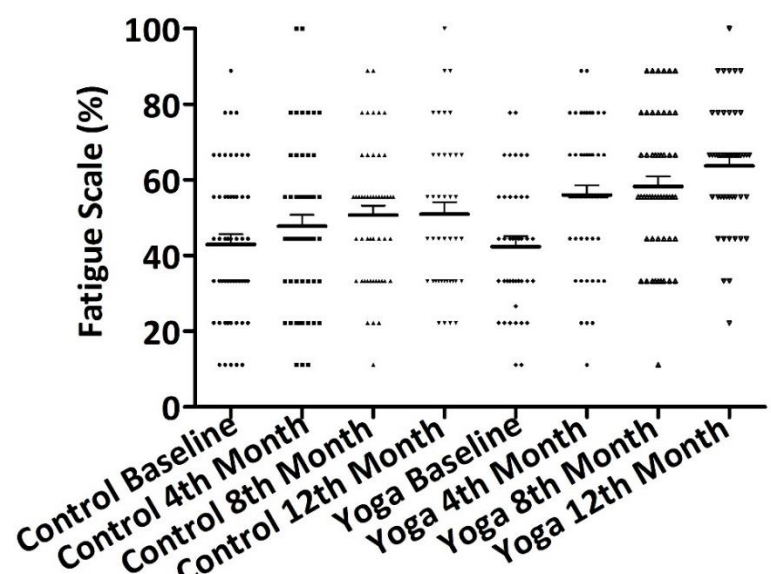
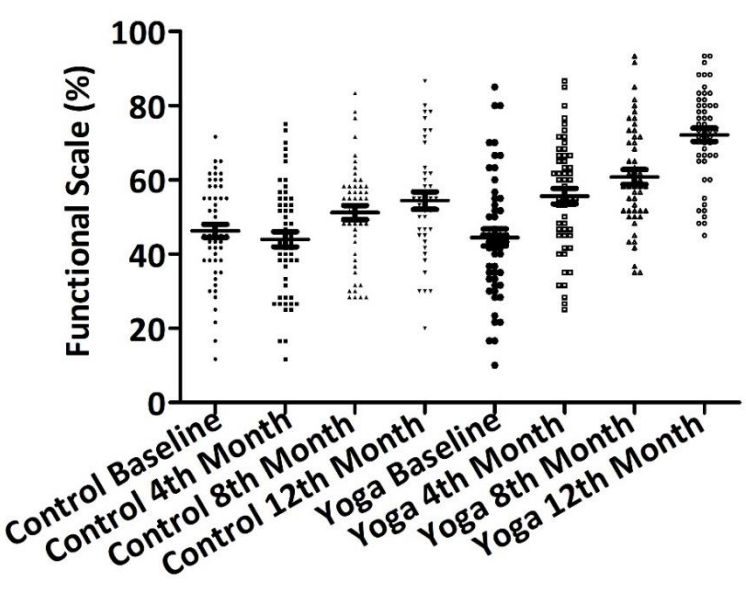
In group-II fatigue was also improved from the baseline to 4<sup>th</sup>, 8<sup>th</sup>, and 12<sup>th</sup> months were 42.38±2.70, 54.9±2.79, 58.33±2.61, 62.44±2.58 respectively and overall little improvement was also recorded in the group-I from baseline 42.18±2.81 to 12<sup>th</sup> months 50.95±3.20.

### ❖ Effect of Yoga on Quality of Life:

In group-II overall quality of life was improved from the baseline to 4<sup>th</sup>, 8<sup>th</sup>, and 12<sup>th</sup> months were 37.33±1.33, 39.87±2.99, 38.79±3.23, 74±1.59 respectively. Whereas the poor quality of life was recorded in the group-I during treatment from baseline 39.51±0.96 to 12<sup>th</sup> months 20.51±1.57.

### ❖ Effect of Yoga on Symptomatic Scale

In group-II symptomatic scale was decreases from the baseline to 4<sup>th</sup>, 8<sup>th</sup>, and 12<sup>th</sup> months were 48.66±1.99, 43.59 ± 1.69, 38.77± 1.49, 34.49±1.62 respectively. The most significant difference was found between the baseline and 12<sup>th</sup> months in group-II. Group-I also showed a decrease from baseline to 12<sup>th</sup> months but the difference was not significant.



## Conclusions

- Yoga may be an important adjunct therapy used in conjunction with cancer treatment to help patients with cancer-related fatigue, improve their immunological profile, and improve their overall quality of life during treatment.
- In the management of cancer-treatment-related side effects, yoga asanas can be as considered a cost-effective and non-invasive adjuvant therapy.
- Further studies are needed to validate these findings in a larger population.

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