



EFFECT OF YOGIC INTERVENTION ON PSYCHOLOGICAL WELLBEING AMONG CANCER PATIENTS

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Abstract

The main purpose of this research was to study the effect of yogic intervention on the psychological well-being of cancer patients, to gender and area of residence. A total of 60 cancer patients participated in the study, 30 male and 30 female, who were then divided into two groups of 30 each, urban and rural. The Psychological Well-Being Scale by Pooja Chaudhary and Devendra Singh Sisodiya was administered to all participants before and after the yogic intervention. A t-test was used to analyze the data, and the results revealed that yogic intervention had a significant effect on the psychological wellbeing of all participants, regardless of gender or area of residence.

Keywords: Cancer, psychological wellbeing, Yoga

INTRODUCTION

Cancer represents a major public health concern. Cancer and its treatment are often associated with prolonged adverse physical and psychosocial symptoms, including reduced physical function and fitness and increased risk of anxiety, depression, and fatigue. Psychosocial interventions such as counselling, support groups and cognitive behavioural therapies may help patients cope with cancer and the psychosocial problems associated with cancer and cancer treatment, but are less likely to help with common physical issues such as loss of strength and flexibility, weight gain, and reduced physical function. (Buffart et al., 2012)

Non-pharmacological interventions to deal with these symptoms include psychosocial interventions, physical exercise, yoga, physiotherapy, dietary management, among others. This approach seems to be an effective way to improve quality of life, increase physical activity, and reduce fatigue in these patients. One opportunity to perform such exercises appears to be yoga, but most investigations come from its cultural origins, such as India and Japan, and this cross-cultural perception might influence its adoption. During radiotherapy, yoga was also associated with a significant reduction in fatigue, and both urinary and sexual dysfunction in prostate cancer patients. In glioma patients, quality of life was moderately improved. Similarly, yoga appears to reduce anxiety in women with breast cancer. (Haier et al., 2018) As an adjunct to conventional cancer therapies, the complementary therapies in question are used to improve quality of life through decreasing the adverse effects of anti cancer treatments or through alleviating the symptoms of cancer.

Cancer survivors are advised a healthy lifestyle, comprising of exercise, fiber and antioxidant rich diet, and lower psychological stress, fear, mood imbalance, anxiety, and depression) because these lifestyle factors are associated with risk of recurrence and changes in these factors go a long way in influencing disease, improving treatment outcomes, and preventing recurrence, while improving quality of life. Techniques in yoga offer a way to regain control over these five personalities and restore normal health. Chronic psychological stress is now being implicated in many non-communicable, lifestyle disorders, and a yoga based lifestyle intervention is suggested as a novel add-on to conventional cancer care. Although there are studies that validate short-term benefits of yoga



practice, there are limited studies that show long term benefits of yoga in survivors. The present case-control study aimed to assess the differences between breast cancer survivors who do and do not practice Yoga with respect to their psychological states. (Amritanshu et al., 2017)

The aim of this research was to study the effect of yogic intervention on the psychological wellbeing of cancer patients.

OBJECTIVES

- To evaluate the effect of yogic intervention on the psychological wellbeing of male cancer patients.
- To evaluate the effect of yogic intervention on the psychological wellbeing of female cancer patients.
- To evaluate the effect of yogic intervention on the psychological wellbeing of cancer patients who are living in urban area.
- To evaluate the effect of yogic intervention on the psychological wellbeing of cancer patients who are living in rural area.

METHODS

2.1 Selection of the Participants

Sixty breast cancer survivor patients were taken from cancer hospitals of Mahesana District. A total of 60 cancer patients participated in the study, 30 male and 30 female, who were then divided into two groups of 30 each, urban and rural.

The process of this research was explained to all the cancer patients and their informed consent form was taken. One and half month, five days in a week, total eight weeks of Yoga Intervention including asanas, Pranayama and meditation was given to all groups. All participants were given detailed information about the study's process.

Inclusive Criteria: Mild to moderate cancer patients aged between 30 to 60 of both sex patients were selected.

Exclusive Criteria: The subjects with a history of major heart problem, respiratory, neurological disorders, diabetes or with a history of major surgery were totally excluded from the study.

Sr. No.	Activity	Time duration
1	Asanas	20 minutes
2	Pranayama	20 minutes
3	Meditation	20 minutes
4	Total	60 minutes

Intervention

The Yoga Group was given the Integrated Yoga practice as an alternative therapy while continuing to take their prescribed conventional medication. The Intervention included an integrated practice of asanas, pranayama and meditation. Yoga Intervention Measurement Tool The Psychological Well-Being Scale was filled before and after the intervention by the both experimental group and the control group.

PROCEDURE

All participants were given detailed information about the study's process and their signed permission was obtained. The Psychological Well-Being Scale by Pooja Chudhary and Devendra Singh Sisodiya was administered to all participants before and after the yogic intervention. The Independent sample t-test was used to compare the pre and post data of the male, female, urban and rural groups.

Statistical Analysis:

Data were analyzed through IBM SPSS (Statistical Packages For Social Sciences) 22.0 version. The average and standard deviation of the whole sample were determined for each variable using the appropriate statistical technique. Pre and post data were analyzed through the dependent sample t-test. The significance level was taken at $p < 0.01$ level.

RESULT

Table -1

Result shown that the effect of yogic intervention on the psychological wellbeing of male cancer patients

Male	No.	Mean	SD	t	Level of significant
Pre test	30	124.97	44.06	7.47	0.01
Post test	30	172.4	46.44		

Significant at 0.01 level of confidence $t(29) = 2.462$

Table-1 indicates that received 't' ratio of yoga group is 7.47, which is >2.462 , there was a statistically significant difference found (at $p < 0.01$ level) in male cancer patients. So the result shown that the psychological wellbeing of male cancer patients was improved after 8 weeks of yogic intervention.

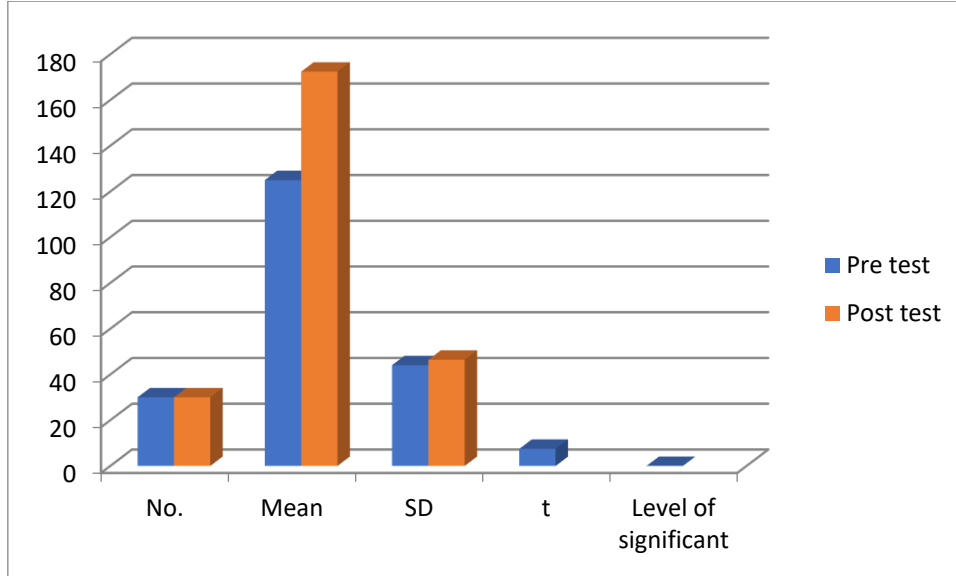


Table -2

Result shown that the effect of yogic intervention on the psychological wellbeing of female cancer patients

Female	No.	Mean	SD	t	Level of significant
Pre test	30	136.03	46.32	5.19	0.01
Post test	30	160.53	52.06		

Table-2 indicates that received 't' ratio of yoga group is 5.19, which is >2.462 , there was a statistically significant difference found (at $p < 0.01$ level) in female cancer patients. So the result shown that the psychological wellbeing of male cancer patients was improved after 8 weeks of yogic intervention.

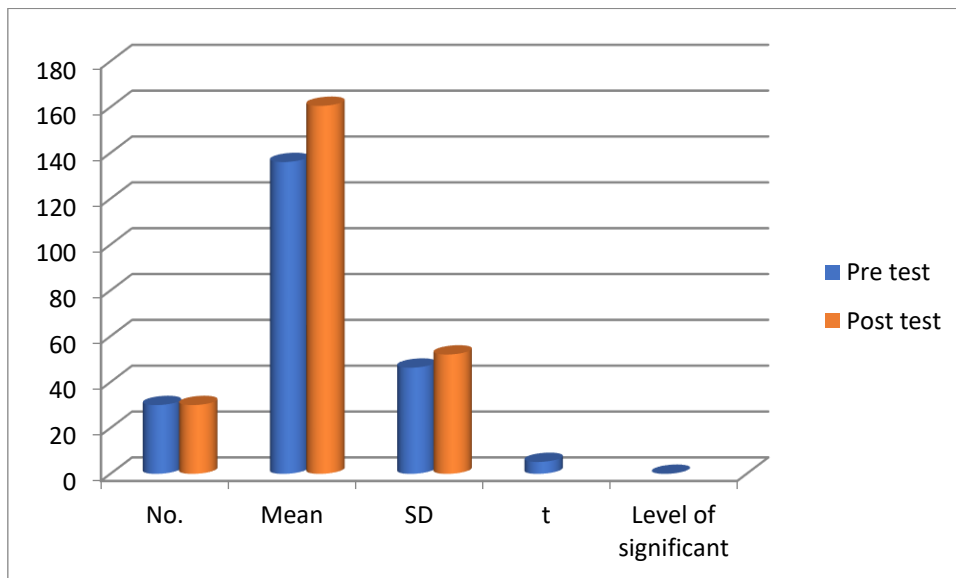


Table -3

Result shown that the effect of yogic intervention on the psychological wellbeing of Urban cancer patients

Urban Psychological wellbeing	No.	Mean	SD	t	Level of significant

Pre test	30	148.1	44.93	4.06	0.01
Post test	30	175.33	53.49		

Table-3 indicates that received 't' ratio of yoga group is 4.06, which is >2.462, there was a statistically significant difference found (at $p < 0.01$ level) in cancer patients who are living in urban area. So the result shown that the psychological wellbeing of cancer patients who are living in urban area was improved after 8 weeks of yogic intervention.

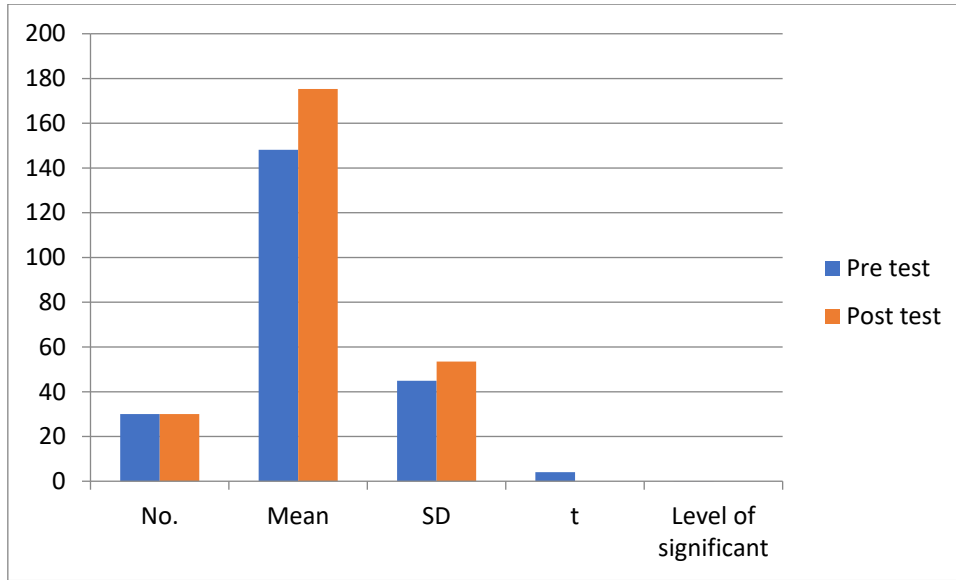
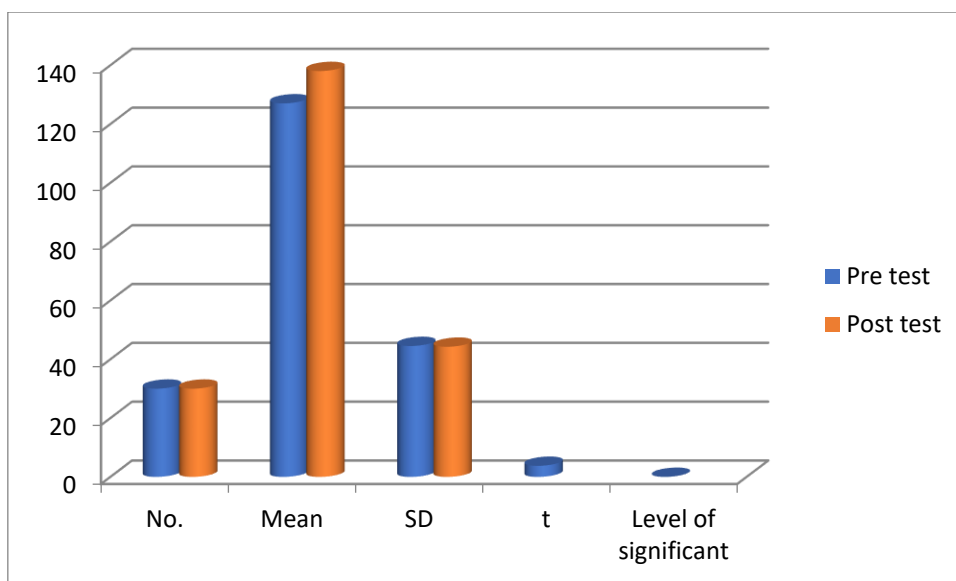


Table -4

Result shown that the effect of yogic intervention on the psychological wellbeing of Rural cancer patients

Rural	No.	Mean	SD	t	Level of significant
Pre test	30	127.03	44.52	3.76	0.01
Post test	30	138.03	44.26		

Table-3 indicates that received 't' ratio of yoga group is 4.06, which is >2.462, there was a statistically significant difference found (at $p < 0.01$ level) in cancer patients who are living in rural area. So the result shown that the psychological wellbeing of cancer patients who are living in rural area was improved after 8 weeks of yogic intervention.





DISCUSSION OF FINDINGS

In this present research the result have shown that the effect of yogic intervention on the psychological wellbeing of male cancer patients is more than the women. Also the result have shown that the effect of yogic intervention on the psychological wellbeing of urban cancer patients is more than the cancer patients who are living in the rural area.

Furthermore, cancer patients must deal with dramatic life changes to which they have to adapt throughout their treatment trajectory. Biological, personal, and most importantly social factors contribute to cancer patients' resilience and, consequently, to favorable psychological and treatment-related outcomes.

One supported study was on the effects of yoga on psychological health, quality of life, and physical health of patients with cancer by **Lin et al., (2011)** This study were identified through a systematic search of seven electronic databases and were selected if they used a randomized controlled trial design to examine the effects of yoga in patients with cancer. The quality of each article was rated by two of the authors using the PEDro Scale. Ten articles were selected; their PEDro scores ranged from 4 to 7. The yoga groups compared to waitlist control groups or supportive therapy groups showed significantly greater improvements in psychological health: anxiety ($P = .009$), depression ($P = .002$), distress ($P = .003$), and stress ($P = .006$). However, due to the mixed and low to fair quality and small number of studies conducted, the findings were preliminary and limited and should be confirmed through higher-quality, randomized controlled trials.

Another supported study was conducted by **Haier et al., (2018)**, they studied on the Improvement of well-being in cancer patients by yoga training. Between 2015 and 2017, they analyzed the effects of yoga on the well-being of cancer patients. Fifty one patients received yoga training specifically designed to address cancer-related problems. Before the start (SoS) and after the end (EoS) of training, the WHO-5 well-being index was used to evaluate patients' perception. Result has shown that the WHO-5 scores significantly improved from 47.1 ± 21.4 at SoS to 69.7 ± 15.1 at EoS. Patients in the middle age group (EoS– SoS: 28.0 ± 20.6) showed a significantly higher benefit ($p < 0.005$) compared with age groups < 40 years (EoS–SoS: 10.7 ± 15.4) and > 60 years (EoS–SoS: 16.0 ± 12.1). Patients with low initial scores benefited most from yoga. The study concluded that yoga training under experienced supervision could serve as a beneficial complementary treatment in cancer patients. Best effects were observed in patients with highly reduced well-being and 40–60-year-old patients.

CONCLUSION

Studies on yoga benefits in cancer patients suffer from heterogeneity with various types of yoga interventions, duration, exposure, practices, and indications. **Rao et. al (2017)** The study concluded that the effect of yogic intervention has positive effect on cancer patients. Best effects were observed in male patients with highly reduced well-being and urban patients. In conclusion, yoga mind-body approaches can be considered as beneficial complementary treatment in relevant groups of cancer patients, especially if these patients suffer from low well-being during cancer treatment and are in the initial convalescence period.

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