



Effect of Yoga on Level of Depression among Females suffering from Polycystic Ovarian Syndrome (PCOS)

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ABSTRACT: The present research was framed to study the effect of yoga training program on level of depression among females suffering from PCOS disease. The sample included a total of 30 females. The criterion test was administered on the sample at the preliminary stage and after that the yoga training program was implemented and then compared the pre and post scores of depression. The result shows that there was a difference between pre-test and post test score regarding level of depression. The result revealed that yoga training program was beneficial for managing the level of depression among PCOS females. On the basis of obtained result researchers can conclude that with the help of yoga PCOS females can cope up with level of depression.

Keywords: Level of Depression, Yoga, females suffering from PCOS

I. INTRODUCTION

A. Depression

Depression is a common mood disorder it is negatively affected on persons thinking, feeling and behavior. It leads variety of emotional and physical problems. Depression is more than sadness. People suffering from depression experience lack of interest in daily activities, weight loss or gain, lack of sleep or excessive sleep, lack of energy, excessive guilt and re current thoughts of suicide.

Women experience depression twice as compare to men. Some factors such as biological, life cycle, hormonal and other factors unique in women and it may linked to their higher level of depression rate. Mood is affected by the various PCOS symptoms. According to Farrell and Antoni (2010) women with PCOS experience mood dysfunction and psychiatric problems to a greater degree than women without PCOS. Many studies show that level of depression is higher in PCOS than healthy women [2].

B. Polycystic ovarian syndrome (PCOS)

PCOS it is a common health problem among women. This problem caused by hormonal imbalance. PCOS Caused by small cysts in the ovary which affect the hormones and disupte the normal menstrual cycle. Around 5-10 % women are diagnosed with PCOS.

Women are suffered from PCOS because of excessive level of stress and strain, perennial tension, following modern faculty life style and some psychological problems like anxiety and depression.

C. Symptoms of PCOS

Irregular Periods, Ovarian cyst, pimples, excessive hair fall, abdominal bloating, mood swings, miscarriage, Irritability, hair growth on the face, weight gain, muscles enlargement, imbalance level of sugar in blood, PCOD can also cause type 2 diabetes and heart attack.

The aim of the study was to measure the level of depression among females suffering from polycystic ovarian syndrome and to find out the effect of yoga on level of depression among females suffering from polycystic ovarian syndrome

II. REVIEW OF LITERATURE

Anitha *et al* (2017) determined the prevalence of depression among women with PCOS compared to normal healthy women. For that purpose they selected 50 cases of PCOS as per the Rotterdam criteria were selected from the Gynecology OPD, Government Chengalpattu Medical College. The depression related information was gathered by Beck's Depression Inventory. The data was compared with that of 50 age -matched normal healthy individuals. The finding shows that depression scores were significantly increased in the PCOS group as compared to the control group. The study showed increased prevalence of mild to moderate depression in PCOS patients compared to the normal subjects [1].

Nidhi *et al* (2012) conducted a comparative study on level of anxiety among adolescent suffering from PCOS and it was proved that the effect of yoga training was more better than physical training and it reducing the level of anxiety [3].

Nidhi *et al* (2013) investigated the impact of yoga & physical exercise on PCOS among adolescent girls (15-18 yrs) and it was found that yoga training was more beneficial as compare to physical exercise [4].

III. METHOD

A. Hypotheses

There would be a difference in pre & post conditions of yoga training with respect to level of depression among females suffering from polycystic ovarian syndrome (PCOS).

B. Sample

The sample for the present research consisted of 30 females suffering from polycystic ovarian syndrome from various gynecologists in Nashik city. The sampling method was purposive sampling and the age range of the sample was 25 - 35 years.

C. Procedure

For the present study 30 females suffering from polycystic ovarian syndrome were selected, who were ready to cooperate. At the initial level, criterion test was administered on the group and study their level of depression. After the study of depression researchers provided the yoga training for 1 month's. After the training, again the same criterion test was administered on the same group and obtained results were compared with the pre-test result to check whether any significant difference could be found in level of depression.

D. Research Variables

- 1) Level of Depression
- 2) Females suffering from polycystic ovarian syndrome

E. Controlled Variables

- 1) Duration of PCOS (2yrs)
- 2) Age
- 3) Region (Nahik city only)
- 4) Economic Status
- 5) Only non-working women were selected

F. Research Design

A comparative study with pre and post design was used in the present research.

Table 1.

<i>Variables</i>	TEST
Level of depression	Pre test
	Treatment –One month s Yoga Training
	Post test

G. Tools

1. Beck's Depression Inventory (BDI - II): By Dr. Beck (1994). The Beck's depression inventory consisted 21 items. The individual scoring 20 and below is consider to be having low level of depression and score of 21 and above will be considered with individuals having high level of depression.

Reliability- Internal consistency reliability coefficient from .73 - .92.

Validity - Satisfactory

2. Module for Yoga Training. Yoga is playing an important role in PCOS it balances the hormones by reducing the androgens and encouraging egg production. Yoga relieves stress it promotes weight loss and also increases fertility and with the help of yoga gastrointestinal imbalance is also improve.

Investigators prepared one yoga module with the help of yoga professional. This module includes asana and pranayama which is beneficial for PCOS patients. Asana help to stretch the pelvic area and pranayama and meditation sooth the mind. This training provided to the patients for one month regularly under the supervision of yoga teacher/professional daily for one hour. Before conducting yoga training session the level of depression of all the participant were measured. Then the yoga training was conducted for a month's period. After the session again the same participants were given the depression scale in order to measure the difference in the level of depression.

This module included the following yoga activities:

- (i) **Bhadrasana (Butterfly pose):** It is helpful to open the region of pelvic and promote the relaxation. It also manages the level of stress and relieves menstrual discomfort.
- (ii) **Bharadvajasana (Bharadvja's Twist):** It is helpful to balancing blood pressure and solves the menstruation problems.
- (iii) **Bhujangasana (Cobra pose):** It stimulates ovarian function and improves digestion.
- (iv) **Naukasana (Boat pose):** It enhances the ovarian functions and also weight loss.
- (v) **Padmasana:** It stretches the pelvic region and controls the hormonal imbalance. It is helpful to reduce menstrual discomfort.
- (vi) **Dhanurasana (Bow pose):** It activates the functions of reproductive organs. a
- (vii) **ViparitaShalabhasana (Superman pose):** It promotes blood circulation to the reproductive organ.
- (viii) **Chakki Chalanasana (moving the grinding wheel):** It modifies the functions of endocrine gland and enhances the efficiency of hormonal secretion.
- (ix) **Sun Salutation (Surya Namaskar):** It controls hormonal imbalance. It is also helpful in controlling of weight.
- (x) **Shavasana (Corpsse pose):** It is helpful to relaxation of the body and mind and also reduces the stress and tension.
- (xi) **Bhramri Pranayama:** It controls the negative signs like stress, strain, anxiety, tension, depression.
- (xii) **Meditation:** It brings harmony in the body, mind.

H. Operational Definition

1. Depression: Scores of individuals as measured by BDI by (Beck Depression Inventory) by Beck.

2. Polycystic Ovarian Syndrome (PCOS): PCOS is a health condition common in women of reproductive age caused by hormonal imbalance leading to pelvic pain, weight gain, mood swing and stress.

IV. RESULTS AND DISCUSSION

To analyze the data, means and SD were calculated and the t-test was computed to check the level of significance. The obtained data is systematically presented in the following tables.

Table 2: Pre and Post comparison regarding level of depression (N=30).

Sample	Variable	Condition	Mean	SD	t-value	Level of significance
Female suffering from PCOS	Level of Depression	Pre-test	45.63	8.36	4.65	P<0.01
		Post-test	32.12	6.21		

The result of table 2 showing the mean values of pre-test and post-test regarding level of depression among females suffering from PCOS were different. The pre-test Mean =45.63, SD = 8.36 & the post-test Mean = 32.12 and SD = 6.21 and the obtained t-value was 4.65 which was significant at 0.01 level. This clearly shows that yoga training program lead to a significant difference on level of depression of the females suffering from PCOS. The results are also supported by the findings of Farrell and Antoni in (2010) and Anitha *et al* (2017).

Yoga is a holistic treatment which is applicable for any kind of physical and mental problem it heals the person. Regular yoga practice gives the peace to mind and relaxation to the body. Yoga is also use as psychotherapy for treating the psychological problems and because of regularly practicing yoga their level of depression decreased.

Providing yoga training to these females with PCOS has helped in opening pelvic area leading relaxation of mind and body. It might be because of lowering cortisol levels, reducing level of depression and stress hormones.

V. CONCLUSION

1. There is significant difference found in the level of depression among the women suffering from PCOS in the pre and post conditions of Yoga training.
2. The level of depression is low after yoga training as compared to the pre-test condition (Before yoga training).

VI. INTERVENTIONS

PCOS it is a common endocrine system disorder which affects women of reproductive age. The number of young women from 25 yrs is affected by this disorder. This disorder has been growing rapidly with the lifestyle changes and increased stress levels that cause hormonal imbalance and so many health problems. PCOS also leads to infertility and major psychological problem like depression. Yoga can help to release stress and depression through pranayamas and asanas that open up the pelvic area and promote relaxation. Yoga also helps to weight loss it helps to regulate the monthly menstrual cycle and naturally relieve stress. Daily practicing yoga such as Nadishodana (alternate nostril breathing with retention) and Bhramri (bee) it helps to relax the body and mind.

In addition to this following a healthy lifestyle including proper foods habits, regular exercise, engaging in recreational activities along with optimistic tendency will keep the mind and body healthy.

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WEB RESOURCES

-<https://www.thefitindia.com>

-<https://www.gyanunlimited.com>