



ISSN 2278 – 0211 (Online)

## Effect of Selected Yogic Treatment on Various Physical Variables of Middle Aged Women Suffering from Infertility

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### **Abstract:**

*The aim of this study was to investigate the effect of selected Yogic Treatment on Physical variables of middle aged women suffering from infertility. Thirty women (24 to 29 years) were selected as subjects for this study. All the subjects used to come at the Sarada Nursing Home at Joynagar, South 24 Parganas to get rid of the problem of infertility. Thirty subjects who had the same physical problems; fifteen subjects were selected to form the Control Group and other fifteen subjects were selected to form the experimental group. Before going for treatment initial tests were conducted on Physical variables namely Body Weight, Percentage of Body Fat, Body Mass Index (B.M.I), Lateral Abdominal Skin Fold. After that one group were given medicine only and the other group were given medicine along with prescribed yogic exercises. Both groups were advised to take same diet as prescribed by a dietician. After a period of twelve weeks the final measurements were taken. The Mean Difference between the Pre and Post Treatment score were obtained by employing the statistics of 't' ratio. It was noticed that the group taking medicine and practicing yogic exercises improved much more than the other group.*

**Keywords:** Infertility, yogic treatment, physical variables

### **1. Introduction**

It is a sweet dream of women becoming mother. Women of all over the world think that life is incomplete without becoming a mother. In our society those women without a child is being neglected by others and it is regarded as a curse. Those women are sometimes being prevented from taking part in Hindu rituals. But it is not the fault of the women suffering from infertility, there are some biological reasons behind this. From old times 'Muni' 'Rishis' tried to rescue such women from this curse by using 'Ayurvedic' medicines and advising certain life style and some success was noticed. With the passage of time medical science concentrated on the problem, research was carried on to find out the actual causes of infertility. Some physical problems like overweight, fat, BMI etc. were considered to be the cause of infertility. Research is still going on this problem. Physicians are now using medicines and in some cases, surgery to remove these physical problems of the women and create a situation which is conducive to fertility but hundred percent success is yet to be achieved. So other methods are also thought of, that is alternative medicines. Vigorous exercises can easily reduce some of the problems in a fast rate. But in underdeveloped and developing countries the socioeconomic conditions and natural shyness of women do not permit participating in such exercises in open area or on the playground, especially in rural areas. Yogic exercises can be performed in a hall or in a room behind the eyes of the spectators which may give easy feelings of the women. Yogic exercises involve, stretching, bending, twisting and holding in the postures and thus it can help in reducing fat and weight.

The investigator believed that the Problem of this infertility may be removed through systematic practice of Yogasana. In spite of being partially able to succeed in curing this problem of infertility medical science largely entails the expense of large amount of money. Besides this there is an ample apprehension of bad side effects on the patients for prolonged use of medicines. It is not at all costly to use Yogasana in improving physical conditions of breeding procedure. It is also completely exempted from side effects if correct procedure is being followed. Yogasana practices seems to be easier because most of the citizens of our country are poverty-stricken and hopelessly unable to undertake better and developed medical service. Yogasana is mostly accessible to most of the rural people because it does not require costly instruments or a big area.

With a belief that proper and prolonged practice of Yogasana may float smile in infertile women with the blessing of sacred motherhood. With the noble objective of this societal welfare the researcher has undertaken this effort.

## 2. Methodology

The subjects of the present study were thirty middle aged women from the District of 24 Parganas (S) and East Midnapur of West Bengal. The age of the subjects ranged from twenty four years to twenty nine years. All the subjects went to the Sarada Nursing Home for treatment as a patient of infertility where a large number of patient having same problem were treated. Out of all, thirty patients who had the same physical problems; fifteen patients were selected to form the Control Group and other fifteen patients were selected to form the Experimental Group. During the treatment period, both groups were asked to follow the prescribed medicine and diet chart prepared by the Gynecologist and Dietician. Experimental group was asked to practice selected yogic posture under the supervision of the Research scholar when the control group remained free from this yogic treatment. Only the effect of medicine was recorded on the control group while the combined effect of medicine and yogic exercises was recorded on the experimental group.

- Selection of variables: - Body Weight, Percentage of Body Fat, Body Mass Index (B.M.I), Lateral Abdominal Skin Fold.
- Statistical Procedure:-Analysis of covariance and Mean Difference between the Pre and Post Treatment score were obtained by employing the statistics of 't' ratio.

## 3. Result and Discussion

| Variables                  | Test      | Mean   | SE    | 't' Ratio |
|----------------------------|-----------|--------|-------|-----------|
| Body Weight                | Pre Test  | 64.443 | 0.180 | 2.456*    |
|                            | Post Test | 64.001 |       |           |
| Percentage of Body Fat     | Pre Test  | 33.938 | 0.112 | 2.136*    |
|                            | Post Test | 33.698 |       |           |
| B.M.I                      | Pre Test  | 25.945 | 0.072 | 2.436*    |
|                            | Post Test | 25.769 |       |           |
| Lateral Abdominal Skinfold | Pre Test  | 23.203 | 0.114 | 3.368*    |
|                            | Post Test | 22.819 |       |           |

Table 1: Mean Difference of the Variables of Control Group.

$$t_{(0.05)}^{14} = 2.045$$

\*Significant at 0.05 level of confidence

From table-1 it was observed that there were significant differences between pre and post treatment scores in the respect of all the variables tested.

| Variables                  | Test      | Mean   | SE    | 't' Ratio |
|----------------------------|-----------|--------|-------|-----------|
| Body Weight                | Pre Test  | 65.823 | 0.248 | 11.339*   |
|                            | Post Test | 63.011 |       |           |
| Percentage of Body Fat     | Pre Test  | 33.247 | 0.148 | 11.141*   |
|                            | Post Test | 31.593 |       |           |
| B.M.I                      | Pre Test  | 27.081 | 0.102 | 11.374*   |
|                            | Post Test | 25.925 |       |           |
| Lateral Abdominal Skinfold | Pre Test  | 24.369 | 0.223 | 19.049*   |
|                            | Post Test | 20.148 |       |           |

Table 2: Mean Difference of the Variables of Experimental Group.

$$t_{(0.05)}^{14} = 2.045$$

\*Significant at 0.05 level of confidence

From table-2 it was observed that there were significant differences between pre and post treatment scores in the respect of all the variables tested.

| Variables                  | Improvement in Percentage |                    |
|----------------------------|---------------------------|--------------------|
|                            | Control Group             | Experimental Group |
| Body Weight                | 0.686                     | 4.273              |
| Percentage of Body Fat     | 0.707                     | 4.975              |
| B.M.I                      | 0.680                     | 4.272              |
| Lateral Abdominal Skinfold | 1.655                     | 17.413             |

Table 3: Percentage of Improvement In Relation to Physical Variables of Control and Experimental Group.

Table 3 showed that Improvement in Percentage of the Experimental Groups were better than the Control Groups in respect of all the variables.

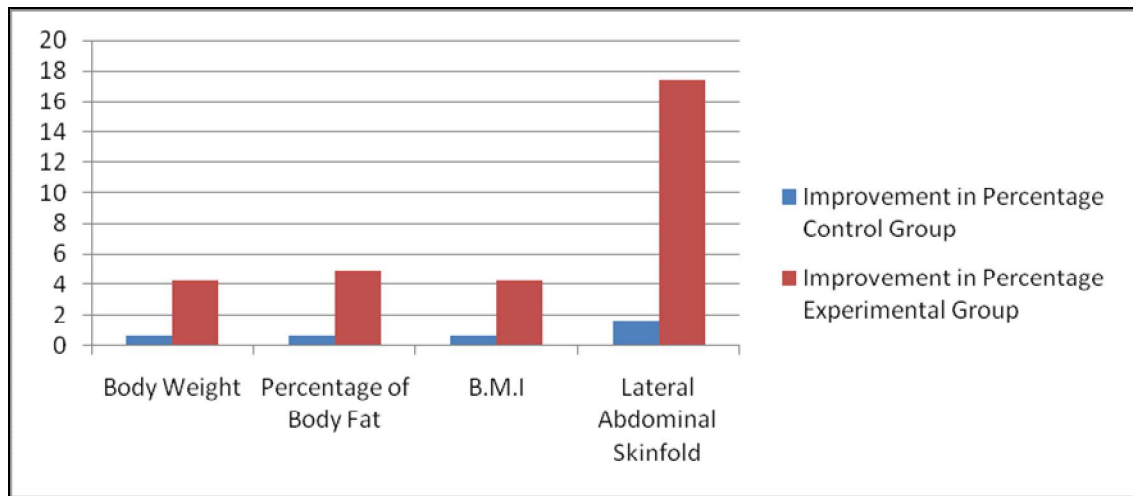


Figure 1

Figure-1 Graphical Presentation of Improvement in Percentage in Relation to Body Weight, Percentage of Body Fat, B.M.I. and lateral Abdominal Skinfold of Control and Experimental Group.

Figure-1 it was observed that the Improvement in Percentage in Relation to Body Weight, Percentage of Body Fat, B.M.I. and lateral Abdominal Skinfold of Control and Experimental Group.

The present study was a comparison between two groups- one following a diet chart and taking of medicine and other following the diet chart, medicine and yogic exercises prescribed by the investigator, and the result shows a ratio of 1:3 of the women conceiving that support the findings of the results.

#### 4. Conclusion

Form the obtain results of the present study it was concluded that :-

1. Using medicine reduced weight, but using medicine along with yogic exercise reduced weight further.
2. Only medicine decreased BMI but medicine along with yogic exercises decreased BMI faster.
3. Percentage of body fat decreased using medicine only, adding yogic exercises with medicine caused further decreased in percentage of body fat.

#### 5. Recommendations

It was recommended that:-1) Study might be conducted on with more number of subjects and involving other variables like progesterone, cholesterol, blood pressure etc. 2) Similar study conducted on the male subjects suffering from infertility.3) Similar study might be conducted on women in the age group of 30-35 years, 36-40 years and also 41-45 years.

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