EFFECTIVENESS OF PRANAYAMA REDUCING STRESS AMONG HYSTERECTOMY WOMEN

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Abstract

Hysterectomy is one of the commonest gynecological surgeries removing a “valued object” which could be related to pain both physical and psychological. The major psychosocial problems are mainly belongs to domains of pain, stress, sexuality and psychological wellbeing. Stress is among the most frequently experienced emotional problems after hysterectomy. The main objectives of the study were, To find out the level of stress among hysterectomy women. To assess the effectiveness of pranayama on stress reduction among hysterectomy women. The research design selected for the study was pre experimental one group pretest-posttest design. A purposive sampling techniques was used to obtain a sample of 30 hysterectomy women who satisfied the inclusion criteria. Pre test stress level was estimated on the first day by using perceived stress scale followed by pranayama was practiced by the samples for 4 weeks. Finally post test stress level was estimated using the same scale. Ethical aspect of this study maintained throughout the study. The data were analyzed using descriptive and inferential statistics. The study identified that 3% of the sample had mild stress, 67% of the sample had moderate stress, 23% of the sample had severe stress, and none of the sample had no stress. The study result shows that the pre test mean value is 71.3 and pre test SD is 11.7. The post test mean value is 41 and post test SD is 8.6. The mean difference is 30. The calculated ‘t’ value is 25 is higher than the table value 2.045. Hence there is a reduction in stress level after administration of pranayama among hysterectomy women. The study concluded that pranayama found to be an effective relaxation therapy in reduce stress level among hysterectomy women.

INTRODUCTION

A hysterectomy is a major event in a woman’s life. It will result in instant menopause and the woman will experience all the physiological changes of menopause after undergoing hysterectomy. She will no longer menstruate and will not be able to bear children. Other physical discomforts associated with hysterectomy are hot flushes, night sweats, difficulty in sleeping, fatigue and dryness of vagina, among other things. Many women also become irritable and suffer from mood swings as a result of the hormone withdrawal. Younger women often find it difficult to cope with such changes and sometimes go into depression. Hormone replacement therapy is given to avoid all menopausal features, like, hot flushes, vaginal discomfort, osteoporosis, and cardio vascular disease, to patients whose ovaries are also removed.

The major psychosocial problems reported in relation to hysterectomy are mainly belong to the domains of pain, sexuality and psychological well being which is necessary to access for negative psychosocial outcome followed by problems such as depression, anxiety, and sexual dysfunction. Some authors, especially those of the psychoanalytical school, attribute to the uterus, unique, symbolic importance central to feeling feminine and attractive. They suggest that loss of the uterus may deal a blow to self-esteem, and that at this juncture in their lives many women may suddenly want another child as evidence that they are still fertile. More recent views point out that
women do not usually want to start bringing up another baby during their fourth decade, although many may dread the changes heralded by hysterectomy or the menopause. Because they have been little preparation and do not know what to expect. (Rose, L., The Menopause book).

Need For The Study

Women who undergo hysterectomy face a multitude of physical and psychosocial problems both before and after the hysterectomy. For many women, the uterus is the symbol of femininity, sexuality, fertility and maternity, and the loss of it signifies the loss of womanhood because, giving birth to a child is considered to be the basic function of a woman. After surgical operation, the woman thinks that her husband does not find her attractive anymore and their sexual relationship will be affected. Some women confuse the removal of the uterus with the removal of the vagina, and therefore think that they will completely lose their sexual functions. They adopt a fear of early aging if their ovaries are also removed during the operation.

Primary methods used in coping with stress include meditation, yoga, hypnosis, music and massage therapies, biofeedback and progressive relaxation exercises. Relaxation exercises, slows down heart rate, drops blood pressure, decelerates breathing rate, reduces oxygen need, increases blood flow to big muscles, reduces muscular rigidity, stress, fatigue and pain, and provides comfortable sleep. It provides more energy and therefore more productivity in daily activities.

Pranayama is one of the relaxation therapy which reduce stress among hysterectomy women. Prāṇāyāma is a Sanskrit word meaning "extension of the prāṇa or breath" or "extension of the life force". The word is composed of two Sanskrit words: prana, life force, or oted particularly as the breath), and ayāma, to extend or draw out. (Not "restrain, or control" as is often translated from yam instead of ayāma). It is a yogic discipline with origins in ancient India.

Statement Of The Study

A Study to evaluate the effectiveness of pranayama on Stress among hysterectomy Women at selected areas in Arumanai panchayat, Kanyakumari district.

Objectives

- To assess the level of stress among Hysterectomy Women.
- To evaluate the effectiveness of pranayama on stress among Hysterectomy Women.
- To determine association between the mean pre-test stress and selected socio-demographic variables such as age, occupation, Religion, Education, Individual monthly income, Marital status, Type of family, number of children, Area of living, and Reason for hysterectomy.

Hypothesis

H1: There is a significant reduction in perceived stress score among Hysterectomy women after practicing of pranayama.

H2: There is a significant association between the stress and selected demographic variables such as age, occupation, Religion, Education, Individual monthly income, Marital status, Type of family, number of children, Area of living, and Reason for hysterectomy among Hysterectomy women.

Operational Definitions

a) Effectiveness: In this study, it refers to reducing the level of stress, as determined by significant reduction in post-test stress score by using modified perceived stress scale.

b) Pranayama: Pranayama refers to the regulation of the breath through certain techniques and exercise. In this study pranayama is the selected breathing and relaxation techniques which is used to reduce the stress among hysterectomy women.

c) Stress: In this study, stress refers as a physical, mental, or emotional response to events that causes bodily or mental tension
d) Women: In this study, it refers to female population between age group of 35-65 years.

e) Hysterectomy women: In this study it refers to women whose uterus have been removed either abdominally or vaginally.

Conceptual framework

The conceptual framework based on Bettyneumann’s (1989) model.

MATERIALS AND METHODS:

Research Design

Research design used in this study was pre-experimental one group pre-test and post-test Design.

Setting Of The Study

The study was conducted in Marappadi and Thiruvarambu (Arumanai Panchayat), Kanyakumari District.

Population

The target population: All Hysterectomy women in selected community

Accessible population: Hysterectomy women who satisfied in inclusion criteria

Sample

Method of sample selection

Sample size: The sample size consists of 30 samples of hysterectomy women.

Sampling technique: Samples were selected based on purposive sampling technique.

Criteria For Sample Selection

Samples were selected based on the following inclusion and exclusion criteria.

Inclusion criteria

- Women who had undergone Hysterectomy
- Between 35 to 60 years of age group.
- Who are willing to participate in the study
- Who can able to understand Tamil.

Exclusion criteria

- A women who are taking treatment in hospital
- Sick at the time of data collection.
- A women who are having abdominal pain.
- Hysterectomy women those who are attended the yoga or relaxation classes earlier

Data collection tool

- The data collection tool used for the study were–
  1. Demographic Variables
  2. Modified Perceived stress scale

Description of the tool

The tool consists of two parts.

Section A – Demographic Variables

This section deals with demographic variables such as age, occupation, religion, education, Individual monthly income, marital status, type of family, number of children, area of living, reason for hysterectomy.

Section B – Modified Perceived stress scale

This scale is used to estimate the stress level among hysterectomy women. The perceived stress scale consists of 25 negative statement. The score ranges from 0-4 for each question based on the severity of the stress.

Samples that score more than 25 on perceived stress score were selected for the study.

Scores are done as follows
- No stress- 0-25
- Mild stress-26-55
- Moderate stress-56-80
- Severe stress-81-100
Data collection Procedure

Formal permission for data collection was obtained from the authorities for conducting the study. The study was conducted in Marappadi and Thiruvarambu village. The samples were selected based on inclusion criteria. Informed verbal consent was obtained from the samples and confidentiality was assured. The samples were identified by using survey method. The investigator introduced herself and the purpose of the study was explained to the samples. Twenty samples were selected from Marappadi village and ten samples were selected from Thiruvarambu village by purposive sampling technique. The hysterectomy women were interviewed on basic through home unit by using modified perceived stress scale. The duration of structured interview schedule was about 20-25 minutes. After the pretest pranayama, was taught to the hysterectomy women. Procedure was demonstrated by the researcher and the sample was re demonstrated the pranayama. Sample were performed pranayama daily 15 minutes morning for four weeks under the supervision of researcher. After 4 weeks post- test was conducted to the experimental group to determine the effectiveness of pranayama.

DATA ANALYSIS AND INTERPRETATION:

Section: A – Demographic Variables

This section deals with the distribution of the study subjects based on their demographic Variables such as age, occupational status, religion, educational status, marital status, type of family, individual monthly income, number of children, area of living, and reason for hysterectomy.

Fig. 1: Distribution of Sample According to the Age of Hysterectomy Women is represented as Pie diagram in Figure 1.

Fig. 2: Distribution of Sample According to the Occupational status of Hysterectomy Women is represented as Bar diagram in Figure 2.

Fig. 3: Distribution of Sample According to the Number Of Children is represented as Bar diagram in Figure 3.
Fig. 4 Distribution of Sample According to the Reason
For Hysterectomy is represented as Bar diagram in figure 4.

Figure 4 Distribution Of Sample According To The
Reason For Hysterectomy

SECTION: B – assess the level of stress among hysterectomy women

This section deals with the level of stress among hysterectomy women in Marappadi and thiruvarambu village.

The above table shows that 3% of the sample had mild stress, 67% of the sample had moderate stress, 23% of the sample had severe stress and none of the sample had no stress.

The above findings are presented as Bar diagram in figure 5.

Figure 5 Level Of Stress Among Hysterectomy Women

SECTION C:

Comparison of pre test and post test stress level

The above table shows that In pre test, 10% of the sample had mild stress 67% of the sample had moderate stress and 23% of the sample had severe stress. In post test 20% of the sample had no stress 67% of the sample had mild stress 13% of the sample had moderate stress and none of them had severe stress.

The above findings are presented as bar diagram 6.

Figure 6 Comparison Between Pre Test and Post Test Stress On Hysterectomy Women

SECTION D: Effectiveness of Pranayama on stress among hysterectomy women

This section deals with the effect of pranayama on stress among hysterectomy women

Note-The above table shows that the pre test mean value is 71.3 and pre test SD is 11.7. The post test mean value is 41 and post test SD is 8.6. The mean difference is 30. The calculated ‘t’ value is 25 is higher than the table value 2.045. Hence there is an reduction in stress level after administration of pranayama among hysterectomy women.

The above findings are presented as Fig 7.

Figure 7 Effectiveness of pranayam on stress among hysterectomy women

SECTION E: – Association Between Demographic Variables with the Stress Level.

This section deals with the distribution of the study subjects based on their demographic Variables such as age,
occupational status, religion, educational status, educational status, marital status, type of family, individual monthly income, number of children, area of living, and reason for hysterectomy.

Association Between Demographic Variables with the stress Level of Selected Subjects (N=30)

Note - The above table shows that the level of stress is associated with Age, education and individual monthly income at 0.05 level of significance and there was no association with demographic variable such as occupation, Religion, Marital status, Type of family, Number of children, Area of living, Reason for hysterectomy.

Discussion

This chapter gives a brief account of the presents study including result and discussion compared with some of the relevant studies done in different settings.

The present study was undertaken to assess the effectiveness of pranayama on stress among women undergone hysterectomy at Marappadi and Thiruvarambu village. Pre experimental one group pre and post design for the study. The level of stress was assessed by perceived stress scale. The result and discussion of the study are based on the findings obtained from the statistical analysis.

Distribution of Selected Characteristics of Study Subjects

The demographic variables of samples were the age, occupation, religion, education, individual monthly income, marital status, Type of family, number of children, area of living reason for hysterectomy.

The study findings reveal that 30% of the samples were in the age group between 31-40 years and 27% of the samples were in the age group between 41-50 years 43% were in the age group of 51-60 years. The percentage distribution based on religion reveals that 40% of the samples belongs to Hindu religion, 47% of the samples belongs to Christian religion, 13% of the samples belongs to Muslim religion. Among the sample 27% of the subjects had illiterate, 60% belongs to school education, 13% belongs to collegiate education. The percentage distribution based on the marital status 10% belongs to single, 80% belongs to married, 10% were in widow. Among the sample 57% belongs to dysfunctional uterine bleeding, 23% belongs to fibroid uterus, 20% were in any other.

The study findings of the 50 sample were discussed based on the objectives of the study.

The first objective of the study was to assess the level of stress among hysterectomy women. This study reveals that out of 30 sample(10%) of the sample had mild stress, (67%) of the sample had moderate stress, (23%) of the sample had severe stress. The study findings were congruent with the study of Priya (2014) The result shows that stress, depression occurred more often in women who had emergency hysterectomies and in women who had expressed some fear of possible change after the operation.

Dr. Helena Judith P. et. Al (2003) study was conducted to evaluate the risk of major depressive disorder and the psychological impact of recent hysterectomy. This showed that previous emotional problem and proper body image, sexual functioning and higher stress are risk factors for post hysterectomy major depressive disorder.

The second objective of the study was to evaluate the effectiveness of pranayama on stress among hysterectomy women.

The pretest mean value is 71.3 and the post test mean value is 41. The mean difference is 2.045 and the ‘t’ value is 25. Hence there was a significant reduction of stress among women undergone hysterectomy.

The study findings were congruent with the study of Chi hung hee the study concluded that Yoga was effective in decreasing the level of physiological stress, and also allowed the participants to have a better sleep.

Chattha Ritu .et. al(2008)’s study findings revealed that on treating the hysterectomy there was a significantly greater degree of decrease in Perceived Stress Scale scores \( P < 0.001 \), independent samples t test in the yoga group compared with controls (between-group analysis) with a higher effect size in the yoga group (1.10) than the control (0.27).
The third objective of the study was to find out the association between the mean pre test stress and selected demographic variables such as age, occupation, religion, education, individual income, marital status, Type of family, Number of children, Area of living and Reason for hysterectomy.

This study findings reveal that there is a significant association between Age individual income, education and stress.

CONCLUSION:

The study identified that 10% of the sample had mild stress, 67% of the had moderate stress and 23% of the sample had severe stress, it was found that there was a significant reduction in the level of stress of samples after giving the pranayama therapy.

BIBLIOGRAPHY