

Effect of Selected Yogic Practices on the Mental Stress of Dysmenorrhea Patients

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Abstract

Dysmenorrhea is defined as painful menses in women with normal pelvic anatomy, usually begins during adolescence. This problem actually disturbs the normal routine of the young girls and that is why they always look for remedy. The objective of this study was to investigate the effect of yogic practice on stress of dysmenorrhea patients. For this study 20 female students were selected as sample. The researcher tried to assess dysmenorrhea patients by giving them yoga manipulation. The entire treatment process was scheduled for three months; 4 days in a week. Yogic practice program included 40-45 minutes asanas and pranayama specified for pelvic region. For measuring the stress of the patients, the scholar used a standard questionnaire Perceived Stress Scale. Analysis of the results revealed that performing yogasana and pranayama significantly reduced the stress of dysmenorrhea patients ($P \leq 0.01$). So it can be concluded from this study that if dysmenorrhea patients regularly practice yogic at home then they can surely get benefit.

KEYWORDS: Yogic practice; Dysmenorrhea; Mental Stress.

Introduction

Menstruation is a biological phenomenon. It starts when a girl attain puberty and it goes on up to menopause. The menstrual cycle is a very important indicator of women's reproductive health and of their endocrine function.(1, 2) The characteristic features of the menstrual cycle vary across different age groups, between married and unmarried individuals, with the place of residence, with differential life styles and among different socioeconomic groups.(3-8). There are different types of problems related to menstruation women generally face, some of them known as delay starting menstruation that is call menarche, delayed menstruation that is called amenorrhea and there is another problem dysmenorrhea. Dysmenorrhea is known as painful menstruation. Dysmenorrhea is a common problem in women of reproductive age. Primary dysmenorrhea is defined as painful menses in women with normal pelvic anatomy, usually begins during adolescence (9). Normal and abnormal menstruation can be very complex and distressing for adolescent girls. The girl may become distressed at seeing blood and she does not understand why she is bleeding. There may be difficulties with hygiene, especially whether the periods are heavy, necessitating regular changes in sanitary protection. (10) This may disturb the menstruating girls mentally as well as physically and this may further disturb their parents. Sometimes this issue may hamper their career also. Worldwide, there are several processes which may help to reduce the pain during Dysmenorrhea. Pharmacological and non-pharmacological processes are used as management of Dysmenorrhea. Even various non-invasive nutritional and psychological interventions have been suggested as treatments. These include Psychotherapy, Yoga, Exercise, Hypnotherapy, Massage, Transcutaneous Electrical Nerve Stimulation, Vitamins and

nutritional supplements. Prescribed medications include inhibitors of Prostaglandin Synthesis and Non-Steroidal Anti-Inflammatory Drugs (NSAIDs) as well as some oral contraceptives for the relief of pain. Non-pharmaceutical treatments include acupuncture and surgery. Doctors also provide medicines like Ibuprofen, Diclofenac, Naproxen, etc. to reduce Dysmenorrhea pain. These medications sometimes have side effects such as renal dysfunction, stomach problems, nausea, headaches or drowsiness or may be contraindicated in certain groups of women. (11) Looking to the side effects of various pharmacological treatments the patients of dysmenorrhea hunt for alternative way of healing and as suggested by various philosophers/ authors/ practitioners, yoga asana is a way to get relief from dysmenorrhea. Yoga is known as a form of mind-body medicine that integrates an individual's physical, mental and spiritual components to improve aspects of health, particularly stress related illnesses. A 3,000 year old tradition, yoga, is now regarded in the Western world as a holistic approach to health and is classified by the National Institutes of Health as a form of Complementary and Alternative Medicine (CAM). (12) The word "yoga" comes from a Sanskrit root "yuj" which means union, or yoke, to join, and to direct and concentrate one's attention (13). Regular practice of yoga promotes strength, endurance and flexibility. (14) Regular practice leads to improvement in life perspective, self-awareness and an improved sense of energy to live life fully. (15) With the practice of yoga balance between the mind and body can be achieved. (16)

Materials and Methods

This study was carried out at Panskura Banamali College, Purba Medinipur, West Bengal. Female students from three colleges under Vidyasagar University were screened for the complaints of primary dysmenorrhea. Unmarried girl students, within the age group 18-23 years, with primary dysmenorrhoea were included in this study. Out of the 196 female students 105 students fulfilled the fixed criteria. These subjects were assured of confidentiality of information after explaining the purpose of the study and obtaining consent. The scholar selected 20 students following random sampling technique who ultimately acted as the subjects for the study. The aim of this study was to give psychological relief to the dysmenorrhea patients by using yoga. Total 20 subjects in this study were asked to attend yoga class 4 days in a week for a period of three months. The following Yoga poses were practiced by the subjects: Savasana, Suryanamaskar, Utkatasana, Padahasthasana, Yoga Mudra, Adhomukha Virasana, Janu Sirasana, Vakrasana, Baddha Konasana, Bhumasana, Adhomukha Kapotasana, Apanasana, Setubandhasana, Vipritkarani Mudra, Naukasana, Kapalvati, Anoloma Viloma. These yoga manipulation's were selected after exhaustive pilot study. All the subjects were given proper practice of the yogic poses. The entire training was given following proper load principle. The scholar used a standard questionnaire Perceived Stress Scale to measure the stress of the patients (17). Stress was assessed two times that was before the initiation of treatment and after the 3 months of the treatment process. For analysing the data the scholar used Wilcoxon Signed Ranks Test.

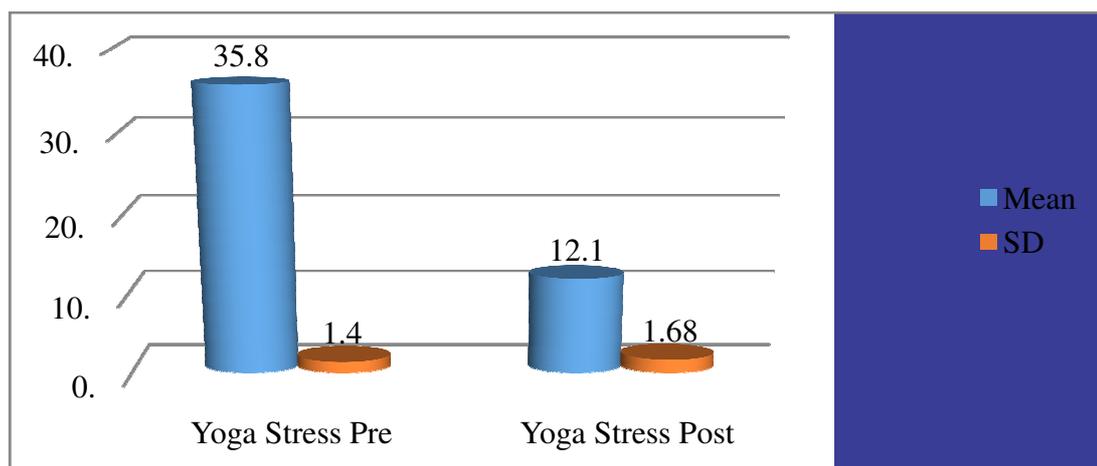
Result and Discussion

Table No. 1

Wilcoxon Signed Ranks Test of Stress between the Pre and Post Result of Yoga Group					
Variables	Mean	SD	Median	Z	P
Yoga Pre	35.80	1.40	36.0	3.94*	0.01
Yoga Post	12.10	1.68	12.0		

It is observed from table - 1 that the mean stress score before the commencement of yoga treatment was 35.80 with ± 1.40 standard deviation, whereas after getting yoga treatment for three month (post treatment) the mean stress score was 12.10 with ± 1.68 standard deviation. It is further revealed from the above table that significant difference was found between the stress score of pre yoga treatment and post treatment as the Z- score was found 3.94 with respect to P 0.01.

Graph



Graphical representation of effect of Yoga modulation on Stress

Discussion and Conclusions

The purpose of this study was to formulate some specific yogic practice module and further to find out the effect of those prescribed intervention on the mental stress of primary dysmenorrhea. After analysing the data observed through Perceived Stress Scale (17) questionnaire. It was found that yogic practice intervention plays significant role in reducing dysmenorrhea stress. Yoga reduces stress through reducing sympathetic activity (18) and improves the sense of general well-being (19). Yoga holds potential as a self-empowering, non-pharmacological method for enhancing stress management, and wellness in college students (20). Udupa and others conducted a study to find out the effect of integrated yoga on autonomic parameters and psychological well-being during both pre- and post-phases of menstrual cycle in healthy young female controls, and they observed that there was a significant alteration of autonomic functions and psychological status in

premenstrual phase when compared with post-menstrual phase in young healthy females. In addition, it was revealed that regular practice of yoga had beneficial effects on both phases of menstrual cycle by bringing parasympathetic dominance and psychological well-being probably by balancing neuro-endocrinal axis (21).

So it can be concluded from this study that if dysmenorrhea patients regularly practice yogic practices at home which are actually easier to perform then they can surely get benefit.

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