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Effect of Aerobic Exercises versus Resistance Training on Abdominal Strength, Sexual Dysfunction, Pain and Menstrual Parameter in Women Suffering from PrimaryDysmenorrhoea: A Case-Control Study

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ABSTRACT

Introduction: Menstruation is the monthly, cyclical, repeated passage of blood from the uterus through the vagina that occurs during the reproductive years. In the absence of pregnancy, menstruation happens when progesterone and estrogen level drop, shedding the accumulation of uterine lining. The typical age of the menarche is still between 12 and 13 old years. Dysmenorrhoea, or problematic menstrual flow, refers to uncomfortable 9 periods. It is among the most prevalent gynaecological conditions, affecting 20-90% of female throughout their reproductive years. A broad range of physical (mental) symptoms are recognised to be a part of dysmenorrhoea syndrome. Research studies indicate a link between physical exercise and dysmenorrhoea. The females who are involved in physical activity are at 3.5 times lower risk of developing dysmenorrhoea. Studies indicate that a 15-minute resistance training session causes the body to produce lactic acid and growth hormones, activating fat metabolism.

Aim: To compare the effect of aerobic exercise and resistance training on abdominal strength, sexual dysfunction, pain, and menstrual parameters in women suffering from primary dysmenorrhoea.

Materials and Methods: Forty-five subjects with diagnosed dysmenorrhoea after the menarche were allocated to the experimental and control groups (N=45, n=15). Participants of all groups were asked to perform a set of exercises. The intervention of the experimental group consisted of aerobic exercise and resistance training along with stretching and hot packs, whereas the control group was given only stretching exercise and a hot pack. The intervention was prescribed 4 days a week for 6 weeks. All the outcome variables (abdominal strength, sexual dysfunction, pain, and menstrual symptoms) were recorded at baseline and the end of 6 weeks.

Results: A statistically significant difference ($p \leq 0.05$) was found in the mean value of pre- and post- values of the experimental groups as well as between the groups. The difference was found to be more than that of the control group in the abdominal strength, sexual dysfunction, pain and menstrual parameters.

Conclusion: In this study, it was found that aerobic exercises are more effective in improving sexual dysfunctions, and menstrual parameters, whereas resistance training could improve abdominal strength, as found in the study.

Keywords: Lactic acid, Menstrual parameters, Stretching exercise

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