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IRJPSS Research Journal Impact Factor (ISRA & SJIF): 7.436
Research Unique Number (RUN): 16.09.2022.2034

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EFFECT OF ASHWAGANDHA AND VIDARIKAND ON PULSE RATE OF SPORTSPERSON^{p.p.38-45}



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ABSTRACT

The primary goal of the research was to determine how Ayurvedic medicine affected athletes' strong tenacity. Three groups were chosen, with one receiving Vidarikanda, the other receiving ashwagandha, and the third serving as a control group. Experimental group: Two groups of sixty subjects each were maintained in the experimental group. Each drug group, consisting of 60 subjects, is referred to as group A for ashwagandha and group B for vidarikand. The remaining sixty volunteers were retained in the control group (c). The data was analyzed using the mean, S.D., and t test. While there was a statistically significant difference in the mean values at the posttest ($p < 0.05$), the mean difference in squat across the study groups was found to be equivalent at the beginning level ($p > 0.05$). Because of this, the hypothesis that "There will be no significant effect of Ashwagandha on selected Physical Fitness Pulse rate variables of the Sportspersons" was rejected.

Keywords: Sportsperson, Strong Perseverance & Ayurvedic Medication.

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INTRODUCTION

The players' primary effort begins at their most fundamental formative stage and progresses to an unquestionably high level. In sports, real health phrases are frequently used, and they might signify different things to different people. It describes a competitor's capacity to move more quickly and precisely in sports. The primary objective of true wellness readiness is to support the energy-building structures anticipated from unplanned exercise. Real presence, spiritual presence, and character as a whole are respected by Ayurvedic practitioners, as each has the capacity to affect the others. At the heart of Ayurveda lies a comprehensive research and therapy methodology. William Dymock and other innovators in the 19th century combined a variety of purpose-driven herbal treatments with minimalist design, substance synthesis, toxicology, folklore, and ties to English trade in India. In Ayurveda, animal products such as milk, bones, and gallstones are used. Furthermore, it is recommended to employ minerals such as gold, copper sulfate, sulfur, arsenic, and lead. Rasa Shastra is the extension of minerals into herbal remedies. Some reports claim that up to 80% of Indians use conventional treatment, including Ayurveda. Yadav, et al., (2014) Carried out the study to evaluate the impact on high-density lipoprotein cholesterol (HDL-C) of a quick but thorough yoga-based lifestyle intervention. A pretested 10-day yoga-based program that included asanas (postures), pranayama (breathing exercises), meditation, group discussions, lectures, and personalized advice on stress management and a healthy diet was given to subjects in the study who appeared to be in good health but were overweight or obese. The primary outcome measure was change in serum HDL-e at day 10 versus day 0.238 participants (147 women, 91 men, 38.81±11.40 years) were included in the study. Results showed that there was a significant increase in HDL-c levels from baseline to day 10 (42.93±5.00 vs. 43.52±5.07 mg/dL, P = 0.043). Notably, HDL-c was significantly improved in those for

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whom the baseline HDL-c levels were lower than the recommended values. Also, there was a reduction in blood pressure, fasting blood glucose, and improvement in other lipid profile variables. The findings of the study concluded that the yoga-based lifestyle intervention significantly increased HDL-c levels in a short duration of 10 days. This has additional clinical relevance as HDL-c is suggested to be one of the strongest statistically independent predictors of major cardiovascular events. Anshu Malviya et.al. (2016) One of the most significant drugs, vidarikand, is extensively and thoroughly covered in every Ayurvedic textbook. Known by most as Indian kudzu, this perennial climber has massive tuberous roots and a woody, tuberculated stem. Generally speaking, every Nighantus discusses its different attributes. It is utilized in many formulations that are mentioned in the Ayurvedic Samhita for various purposes, including the treatment of various illnesses. Numerous studies on Vidarikand have been conducted, covering a wide spectrum of illnesses and their characteristics. The purpose of this study is to elucidate, assess, and explore the medicinal properties and therapeutic benefits of Vidarikanda in a range of disorders, including recently discovered issues. Material and Methods: A comprehensive review was conducted of the Ayurvedic text book, its commentaries, the contemporary medical text book, and a number of clinical investigations that were published in index journals. Findings and Discussion: With Madhur Rasa, ShitaVeerya, Guru, Snigdha Guna, and properties that pacify Pitta, Rakta, and Vatadoshas as well as mentions of Brihani, Vrashya, Jivniya, Rasayan, Stanya, Shukral, and Balya in Ayurvedic texts, Vidarikanda's field of application for curing ailments is greatly increased. Jwara, Raktapitta, Rajayakshma, Apasmar, Kshatksina, Kasa, Vatavyadhi, Vatarakta, Klevya, and numerous more illnesses are treated effectively with its formulations. The formulations of BalavarnaVardhak and Vranaropak also make reference to it. It has positive effects on the immune system, antioxidants, galactagogue, cardio tonic, aphrodisiac, rejuvenation, no



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tropics, and reduction of inflammation. Dnyaneshwar Kantaram Jadhav (2017) Ayurveda is a life science that is tested over time. Even though sport medicine is a relatively recent field, Ayurveda offers every sport science-related solution. Ayurvedic medications are effective for both acute and long-term injuries. The traditional Indian medical system is called Ayurveda. The Sanskrit words AYU, which means life, and Veda, which means knowledge or science, are combined to form the term Ayurveda. It is still true today that this is one of the world's oldest medical systems. Samhita, we most certainly do not have ready-made management for sports-related matters, nor do we find direct allusions to the specialization of sports medicine. With a great deal of careful observation and accurate interpretation of Ayurvedic texts, we shall get insight into managing sports medicine. This review paper aims to investigate the hidden allusions and use of Ayurveda in sports medicine.

HYPOTHESIS OF STUDY

The study hypothesized that “There will be no significant effect of Ashwagandha on selected Physiological Variables Pulse rate variables of the sportspersons”.

DESIGN OF THE STUDY

The primary aim of the research was to investigate the impact of Ashwagandha on specific physical fitness metrics, such as plank and squat, among athletes. This was an experimental study with a pre- and post-test experimental design. Three groups were chosen, with one receiving Ashwagandha, the other receiving Vidarikanda, and the third receiving control. Experimental group: Two groups of sixty subjects each were maintained in the experimental group. Each drug group, consisting of 60 subjects, is referred to as group A for ashwagandha and group B for vidarikand. The remaining sixty volunteers were retained in the control group (c).The pre- and post-test

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trial configuration was adhered to in this exploratory review. Three groups of students were selected, with one receiving Vidarikanda, the other receiving Ashwagandha, and the third receiving control. Trial group: A total of 120 participants were retained in an exploratory group and divided into two groups, namely both the vidarikand and Ashwagandha drug bunches, often referred to as groups A and B, respectively, contain sixty participsaxants. The remaining sixty employees are retained in the control bunch (c).

Tool Used:

Information was gathered on the picked factors at the pre and post exploratory stage. The accompanying test was utilized to gather the information.

Physiological – Pulse rate

STATISTICAL ANALYSIS OF THE DATA

Table No: 1

Effect on Pulse (BPM) rate of Experimental Groups Ashwagandha and Vidarik and Control

Groups	Pretest		Posttest		Difference Mean	d.f.	't'
	Mean	SD	mean	SD			
Ashwagandha Experimental Group(N=56)	74.50	4.21	72.59	1.81	1.91	55	3.33*
Vidarikand Experimental Group(N=56)	73.71	4.47	72.48	2.08	1.23	55	1.88**
Control Group(N=60)	73.80	4.42	74.52	4.13	0.72	59	0.95**
ANOVA'F'	0.54**		9.08**				

*Significantat0.05levelsof significance.

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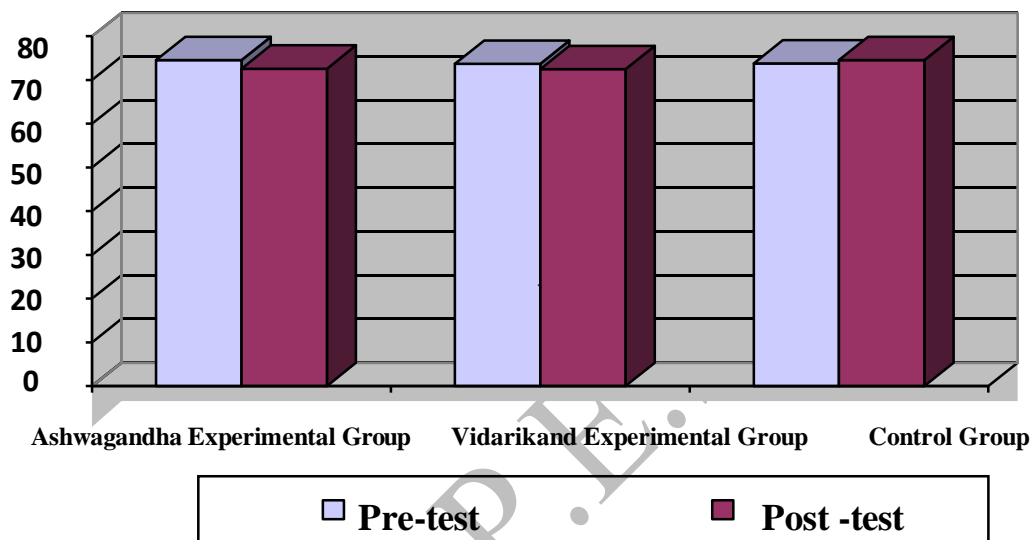


Table No- 01 and graph indicate the mean difference of Pulse rate between pre and posttest experimental groups Ashwagandha & Vidarikand and control group. The mean values of pre and posttest of experiment group Ashwagandha in pulse rate were cited as 74.50 BPM and 72.59 BPM respectively. Whereas the S.D. of pre and posttest of experiment group Ashwagandha in pulse rate were cited as 4.21 and 1.81 respectively and mean difference was 1.91. The 't' was calculated as 3.33 which was significant at the level of significance at $p < 0.05$. Statistically Significant mean difference shows the effect of selected ayurvedic medicine Ashwagandha on pulse rate of sportsperson.

The mean values of pre and posttest of experiment group Ashwagandha in pulse rate were cited as 74.50 BPM and 72.59 BPM respectively. Whereas the S.D. of pre and posttest of experiment group Ashwagandha in pulse rate were cited as 4.21 and 1.81

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respectively and mean difference was 1.91. The 't' was calculated as 3.33 which was significant at the level of significance at $p < 0.05$. Statistically Significant mean difference shows the effect of selected ayurvedic medicine Ashwagandha on pulse rate of sportsperson.

The mean values of pre and posttest of experiment group Vidarikand in Pulse rate were cited as 73.71 BPM and 72.48 BPM respectively. Whereas the S.D. of pre and posttest of experiment group Vidarikand in Pulse rate were cited as 4.47 and 2.08 respectively and mean difference was 1.23 respectively. The 't' was calculated as 1.88 which was not significant at the level of significance at $p > 0.05$. Statistically not significant mean difference shows the no effect of selected ayurvedic medicine Vidarikand on pulse rate of sportsperson. As the same mean values of pre and posttest of control group in Pulse rate were cited as 73.80.

BPM and 74.52 BPM respectively. Whereas the S.D. of pre and posttest of Control group in Pulse rate were cited as 4.42 and 4.13 respectively and mean difference 0.72. The 't' was calculated as 0.95, which was not significant at the level of significance at $p > 0.05$. Statistically not significant mean difference shows the no effect of control group pulse rate of sportsperson. The results of study showed the effect of selected ayurvedic medicine Ashwagandha on pulse rate of sportsperson, whereas Vidarikand & control groups showed no effect of selected ayurvedic medicine on pulse rate of sportsperson. The mean values of pulse rate among the study groups was not found significant at pretest $p > 0.05$ while the difference was observed at posttest $p < 0.05$.

CONCLUSIONS

The results of study showed the effect of selected ayurvedic medicines Ashwagandha and Vidarikand on muscular endurance (pulse rate) of sportsperson, whereas control group showed no effect on muscular endurance (pulse rate) of sportsperson. The mean value of pulse rate among the study groups was found significant

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difference at pre-test level. The results of study showed the effect of selected ayurvedic medicines Ashwagandha and Vidarikand on muscular endurance (pulse rate) of sportsperson, whereas control group showed no effect on muscular endurance (pulse rate) of sportsperson. The mean difference of squat among the study groups were found similar $p > 0.05$ at initial level whereas the statistically significant difference in the mean values was observed at post-test ($p < 0.05$). Thus the hypothesis "There will be significant effect of Ashwagandha on selected Physical fitness pulse rate variables of the sportspersons" was rejected.

REFERENCES

1. Yadav RK et al. (2014), Height-density lipoprotein cholesterol increases following a short-term yoga-based lifestyle intervention: a non-pharmacological modulation. ActaCardiologica, 69(5):p. 543-9.
2. AnshuMalviya et.al.(2016), Critical Review on Vidarikand (PUERARIA TUBEROSA DC.) -AN AYURVEDIC HERB, Vol 4, Issue 2: February 2016.
3. DnyaneshwarKantaramJadhav (2017), Role of Ayurved in Sport Medicine: A Short Review, Journal of Physical Fitness, Medicine and Treatment in Sports JPFMTS, 1(1).
4. DeveshChaudhary and Mohammad Ahsan (2012), Effect of Yoga Training on Physiological Characteristics of College Students. International Journal of Health, Sports and Physical Education, Vol.1 No.1: p.25-27.
5. Swift DL, et.al (2012), The effect of difference doses of aerobic exercise training on exercise blood pressure in overweight women. Applied Physiology.Nutrition and Metabolism, 35(5): p.907-11.
6. Prachi D. Dalvi et.al. (2018), Effect of Anutailanasya on Shoulder and Chest of Athletes, International Ayurvedic Medical Journal AMJ: Volume 6, Issue 7, July – 2018.