



EXPLORING THE THERAPEUTIC EFFECTS OF YOGA AND ITS ABILITY TO IMPROVE THE WELL BEING OF TYPE- 2 DIABETIC MELLITUS

Kum. Reshma Nadaf¹ and Prof. N. Chandrappa²

¹Research Scholar , DOS in Physical Education and Sports Sciences A W University,Vijayapura.

² Research Guide , DOS in Physical Education and Sports Sciences A W University,Vijayapura.



ABSTRACT

In the year of 2015, 415 million of adults were suffering from the diabetes mellitus and studies are telling that this number is expected to increase to around 642 million or one in ten adults by 2040. One in a two adults with diabetes mellitus is undiagnosed because they don't know the terrible complications of diabetes. Many people living with type 2 diabetic mellitus for a prolonged period without being unaware of their health condition, diabetes lead many health complication like diabetic foot, frozen shoulder, cardiovascular disease etc, delayed diagnosis means peoples may get one on the other complications by the time of treatment, in many countries diabetic is a leading cause for retinopathy, kidney failure, amputation of lower limb. Early detection and time to time treatment individuals can prevent or reduce the impact of diabetic complications.

KEYWORDS: diabetes mellitus , health condition, diabetes lead.

INTRODUCTION

Good Health is the key to a happy life for every human being, everyone know that health is wealth. The modern pace of life hardly gives time to take care of health, but ancient Indian literatures says that the true accomplishment of life begins with good health, for a good health numerous things has to be done like intake of calories accordingly body activity demands, and regular exercise has to be done according (Divakar and Mulla, 1978; Shambekar and kate, 1980). World Health Organization stated that "Health is a state of complete physical, mental and social well-being" Neither is it 'merely the absence of disease or infirmity.

PHYSICAL HEALTH:

According to the experts, for human physical Health refers to 'good body health or fitness' which is due to regular exercise or physical activity good nutrition and adequate.

MENTAL HEALTH:

Mental health refers to emotional and cognitive well-being. A person who enjoys good mental and emotional balance does not have a mental disorder

About mental health World Health Organization says that it is a "state of well-being in which the individual realizes his or her own abilities, can cope with normal stresses of life, can work productively and fearlessly and is able to make a contribution to his or her community"

The essential dimensions of 'health' would be the achievement of optimal growth and development, reflecting the full expression of one's genetic potential, maintenance of the structural integrity and functional efficiency of body tissues necessary for an active and productive life, mental health, ability to with

stand the inevitable process of ageing with functional impairment and minimal disability and ability to fight against disease (Kristal et al., 2005).

Yoga:

Yoga is a 3,000 year old tradition and it's first described by Indian saint 'Patanjali' in the classic book 'yoga suthra' which is widely recognized as the authoritative book on yoga. The 'yoga' word comes from a Sanskrit word 'yuj' which means yoke or union to join, and to direct and concentrate one's attention today, many people's think that yoga means only physical poachers, Asana is just one of the eight tools used for get good physical health; in the text of yoga suthra only three of the 196 suthras mention asana and the remain 193 suthras discusses the other factors of yoga including controlled breathing meditation or dhayana, diet changes, lifestyle, healing use of sound and visualization, among many others. In yoga suthra pathanjali mentioned eight fold ways or path to get awareness and enlightenment about life and its called as a 'ashtanga' which literally means 'eight limbs or eight parts'

BENEFITS OF YOGA

Physiological Benefits

The physiological benefits are stable autonomic nervous system equilibrium; blood Pressure decreases (of special significance for hyporeactors); pulse rate decreases; GSR (galvanic skin response) increases; respiratory rate decreases; ECG- alpha waves increase (during various stages of meditation theta, beta and delta waves also increase); cardiovascular efficiency increases; EMG activity decreases; efficiency of respiratory increases; eye and hand coordination's increase; grip strength increases; reaction time and dexterity skills improves.

Psychological Benefits

From practicing of yoga the psychological benefits are subjective well-being increases and mood improves; hostility decreases; anxiety and depression decrease; concentration, attention, mood, learning efficiency, memory improves; actualization, social skills and well-being increases.

Biochemical Benefits

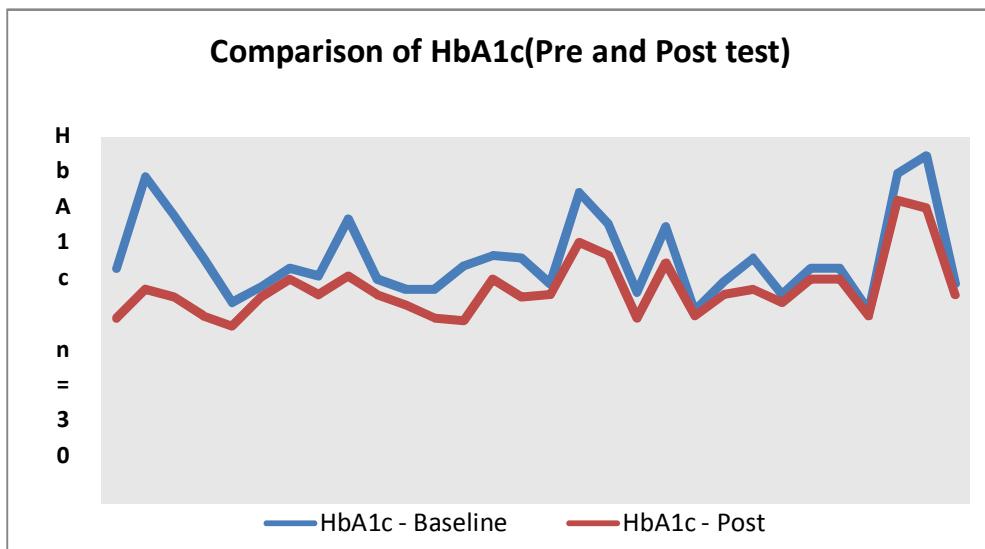
From practicing of yoga the biochemical benefits are glucose, sodium, total cholesterol, triglycerides, LDL cholesterol, VLDL cholesterol, catecholamine's are decrease; and HDL cholesterol, cholinesterase, ATPase, Hematocrit, Hemoglobin, Total white blood cell count, Lymphocyte count, thyroxin, Vitamin C, Total serum protein increases.

Blood Pressure

The blood pressure of both Genders is presented in table no 2. A total 30 subjects, 60% subjects were having normal blood pressure, 33.3% subjects were having grade 1 hypertension and female were having grade 2 hypertension and grade 3 hypertension when compared to males.

sl,no	Age	Gender	ID no	Hight	Weight	Pre-test date	Pre-HbA1c	Post test	Post HbA1c
1	57	M	4973	170	69	2/6/2015	12,5	3/9/2015	8,2
2	49	M	4974	176	104	2/6/2015	11	6/9/2015	7,9
3	36	M	4130	170	78	28/6/2015	9,0	28/9/2015	8,6
4	45	M	4982	168	64	6/6/2015	10,9	8/9/2015	8,7
5	59	M	4741	163	51	9/6/2015	8,2	12/9/2015	7,1
6	53	M	253	164	60	9/6/2015	9,1	12/9/2015	7,0

7	41	M	2372	153	72	12/6/2015	8,6	14/2015	8,6
8	40	M	2974	163	63	16/6/2015	10,7	18/9/2015	9,5
9	46	M	4087	174	74	16/6/2015	8,1	18/9/2015	7,1
10	48	M	2135	156	68	19/6/2015	9,4	22/9/2015	8,2
11	51	M	2670	169	69	18/6/2015	8,0	22/9/2015	7,7
12	57	M	3104	165	80	25/6/2015	7,4	22/9/2015	7,2
13	58	M	1822	168	75	26/6/2015	12,6	28/9/2015	11,6
14	34	F	4134	165	71	1/6/2015	9,0	3/9/2015	7,1
15	52	F	717	163	49	3/6/2015	9,4	7/9/2015	7,2
16	55	F	1900	155	72	4/6/2015	8,3	8/9/2015	7,7
17	54	F	4980	153	72	88/6/2015	8,3	28/9/2015	7,9
18	47	F	1621	155	62	6/6/2015	8,7	7/9/2015	8
19	47	F	4984	156	53	8/6/2015	8,6	9/9/2015	8
20	35	F	4986	165	70	9/6/2015	8,2	9/9/2015	7,6
21	50	F	4353	147	63	13/6/2015	9,4	15/9/2015	7,9
22	49	F	5004	151	58	15/6/2015	11,9	16/9/2015	10
23	43	F	5008	152	91	18/6/2015	10,6	19/9/2015	9,2
24	48	F	5007	155	71	18/6/2015	7,4	20/9/2015	7,2
25	51	F	1838	158	82	18/6/2015	8,5	21/9/2015	8,0
26	57	F	5014	144	49	23/6/2015	9	25/9/2015	9,6
27	59	F	1243	152	68	24/6/2015	9	27/9/2015	8,6
28	40	F	1822	156	78	27/6/2015	13,3	28/9/2015	11,3
29	58	F	224	145	78	28/6/2015	8,4	29/9/2015	8
30	58	F	1826	147	78	14/6/2015	9	15/9/2015	8,5



The average adherence is calculated as = (actual hours of yoga attended by each patient/total hrs of yoga)*100. The average adherence of all 30cases is 90.5% and divided the cases into two groups <90% and >=90%

CONCLUSION

In conclusion, the present study shows that yoga therapy in addition to standard medical therapy reduces blood sugar level. Yoga therapy, as applied in western culture, is an innovative form of physical activity and stress management, this mind–body practice is a complementary and alternative medicine (CAM) modality that has become increasingly popular in recent years. Among adults with diabetes, yoga therapy has been associated with multiple benefits and few adverse effect. Yet, studies that investigate yoga therapy and its outcomes rarely report data beyond 1 year post intervention, and few, if any, examine aspects of the social environment that may contribute to yoga practice as a lifestyle to prevent or minimize complications from diseases such as diabetes.

REFERENCES

- [1] International Diabetes Federation (2009). *IDF Diabetes Atlas* (4th ed.). Brussels: Belgium.
- [2] The Department of Health (2007). Making every young person with diabetes matter. Report of children and young people with diabetes working group, 1-76.
- [3] National Institute of Clinical Excellence. (2004). Type 1 diabetes in adults. National clinical guideline for diagnosis and management in primary and secondary care.
- [4] The Department of Health (2003). National Service Frame-work for Diabetes: Delivery Strategy, 1-32
- [5] Wolpert, H. A., & Anderson, B. J. (2001). Metabolic control matters: Why is the message lost in the translation? The need for realistic goal-setting in diabetes care. *Diabetes Care*, 27(7), 1301–1303.