INTRODUCTION

It is rightly called the era of science and technology. In this 21st century stupendous developments have been found in the Science and Technology, research in Space, Defense, Atomic energy, Computer, Internet service and many other areas. Through Internet invention we may collect required information within a fraction of a second from any part of the universe. Due to this advanced scientific technological invention the body movements of the human being have been restricted and also the sedentary habit has been created, which have made physical exercise necessary for the maintenance of health. To be of benefit, physical exercise must be adapted to the capacity of the individual who practices it.

Each and every one has to follow good health practices in his/her routine life. Minor health disorder is common to all, but in case of major health problems like blood-pressure, acidity, diabetes and asthmatic patients are swallowing some conventional medicine regularly prescribing by the doctors. But such practices do not completely eliminate the health disorders; on the other hand, it may lead to several other health problems.

The structure of human body is so made that it functions like administrative system of a country. Various parts of the body perform different functions. If one of the systems of the body does not function properly it causes ill health. The main reason of ill health is accumulation of waste products in the body by eating wrong type of food, lack of exercises and assimilation with various diseases. The functioning of the human body is very complex and it involves mechanical laws as well as psychological principles. How effectively and efficiently the body performs depend mostly upon its mechanical aspects as they are directly related to performance of activities of an individual.

The educational institutions are the temple of learning, where two factors are involved: the teacher and the taught. The duty of the teacher is to teach and that of the taught to learn. To facilitate the teaching learning process, there should be harmony and co-operation between the teacher and learner.

The teacher is usually the first authority figure out side of the family to whom the child must relate. This authority figure remains with the child through all of his schooling. It is common for
many children to approach the teacher when problems arise, because they feel that this teacher will understand. The teacher should attempt to help the student with his problem while making him conscious of his obligations to the school, his home and his fellow classmates and helping him to understand that rules are not made either for or against him as an individual but for the school or society as a whole.

The teaching profession faces new challenges now and in the immediate future. So the teachers should prepare themselves and keep them fit physically, mentally, socially, emotionally for specialized role in effective contribution to education. But the teachers those who are suffering from diabetes fail to fulfill the expected role as a teacher.

We need energy to carry out any activity by the body. Our body converts glucose into working power and remains active. Digestive process converts carbohydrates from our food into glucose. As the proportion of glucose in the blood increases, immediately pancreas gland situated behind the stomach releases hormones known as insulin. It converts glucose in the form of power and stores the extra glucose in the cells of liver and muscles. Thus the quantum of glucose in the blood remains balance.

Medical science has established that when the liver, pancreas, spleen of human body fails to act properly, insulin deficiency along with imbalanced secretion of other hormones is seen. Continuous substance of such a situation leads towards diabetes, namely MELLITUS and INSEPIDAS. Diabetes Mellitus is a disease state in which pancreas not functions normally, no sufficient insulin is produced and so, the body is not capable to manage its food intake properly, body’s metabolism gets disturbed. The sugar, starch and other carbohydrates are not burnt properly because of missing insulin. When insulin deficiency is seen in human body, glucose comes from liver being accumulated with blood and increases the rate of glucose (normal range 70 to 110 mg %) and the excess glucose passes through urine.

Diabetes Mellitus occurs in two forms. Type I or also called as juvenile Diabetes or Insulin Dependent Diabetes Mellitus (IDDM). The patients belonging to this category have their pancreas damaged due to virus. In such cases the cells producing insulin normally get destroyed. Therefore, it becomes essential to get insulin injected from outside. It can occur at any age, though it most commonly occurs during younger age.
Type II also called as maturity-onset Diabetes or Non-Insulin Dependent Diabetes Mellitus (NIDDM). This diabetes is more common than Type I. About 95 to 98% of diabetic patients fall in this case Type II diabetes, mostly occurs after the age of 35 or 40. In this type of patients, insulin is produce in the body but its quantum is lower than required.

The symptoms of this disease are affected with thirst, maximum urine pass, less sweating and it is characterized as chronic, the patient feels weakness, headache, costiveness, hungry, distress etc. Type II diabetes can be controlled by balance diet, exercises and performance of yoga exercises.

Yoga exercises gently tone and shape the body, improve posture and flexibility, and contribute to feeling of well-being. Most yoga exercises have a profound effect on improving circulation, especially to the extremities. Yoga exercises help keep the blood vessels elastic, and yoga exercise combined with relaxation training has even been shown to reduce high blood pressure in some cases. After you have practiced for a while, you can add more vigorous exercises to your yoga routine to give you the added benefits of some aerobic conditioning and increasing muscle strength. Yoga exercises gently press on the body glands and organs, resulting in positive effects for the digestive, endocrine, and reproductive systems.

There seemed to be a popular opinion that the persons suffering from diabetes should not be allowed to go for any type of physical exercises and to have sweet (any type), potatoes, sweet fruits etc. Sometimes it was seen that the doctors also subscribed to this view. Even they suggested bed-rest for such patients to be followed by swallowing of some conventional medicines prescribed by them. In case of INSEPIDAS diabetes the doctors might be correct, but when it is MELLITUS Type II diabetes the physical educators thought differently.

Keeping in mind the aforesaid facts it was planned to subject such patients to undertake selected yoga exercises with a view to see whether the maladies of the type II diabetes (Mellitus) could be controlled or removed without conventional therapeutic treatment with medicines. The positive results of the experiment might be helpful in case of Type II diabetic (Mellitus) patient teachers to perform their responsibilities as a teacher more effectively and efficiently.
Statement of Problem:
The purpose of the study will be to study the Rolle of Yogasanas In Teaching Effectiveness of College Teachers Suffering From Diabetes.

Purpose of Study:
It is assumed that the result of this experiment might be a blessing to the diabetic college teachers and it also expected that they might be confidently practice Yogasanas in order to get rid of this incurable disorder and also could live the life almost normal.

Delimitation

1. Area: The experiment will be confined to the college teachers in S.G.B. Amrawati University {Maharashtra}.
2. Age: The range varied from 35 to 55 years.
3. Sex: The subjects will be both male and female college teachers.
4. Subjects: Among the diabetes patients in the college teacher suffering from diabetes. 30 (thirty) male and 10 (ten) female and 15 (fifteen) male and 5 (five) female non-diabetes college teachers will also be selected from various colleges in sgb Amrawati University as the subjects.

Limitation

1. Subjects will be not having the yoga background of the yoga.
2. Daily routine of subjects health habits and leisure time activities of the subjects is not considered.
3. The investigator could not controlled the day to day physical activities of the subjects.

Objective of the Study:
1) To select the diabetic college teachers and to estimate the intensity of this functional disorder.
2) To estimate the quality of college teachers as a result of yoga intervention and to compare this effectiveness with control as well as with normal individuals.
Hypothesis:
The following hypotheses are laid down for the study.
H1. There is a difference in organic fitness between the diabetic college teacher and non-diabetic college teacher.
H2.- There is an impact of Yoga exercises on diabetes.
H3.- There is a difference in teaching effectiveness between diabetic and non-diabetic college teachers (normal).
H4.- Yoga exercises may contribute to teaching effectiveness of diabetic teachers.

Definitions of the terms used in the study

Blood sugar:

When the quantity and quality of insulin produced by the pancreas are inadequate or isn’t working properly, glucose comes from liver being accumulated with blood and rise in the blood sugar level. (Khan Ada P, 2002)

Urine Sugar:

When glucose just accumulates in the bloods, after a certain point, the blood glucose becomes so high that the kidneys, which filter waste products from the blood, begin to overflow some of the glucose into the urine is called Urine Sugar. (Khan Ada P, 2002)

White Blood Cell (W.B.C.) or Leukocytes:

White blood cell (W.B.C.) or leukocytes are the colorless and nucleated formed elements of blood. Leukocytes play very important role in defense mechanism of the body. Depending upon the presence or absence of granules in the cytoplasm, the leukocytes are classified into 2 types namely i. Granulocytes ii. Agranulocytes. (Sembulingam K. and Sembulingam Prema, 2002)
Red Blood Cell (R.B.C.) or Erythrocytes:

Red Blood Cells or Erythrocytes are the non-nucleated formed elements in the blood. Normally, the red blood cells are disc shaped and biconcave. The red color of the cell is due to the presence of the coloring matter- hemoglobin in these cells. (Sembulingam K. and Sembulingam Prema, 2002)

Diabetes:

Diabetes is a grouping of anatomic and chemical problems resulting from a number of factors in which an absolute or relative deficiency of insulin or its function usually is present. (Marbel A. et al, 1985)

Yoga:

Yoga is a great philosophy, an art, a science and a way of life, aimed at developing a perfect balance between the body and mind and between the individual self on the cosmos. (Dalal Nergis, 1992)

Yoga is a science. It is applied psychology. Not only is it the means to achieve the purpose of life, but it enables one to do anything one wants, even in this world, with great energy and with great benefit to other people. (Xavier G. Francis, 2006)

Asana:

Asana or the physical postures are movements of the physical body which are relaxing and refreshing; they give physical, psychological and physiological benefits and bring body, mind and spirit into harmony and equilibrium thus helping both the young and the old. (Irene Carrmine, 2006)

CollegeTeacher:

CollegeTeacher is a person who stimulates learning in the students by organizing and guiding certain experiences of the individual under his leadership.
**Teaching:**

Burton considers teaching as “Stimulation, guidance, direction and encouragement of learning.”

**Teaching Effectiveness:**

According to Derek Bok, Teaching effectiveness as an “Act of Faith.” on the part of students and teachers to do their best.

**Significance of the study:**

1) This study may help the physical education teachers to change their attitude towards these groups of ailing persons for whom they think that these are the patients and will be treated by medical practitioner.

2) This study may lead the physical education teacher to find out the corrective yogic exercises for these type of handicapped person.

3) This study may help the ailing college teachers to realize that the suitable Yogasanas prescribed by the experts are beneficial for them.

4) This study may help the physicians to appreciate the value of certain well prescribed exercises for diabetic patients and this may help them to change their idea that such patients should abstain from all sorts of physical activities. It is expected that the teacher suffering from diabetes be enlightened from finding of the study in such a manner that there are alternative and effective systems of controlling Diabetes without conventional medicine. Here lies the significance of the study.