1. INTRODUCTION

With the advent of human civilization on the earth, in India and all over the world plant based traditional system of therapy such as Ayurveda, Unani and few other systems were developed. These traditional systems have been providing primary health care to more than seventy-five percent of the world’s population. Ayurveda is the Health science explained in ancient Indian text. This traditional system of medicine is very important and native of India.

The important concept of Ayurveda is keeping of good health. WHO defines good health as not merely disease free state, but as a state of complete physical, mental, and social well-being. Charaka and Sushruta defined it as the only way to achieve the ultimate goal among chaturvidha purushartha. Sushruta further said that Madhyama Sharira is best but Ati Sthula or Ati Krisha Sharira always may have some complaint. Sthoulya vyadhi is explained in Santarpanajanya Vyadhi in Ayurveda and Atisthoola purusha has been considered as one of the Asthanindita purusha.

Good health, according to Ayurveda is archived by the equilibrium of sharir Dosha, Dhatu and Mala. In the every human body these seven dhatus are in a particular proportion. Any change in their equilibrium leads to various diseases. Meda or fat is one of these dhatus which serves many purposes, important of which is to create and maintain body-heat which keeps us alive. Meda also protects delicate structure of our body from any injury and shock etc. Meda gives necessary supports to skeletal structure of our body and brings about necessary form or shape to our body.

Ayurveda professes natural form of treatment. Ayurveda emphasize treatment of patient in holistic manner i.e. while treating the patient it not only considers his physical condition but also takes into account his general and environmental conditions viz. his diet, medicine, exercise, lifestyle, behavioural patterns etc. Ayurveda is an important therapy predominantly uses herbal drugs in the prevention and cure of various ailments of human being and also domestic animals.
In India Ayurveda has greatly contributed towards quality healthcare of not only rural and tribal communities but also sizeable section of people living in urban areas.

Ayurvedic history reveals that the earliest literature on Indian medical practice dates back to Ved Kala or Vedic period. Rigveda (5000 BC) recorded medicinal uses of 67 species, about 80 species of yajurveda and Atharvaveda (4500 BC to 2500 BC) gives more than 280 species of medicinal herbs. Furthermore Charak Samhita (700 BC) and Sushrut Samhita (200 BC) are encyclopaedias of medicine, compiled from various sources in which medicinal properties and uses of 1100 and 1230 species of medicinal herbs have been described.

In the present era of modernization, the use of latest technology by human in every walk of life has brought about drastic changes in dietary habits, modes of lifestyles and various regimens of life. Most of the individuals are habituated to luxurious and comfortable lifestyle lead to various chronic and non-communicable diseases. Hypertension, Diabetes millets, ischemic heart disease, varicose veins, atherosclerosis, cancer etc. are recognized as major non-communicable diseases for which Sthoulya (Obesity) is traced to be a major risk factor. Sthoulya is the commonest nutritional disorder in affluent societies and mostly prevalent in developed countries.

In modern medical science Sthoulya may be compared with Obesity. Enlargement of fat cell in its size or an increase in number or both leads to abnormal growth of adipose tissue which is known as Obesity. In such condition body fat is extensively accumulated under the skin and around certain organs such as belly, buttocks, breast, thighs and individual becomes significantly overweight. It has been categorized as AtiSthoulya (Obesity). Sthoulya is thus abnormal and excess accumulation of medodhatu. Muscles, bone, fat and water in the body increases body weight excessively and labelled as Sthoulya.

Sthoulya (overweight and obesity) is major risk factors for number of chronic diseases such as coronary heart disease (CHD), High Blood Pressure, Stroke, Diabetes, Cancers, Osteoarthritis etc. Metabolic syndrome is group of risk factors that raises risk for cardiovascular diseases and other health problems. The coronary arteries supply oxygen-rich blood to your heart. If Body Mass Index (BMI) rises the
substance called plaque block the coronary arteries and reduce the blood flow and causes heart failure. Similarly, if you are Sthoulya, there are greater chances of high blood pressure. The risk of having a stroke rises as BMI increase. Most people who are Sthoulya (Obese) have type 2 – Diabetes. The common way to find out whether you are Sthoulya or AtiSthoulya is to calculate your Body Mass Index (BMI ). BMI is an estimate of body fat and can indicate risk for disease. BMI is a simple index and calculated by dividing persons weight in kilograms by his height in meter squares. The World Health Organization (WHO) defines,

(a) A normal weight as a BMI range : 18.5 to 24.9
(b) Sthoulya (overweight) as a BMI range : 25.0 to 29.9
(c) AtiSthoulya (Obese) as a BMI range : 30 to 39.9
(d) AtiSthoulya (extreme obesity) as a BMI : 40.0 and above

For calculating BMI for children and teens, in addition to weight and height, their age and sex also taken into account.

In Sthoulya people, osteoarthritis is a common joint problem of knee, hips and lower back. People having Sthoulya are at increased risk of having gallstones. In women Sthoulya may develop menstrual problems and infertility. In children there is higher risk of disability in adulthood or even pre-matured death.

Once considered a problem in high-income countries overweight and obesity are now dramatically on the rise in low-and middle-income countries, particularly in urban settings. Of late Sthoulya has also become problem of concern in under developed and developing countries. Recently, it has been reported that Sthoulya level in poor families of lower income group people in the under developed countries has gone higher than those of people in the well developed countries like United States of America, United Kingdom, Japan, Germany etc.

The Hetus (causes) of Sthoulya Roga have been clearly explained in Ayurveda. A lack of energy balance most often causes Sthoulya (Obesity). Energy balance is the amount of energy or calories you get from food and drink etc. which is equal to the amount of energy your body uses for things like breathing, digesting and
being physically active. To maintain a healthy weight your energy or calories taken in and calories used do not have to balance every day. It is the balance over time that helps you maintain the healthy weights.

In the field of Ayurveda it is experienced that ‘Shodhan Chikitsa’ is effective in Sthoulya vyadhi. While considering day-to-day life and available time factor of patient, 'Shaman Chikitsa' is preferable. This is one of the cause for me to conduct the trial, so I have taken Mustadikwath as a trial drug which is explained by Charakacharya for santarpanjanyavyadhi.

By administering this trial drug I had observed and verified the changes in sign and symptoms of Sthoulya (obesity) along with weight, BMI and Lipid levels.
Need of study

Nowadays Obesity is the major and basic cause of lifestyle disorders like Diabetes mellitus (T2DM), Coronary heart disease (CHD), Hypertension. Obesity (Sthoulya) is increasing at an alarming rate in developed industrialized countries which are undergoing rapid nutrition and lifestyle transition. Substantial changes in lifestyle (greater consumption of energy dense foods, inactive lifestyle etc.) are the predominant reasons for increase in prevalence of obesity and related disorders. In modern medicine there is no any medicine to control or permanent cure for these diseases due to Obesity.

The worldwide prevalence of obesity more than doubled between 1980 and 2014. In 2013, 42 million children under the age of 5 were overweight or obese. Once considered a high-income country problem, overweight and obesity are now on the rise in middle and low-income countries, particularly in urban settings. In developing countries with emerging economics (classified by the World Bank as lower- and middle-income countries) the rate of increase of childhood overweight and obesity has been more than 30% higher than that of developed countries.

Some recent WHO global estimates are as under.

In 2014, more than 1.9 billion adults, 18 years and older, were overweight. Of these over 600 million were obese. Overall, about 13% of the world’s adult population (11% of men and 15% of women) were obese in 2014. In 2014, 39% of adults aged 18 years and over (38% of men and 40% of women) were overweight.

Overweight and obesity are linked to more deaths worldwide than underweight. Most of the world’s population live in countries where overweight and obesity kill more people than underweight (this includes all high-income and most middle-income countries).

Obesity (Sthoulya) is associated with increase in risk of diseases like type 2 diabetes mellitus (T2DM), coronary heart disease (CHD), hypertension, dyslipidemia, the metabolic syndrome and certain cancers and it significantly increases the risk of mortality at any age.

So it is wisely said “Longer is the belt shorter is the life”. It is the demand of the hour to treat a person rationally with positive multidimensional approach, so
that life expectancy can be increased and he can be prevented from the dreadful diseases. Modern therapeutics could not fulfil this aim because of extreme hazards of drugs like Amphetamines and other anorexic agents. In this regard approach of this study is to give safer, comprehensive and rational option for treating Sthoulya (Obesity).

In this regard, approach of this study is to give safer, comprehensive, cost effective and rational option for treating Sthoulya (Obesity) and this is a humble attempt to probe into the different pathophysiological aspects behind Sthoulya, taking into consideration the classical therapy coupled with modern interpretations. Though it is a well known fact that Sthoulya (Obesity) management runs a long schedule, a sincere effort has been made here to manage Sthoulya according to classical line within stipulated time limits.