Ayurveda view of prevention aspects of diabetes

S. P. Molligoda
National Institute of Ayurveda, India

Abstract
Diabetes mellitus is a common disease in the world. It is estimated that over 30 million people are already caught with diabetes, and 10.4 million diabetics are not aware of the existing disease. Diabetes prevalence has increased steadily in the last half of this century and will continue rising among world population. It is believed to be one of the main criteria for deaths in world; every year. Main utility of the Āyurveda science is to help maintain the health of a healthy individual and cure of diseases of patient. In Āyurveda, diabetes is known as ‘Prameha’ which means profuse urination. It is also believed that increased kapha blocks the channel of the urinary system and pancreas and is responsible for producing low tissue fire or mandha-dhatuagni which results in malfunction of all the tissue in body. According to Āyurvedic view all causative factors of diabetes could be categorized under two main factors, mean foods and behavioral. Caraka Ācārya has explained all facts in briefly. Indulging in sitting on soft cushions for long periods, sleeping for long hours, use of curds, fresh grains, puddings made of jiggery/sugar and all other similar factors which bring about increase of Kapha in the body are causes for diabetes. According to Āyurveda view Kapha causes Premehas by affecting Medas (lipid metabolism), muscles and body fluid situated in urinary bladder. This paper summarizes Āyurvedic evidence supporting to prevent diabetes and discusses major policy challenges to broad implementation of lifestyle intervention in the health system.

Introduction
In modern society, DM remains a challenge to countless people round the world. Despite innumerable advances in life science, the worldwide medical profession has been met with minimal success in its fight to eradicate diabetes. Statistically, a dark picture has been painted thanks to its epidemic status combined with the unsuccessful attempts to cure this disorder. As an example, the planet Health Organization (WHO) projects a sixty-four percent increase in diabetes within the us alone and in developing countries, like India, are projected to face a huge increase within the number or diabetes cases by the maximum amount together hundred seventy percent by 2025. Despite the very fact that students and medical personnel have established remarkable initiatives to tackle the disease, key facts from the planet Health Organization state that the worldwide prevalence of diabetes has increased considerably from 1980 to 2014 with the amount of cases in 1980 being 108 million rising to 422 million in 2014. DM cases almost doubled from 4.9% in 1980 to 9.5% in 2014 in adults over 18 years aged. DM has gained negative recognition together of the world’s largest silent killer diseases. WHO projects diabetes are going to be the seventh leading explanation for death in 2030. Several sorts of literature trace the history of diabetes back to 1000 BC. Āyurvedic research is one such vital source of data that furnishes the readers with descriptions of the disorder and its management. Sushruta Samhitāv (1000-600BC) and Caraka Samhitāv (1000BC) attributed madhu meha (diabetes) to increased cases of frequent urination by individuals with this disease. Consistent with Srikantthi, the mentioned urine exhibited a sweet taste, a symbol of the presence of glucose in its contents. Ayurveda sites the causation of diabetes as an element contributing to the multi-factorial etiology of the disease. The literature further classifies the medical condition among the eight major diseases that aren't only refractory, but also pose challenges in treatment. Several factors, including lifestyle, environment, genetic (karmic), and dietary are habitually at the basis of diabetes. DM may be a medical condition that's characterized by the body’s inability to manage its blood sugar levels leading to hyperglycemia. This malfunction is usually thanks to a faulty mechanism within the pancreas; thus, rendering its inability to supply adequate amounts of the hormone insulin. The challenge with this disorder is that the inability to diagnose and treat it at an early stage where medical management can prolong or maybe deter the various complications that accompany this disease. However, Āyurveda’s treatment strategy provides effective prevention, management, and even remission from certain sorts of this disorder. This paper’s focus is to pose a comparative analysis between Ayurvedic treatment strategies and therefore the western medical model for DM by examining relevant scholarly and peer reviewed literature. There are two sorts of diabetes recognized within the U.S. today: Type I (madhu meha) or insulin dependent (IDMM) and sort II (Ikṣu meha) or non-insulin dependent (NIDDM). Type 1 DM affects approximately 10% of the individuals diagnosed with diabetesviii. Both western and Ayurvedic medicine believe that this sort of diabetes is incurable, but manageable through proper treatment. Pathogenesis of Type I diabetes, from the Western perspective, is believed to be a culmination of lymphatic penetration leading to the destruction or breakdown of the insulin secreting beta cells that are housed within the islets of Langerhans (pancreas). After sufficient loss of those beta cells within the pancreas, hyperglycemia within the blood sugar levels are unobtainable and hyperglycemia ensues. The feedback loop within the liver monitoring glucose levels recognizes the high level of sugar and incorporates the help of the urinary and endocrine systems. These systems assist the liver and check out to assist remove the toxic levels of sugar within the blood stream. As a result, the individual tends to urinate more frequently and exhibits increased sweating. Patients during this catabolic state are usually diagnosed with diabetes requiring insulin to normalize glucose, lower hyperglycogenenia, and regulate protein and lipid digestion. Curious enough, it's been noted in studies that Type I diabetes tends to be a co-occurring disorderix. Often, persons living with diabetes will suffer with other auto-immune disorders like vitiligo, hypothyroidism, graves disease, hashimoto thyroiditis, and Addisons disease. Mukherjee & Wahile 2006 attribute DM to environmental factors like viruses that prompt the body’s white blood cells to hunt and destroy the insulin producing beta cells, this might be the link between diabetes and therefore the other sorts of auto-immune disorders that appear to occur round the some timeframe of diabetes within the individual. Both western medicine and Ayurveda believe that Type I diabetes must be treated with insulin injections, dietary changes and implementation of an exercise regimen. the quality for western medicine treatment for people with Type I diabetes requires scheduled injections to assist moderate their glucose levels. Each injection of
insulin is decided by a wage scale. This scale takes under consideration the person’s age, diet, activity level and sensitivity to the insulin. Western medicine’s unfortunate belief of ‘one size fits all’ dietary guideline doesn’t take under consideration the standard food nor the person’s size and dosha (mind-body type). This is often the purpose where Ayurvedic treatment stands out from western medicine. From an Ayurvedic perspective, this type of diabetes is additionally incurable. However, Ayurveda sees the causation of the disease as a vata-vitiating lifestyle. This suggests that the individual has depleted their system from insufficient sleep, an excessive amount of worry and stress with a possible genetic (karmic) connection. The symptoms are almost like western medicine but also can include complications thanks to candida, ulcerations, diabetic neuropathy (which can cause proprioception) difficulty, frequent nausea or vomiting and a fruity odor emanating from one’s breath. (Halpern 1995). There are three main prognosis in Ayurveda, as described by Gogte; they’re sadva (curable), yapya (palliable) and asadhya (incurable). Gogte explains that patients under sadva have received a diagnosis of this disorder at an early stage and also those that are obese. DM has continued to prevail within the global arena together of the refractory lifestyle disorders despite the efforts to suppress its prevalence. Proponents within the medical profession have adopted a bio-medical model that emphasizes scientific tools to pinpoint the causal factors of the illness and management options. The medical approach has also the power to spot certain aspects of genetic makeup that choreograph or detect the disease onset, along side introducing therapeutic initiatives. On the contrary Ayurveda presents as a totally different approach in addressing DM. Ayurveda, not only utilizes medicines, but also emphasizes proper diet, pursuance of exercise, healthy lifestyle choices, among everyone as a preventative model. As mentioned, efforts are underway to get evidence on the efficacy of the approach additionally to determine the extent of the utilization of Ayurveda as a standalone therapy for patients with DM. The pursuance of clinical studies with diverse evaluation criteria and broader objectives is vital in generating substantial evidence on the effectiveness and efficacy of the Ayurvedic treatment protocols along side the extent of its use. Medical management may be a complex and evolving science. Ayurveda is that the oldest practiced life science known to man, and it’s proven itself as a foundational practice in medical care, disease prevention and within the art of healing and healthy living. Unlike modern medicine which may mask an illnesses symptom with the utilization of pharmaceuticals, Ayurveda truly supports the person in being liable for their health. Through the numerous, and more importantly, specific treatment recommendations of herbal medicines, diet, and lifestyle changes Ayurveda focuses on going to the basis explanation for the disease and not just treatment of the symptoms.