

**CONTRIBUTION OF AYURVEDA IN MANAGEMENT OF NON-COMMUNICABLE
DISEASE -DIABETES MELLITUS****Dr. Sonam Kumari Keshari¹, Dr. Avadhesh Kumar², Dr. Deena Nath Singh³ and Dr. Jai Shankar Prasad⁴**¹Junior Resident (Department of Roga Nidana Evum Vikriti Vigyana).²Professor & H.O.D.(Department of Roga Nidana Evum Vikriti Vigyana).³Assistant Professor (Department of Roga Nidana Evum Vikriti Vigyana).⁴Assistant Professor (Department of Kriya Sharira).***Corresponding Author: Dr. Sonam Kumari Keshari**

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ABSTRACT

A non-communicable disease (NCD) is a disease that is not transmissible directly from one person to another. Non-communicable diseases (NCDs) also known as chronic diseases are defined as diseases of long duration, generally having slow progression. A combination of genetic, physiological, lifestyle and environmental factors can cause these diseases. According to WHO, four main types of NCDs are cardiovascular disease, cancer, chronic respiratory disease and diabetes. NCDs are the leading cause of death globally. Non-communicable diseases kill 71 million people every year which accounts to 71% of annual global deaths. Among that diabetes being one of the major NCD contributes to 1.5 million deaths. It is estimated that approximately 537 million adults are living with diabetes which will hit a peak of 643 million by 2030. India is deemed as world's diabetes capital. According to information by Health Ministry Govt. of India, the diabetic population of the country is going to hit the alarming figure of 69.9 million by 2025 and 80 million by 2030. Urban India has more incidences of diabetes than rural India. Also, the prevalence is more in age group of 70-79 years and also males are more prone to diabetes. Diabetes is a major cause of blindness, kidney failure, heart attacks, stroke and lower limb amputation and also there was 5% increase in premature mortality (aged less than 70 years) due to diabetes. The main objective of Ayurveda is to "Maintain the health of a healthy individual by prevention of disease and to cure the diseased ones." Ayurveda being the foremost life science describes ways to prevent and manage lifestyle disorders. It provides proper dietary management, herbal medication and lifestyle advices through Dinacharya (daily regimen), Ritucharya (seasonal regimen), Panchakarma (Bio-purification therapies), and Rasayana (rejuvenation) therapies, yoga and exercise. The blood sugar level reduces slowly and progressively with continuous use of ayurvedic medicines which are very safe because these medicines do not lead to hypoglycemic episodes.

KEYWORDS: Diabetes mellitus Type 2, *Madhumeha*, *Prameha*, Ayurveda management, Diet, Lifestyle.**INTRODUCTION**

Diabetes mellitus, is a group of metabolic diseases in which the person has high blood glucose (blood sugar), either because insulin production is inadequate, or because the body's cells do not respond properly to insulin, or both. The hormone insulin moves sugar from the blood into our cells to be stored or used for energy. Patients with high blood sugar levels typically experience frequent urination (polyuria), increased thirst (polydipsia), excessive hunger (polyphagia) and exhaustion.

Types of Diabetes

Type 1 Diabetes is an autoimmune disease where the immune system attacks and destroys cells in the pancreas where insulin is made.

Type 2 Diabetes happens when body becomes resistant to insulin and sugar starts building up in the blood.

Prediabetes occurs when blood sugar is higher than normal but lesser to be detected as type 2 diabetes.

Gestational Diabetes happens during pregnancy due to the insulin blocking hormone released by placenta.

Diabetes in Ayurveda

Diabetes in ayurveda is called by the name '*PRAMEHA*' which refers to a group of disorders associated with urinary system often coined to the term obstinate urinary disorder. Ayurveda describes 20 types of *prameha* in which 10 are of *kapha* predominant ones, 6 are pitta predominant and 4 are *vata* predominant. It further

explains about another variety called as *madhumeha* which comes as a complication if these 20 varieties of *prameha* are left untreated.

Madhumeha can be correlated to modern-day Diabetes mellitus

Causes Of Prameha

1. Eating without any check or control
 2. Addiction to the pleasure of sedentary habits and sleep
 3. Excess intake of curds
 4. Excess consumption of meat of domesticated and aquatic animals and animals from marshy land
 5. Excess intake of milk and its products
 6. Intake of freshly harvested grains freshly prepared alcoholic drinks
 7. All *kapha* aggravating factors
- Signs And Symptoms Of *Prameha*

The 3 signs of prameha according to ayurveda are

- Excessive urination
- Urinary sweetness
- The sensation of sweetness in the body

Ayurveda further includes the following under the signs and symptoms of prameha

Excess thirst, Diarrhoea, Headache, Burning sensation, General debility, Indigestion, Necrosis, Carbuncles, Muscle wasting, Excessive sleep, Sluggishness.

Ayurveda lists *Prameha* or *Madhumeha* under *Asta Mahagada* (8 most dangerous diseases) due to the complications it can cause and make the life of the person miserable.

Ayurvedic Management of Prameha

Correcting *Agni* (digestive fire) and elimination of *Kleda* (Sticky elements in the body) is the main aim in doing Ayurvedic treatments for *Prameha*.

The line of Treatment includes

1. *NIDANA PARIVARJANA* or Avoidance of causative factors: adapting a healthy life style prevents *prameha* or controls *prameha*.
2. *SAMSHODANA KARMA* or *PANCHAKARMA*: also known as biocleansing or body detoxification aims at cleansing the body for toxins and making the body fit for further rehabilitation. *Panchakarma* procedures like *vamana*, *virechana* and *basti* are performed. But they mostly depend on the person's body constitution and severity of the disease.
3. *SHAMANA CHIKITSA* or Palliative Therapy: Mainly includes various external therapies to strengthen the body, Drug therapies which can act as a supporting treatment for the conventional diabetic treatment.

Simple Medical Herbs Advised In Prameha Treatment

Amalaki or Amla / Indian Gooseberry: *Phyllanthus emblica*.

Haridra or Turmeric: *Curcuma longa*.

Jambu or Jamun /Java Plum: *Syzgium cumini*

Meshasringi or Gudmar/ Gymnema: *Gymnema sylvestre*.

Methi / fenugreek: *Trigonella foenum-graecum*.

Vijayasara or Bijak / Indian kino: *Ptenocarpus marsupium*.

Karela / bittergourd: *Memorandia charantia*
Saptachakra / lolly berry: *Salacia chinensis*
Bimbi / ivy gourd: *Coccinia indica*.

Yoga Practices Advised in Prameha

Certain yoga practices are believed to stimulate the pancreas and improve its function. But perform these under the instruction of a yoga therapist. *Katichakrasana*, *Tadasana*, *Pavanamuktasana*, *Gomukhasana*, *Shalabasana*, *Vakrasana*, *Shashankasana*, *Dhanurasana*, *Mayurasana*, *Paschimothanasana*, *Ustrasana*, *Bhastrika*, *brahmari*, *suryabhedhi pranayama*.

Preventive Measures As Per Ayurveda

Do's (Pathya)

1.Regular exercise especially walking. 2.Timely intake of diet. 3.Intake of old harvested cereals, barley (Yava), Sorghum (Jowar), whole wheat atta, bitter gourd (Karela), green leafy vegetables, garlic (Lasuna), turmeric (Haridra), aloe (Kumari) in vegetables and fruits like Guava, Oranges, Indian Blackberry (Jamun) etc. may be useful. 4.Reduce intake of rice, food rich in carbohydrate and fried or processed food. 5.Regular practice of Yoga, Meditation etc.under the supervision of Yoga specialist is suggested.

Don'ts (Apathya)

1. Sugarcane juice, jaggery, sugar, milk products. 2. Sedentary lifestyle. 3.Sleeping in the day time and excessive sleeping 4. Alcohol 5. Staying too long on empty stomach. 6. Cold drinks, Ice cream, burger- pizza and other fast foods etc.

The role of ahara (dietary regimen) & vihara (lifestyle) are equally or even more important in diabetes to control blood sugar level as well as to prevent complications of this disease.

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