Introduction
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Diabetes was described more than 2000 years ago. For the past 200 years it has featured in history of modern medicine. As we enter the new millennium, diabetes has become a problem of epidemic proportion. It touches us all in every walk of life – Physicians and Scientists, Family and Friends, even Government and Communities – and it imparts a constantly toll. Over Society as a whole more and more people have problems requiring answers, and in these days of rapidly expanding technology they find it difficult to shift through all the information. Today, more than ever, “to know diabetes is to know medicine.”

Diabetes mellitus is the most prevalent non-communicable group of common metabolic disorders that share the phenotype of hyperglycemia in the world. Several distinct types of DM exist and are caused by a complex interaction of genetics, environmental factors, and life-style choices. Depending on the etiology of the DM, factors contributing to the hyperglycemia may include reduced insulin secretion, decrease glucose usage, and increased glucose production. The metabolic dysregulation associated with DM cause secondary pathophysiologic changes in multiple organ systems, that impose a tremendous burden on the individual with diabetes and the health care system. With increasing incidence worldwide, DM will likely continue to be a leading cause of morbidity and mortality in the forthcoming future.
Recent changes in classification\textsuperscript{3,4,5,6,7} reflect an effort to classify DM on the basis of pathogenic process that lead to hyperglycemia as opposed to criteria such as age of onset or type of therapy

**Etiological classification of diabetes Mellitus**

1. **Type 1 diabetes** (β cell destruction, usually leading to absolute Insulin deficiency)
   - \(I_A\) Immune mediated
   - \(I_B\) Idiopathic

2. **Type 2 diabetes** (may range from predominantly insulin resistance with relative insulin deficiency to a predominantly insulin secretory defect with insulin resistance)

3. **Other specific type of diabetes**

   \(3_A\) *Genetic defects of β cell function characterized by mutation in -*
   
   1. Hepatocyte nuclear transcription factor (HNF)
   2. Glucokinase (MODY-2)
   3. HNF 1α (MODY-3)
   4. Insulin Promoter Factor (IPF)-1 (MODY-4)
   5. HNF1β (MODY-5)
   6. Mitochondrial DNA
   7. Proinsulin or insulin conversion

   \(3_B\) *Genetic defect in insulin action*
   
   1. Type A insulin resistance
   2. Leprechaunism
   3. Rabson Mendenhall syndrome
   4. Lipoatropic diabetes
3c Disease of the exocrine pancreas
   (Pancreatitis, Pancreatectomy, neoplasia, Cystic fibrosis, hemo chromatosis)
3d Endocrinopathies
   (Acromegaly, Cushing syndrome hyperthyroidism, pheochromocytoma, aldosteronoma)
3e Drug or chemical induced
   (Glucocorticoid, pentamidine, nicotinic acid, thyroid hormone, β adrenergic agonists, thiazides, phenytoin, α Interferon, β Blockers)
3f Infection- Congenital rubella, CMV, Coxsackie
3g Uncommon form of immune mediated diabetes
   (Stiffman syndrome, Anti insulin receptor antibodies)
3h Other genetic syndromes
   (Down’s, Klinefelter, Turner’s, Friedrich’s ataxia, Huntington’s Chorea, myotonic dystrophy, porphyria, Prader Willi syndrome)

4. Gestational diabetes mellitus (GDM)
   By such nosology a huge group approximately 150 million people (nearly 90% of diabetic population) emerged a Type 2 Diabetes Mellitus which is the commonest form of Diabetes Mellitus seen all over the world, and by itself is highly heterogeneous in patients profile manifestation, complication and management. The prevalence of Type 2 diabetes varies in different geographic regions and different ethnic group. Prevalence of Type 2 diabetes is increasing in most of the countries, especially in developing countries such as India
According to the recent WHO reports, the prevalence of diabetes mellitus in adults worldwide will rise from 4% in 1995 to 5.4% in the year 2025 and more than 75% of them will be residing in developing countries.\textsuperscript{8,9}

**Diabetes in India**

Diabetes mellitus has emerged as a major public health problem in our country and has assumed epidemic proportion. According to Indian Council of Medical Research – Prevalence of diabetes mellitus has increased from 2.1% in 1972 to almost 12% in 1995. The vast majority of diabetes in India are Type 2. Prevalence of Type 2 DM has changed from 1972 2.3% in urban and 1.5% in the rural areas to 11.5% in urban and 2.4% in rural areas. WHO recognized two sub clinical type of Type 2 as obese and non-obese.\textsuperscript{10,11,12,13} In contrast to WHO prediction of 60-80% to be obese only, about 30% of Indian diabetics are obese and vast majority of them were found to be non-obese. The age of onset is a decade earlier from their counterparts in the developed countries.\textsuperscript{17,19,48,49}

There is a sub type of Type 2 diabetics, who are lean and underweight (below 20% of the expected ideal body weight for height) with a body mass index (B M I) < 18.5 Kg/m\textsuperscript{2}. They are different from patients who loose weight at the onset of diabetes. Attention to this specific type of underweight Type 2 diabetes was first drawn by Tripathi and Kar\textsuperscript{14} in 1965, who reported that 28% of their adult onset diabetics were underweight and they did not develop Ketoacidosis. However, they thought that this was because of under nutrition.
Das in 1991 highlighted these clinical features, biochemical, hormonal profiles which confirmed that there are variants of Type 2 diabetes

Therefore, in the past these adult onset diabetics were variously nomenclatured as underweight, undernourished, lean and even non-obese by different authors. However, the International workshop on "Types of diabetes peculiar to tropics", held in Cuttack\textsuperscript{15,16} gave these diabetics defined nomenclature of low body weight as they were neither malnourished nor the loss of weight could be attributed to the prevalent metabolic state

However, the various studies done at various centers in India (such as Calcutta, Cuttack, Chennai, Hyderabad, Madurai & Jaipur) have showed that these low body weight type-2 diabetics revealed significant difference in their clinical, biochemical, hormonal and mortality profile

Since most of these studies on low body weight type-2 diabetes mellitus done in our country are from other states. No study has been done in our state U.P and Bundelkhand region as well as in Department of Medicine Jhansi

This very thought enriched us with new enthusiasm and we planned to study the clinical profile of low body weight type-2 diabetes mellitus in Bundelkhand Region in the Department of Medicine, Maharani Laxmi Bai Medical College, Jhansi, U.P, India
Essentials of diagnosis of diabetes⁷:

1. **Symptom of diabetes plus random blood glucose concentration ≥200 mg/dl (11.1 mmol/L)**
   
   OR

2. **Fasting (no caloric intake for at least 8 hr) plasma glucose ≥126 mg/dl (7 mmol/L)**
   
   OR

3. **Two hour plasma glucose ≥200 mg/dl (11.1 mmol/L) after 75 gm oral glucose load**

Etiological determinants and risk factors for type-2 diabetes:

1. **Genetic factor**
   (a) Genetic marker  (b) Family History  (c) Thrifty gene(s) etc

2. **Demographic characteristics**
   (a) Sex  (b) Age > 45 yrs  (c) Place/Ethnicity

3. **Modifiable risk factor (Including behavioural and lifestyle related)**
   - Obesity (including distribution & duration)
   - Physical inability
   - Diet
   - Westernisation, Urbanisation, and Modernisation
   - Intra Uterine environment

4. **Other**
   - Hypertension ≥ 140/9 mm Hg
   - HDL ≤ 35 mg/dl Triglyceride > 250 mg
   - History of GDM