

**A HOLISTIC APPROACH OF UNANI MEDICINE IN PREVENTION AND
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ABSTRACT

The prevalence of diabetes is predicted to double globally from 171 million in 2000 to 366 million in 2030 with a maximum increase in India. It is very obvious that India currently faces an uncertain future in relation to the potential burden that diabetes may spread upon the country. Diabetes (*Ziabetus*) is a silent killer disease which encircle the mankind in their shadow. Today it is increasing rapidly day by day due to damage of pancreas, defective/insufficient production of insulin, peripheral resistance along with other causes to a lesser extent. Most of the Unani physicians have described the *Ziabetus* (Diabetes) into two forms: *Ziabetus Sada* (Diabetes incipidus) and *Ziabetus Shakri* (Diabetes mellitus). The ancient physician has also described the causes, clinical features, complications, management and preventive measures in detail. In this paper we tried to put up all the descriptions which are mentioned in Unani system of medicine.

KEYWORDS: Diabetes, *Ziabetus*, Unani medicine.

INTRODUCTION

According to the World Health Organization in Nov 2014, about 347 million people have diabetes worldwide. WHO estimates that in 2012, approximately 1.5 million deaths were directly caused by diabetes, and more than 80 percent of these deaths occurred in low- and middle-income areas. Diabetes was the direct cause of 1.6 million deaths in 2016 and high blood glucose was the cause of another 2.2 million deaths in 2012. Almost half of all deaths attributable to high blood glucose occur before the age of 70 years.^[1] Diabetes is fast rising status of a potential epidemic in India with more than 62 million diabetic individuals currently diagnosed with the disease.

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The word Diabetes has been derived from Greek word "*Diabanmo*" Which means "passing through" or "to run

through" or "Siphon" because of excessive urination.^[3,4] It is a chronic disease that occurs either when the pancreas does not produce enough insulin or when the body cannot effectively use the insulin after production. Insulin is a hormone that regulates blood sugar. Hyperglycemia, or raised blood sugar, is a common effect of uncontrolled diabetes and over time leads to serious damage to many of the body's systems, especially the nerves and blood vessels.

Arab Atibba mentioned Diabetes with the name *Ziabetus*, as a disease of kidneys. The disease is characterized by excessive thirst, excessive urination, presence of sugar in urine, increased appetite, gradual loss of body weight etc.^[5] They described *Ziabetus* by some other terms like, *Atsha*, *Moattasha*, *Intesae Anmas*, *Dolab*, *Zalaqul kulliya*, *Dawwarah*, *Barkar*, *Barkarya*, *Qaramees* etc.^[4,6] Hippocrates (460 BC) mentioned a disease with excessive urinary flow and wasting of body. Galen (131-201 AD) defined diabetes as "Diarrhoea Urinosa" (diarrhoea of urine) and "dipsakos" (thirsty disease).^[7]

Pathogenesis

Jalinoos (Galen) described it as a disease specific to kidneys because of weakness in their retentive ability. He has expressed the thought that the weakness of *quwwat-e-mughayyarah* may be a causative factor of diabetes. He mentioned that, when hot temperament is associated with moisture, then absorption (into the kidneys) is less, urine is dark in colour, viscous and, if cold temperament is predominant along with dryness, then the power of absorption is very strong and this is the most lethal form of diabetes.^[7,8,9]

Zakariya Razi in *Al-Hawi Fil- Tib* states that this disease is basically caused due to abnormal hot temperament of the kidneys. This hot temperament affects the bladder also. Due to the increased heat, the kidneys absorb a lot of fluids from the gastro-intestinal tract. And also, due to weakness of *quwwat-e-masika*, the kidneys are not able to retain these fluids and they are immediately diverted to the bladder, and excreted as such. The Loss of fluid is again responsible for increasing the already abnormal hot temperament. This gives rise to a vicious cycle of intake and excretion.^[10]

According to *Ibne Nafees* in diabetes *quwwate- masika* of the kidneys is weakened due to the abnormal hot temperament, therefore, they are unable to retain the fluids in the body and the *quwwat-e-dafi'a* is stimulated and it expels the fluids immediately after intake. Thus the cycle of absorption (into the kidneys) and excretion continues. On this basis, it has been named *dulaab* (water-wheel) and *dawwarah* (whirling etc). *Ibne Sina* (Ave Sina 980-1037 AD) termed the disease "aldulab" (water wheel) and "zalqul Kulliyya" (diarrhea of the kidneys) also described the complications as mental troubles, impotence, gangrene and furunculosis. *Ibne Sina* was the first who wrote differentiating feature of *Ziabetus* (Diabetes) associated with emaciation form other causes of polyuria.^[7]

Etiology

The etiology of disease is considered to be seated in the kidneys and the liver. *Ziabetus* is caused by one of more of the following factors:

- ***Su-e-Mizaj Haar kulya* (Hot derangement in the temperament of kidneys)**

Kidneys absorb water in an excess amount from circulation due to excessive hotness or derangement in temperament, so they cannot retain much amount of fluid and pass in the form of urine frequently (polyuria) and the patient drinks water frequently (polydipsia) to overcome his thirst.^[6,11]

- ***Su-e-Mizaj Barid kulya* (Cold Derangement in Temperament of Kidney)**

Sometimes, *Ziabetus* develops due to excessive exposure of cold to kidneys that may lead to *sue mizaj barid* (cold derangement in temperament).^[4,12]

- ***Zoaf-ul-Kulya* (Weakness of Kidneys/ Renal insufficiency)**

Water cannot be retained properly due to the weakness of kidneys and their *Quwate masika*.^[4,6,12]

- ***Barudat-e-kabid wa kulya* (Cold Derangement in Temperament of Kidneys and liver)**

It is due to the excessive exposure of the whole body or liver or kidneys to cold, which leads to *sue mizaj barid* (cold derangement in temperament).^[5,12,13,14]

- ***Ittisa- ul-kulya wa Majrā-e-Bawl* (Dilatation of Kidneys and urinary tract)**

Water cannot be retained for long or required time due to dilatation of *kulya wa Majrae Bawl* (Dilatation of Kidneys and Tubules) so it is passed out rapidly.^[11,12,13]

Classification of Diabetes (*Ziabetus*)

Ziabetus with the presence or absence of sugar in the urine is divided into two types:

- ***Ziabetus Sada* (Diabetes insipidus)**

It is also called *Ziabetus gair shakari* and characterized by excessive thirst and excessive urination but there is no sugar in the urine.^[15]

- ***Ziabetus Shakri* (Diabetes Mellitus)**

It is characterized by excessive thirst and urination and presence of sugar in the urine. This is very clear in this disease patient feel excessive thirst and takes plenty of water and passes all the water he consumed without any metabolic change.^[10]

According to the *khiffat* and *shiddat* (intensity) of the sign and symptom it is also divided into two types:^[5,15]

- ***Ziabetus Haar***

Acute symptoms of the *Ziabetus* with abrupt onset occur like excessive thirst (polydipsia) and increased urination (polyuria) with other symptom and sign of *sue mizaj haar* like dryness of the body and heat in the flanks, due to *sue mizaj haar sada* of kidneys.^[10]

- ***Ziabetus Barid***

In this *Ziabetus*, thirst and frequency of urine is comparatively less. *Mizaj* of kidneys is disturbed in this type, so they absorb water from blood and send to the urinary bladder immediately due to weakness in *Quwate Masika* (retentive power). It has also been described that the kidneys attract the watery substance of blood, but the urinary bladder does not attract anything. So kidneys attract the water from the circulation, liver, stomach and intestine because of which patient feel the immoderate thirst (polydipsia).^[6,12]

The American Diabetes Association classification scheme for DM is summarized and clinical diabetes is divided into four general subclasses:

- Type 1, primarily caused by autoimmune pancreatic β cells destruction and characterized by absolute insulin deficiency;

- Type 2, characterized by insulin resistance and relative insulin deficiency; other specific types of diabetes associated with identifiable clinical conditions or syndromes; and gestational diabetes mellitus.^[16]

In addition to these clinical categories, two forms of pre-diabetes

- Impaired glucose tolerance
- Impaired fasting glucose.

Complications of *Ziabetes (Diabetes)*

It leads to complications like:

- Retinopathy (Blindness)
- Nephropathy (Renal failure)
- Cardiomyopathy (Coronary artery disease)
- Encephalopathy (Gangrene and coma).

Line of Treatment

1. Correction of *Su-e-Mizaj*

Unani line of treatment may be effective for correction of organs and correction of temperament (*Sue-Mizaj*) and could be preventive in progressing the disease further.

2. Removal of predisposing cause

Remove the predisposing factors which are responsible for this disease.

ILAJ (Treatment)

Therapeutic approaches for *Ziabetes* in Unani medicine can be broadly classified into three main categories.

- Dietary modifications
- Lifestyle modifications
- Pharmacotherapy

Dietary modifications

- Avoid refined cereals.
- Give more weightage to fibrous foods.
- Avoid fatty foods.
- Avoid junk, fast and sugary foods.
- Restrict red meat and liquor.
- Foods should be cooked in vinegar.
- They should reduce the amount of food.
- Hot spices should be added in *ghiza* (food) e.g. *Filfil Daraz*, *Zeera*, *Lehsun* because they have *Mulattif*.

Lifestyle modifications

- Physical exercise of appropriate intensity and duration is recommended.
- Avoid excessive sleep, because of its effect in promoting the phlegmatic humour, should be avoided.
- Stress, strain and anxiety should be avoided.
- Avoid sedentary lifestyle.
- Avoid humid and cold environments.

ILAJ BIL DAWA (Pharmacotherapy)

Single drugs (*Mufrad Advia*)

Following single drugs are used in Unani medicine since ancient time.^[4,10]

- **Jamun** (*Syzigium cuimini*): Jamun seeds control the level of sugar in urine and ease the Diabetic symptoms. This is the main quality of Jamun seeds.
- **Karela Bark or Bitter Gourd** (*Momordica charantia*): This plays an important role in the management and prevention of diabetes.
- **Neem** (*Azadirachta indica*): Neem is mainly used in purifying of blood. It control the level of sugar in blood.
- **Methi** (*Trigonella foenum*): This lowers the blood sugar level & good source of fibers.
- **Binola Seeds or Cotton seeds**
- **Bail Leaves** (*Aegle marmelos*)
- **Kalonji** (*Nigella sativa*)
- **Tabasheer** (*Bambusa arundinaceae*) Regulates the blood sugar due to the presence of natural antioxidants.
- **Zanjabeel** (*Zingiber officinalis*)
- **Gurmar booti** (*Gymnema sylvestre*)

Compound formulation (*Murakab Advia*)

Following Compound formulations (*Murakab Advia*) are used in unani system of medicine:

- Qurs Ziyabetus
- Zulale Ziyabetus
- Qurs Tabasheer
- Jawarish jalinoos
- Qurs Kushta Baiza Murgh
- Dulabi
- Diabeat
- Shakreen
- Qurs Gulnar
- Kushta Zamarrud

Preventive Measures in Unani Medicine

- It is very famous proverb 'Prevention is better than cure'. So we should follow the balanced diet plan and healthy lifestyle to keep our body away from diseases. Unani medicine along with some diet management can retain the normal glucose level. Unani treatment can regulate the normal functions of pancreas cells and is free from any sort of side effects.
- Eat three meals a day at regular times and space meals no more than six hours and take fibers rich products and raw vegetables which can control diabetes and prevent its further complications.
- Take adequate amounts of Vitamin B6, Vitamin C, Vitamin D, Vitamin E, Beta-carotene.
- Exercise: perform at least 3 - 5 times per week.
- Sleep: Lack of sleep or disrupted sleep can alter insulin and glucose levels.
- Rest & Relaxation: Stress relaxation aids blood sugar control.
- Stop smoking.

CONCLUSION

There is no sufficient and effective treatment for diabetes despite of advancement on large scale in medical science. Because the cases of diabetes is increasing regularly specially in India. The holistic approach of Unani medicine is a of hope for the people suffering diabetes (*Ziabetes*). Correction of derangement of temperament, weakness of kidneys/ renal insufficiency, dilatation of kidneys and urinary tract and may be best preventive and curative steps to halt the progress of disease in the Unani prospect. There is a lot of single and compound drugs being used to treat the *Ziabetes* and stop its complications but scientific validation is still required on large sample size.

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