INTRODUCTION:
The history of Indian medicines reflects its development from vedic era to modern Ayurvedic pharmaceutics (Dravyaguna) passing through samhita (Ayurvedic text) era. Ayurveda, the science of life, which has highly effective treatment for a number of tough diseases, also has effective and successful treatment for Diabetes Mellitus (Madhumeha).

The disease ‘Diabetes’ has been considered as one of the leading cause of death in the world. Its victims and non-victims are always fighting to get rid from this disease adopting by different therapies. Herbal formulations play an important role in controlling many chronic health problems including Diabetes Mellitus. Ancient Indian literature incorporates a remarkably broad definition of medicinal plants and considers all plant parts to be potential sources of medicinal substances. Traditional medicinal practices have remained as a component of health care system of many societies in spite of the availability of well-established alternatives.

Diabetes / Madhumeha is a disease prevalent from the antiquity of mankind as it is mentioned in veda and Ayurveda.

Being a life science concerned texts ‘Ayurveda’ for the first time identified, Diagnosed and managed this disease. The disease
'Madhumeha’ was considered as one of the ‘Mahagada’ (Maha+ gada) while the present scenario of Diabetes alarming the world as estimated to be increase double in numbers in 2030.

Diabetes is a disease syndrome characterized by disorder metabolism and abnormally high blood sugar caused by qualitative and quantitative deficiency of insulin.

The present medical era facing a crucial stage to control and prevent this disease even after discovering of insulin and other oral hypoglycemic agents.

The present study is designed to explore the importance of three commonly available medicinal plants i. e. Emblica officinalis (L) - Amalki, Curcuma longa (L) - Haridra & Syzygium cumini (L) - Jaman using from the pre vedic to post vedic eras. This study also attempts to screening the history of Diabetes from the time of Vedas.

OBJECTIVES:
To rule out the utility of traditionally used plants by ancient Indian Physician.

HYPOTHESIS:
Selected plants are more effective in control and prevention of Diabetes.

MATERIALS & METHODS:
In the present study the history of Diabetes as well as Madhumeha were studied for screening on Data based along with screening of 3 plants namely- Emblica officinalis(L) – Amalki, Curcuma longa(L) – Haridra, and Syzygium cumini(L) – Jaman mentioned in the Vedas and Ayurveda as antidiabetic plants. The inclusion criteria of this study were based on different Vedas and Ayurveda & traditional used and availabilities. The study covers from pre-vedic to post vedic periods. The present research work engulf the vedic Samhitas, e.g- Atharva veda, Rig veda, Sam veda and Yajur veda along with Ayurveda related samhitas.

No doubt, there is miraculous inter relation between the Vedas and Ayurveda since the both are science and deals with life of human being also. The history of Indian medicines reflects its development from Vedic era to modern Ayurvedic pharmaceutics (Dravyaguna) passing through samhita’s (Ayurvedic text) era.

It was revealed in turned over the leaf of texts of Indian medicines that Ayurveda mainly related with Atharva veda though the Vedas are found in incomplete description pertaining to medicinal text. During the post vedic period the term ‘Upaveda’ (applied knowledge) is used in traditional literature. In this work it has been found amplies of references in concerned disease in different Vedas and Ayurved Samhitas.

LITERARY REVIEW:
(A) Disease aspect:
Pre Vedic & Vedic period (4000B.C – 1000 B.C)

The knowledge of the system of Diabetes Mellitus, as the history reveals, existed with the Indians since prehistoric age. Its earliest reference (1000B.C) Ayurvedic literature is found in mythological form where it is said to have originated by eating ‘Habisha’ – a special food which used to be offered at the time of yagna organized by Dakshaprajapati.

Of course Ayurveda recognized the disease Madhumeha right from the Vedic period.

The word ‘Madhumeha’ is one type of vataja prameha under 20 types of prameha (pra+ meha). ‘Pra’ means excess in frequency & quantity and ‘Meha’ means urination / watering which derives from the root
“miha sechane” by adding iyu (pratya) - Sabdakalpadruma. So ‘prameha’ denotes the meaning of excess urination in frequency & quantity. The first and foremost Vedic references of meha found in yakshma Nashana sukta of Rig Veda. The word ‘Madhumeha’ (madhu= honey+ meha) derived from the root “manyante vishesanajayanti yeshmin”.

Meha: Derivation-
1. Mehayati chinchati mutra retamsi iti mehaha.(Halayudha Kosha)
2. Mehayati mutrayati iti arthaha.
3. The synonyms of madhu are Kshudram, Kusumasavam, Makaranda, Makshikam, Jalam, Pusparaja, Kshiram etc. and thus the disease madhumeha were expressed by others name instead of madhumeha in some vedic and Ayurvedic literatuere, e.g- Kshaudrameha.

So, Madhumeha is a disease where excretion of urine having the same quality of Madhu in its colour, test, smell & consistency-Madhavakara.

On the other hand it is a condition by name of Madhumeha while the afflicted individual passes sweet urine and inhibits sweeteners in the sweet mucous, blood, breathe etc. Sushruta narrated Kshaudrameha in place of Madhumeha. The synonyms of Madhumeha in ancient classics are Ojameha ( Caraka), Kshudrameha ( Sushruta), Pushpameha (Anjan Nidana) etc.

The evaluation of Madhumeha can be traced from Veda. In Atharva Veda (2500 B.C) there is description about ‘Ashrava’ meant for Mutratisara i.e- excessive urination. This syndromic disease can be compared with Diabetes. The commentators of vedic works- sayana & Kesavabhatta included Mutrasrava- (Excessive urination) under ashrava. Krambelkar (1961) interpreted that the term ‘Ashrava’ is formed from the root a+sr meaning to flow. The description avialable in Atharva veda is considered as 1st ever on this topic & is mentioned in kaushikasutra. Noteworthy that the ancient physician aware of the presence of sugar in blood & urine- Kaushikasutra.

In Samhita period:
Caraka samhita: In Samhita period the disease Madhumeha (Meha viz a viz Prameha) has been explained its Aetiology, Pathology, Prodromal symptoms, clinical features, complications & therapeutic procedure by Caraka. Sushruta Samhita: Sushruta noted the Madhumeha as a transformed condition from prameha if one not treated Madhumeha at time. He described its treatment in Prameha Pidaka chapter also. Description of Kshaudrameha instead of Madhumeha is also found in this samhita.

Bagbhatta Samhita (A.H): Bagbhatta described the leading causes of Madhumeha in Bagbhatta Samhita.
Harita Samhita: Harita described 13 types of prameha in different nomenclature i.e- Puyameha, Ghritameha with its causes.
Kashyap Samhita: Kashyapa noted the disease Prameha as Chirakari similar to syndrome of Juvenile Diabetes mellitius in vedana adhyaya of Kashyap Samhita.
Bhela Samhita: Bhela described two types of prameha i.e- Swayan akrita & Prakrita meha.

Medieval period (4th – 16th century)
(Collection of thoughts of previous authors)
Madhava Nidan: Madhava repeatedly described the Prameha / Madhumeha as mentioned in Caraka, Susruta, & Bagbhatta samhita.
Gayadasa: He has noted a syndromic disease as samaltva of mutra (avilamutrata) is
due to the presence of *dushya* in *mutra* resembled with *prameha* in Nyaya Chandrika.\(^{11}\)

**Chakrapani Dutta:** He described about the treatment of *Prameha* in his documentation during 321-296 B.C. Kautilya mentioned a method to produce diabetes in his book 'Arthasashstra'.

**Sarangadhar Samhita:** Sarangadhar mentioned 20 types of *prameha* with its poly herbal formulation.\(^{12}\)

**Bhavaprakasha:** He mentioned *prameha* / *Madhumeha* with new herbomineral preparation

**Yogaratnakara:** He explained *prameha*/ *Madhumeha* with respective treatment.

**(B) Plants aspect:**

*Ayurveda*, the science of life, which has highly effective treatment for a number of tough diseases, also has effective and successful treatment for Diabetes Mellitus (*Madhumeha*). A detailed and accurate explanation about the different aspects of this, like aetiology (Causes), pathology (process of the disease), prodromatology (premonitory symptoms), symptamatology (signs and symptoms) and treatment including prognosis are explained vividly in almost all important treatises of *Ayurveda* like Caraka Samhita, Sushruta Samhita, Astanga Hridaya Madhava Nidana, Yogaratnakara, Sarangadhara Samhita and Bhavaprakasha Nighantu. There are so many plants and herbs used for prevention & controlling of Diabetes (*Madhumeha*) mentioned in veda and *Ayurveda*. But in this work emphasis has been given on 3 plants namely Emblica officinalis (L), Curcuma longa (L) & Syzygium cumini (L).

**Plants used by-**

**Amalki:**

Caraka and Sushruta have mentioned many indications along with Diabetes obtained from the description given in different context of treatment.

Caraka gives 10 combinations of drugs to all the *Mehas* with *kapha* predominance diseases where the *Amalki* was included. Sushruta mentioned that after proper *samsodhana* the patient should used *swarasa* of *Amalki* with *Haridra* powder and Madhu. Bagbhata explained 3 *Kwatha yogas* out of which *Amalki* is ingredient of *Patoladi yogas*. Along with *Haridra*, *Amalki* is indicated as the specific drugs of choice for diabetes. *Amalki* and *Haridra* were considered as the best medicines for treating *prameha* in Astanga Hridaya while describing about Agryasangraha (group of best things) mentioned as *Nisha & Amalki*.\(^{13}\)

*Amalki* is beneficial & effective in *Prameha* / *madhumeha* mentioned in Ayu. Pharmacopiea, i.e. Bhavaprakash nighantu & Sarangadhara Samita.

**Jaman:**

Jaman found in the name of *YAMANA* / *YAMUN* in Rig veda. Rig veda – Syzygium cumini (L) considered for Diabetes – a Panacea. Very beneficial when it mixed with water.

The *Ayurveda* & other traditional approaches had described antidiabetic potentials in more than 800 plants in India subcontinent. The plants commonly used by Tribes of Midnapur district are Banyan tree, Currey leaves, *Jaman* seeds & leaves, bittergourd & *Gurmur*. It reduces blood sugar & is very good in control of Diabetes due to its Glucosides, Jamboline & Ellagic acid.

**Haridra:**

Earlier description of curative properties of medicinal plants was found in Rig veda (2500-1800B.C).
Atharva veda mentioned about Haridra for controlling of Ashrav.
Laxicons of Chakradutta & Vangasena (ancient treatise of Ayurveda) mentioned about turmeric in Diabetes.
Along with Haridra, Amalki is indicated as the specific drugs of choice for diabetes-Bagbhatta.
So many trial has been found as significant in Alloxan induced diabetes.
Nishakawathwadi Kwath, Nisoseeradi Kwath, Pramehamihira Taila & Devadarvarista are very effective in Diabetes of which Haridra is a Ingredient- Vedic preparation.

RESULT AND DISCUSSION:
So many herbal drugs were prescribed by different Vedas and Samhitas for the prevention and treatment of diabetes as the disease is prevalent from the antiquity of mankind which may help the further researcher to reduce the global problem.

CONCLUSION:
The present work was designed to study the pre & post vedic plants used in diabetes and overall assessment can be stated that the disease is prevalent from the pre-vedic to present era of Ayurvedic pharmacopeia. During this era the victims, non victims and the health providers used the selected 3 plants, i.e-  Emblica officinalis(L) , Curcuma longa(L) and Syzygium cumini(L).

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