

A Review of *Pramehahara Dravyas* in *Bhavaprakash Nighantu*
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Abstract:-

Diabetes Mellitus (DM) is a clinical syndrome characterized by hyperglycemia. The number of cases and prevalence of Diabetes Mellitus is increasing very rapidly. India has an estimated 77 million people with Diabetes Mellitus, which makes it the second most affected in the world after China. The majority of the people with Diabetes Mellitus have type-2 diabetes. This type of diabetes is largely the result of excess body weight and physical inactivity. In *Brihatrayee* and *Laghutrayee*, 20 types of *Prameha* are described. *Madhumeha* is a type of *Vataj Prameha*. Diabetes Mellitus can be correlated with *Madhumeha*. In Ayurvedic classics various drugs are described for the treatment of *Prameha*. *Bhavaprakash Nighantu*, an important lexicon from *Laghutrayee* has described various drugs acting on *Prameha*.

Keywords:- *Prameha, Pramehahara Dravyas, Bhavaprakash Nighantu, Diabetes Mellitus, Varga.*

INTRODUCTION Diabetes Mellitus is a clinical syndrome characterized by hyperglycemia, due to absolute or relative deficiency of insulin. Lack of insulin, whether absolute or relative, affects metabolism of carbohydrates, proteins, fats, water and electrolytes. Death may result from acute metabolic compensation while long standing metabolic de-arrangement is frequently associated with changes in the cells of the body, those of vascular system being particularly susceptible. These changes lead in turn to the development of well defined clinical entities, called complications of diabetes. These complications most characteristically affect the eye, the kidney and the nervous system..

Diabetes Mellitus, a global public health problem, is now emerging as a pandemic. Worldwide the number of people with Diabetes Mellitus rose from 108 million in 1986 to 422 million in 2020. Its prevalence has been rising more rapidly in low and middle-income countries than in high-income countries.

The majority of people with Diabetes have type 2 Diabetes. This type of Diabetes is largely the result of excess body weight and physical inactivity.

India has an estimated 77 million people with Diabetes Mellitus, which makes it the second most affected in the world after China. One in the six people (17%) in the world with Diabetes is from India. The number is projected to grow by 2045 to become 134 million as per the International Diabetes Federation.

In Ayurvedic classics, 20 types of *Prameha* are described which are in general characterized by production of excess amount of urine (*Prabhoot mutrata/ polyurea*) and increased frequency of micturation (*Varam varam mehati*). Diabetes Mellitus can be correlated with *Madhumeha*, which is a type of *Vataj Prameha*. In *Brihatrayee*, *Madhumeha* is very well described. *Acharya Charaka* described it as *Madhumeha* in *Nidansthan* while in *Chikitsasthan* it is mentioned as *Oojomeha*. It is said in classics that all types of *Prameha* if neglected or not treated properly, it change into *Madhumeha*. In *Sushruta Chikitsasthan*, *Prameha* is classified as *Sahaj* and *Aaharaj*. *Bhavaprakash Nighantu* is a very important lexicon from *Laghutrayee*. It is written in 16th century by *Aacharya Bhavmishra*. It is divided in 23 *vargas* along with *Anekartha Varga*. From all the *Vargas Sthavar Dravyas*, acting on *Prameha* are enlisted and their efficacy in Diabetes Mellitus is reviewed by reviewing research studies done on them.

Materials and Methods:-

Bhavaprakash Nighantu, other Ayurvedic classics, contemporary literatures, journals and internet media were used for collecting information. Total 426 *Dravyas* are mentioned in *Bhavaprakash Nighantu*. From these following herbs have been sorted out which act on *Prameha* with their reference, Latin name, family and *dosha karma* and specific antidiabetic action.

Observation:-

Total 426 *Dravyas* are dealt in *Bhavaprakash Nighantu*. Out of that 47 *Sthavar Dravyas* are described as *Pramehahara* or *Pramehaghna* or *Pramehanut* or *Pramehajeet*. Along with these 47 *dravyas*, *Tushar jala* from *Vari Varga*, *Jangala mansa* from *Mansa Varga*, *Takra* from *Takra Varga*, four types of *Madhu* as *Kshaudra*, *Paitik*, *Cchatra* and *Dal* and *Rajat*, *Vanga*, *Yasad*, *Naaga*, *Lauha*, *Mandoora*, *Swarnamakshika*, *Taarmakshika*, *Shilajatu*, *Abhraka*, *Rajavarta*, etc. are described as *Pramehahar* or *Pramehaghna* or *Pramehanut dravyas*. But *dravyas* described as acting on a *Prameha* are not specifically mentioned as *Madhumehahar* or *Madhumehaghna* or *Madhumehanut*. Most of the *Sthavar dravyas* or herbs from above 47 *dravyas* are pharmalogically screened for hypoglycemic or antidiabetic action. For these screening tests, animal models are used like fasting rat, streptozotcin induced rat, alloxan induced rats, and normal rats. Herbs or plants are screened in the form of water extracts or alcohol extracts.

Table 1: Drugs acting on *Prameha* from *Haritakyadi Varga*

| Sr. No. | Name | Latin name | Family | Dosha Karma | Action | Reference Shloka No. |
|---------|---------------------|------------------------------|-------------------------|--------------------------|------------------------|----------------------|
| 1. | <i>Haritaki</i> | <i>Terminalia chebula</i> | <i>Combretaceae</i> | <i>Tridosahara</i> | <i>Pramehanashayet</i> | 20-22 |
| 2. | <i>Aamalaki</i> | <i>Emblica officinalis</i> | <i>Euphorbiaceae</i> | <i>Tridosahara</i> | <i>Pramehaghna</i> | 39 |
| 3. | <i>Pippali</i> | <i>Piper longum</i> | <i>Piperaceae</i> | <i>Vata, Shleshmahar</i> | <i>Pramehahanti</i> | 55 |
| 4. | <i>Kampillaka</i> | <i>Mallotus philippensis</i> | <i>Euphorbiaceae</i> | <i>Kapha, Pittahara</i> | <i>Mehahanti</i> | 147 |
| 5. | <i>Katuka</i> | <i>Picrorhiza kurroa</i> | <i>Scrophulariaceae</i> | <i>Kaphapittahara</i> | <i>Pramehanuta</i> | 152 |
| 6. | <i>Katphala</i> | <i>Myrica esculenta</i> | <i>Myricaceae</i> | <i>Vatakaphahara</i> | <i>Pramehanti</i> | 181 |
| 7. | <i>Pashanabheda</i> | <i>Bergenia ligulata</i> | <i>Saxifragaceae</i> | <i>Tridoshhara</i> | <i>Pramehahanti</i> | 185 |
| 8. | <i>Manjishtha</i> | <i>Rubia cordifolia</i> | <i>Rubiaceae</i> | <i>Tridoshhara</i> | <i>Mehanut</i> | 191 |

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|-----|----------------|-----------------------------|----------------------|-----------------------|-------------------|-----|
| 9. | <i>Haridra</i> | <i>Curcuma longa</i> | <i>Zingiberaceae</i> | <i>Kapha-Pittahar</i> | <i>Mehapaha</i> | 197 |
| 10. | <i>Bakuchi</i> | <i>Psoralea corylifolia</i> | <i>Fabaceae</i> | <i>Kapha-Pittahar</i> | <i>Mehapranut</i> | 208 |

Table 2: Drugs acting on Prameha from Karpuradi Varga

| Sr. No. | Name | Latin name | Family | Dosha Karma | Action | Reference Shloka No. |
|---------|----------------|-------------------------|--------------------|----------------------|--------------------|----------------------|
| 1. | <i>Deodara</i> | <i>Cedrus deodara</i> | <i>Pinaceae</i> | <i>Kapha vatahar</i> | <i>Pramehannut</i> | 25 |
| 2. | <i>Guggulu</i> | <i>Commiphora mukul</i> | <i>Burseraceae</i> | <i>Tridoshahara</i> | <i>Mehan jayet</i> | 40 |

Table 3: Drugs acting on Prameha from Guduchyadi Varga

| Sr. No. | Name | Latin name | Family | Dosha Karma | Action | Reference Shloka No. |
|---------|----------------|-----------------------------|-----------------------|---------------------|-------------------|----------------------|
| 1. | <i>Guduchi</i> | <i>Tinospora cordifolia</i> | <i>Menispermaceae</i> | <i>Tridoshahara</i> | <i>Pramehanut</i> | 9-10 |
| 2. | <i>Gokshur</i> | <i>Tribulus terrestris</i> | <i>Zygophyllaceae</i> | <i>Vatahara</i> | <i>Pramehanut</i> | 46 |

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|-----|----------------------|--------------------------------|-----------------------|---------------------------------|----------------------|---------|
| 3. | <i>Aatarusha</i> | <i>Adhatoda vasica</i> | <i>Acanthaceae</i> | <i>Kapha, Pittahar, Vatakar</i> | <i>Mehapaha</i> | 90 |
| 4. | <i>Nimba</i> | <i>Azadiracta indica</i> | <i>Meliaceae</i> | <i>Pittahara Vatar</i> | <i>Mehanut</i> | 96 |
| 5. | <i>Mahanimba</i> | <i>Melia azedarach</i> | <i>Meliaceae</i> | <i>Kaphapittahara</i> | <i>Pramehanashan</i> | 99 |
| 6. | <i>Karanja phala</i> | <i>Pongamia pinnata</i> | <i>Leguminaceae</i> | <i>Vatakaphahara</i> | <i>Mehajeet</i> | 122 |
| 7. | <i>Karanji</i> | <i>Holoptelia integrifolia</i> | <i>Ulmaceae</i> | <i>Kaphapittahara</i> | <i>Pramehajeet</i> | 124 |
| 8. | <i>Atibala</i> | <i>Abutilon indicum</i> | <i>Malvaceae</i> | <i>vatahara</i> | <i>Hanyat Meha</i> | 146 |
| 9. | <i>Varahikanda</i> | <i>Dioscorea bulbifera</i> | <i>Dioscoreaceae</i> | <i>Kaphahara-Pittakar</i> | <i>Mehahrut</i> | 179 |
| 10. | <i>Indravaruni</i> | <i>Citrullus colocynthis</i> | <i>Curcubitaceae</i> | <i>Kapha-Pittahar</i> | <i>Pramehapaham</i> | 203-206 |
| 11. | <i>Moorva</i> | <i>Marsdenia tenacissima</i> | <i>Asclepiadaceae</i> | <i>Tridoshahara</i> | <i>Mehanut</i> | 245 |
| 12. | <i>Kakamachi</i> | <i>Solanum</i> | <i>Solanaceae</i> | <i>Tridoshahara</i> | <i>Mehajeet</i> | 247 |

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|-----|----------------------|------------------------------|-------------------------|--------------------------------|---------------------|--------|
| | | <i>nigrum</i> | | | | |
| 13. | <i>Meshashringi</i> | <i>Gynema sylvestre</i> | <i>Asclepiadaceae</i> | <i>Kaphapittahara, Vatakar</i> | <i>Mehapranut</i> | 255 |
| 14. | <i>Arkapushpi</i> | <i>Holastemma rheedianum</i> | <i>Asclepiadaceae</i> | <i>Kaphapittahara</i> | <i>Mehajeet</i> | 271 |
| 15. | <i>Brahmi</i> | <i>Bacopa monnieri</i> | <i>Scrophulariaceae</i> | <i>Pittahar</i> | <i>Mehajeet</i> | 279-81 |
| 16. | <i>Mandookparni</i> | <i>Centella asiatica</i> | <i>Apiaceae</i> | <i>Pittashamak</i> | <i>Mehajeet</i> | 281 |
| 17. | <i>Suvarchala</i> | <i>Cleome viscosa</i> | <i>Capparidaceae</i> | <i>Kapha-Pittahar</i> | <i>Mehani hanti</i> | 286 |
| 18. | <i>Gojivha</i> | <i>Onosma bracteatum</i> | <i>Boraginaceae</i> | <i>Kapha-Pittahar</i> | <i>Pramehahari</i> | 298 |
| 19 | <i>Vruddhadaruka</i> | <i>Argyrea Speciosa</i> | <i>Convolvulaceae</i> | <i>VataKaphahar</i> | <i>Mehapranut</i> | -- |

Table 4: Drugs acting on *Prameha* from *Vatadi Varga*

| Sr. No. | Name | Latin name | Family | Dosha Karma | Action | Reference Shloka No. |
|---------|--------------------|-------------------------------|-------------------------|-------------------------|-----------------------|----------------------|
| 1. | <i>Sarjaka</i> | <i>Vateria indica</i> | <i>Dipterocarpaceae</i> | <i>Kaphahara</i> | <i>Meha vyapohati</i> | 21 |
| 2. | <i>Arjun</i> | <i>Terminalia arjuna</i> | <i>Combrataceae</i> | <i>Kaphapittahara</i> | <i>Mehahrut</i> | 27 |
| 3. | <i>Beejak</i> | <i>Pterocarpus marsupium</i> | <i>Leguminaceae</i> | <i>Kapha, Pittahara</i> | <i>Mehahanti</i> | 28-29 |
| 4. | <i>Khadir</i> | <i>Acacia catechu</i> | <i>Mimosaceae</i> | <i>Kapha, Pittahara</i> | <i>Mehaharet</i> | 30-32 |
| 5. | <i>Palashphala</i> | <i>Butea monosperma</i> | <i>Fabaceae</i> | <i>Kaphavatahara</i> | <i>Mehapaham</i> | 53 |
| 6. | <i>Dhava</i> | <i>Anogeissus latifolia</i> | <i>Combretaceae</i> | <i>Kaphahara</i> | <i>Prameha Aapah</i> | 60 |
| 7. | <i>Katabhi</i> | <i>Careya arborea</i> | <i>Lecythydaceae</i> | <i>Kaphahara</i> | <i>Pramehahanti</i> | 67 |
| 8. | <i>Tinish</i> | <i>Ougeinia dalbergioides</i> | <i>Fabaceae</i> | <i>Kaphapittahara</i> | <i>Pramehajeet</i> | 76 |

Table 5: Drugs acting on Prameha from Aamradiphaladi Varga

| Sr. No. | Name | Latin name | Family | Dosha Karma | Action | Reference Shloka No. |
|---------|----------------------|-------------------------------|----------------------|-----------------------|---------------------|----------------------|
| 1. | <i>Aamrapushpa</i> | <i>Magnifera indica</i> | <i>Anacardiaceae</i> | <i>Kaphapittahara</i> | <i>Pramehanut</i> | 2 |
| 2. | <i>Pakva Kadali</i> | <i>Musa sapientum</i> | <i>Museceae</i> | <i>Kaphapittahara</i> | <i>Mehaghnam</i> | 33-34 |
| 3. | <i>Pakva Tinduka</i> | <i>Diospyros embryopteris</i> | <i>Ebenaceae</i> | <i>Kaphapittahara</i> | <i>Pramehaghnam</i> | 65 |

Table 6: Drugs acting on Prameha from Shaka Varga

| Sr. No. | Name | Latin name | Family | Dosha Karma | Action | Reference Shloka No. |
|---------|-------------------------|-----------------------------|----------------------|-----------------------|-----------------------|----------------------|
| 1. | <i>Loni</i> | <i>Portulaca quadrifida</i> | <i>Portulacaceae</i> | <i>Kaphapittahara</i> | <i>Pramehanut</i> | 20-22 |
| 2. | <i>Shitivar</i> | <i>Marsilea minuta</i> | <i>Marsileaceae</i> | <i>Tridosahara</i> | <i>Mehapranut</i> | 29-32 |
| 3. | <i>Dronpushpi Patra</i> | <i>Leucac cephalotes</i> | <i>Labiatae</i> | <i>Pittakar</i> | <i>Mehahar</i> | 34 |
| 4. | <i>Karavellam</i> | <i>Momordica charantia</i> | <i>Cucurbitaceae</i> | <i>Kaphapittahara</i> | <i>Mehahar</i> | 63 |
| 5. | <i>Kemuk</i> | <i>Costus speciosus</i> | <i>Zinziberaceae</i> | <i>Kaphapittahara</i> | <i>Pramehanashana</i> | 111 |

Apart from 47 *Sthavar dravyas*, 3 groups of *dravyas* (*Mishraka Varga*) i.e. *Ashtavarga*, *Trikatu* and *Triphala* are described as *Pramehahar*.

Table 7: *Mishrak Varga* acting on *Prameha*:

| Sr. No. | Name of <i>Mishrak Varga</i> | <i>Dosha Karma</i> | <i>Action</i> | <i>Reference Shloka No.</i> |
|----------------|-------------------------------------|---------------------------|----------------------|------------------------------------|
| 1. | <i>Triphala</i> | <i>Kaphapittahara</i> | <i>Mehahara</i> | <i>Harityakyadi Varga -43</i> |
| 2. | <i>Trikatu</i> | <i>Kaphahara</i> | <i>Mehahanti</i> | <i>Harityakyadi Varga -63</i> |
| 3. | <i>Ashtavarga</i> | <i>Vatapittahara</i> | <i>Mehapranut</i> | <i>Harityakyadi Varga -122</i> |

Table 8: Number of *Dravyas* according to *Varga*:

| Sr. No. | Name of <i>Varga</i> | Number of <i>Dravyas</i> |
|----------------|-----------------------------|---------------------------------|
| 1. | <i>Haritakyadi Varga</i> | 10 |
| 2. | <i>Karpuradi Varga</i> | 2 |
| 3. | <i>Guduchyadi Varga</i> | 19 |
| 4. | <i>Vatadi Varga</i> | 8 |
| 5. | <i>Aamraphaladi Varga</i> | 3 |
| 6. | <i>Shaka Varga</i> | 5 |

Table 9: Number of Dravyas according to Doshkarma

| Sr. No. | Doshkarma | Number of Dravyas |
|---------|-----------------------|-------------------|
| 1. | <i>Tridoshahara</i> | 6 |
| 2. | <i>Kaphapittahara</i> | 23 |
| 3. | <i>Vatapittahara</i> | 2 |
| 4. | <i>Vatahara</i> | 2 |
| 5. | <i>Kaphavatahara</i> | 8 |
| 6. | <i>Pittahara</i> | 4 |
| 7. | <i>Kapahahara</i> | 4 |
| 8. | <i>Pittakara</i> | 1 |
| 9. | <i>Vatakar</i> | 3 |

Result and Discussions:-

Bhavaprakash Nighantu has dealt 426 drugs/ *Sthavar dravyas*. From these 47 single *dravyas* and 3 groups or *Mishraka Varga* are described as *Pramehahar dravyas*. Among these *dravyas*, maximum number of *dravyas* are from *Guduchyadi Varga*. In these *dravyas*, mainly *Kaphapittahar Karma* is observed. It is observed that most of the *Sthavar dravyas* have *Laghu*, *ruksha guna*, *tikta*, *kashaya rasa* and *katu vipaka*. *Pramehahara dravyas* are mentioned as *Pramehaghna*, *Mehagna*, *Mehahar*, *Pramehanut*, *Prameha jeet*, etc. but not a single *dravya* is described as *Madhumehaghna* or *Madhumehahar* or *Madhumehanut*.

Most of the *dravyas* are screened for hypoglycemic or antidiabetic action. Most of the drugs have active principles like glycosides, alkaloids, terpenes, saponins, etc. which are responsible for hypoglycemia or antidiabetic action.

Conclusion:-

In India, the number of cases and prevalence of Diabetes Mellitus is increasing very fast. It is a major health problem. Diabetes Mellitus is co-related with *Madhumeha* which is a type of *Vataja Prameha*. *Dravyas* from plant origin, animal origin and minerals are mentioned as *Pramehahara* or *Pramehaghna* in *Bhavaprakash Nighantu*, but not a single *dravya* is described as *Madhumehanashaka* or *Madhumehahar*. But most of the *Sthavar dravyas* have proved their antidiabetic or hypoglycemic action in pharmacological screening. Among these 47 *dravyas*, some are controversial and rare while others are simple and easily available. So these *dravyas* could be considered for higher studies in terms of clinical validation in future.

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