Classification of Substances in *Vaidyanighanṭus*— Medical Lexicons

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Abstract

Qualities and effects of substances are described in all Ayurvedic works. The classics describe the substances of food and drink in separate group for each type like milk, ghee, oils etc. and medicinal substances in one group. Later medicinal substances were dealt with in more than one group increasing from seven to twenty four. In late medieval period the number of groups as well as of substances further increased with separate groups for articles used in food and drink like different vegetables, cereals, pulses, grains as well as different types of prepared foods. The number of groups from about ten increased to more than fifty covering each and every item used in food, drink and regimen indicating the importance of each and every substance in maintaining health and preventing and curing diseases.

Key words: Dravyamuktāvalī, Dravyaratnākara, Dravyaratnāvalī

1. Introduction

It is well-known that ancient people of India were living very close to the nature and were keen observers of nature including animal and vegetable kingdom. The substances were classified into three categories, jangama, audbhida and pārthiva-animal and vegetable kingdoms and minerals. Vegetable kingdom was again classified into four vanaspati, vīrudh, vānaspatya and osadhi. Caraka Samhitā mentions the following parts/products of plants indicating the keen observation: mūla (root), tvak (bark), sāra (pith), niryāsa (gum or resin), nāla (stalk), svarasa (sap) pallava (very tender leaves), ksāra (alkali), ksīra (milky juice/sap), phala (fruit), puspa (flower), bhasma (ash), taila (oil), kantaka (thorn), patra (leaf) śunga (awn or prop roots), kanda (tuber) and praroha (germinating parts). Use of different parts for different effects was noticed.

Apart from the natural substances, different aspects of preparation of different articles

of food and drink were also observed for their effects on health and disease. The changes in the effects by different methods were studied and were classified into seven. They are *svabhāva* (nature), *saṃyoga* (combination), *saṃskāra* (processing), *mātrā* (quantity), *deśa* (place or region), *kāla* (time) and *upayogavyavastha* (mode of administration). All these are well explained in Ayurvedic classics.

2. Classification of Substances from *Samhitās*

The classification of substances shows the development in the knowledge as well as analytical approach. The classification of different substances including medicinal substances in classics-*Samhitās* is as below.

2.1 Caraka Samhitā - 12 groups

1. Śūka -awned grain, 2. Śamī-pulses/ legumes, 3. Māṃsa-meat, 4. Śāka-vegetables, 5. Phala-fruit, 6. Haritaka-substances used in food

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preparations without cooking like ginger, 7. *Madya*-intoxicating drinks, 8. *Jala*-water, 9. *Gorasa*-milk and milk products, 10. *Ikṣu*-sugarcane, 11. *Kṛtānna*-prepared foods, and 12. *Āhārayogi*-combinations of food.

2.2 Suśruta Samhitā - 19 groups

1. Pānīya-water, 2. Kṣīra-milk, 3. Dadhi-curd, 4. Takra-butter milk, 5. Ghṛta-ghee, 6. Taila-oil, 7. Madhu-honey, 8. Ikṣu-sugarcane, 9. Madya-intoxicating drinks, 10. Mūtra-urine, 11. Śāli-paddy and such grains, 12. Māṃsa-meat, 13. Phala-fruit, 14. Śāka-vegetables, 15. Puṣpa-flowers, 16. Lavaṇa-salt, 17. Kṛtānna-prepared dishes, 18. Bhakṣya- special preparations like laḍḍus, and 19. Anupāna-accessory liquids taken after taking food.

2.3 Aṣṭāṅgasaṅgraha - 11 groups

1. *Jala*-water, 2. *Kṣīra*-milk, 3. *Taila*-oil, 4. *Mūtra*-urine, 5. *Śūka*-awned, 6. *Śimbi*-pulses, 7. *Kṛtānna*-prepared dishes, 8. *Māṃsa*-meat, 9. *Śāka*-vegetables, 10. *Phala*-fruit, 11. *Mātrādi*-dose

2.4 Astāngahrdaya - 11 groups

1. *Toya*-water, 2. *Kṣīra*-milk, 3. *Ikṣu*-sugarcane, 4. *Madya*-wine, 5. *Śūka*-awned grain 6. *Śimbi*-pulses, 7. *Kṛtānna*- prepared dishes, 8. *Māṃsa*-meat, 9. *Śāka*-vegetables, 10. *Phala*-fruit, 11. *Ausadha*-medicinal

In *saṃhitās* (classics) the substances used as medicines are all dealt with in one group, while foods and drinks are grouped separately as water, milk, butter etc. Later works of medieval period have more than one group for medicinal substances. Thus the number of groups in *dravyaguṇa* gradually increased.

3. Classification of Substances from Medieval *Nighantus*

The number of groups in some *nighantus* of medieval age is given below:

3.1. Dhanvantarinighantu - 7 groups

3.2. Cūḍāmaṇinighaṇṭu (unpublished) – 7 groups

These two books deal with the medicinal substances in seven groups.

1. Guḍūcyādi, 2. Śatapuṣpādi, 3. Candanādi, 4. Karvīrādi, 5. Kāñcanādi, 6. Āmrādi, 7. Miśrakādi

3.3 Śabdacandrikā – 8 groups

1. Vṛkṣādi, 2. Svarṇādi, 3. Ghṛtādi, 4. Bhūmyādi, 5. Manuṣyādi, 6. Siṃhādi, 7. Madyādi, 8. Pañcakasāyādi

3.4 Nighantuśesa – 6 groups

1. *Vṛkṣa*-tree, 2.*Gulma*-shrubs 3. *Lata*-creeper 4. *Śāka*-vegetables, 5.*Tṛṇa*-grass 6. *Dhānya*-paddy and other grains.

3.5 Dravyagunaśataśloki - 4 groups

3.6 Madanapāla-13 groups

1. Abhayādi/harītakyādi, 2. Śunthyādi, 3. Karpūrādi, 4. Suvarnādi, 5. Vatādi, 6. Phala-fruit, 7. Śāka-vegetables, 8. Pānīyādi-water and drinks, 9. Ikṣukādi-sugarcane, 10. Dhānya-grains, 11. Dhānyakṛtānnādi-food prepared from rice and other such grains, 12. Māṃsa-meat, 13. Miśraka-miscellaneous.

3.7 Bhāvaprakāśanighantu – 23 groups

1. Harītakyādi, 2. Karpūrādi, 3. Gudūcyādi, 4. Puṣpa - flower, 5. Vaṭādi, 6. Āmrādi, 7. Dhātvādi, 8. Dhānya, 9. Śāka - vegetables, 10. Māṃsa - meat, 11. Kṛtānna-prepared dishes, 12. Vāri-water 13. Dugdha-milk 14. Dadhi-curd, 15. Takra-buttermilk, 16. Navanīta-butter 17. Ghṛta-ghee, 18. Mūtra-urine, 19. Taila-oil, 20. Sandhāna, 21. Madhu-honey, 22. Ikṣu-sugarcane, 23. Anekārtha—words having more than one meaning.

This may suggest that in ancient period more stress was given on substances of food and

drinks than medicinal substances in maintaining the health and prevention and cure of diseases, which are the goals of Ayurvedic science. Gradually the stress on the medicinal substances increased, resulting in the increase of number of groups of medicinal substances. Though the medicinal substances are described in only one group in classics, it is to be noted that in *Caraka Saṃhitā* one chapter enumerates the drugs in fifty groups according to their function. This is very elaborate and left no scope for further grouping or additions on the basis of function.

The classification of groups of medicinal substances into more than one group appears to have started with *Dhanvantarinighaṇṭu*, which has seven groups. *Cūḍāmaṇinighaṇṭu* of 17th c. also followed this. The basis of this division is not known. Acharya Bapalalji Vaidya stated that this division is not scientific. He states thus in the introduction to *Nighaṇṭuśeṣa*.

"Most of the *nighantus* give the groups like harītakyādi, gudūcyādi, āmrādi etc. But this classification has no scientific basis. The classification done by Caraka and Suśruta is according to principles of common function. The classes like ūrdhvabhāgahara, śirovirecana are formed on the basis of common function." He even states that 'daśemāni' of Caraka Samhitā is very important but was left over by Vāgbhaṭa. He further states "Acharya Hemacandra (of Nighantuśesa) has not accepted the classification of his predecessors. He has divided his Nighantu into six kāndas viz; vrksa, gulma, latā, śāka, trna and dhānya. This is the special feature of this Nighantu and this is not found in any other Nighantu." However Dr. J.L.N. Sastry has tried to justify this division to some extent, though not very satisfactory. "1. Gudūcyādi- plants combating different diseases e.g. gudūci, śāthi, śāliparni, jīvaka etc. 2. Śatapuspādi- herbs used as stomachic, digestive etc. e.g. śatapuspa, misreya, ela, nāgakeśara etc. 3. Candanādi-plants with volatile oils, flavonoids and minerals e.g. candana,

manaḥśila, tuttha etc. 4. Karavīrādi- herbs used in skin, kṛmi, viṣa and haemorrhage e.g. karavīra, rasona, sinduvāra, akṣa 5.Kāñcanādi- both mineral, herbal and animal sources which are used for different diseases are described under this e.g. Gold, Tin, Mercury, masūra, godhūma etc. 6. Āmrādi- plants used for their fruits, flowers, creepers and barks (some aromatic plants are also present) e.g. āmra, bhavya, kadamba, arjuna, jātī etc. 7. Miśrakādi-drugs with miscellaneous properties e.g. auṣadhigaṇa and viṣagaṇa.

Dr. Sastry has also tried to explain the basis for the twenty seven divisions of *Soḍhalanighaṇṭu* and the ten divisions of *Rājanighaṇṭu* also.

4. CLASSIFICATION OF SUBSTANCES FROM LATE MEDIEVAL PERIOD

During late medieval period many vaidyanighantus were compiled as evident from the survey of the medical manuscripts in different repositories. It shows that the practitioners were very thorough with the qualities and effects of all substances and vaidyanighantus were very popular. Not only the number of groups increased but the number of substances and their varieties also increased. These were so popular that the colophons in one work mention the name of some other work. One or two colophons in Dravyaratnākara and Dravyamuktāvali mention the name of the book as *Dravyaratnāvalī*. Though several vaidyanighantus were compiled with some common or identical topics each one has some significance.

The study of following three manuscripts reveals some interesting features in classification:

1. Dravyaratnāvali, 2. Dravyamuktāvalī, 3. Dravyaratnākara or Guṇapāṭha. Dakṣiṇā-mūrtinighaṇṭu, Dravyaguṇāvalī, Dravyaguṇa-ratnāvalī have also been looked into cursorily. Among these the first Dravyaratnāvalī is published in Telugu script with Telugu translation. Only the first chapter out of five chapters of

Dakṣiṇāmūrtinighaṇṭu was also published in Telugu script. Others are palm leaf manuscripts. The study of the above manuscripts indicates that these are all compilations.

Dravyaratnāvalī deals with all the substances in fifty five groups. The number of substances in each group is also more than any known nighaṇṭu. It has also specified groups for similar type of substances. It deals with considerable number of substances in all groups including the herbs and drugs. Dakṣiṇā-mūrtinighaṇṭu gives only the synonyms. Dravyaratnākara has limited number of groups and substances limiting only to more popularly used things.

Classification of liquid articles of diet, food and drinks is almost same in all *nighaṇṭus* including the *dravyaguṇa* part of classics and other major works. They are water, milk, honey, alcoholic drinks and others. But the twofold classification of oils is unique in *Dravyaratnāvalī*. They are *drumasāra* and *bījasāra* groups. Oil obtained from the seeds is *bījasāra* while *drumasāra* is that obtained from parts other than seeds.

Water is classified differently in some *vaidyanighantus*. Caraka *Saṃhitā* states that water is only of one kind, which falls from atmosphere –rain-but it changes into different types by its contact with the particular region and season while falling or after falling. *Drayamuktāvalī* mentions eight types of water.

Kaupam sārasa tāṭākam śauṇḍam - prasravanodbhavam

Vāpī-nadī-toyamititatpunaśrutamastadhā.

These types are separately described but the number of types described is more than eight including water of hailstones, coconut and such others. If types like coconut-water and others are not considered and only water as understood normally is taken, even then the number does not tally. The types of normally understood water mentioned are as below in this work:

Water of 1. well with saline water, 2. well with sweet (drinking) water, 3. lake, 4. tank, 5. pond, 6. *parvatoparigata*- water on mountains or stream, 7. $c\bar{u}l\bar{t}$, 8. $v\bar{a}p\bar{t}$ - well with steps to go down, 9. $nad\bar{t}$ -river and 10. palvala- puddle.

The first two come under kaupa, the first in the verse. Prasravnodaka can be parvatoparigata. Cūlī is not clear. It appears that some interpolations have taken place. Palvala also appears a repetition but vāpī, śaunḍa, kūpa, taṭāka, sārasa and palvala can be taken as sources of water with different capacity. Thirty two types of water are described in the group of water. In Dravyaratnāvalī seventy items including that of many rivers are described. Dravyamuktāvalī has the water of only one river Tungabhadra, which may be near the place of the author. Dravyaratnākara classifies water into three typesvṛṣṭi (rain), bhauma (ground) and phala (fruitwater like coconut water etc.).

Madanapālanighanṭu mentions four types of water. Divya- divine or water collected directly from rain or atmosphere, tuṣāraja-obtained from mist, dhāra-collected from rain and karihaima-obtained from snow, glaciers and such others. Dhāra may also be rain water collected from roofs and such other sources. Though these are classified as above, water of all types and of all sources like rivers, tanks, ponds and lakes is explained. In Caraka Saṃhitā, group of water is the eighth among the twelve groups. Madanapālanighanṭu and Bhāvaprakāśanighaṇṭu also placed the group of water in the middle of the groups.

The *nighanțus* of late medieval period devoted major part to the substances which are used as food and drink. It may be due to the increase of the number of items used and also of the methods of preparations during the passage of several centuries. Grains described under one group were later divided into śūka, śimbi, tṛṇa,

śāli and vrīhi. It is interesting that Nighaṇṭuśeṣa has separate groups as tṛṇa and dhānya. Besides a separate group dhānyakṛtānnādi is added in Madanapāla including all types of cooked and processed grains, like cereals and pulses. Dravyaratnāvalī deals the cooked and processed foods in the following groups apart from śimbi and tṛṇa- peyādi, odana, sūpa and kṛtānnāpūpa. Peyādi as a separate group is included in Dravyaratnāvali and Dravyamuktāvalī. Dravyaratnāvali has, apart from śimbidhānya group, another group as sūpavarga dealing with the processed preparations of pulses.

Harita group in Dravyaratnāvalī and Dravyamuktāvalī deals with preparations of accessory dishes for staple food, now called as caṭni in Hindi and some other regional languages. This caṭni is called paccaḍi in Telugu and Dravyamuktāvalī calls the group by Telugu name paccaḍi. This word is even used in Sanskrit verse while enumerating the groups as "paccaḍīśuṣkameva ca". Haritaka group in Caraka Saṃhitā is different dealing with substances which are used uncooked like ginger.

Vegetables also gained importance as seen from the increase of groups to more than one group of early period. Dravyamuktāvalī has separate groups as śāka, puspaśāka, phalaśāka, kandaśāka and śuskaśāka, which are leaves, flowers, fruit, tubers and dried vegetables respectively. The leafy or fruit vegetables were collected and cut and dried after mixing little salt. These dried vegetables are called varugu in Telugu and they are used to prepare curries, catnis and others. In addition to the above *Dravyaratnāvalī* has groups for stalks and pith-nāla and majja. Dravyaratnākara grouped the vegetables on the basis of the place from where they are obtained. This appears to be unique in this work. They are ārāmajātā, ksetrajāta, jalādhārajāta, and krsisthānajāta. These may be vegetables grown in park-like fields. paddy fields, irrigated fields and ploughed and cultivated fields

Fruits were also very commonly eaten and they also find considerable place in *nighantus*. Dravyamuktāvalī has only one group for fruits apart from those which are used as vegetables. Dravyaratnāvalī divides the fruits into groups āma, apakva, pakva and śuska meaning very tender, unripe, ripe and dried fruits respectively. These groups are separate from the fruits used as vegetables-phalaśāka. Dravyaratnākara grouped the fruits just like the vegetables on the basis of their availability. They are vanajāta, ārāmajāta, aranyajāta, ksetrajāta, grāmajāta, mahāvanajāta and madhyavanajāta. These may be small forests, raised gardens, ordinary forests, fields, villages, very big and medium forests. Dravvaratnākara has an additional group for seeds-bījavarga.

Meat is dealt with in three groups in all works- *mṛga*, *vihaṅga* and *matsya* meaning animals, birds and fish. Animals are classified as *mahāmṛga*, *mṛga*, *pṛasaha*, *bileśaya*, *viṣkira*, *pṛatuda*, *apcara* and *matsya*. Only the number of animals included differs. *Dṛavyaratnāvalī* has more number of animals, birds and fish and aquatic animals.

Dravyaratnāvalī appears to be the most comprehensive among the *nighantus*. Hence the names of groups and number of items in each group are given below.

Water- jala	86
Milk-kṣīra	46
Curd -dadhi	22
Butter milk -takra	34
Butter -navanīta	11
Ghee -ghṛta	14
Sugarcane- ikṣu	22
Honey mākṣika	41
Oil from seeds- <i>bījasāra taila</i>	26
Oil obtained from parts other than seeds - drumasārataila	8
Wine-madya	30
Urine- mūtra	11
Dung - vid	10
Grass-grains- tṛṇadhānya	38
	Milk-kṣīra Curd -dadhi Butter milk -takra Butter -navanīta Ghee -ghṛta Sugarcane- ikṣu Honey mākṣika Oil from seeds- bījasāra taila Oil obtained from parts other than seeds - drumasārataila Wine-madya Urine- mūtra Dung - vid

15.	Pulses-śimbi	45
16.	Soups-peyādi	21
17.	Food (boiled rice etc)-odana	74
18.	Sweet and special dishes-apūpādi	23
19.	Cooked pulses- sūpa	28
20.	Prepared dishes- kṛtānna	33
21.	Meat of animals- mṛgamāṇṣa	48
22.	Birds -vihanga	58
23.	Fishes- aquatic- matsya	62
24.	Leaf vegetables- patraśāka	121
25.	Sprouts or tender leaves -pallava	13
26.	Flowers (used in food) -puspa	20
27.	Unripe fruit- āmaphala	84
28.	Accessory of food with some sour liquid -khala	7
29.	Stalks nāla	9
30.	Tuber- mūla	28
31.	Catnis harita	23
32.	Fruits (used as food) śuṣkaphala	10
33.	Pāpaḍs etc vaṭakādi	13
34.	Marrow of fruits etc- majjā	7
35.	Dry fruits-śuṣkaphala	10
36.	Flour or cake of sesame etc- tilapiṣṭa	6
37.	Fruits dhātri (āmalaki) etc-dhātryādi	36
38.	Ripe fruit pakvaphala	90
39.	Medicinal -auṣadha	279
40.		

It includes collyrium añjana; nasal insufflation nasya; gargling gaṇḍuṣa; inhalation of smoke dhūmapāna; exercise and others vyāyāmādi; application of oil (to the body) and bath abhyanga; clothes vastra; plates for meals bhojanapātra; use of smoke(fumes) dhūpa; fans vyajana; dwellings vāsasthāna; enjoyment of women strīseva; mercury etc- rasādī; precious stones- ratna; betel leaves, nuts etc. tāmbula; fragrant substances sugandhadravya; unguents lepana; beds śayya; wearing flowers and garlands puṣpadhāraṇa; ornaments ābharaṇa; vehicles yāna; miscellaneous prakīrna.

Note: While editing the manuscript *Dravyaratnāvalī*, I consulted some other manuscripts also. I found that the classification in different works is interesting. Due to some unavoidable circumstances, I could not do full justice to the topic as I planned. I hope to go through and

collate all *nighaṇṭus* and bring out a small monograph on this subject.

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