

**FROM MAGIC TO MEDICINE:  
DISEASES AND THEIR REMEDIES IN EARLY INDIA.**

*Dissertation submitted to Jawaharlal Nehru University  
in partial fulfillment of the requirements  
for the award of the degree of*

**MASTER OF PHILOSOPHY**

**SHREYASEE DEY**

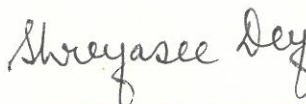


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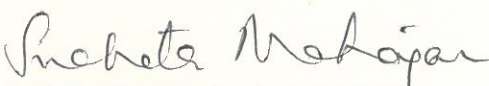
### DECLARATION


I declare that the thesis entitled '*From Magic to Medicine: Diseases and their Remedies in Early India*' submitted by me in partial fulfillment of the requirements for the award of the degree of **Master of Philosophy** of Jawaharlal Nehru University is an original work and has not been previously submitted for any other degree of this university or any other university.

  
**SHREYASEE DEY**


### CERTIFICATE

We recommend that this thesis be placed before the examiners for evaluation.

  
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Chapter One

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Introduction

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Diseases have plagued humanity since its very existence, and with the dawn of civilisation, understanding the very idea of their causes and the means of eradicating them became a necessity. Even when the diseases were not properly identified and named, they had been attributed to certain unknown causes. A curiosity arose to unravel the reason behind the greatest fear of every human being- the common unsolved problem of death. Each individual desired a healthy life and when confronted with situations that brought unease within their body, they tried every means to get rid of the same. This is the case in the present day as well, the only difference being understanding the aetiology and therapeutics of the diseases. This logical approach to comprehend an ailment within the body has brought over a distinct change from the earlier periods.

The material remains from the Indus Valley civilisation suggests that medical knowledge was more primitive.<sup>1</sup> Scholars studying the fascinating history of the Indian medicine often asked the same question about the beginning of the basis of medical knowledge, and the *Āyurveda*. The knowledge was derived primarily from the archaeological remains of the Indus Valley sites where some of the skeletal remains suggested that the ritual of trepanation of the skulls were performed.<sup>2</sup> It was also mentioned by the scholars that material remains from the sites suggested a definite concern for the public health.<sup>3</sup>

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<sup>1</sup> Zysk, Kenneth. G., *Asceticism and Healing in Ancient India: Medicine in the Buddhist Monastery*, Motilal Banarsidass Publishers, Delhi, 1998, The Indus Valley civilization dated roughly from 2300 – 1700 B.C.E Zysk notes that they followed several religious practices of that included ‘purification rites, magic and fire rituals’. Besides, the Indus Valley also had ascetics which Zysk strongly suggests to be ‘shamans or medicine men’, who were supposed to have performed ‘ritualistic magical healings’. pp. 11-13.

<sup>2</sup> Zysk, Kenneth. G., ‘Religious Healing in the Vedas’, *Transactions of the American Philosophical Society*, New Series, Vol. 75, No.7, 1985. Trepanation was performed in order to treat health problems related to intracranial diseases. It has also been used for the cure of epileptic seizures, and subdural hematoma in the later days. p. 4

<sup>3</sup> *Ibid.*, The acts of ritual purification that involved bathing and well-developed systems of disposal suggested the same. p. 6



In order to understand this, I will discuss some of the texts which were the basis of the medical knowledge in early India. But the prehistoric Indian knowledge of diseases and their remedial approaches mostly survived in the form of charms and incantations, where the causes were attributed to supernatural elements. In order to get rid of them, certain talismans and amulets were used.

The Vedic medicine was focused more on magico-ritualistic approaches in identifying and providing a cure for the major and the minor ailments. Use of charms, incantations and sacred utterances were integral to the healing therapy. Diseases were attributed to certain external forces and emphasis was given more on a religiously based medicine where prayers were offered to the Vedic deities. The major source of the Vedic medicine was the *Atharva Veda* and some sections of the *Ṛg Veda*.<sup>4</sup>

The transition was brought about by the rational therapeutic approach that the post-Vedic medical treatises offered. They were based on the foundation of the classical science of Indian medicine, the *Āyurveda*. Such approaches became popular after the *Suśruta* and the *Caraka Samhitā*, and the other texts like that of the *Bhela Samhitā* and *Vāgbhata's Ashtāṅgahridayasaṃhitā*. However, in my essay, I have just focused on *Suśruta* and *Caraka Samhitā*. The Buddhist monasteries facilitated this transition from a magico-religious system to a rational approach, along with the use of flora and fauna to make drugs. Besides, the

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<sup>4</sup> *Ibid.*, Zysk says that the *Oṣadhi mandala* of the *Ṛg Veda* which was the Tenth Section, described some of the plants and their medicinal uses in healing ailments. pp. 111-112 and,

Kutumbiah.P, *Ancient Indian Medicine*, Orient Longman Limited, Madras, 1962. He also mentions about the Tenth section of the *Oṣadhi mandala*. p. xiii.

Buddha insisted on following the path of the Four Noble Truths that was thought to have brought an end to the suffering.<sup>5</sup>

In my essay, therefore, I will discuss the primary sources followed by the secondary sources that give knowledge about the early Indian medicine and the diseases. Then, I will give a brief discussion on how the diseases were identified and provided a cure during the Vedic, Buddhist and post-Vedic period.

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<sup>5</sup> Zysk, *Asceticism and Healing in Ancient India*, The Four Noble Truths of the Buddha were based on a medical paradigm, where, suffering, its cause, its suppression and the method for its elimination corresponded in medicine to the disease, its cause, health and remedy. p. 30.

## Sources

For the Vedic medicine, I have referred to the English translations of the *Atharva Veda* by R.T.H. Griffith, Volumes One and Two, E.J. Lazarus and Co., Benares, 1916. The next work that I look at, by Maurice Bloomfield is: *Hymns of the Atharva Veda, Sacred Books of the East*, Volume.XII. Literature of the Vedas does not include a single literary work rather comprises a whole great collection of literature that arose in the course of the centuries, being handed down from generation to generation through verbal transmission.

The Vedic literature consists of three classes of literary genres, the *Samhitās*, which are the collections of hymns, prayers, incantations, benediction, sacrificial formulas and litanies, the *Brāhmaṇas* includes prose texts mainly on the theological matter, especially observations on the sacrifices and the practical or mystical significance of the separate sacrificial rites and ceremonies, the *Āraṇyakas* which are the forest texts and the *Upaniṣads*, that are the secret doctrines, partly included in the *Brāhmaṇas* themselves, while also regarded as independent texts.

The Four *Samhitās* comprises the *Ṛg Veda*, the *Sāma Veda*, the *Yajur Veda* and the *Atharva Veda*, each one of them connected with the several works of the *Brāhmaṇas*, *Āraṇyakas* and *Upaniṣads*. The *Atharva Veda* is utterly different from the other three Vedas and was comparatively a later addition to the Vedic literature. It was never accorded full recognition owing to the nature of its being ‘a prayer book of the ‘simple folk, haunted by ghosts and exploited by Brahmins’.<sup>6</sup>

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<sup>6</sup> Ghosh, B.K., ‘The Vedic Literature – General View’, *The Vedic age*, ed. Majumdar, R.C., Bharatiya Vidya Bhavan Series, George Allen & Unwin Ltd., London, 1951. p. 236.

The *Atharva Veda* does not derive its name from the nature of its contents but rather the word *Atharvan* which meant a fire priest and he was said to have been the first priest who rubbed fire and communicated between the Gods and the men. This text has often been referred to as the '*Atharvāngirasah*, which was a compound formed of the names of two ancient families of priests, the *Atharvans* and the *Angirases*'.<sup>7</sup>

In order to understand the dating and chronology of literature, Maurice Winternitz mentioned, that it should first be noted that dating any class of literature should always be done under a relative chronology.<sup>8</sup> Dates of the text are debatable but it is said to have been compiled around 1200-1000 B.C.E.<sup>9</sup>

The *Atharva Veda Samhitā* is a collection of seven hundred and sixty hymns and about six thousand verses. The text is further divided into twenty *Kāndas* out of which books one to thirteen consists of prayers, formulas, and charms while book fourteen consists of the religious ceremonies and the *vratyā*. Books sixteen and seventeen mentions about the conjurations, book eighteen about the funeral rites, and the nineteenth consists of the supplementary hymns while the twentieth book consists of the *Kuntapa* section which addresses prayers to Lord *Indra*, and have been mostly derived from the *Ṛg Veda*. Besides a number of charms and incantations along with the mention of '*Grihya* sacrifices of the

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<sup>7</sup> Gonda, Jan, *A History of Indian Literature: Introduction*, Volume One, Otto Harrassowitz, Weisbaden, 1975. p.267; Winternitz, Maurice, *A History of Indian Literature*, Volume One, Motilal Banarsidass Publishers, Delhi, 2007. He explained *Atharvan*, which denotes the holy magic bringing happiness, while the *angirases* meant hostile and black magic. pp. 119.

<sup>8</sup> Winternitz, *History of Indian Literature*, p. 120

<sup>9</sup> Witzel, Michael, 'Vedas and the Upaniṣads', ed. Flood, Gavin, *The Blackwell Companion to Hinduism*. Blackwell Publishing Ltd., United Kingdom, 2003. This argument was supported by Winternitz claiming that many of the hymns and verses from the *Ṛg veda* have been incorporated in the *Atharva Veda*. pp. 68-69

common people evolving around the simple fire-cult', the *Atharva Veda* also discusses a number of medicinal charms.<sup>10</sup>

It can be seen that numerous diseases are mentioned and their causes attributed to a demonic force or an external being to which the remedies that are suggested are mostly certainly sacred utterances along with magic rituals. It also involves the usage of certain plants and herbs along with prayers to a deity or certain set of deities.

The *Atharva Veda* has nine recensions out of which the *Śaunakīya* and the *Paippalāda* are the surviving ones, which includes the Kashmir recensions that have been studied by Le Roy Carr Barret and the Orissa recensions that were initially studied by Durgamohan Bhattacharya.<sup>11</sup> Both consists of twenty books, however, the arrangement of the books differ in each of the recensions. Eleven books of the Kashmirian recension have been published. The *Paippalāda Samhitā* gives an account of the hymns related to the magic rituals and formulae that were used as a part of healing apart from the prayers to certain deities to help one succeed in their sacrificial rituals. While the *Śaunakīya* recension mostly talks about the priest's participation in the *Śrauta* ritual that has been included in the *Vaitāna Sūtra*, the *Kausika-Sūtra* sheds some light on the details of the rituals, as a part of describing the healing process. I will refer to some sections from Maurice Bloomfield in his article, 'The *Kausika-Sūtra* of the *Atharva Veda*'.<sup>12</sup> The different names by which the *Atharva Veda* is known throws light on the 'richness and variety of its contents and its heterogeneous nature'.<sup>13</sup>

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<sup>10</sup> *The Vedic Age*, p.411.

<sup>11</sup> Barret, Le Roy Carr, 'The Contents of the Kashmirian Atharva Veda', *Journal of the American Oriental Society*, Vol. 46, 1926, pp. 8-14.

<sup>12</sup> Bloomfield, Maurice, 'The *Kausika-Sūtra* of the *Atharva Veda*', *Journal of the American Oriental Society*, Volume 14, 1890, pp-i-xviii, 1-424.

<sup>13</sup> Modak, B.R., *The Ancillary Literature of the Atharva Veda*, Rashtriya Veda Vidya Pratisthan, Delhi, 1993. pp.24-29.

Maurice Bloomfield in his work on the *Atharva Veda* gives a category of the hymns as to how they can be generally classified. He mentions the following:

- *Bhaiṣajyāni*: the remedial charms for curing diseases and also possession by evil spirits.
- *Āyusyāni*: prayers for health and long life.
- *Sāmmansyāni*: spells to secure harmony in a family, village or an assembly.
- *Paus̥tikāni*: Charms to secure happiness and prosperity.
- *Strīkarmāni*: Charms pertaining to women, love and marriage.
- *Rājakarmāni*: Hymns used for the royal ceremonies and for the welfare of the king.
- *Ābhicārikāni*: Charms to curse, injure and kill the enemy through witchcraft.
- *Kṛtyāpariharaṇāni*: Charms for counteracting the magic employed by the enemy.
- *Prāyaścittāni*: Spells used for expiating sin and defilement.
- *Ādhyātmikāni*: Cosmogonic and theosophic hymns.

Besides these, the ancillary literature includes the *Gopatha Brāhmaṇa* and the *Upaniṣads*. The latter includes the *Muṇḍaka Upaniṣad*, including sixty-four verses in the form of mantras and three *Mundakams* that define the ‘nature of the self, soul and spiritual knowledge’, the *Māṇḍūkya Upaniṣad* that discusses the ‘syllable *Om* and represents the theory of the four states of consciousness asserting the existence of the *Ātman*’ and the *Praśna Upaniṣad* dealing with several ‘metaphysical questions and answers embellishing

mythology and symbolism.’<sup>14</sup> The *Sūtras* comprises the *Kauśika-Sūtra* and the *Vaitāna Sūtra* that also includes the *Atharva Prāyaścitta*, the *Kalpas* that mentions the methods or the ways of performing sacrificial rites; the *Kalpas* include the *Nakṣatra Kalpa*, the *Śānti Kalpa*, *Āṅgīrasa Kalpa*, *Vaitāna Kalpa* and the *Samhitā Kalpa*.

The next source that I have looked at for Buddhist medicine, is the *Vinaya Texts*, Part Two, translated by Rhys Davids and Hermann Oldenberg Sacred Books of the East, Volume XVII published in 1882. I have also referred to *The Book of Discipline (Vinaya Piṭaka)*, *The Mahāvagga*, Volume Four, translated by I.B. Horner. It gives a discussion on the Buddhist monastic life and the translation by Horner begins with the discussion on the ‘seven days contemplation’ under the Bodhi tree where ‘Gotama sits in bliss, just after he attained the full awakening, illumination or enlightenment, which marked his passage from Bodhisattahood to Buddhahood.’<sup>15</sup> The *Vinaya Piṭaka* was said to have been compiled at the First Council and was recited by *Upāli* just after the Buddha’s death in 483 B.C.E. The *Mahāvagga* is part of the *Khaṇḍhaka* which is the second book of the *Vinaya Piṭaka* and consists of ten sections. The sixth section mentions about the medicaments, which gives an idea of the Buddhist monasteries and the monks, who fell ill and relied upon medicine in the form of various leaves and herbs, gums, resins, fruits and roots.

The next source I look into is the *Milinda Pañha* or *The Questions of King Milinda*, translated by Rhys Davids and published in 1890. The *Milinda Pañha* has been placed between 100 and 200 B.C.E.<sup>16</sup>

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<sup>14</sup> Modak, *The Ancillary Literature of the Atharva Veda*, p.32

<sup>15</sup> *The Book of the Discipline (Mahāvagga)*, *Vinaya Piṭaka*, Volume IV, trans. I.B. Horner, Luzac and Company Ltd., London, 1962. p vi.

<sup>16</sup> Law, Bimala Churn, *A History of Pāli Literature*, Rekha Printers Pvt. Ltd., New Delhi, 2000. p.329.

It has also been said that the text is definitely older than fifth century CE, as mentioned by *Buddhaghosa*.<sup>17</sup> This book as Rhys Davids pointed out, was written in northern India and was written either in Sanskrit or in ‘some form of North Indian Prakrit which was entirely lost’.<sup>18</sup>

They were only found in countries such as, Ceylon and in those areas, that derived Buddhism from Ceylon. Rhys Davids cited General Cunningham from his work, ‘*Ancient Geography of India*’, where the latter has mentioned that *Milinda* was famous in all the Buddhist countries. The text was preserved there and was translated to *Pāli* at a very early date and later, to Sinhalese.

This text holds importance after the *Pāli Piṭakas*. From Ceylon, it was transferred in its *Pāli* form to Burma and Siam.<sup>19</sup> It is the ‘only prose work’ that Rhys Davids claimed to have been a ‘successful work of art in ancient India’.<sup>20</sup> The book consists of a discussion in the form of a conversation between the Greek King *Milinda* or Menandros and the Buddhist sage, *Nāgasena*. *Milinda* or Menander has been said to be one of the kings of Bactria and no other name had come close to the name ‘*Milinda*’, which suggested that the identification of both, Menander or Menandros and *Milinda* mentioned in the text are same.<sup>21</sup> Also, twenty-

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<sup>17</sup> *Ibid.*, p.330.

<sup>18</sup> *The Questions of King Milinda*, Part One, trans. David, T.W. Rhys, Clarendon Press, Oxford, 1894. p. xi.

<sup>19</sup> *Ibid.*, Part One, pp.-xii.

<sup>20</sup> *Ibid.*, p. xii.

<sup>21</sup> *Ibid.*, He also points out that Strabo in his *Geography* mentioned that Menander was one of the Greek kings of Baktria who was instrumental in spreading the Greek dominion furthest to the East into India. He crossed the ‘Hypanis which was the Sutlej and went as far as the Isamos which was the Jumna. The work of Justin claimed that Menander was one of the “Indian kings” while, that of the work of Plutarch mentioned that the ruler was famous for his justice and was popular among his subjects’. p. xviii, pp.- xix-xx.



two different coins were discovered which had the name engraved, while eight of them the 'effigy of Menander'.<sup>22</sup>

The text discusses the bodily humors and how they affect the human body, explaining the reasons of a person's premature death. The most important aspect of this text is that it emphasizes on following the Four Noble Truths and the Eightfold path that could lead to the ultimate end of one's suffering.

*Nāgasena* also gives importance to the fact that *karma* and medicine served different roles altogether.<sup>23</sup> Bimala Churn Law in his work states that such conversations or questions that were raised had been 'put into the mouth of *Nāgasena* in order to come up with certain solutions to such problems that the Buddhist community faced'.<sup>24</sup>

I have also looked at some sections of the *Dīgha Nikāya* in the Maurice Walshe translated, *The Long Discourses of the Buddha* which I have referred to, in the section on the primary sources. The *Dīgha Nikāya* or the *Dīghāgama* or *Dīgha Samgaha* is the first book of the *Sutta Piṭaka* and is a collection of long discourses that comprises thirty- four long *Suttas*. There are five *Nikāyas* out of which the *Dīgha Nikāya* and the *Majjhima Nikāya* are the most important ones.<sup>25</sup> The *Dīgha Nikāya* is divided into three parts- the *Sīlakkhandha*, *Mahāvagga*, and *Pātheya* or *Patikavagga*.<sup>26</sup>

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<sup>22</sup> *Ibid.*, These coins were said to have been found in Kabul, Mathura in the east, while as far as Kashmir in the north. p. xx

<sup>23</sup> *Ibid.*, Part Two, p. 218.

<sup>24</sup> Law, *A History of Pāli Literature*, p.330. And also in *The Questions of King Milinda*, where he points out that the King plays a subordinate position. What is interesting is the fact that emphasis is more on the solutions given to the questions that were raised. p.xvii.

<sup>25</sup> Pratt, James Bissett, *The Pilgrimage of Buddhism and a Buddhist Pilgrimage*, MacMillan and Co. Limited, London, 1928. p. 20.

<sup>26</sup> Law, *A History of Pāli Literature*, p. 102.

The *Dīgha Nikāya* was said to have been compiled shortly after the Buddha's death. The first part of the *Suttas* are the *Brahmajāla Sutta*, second is the *Samaññaphala Sutta*, followed by the 'Ambaṭṭha Sutta, the *Soṇadaṇḍa Sutta*, the *Kūṭadanta Sutta*, *Mahāli Sutta*, *Jāliya Sutta*, *Kassapasīhanāda Sutta*, *Poṭṭhapāda Sutta*, *Subha Sutta*, *Kevaṭṭa Sutta*, *Lohicca Sutta* and *Tevijja Sutta*'.<sup>27</sup>

The second part of the *Nikāya* comprises the 'Mahāpadāna Suttanta, Mahanidāna Suttanta, Mahāparinibbāna Suttanta, Mahasudassana Suttanta, Janavasabha Suttanta, Maha Govinda Suttanta, Maha Samaya Suttanta, Sakkapañha Suttanta, Mahasati Paṭṭhāna Suttanta, Pāyāsi Suttanta, Pāṭika Suttanta, Udumbarika-Sihanada Suttanta, Cakkavatti-Sihanada Suttanta, Aggañña Suttanta, Sampasādaniya Suttanta, Pāsādika Suttanta, Lakkhaṇa Suttanta, Singalovada Suttanta, Āṭānāṭiya Suttanta, Saṅgāti and the thirty-fourth Sutta is the *Dasuttara Suttanta*'.<sup>28</sup>

The next source for the *Āyurvedic* medicine that I have looked at, are both the classical medical texts of the *Suśruta* and the *Caraka Saṁhitā*. *Suśruta Saṁhitā* is an earlier text which is said to have been dated around the fourth century before the Christian era while the *Caraka Saṁhitā* have roughly been said to be completed, by around the third-century B.C.E.<sup>29</sup>

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<sup>27</sup> *Ibid.*, p. 103

<sup>28</sup> *Ibid.*, pp. 103-131.

<sup>29</sup> *An English Translation of the Suśruta Saṁhitā*, trans. Bhishagratna, Kunja Lal, S.L. Bhaduri Publications, Calcutta, 1916. Volume One, p.19 and,

*Caraka Saṁhitā: Text with English Translation*, Volumes One and Two, trans. Sharma P.V., Jayakrishna Āyurveda Series, No.36, Chowkhamba Orientalia, Varanasi, 2014. Volume One, p.vi.

*Suśruta* belonged to the race of *Viśvāmitra* and the *Mahābhārata* represented him as ‘the son of a royal sage’.<sup>30</sup> The *Garuda Purāṇa* places *Divodāsa*, fourth in descent from *Dhanvantari*, who was the first one to set forth the medical science on earth. However, the *Suśruta Samhitā* describes the two, identical.

*Divodāsa* has been identified as the ‘preceptor of *Suśruta*’ who was a firm believer in the ‘doctrine of psychic transmigration’, and represents himself as an ‘incarnation of *Dhanvantari*, assuming his name and style in the usual way’.<sup>31</sup>

No original *Samhitā* exists, but only a recension or recension of the recensions. *Nāgārjuna* who was said to have redacted the *Suśruta Samhitā*, lived around the late 4<sup>th</sup> century B.C.E. *Dalhana*’s commentary ascribed the authorship of *Uttara Tantra*, the last section of the *Suśruta Samhitā* to *Nāgārjuna*.<sup>32</sup>

Chronological facts especially from that of the *Mahābhārata* and the *Garuda Purāṇa*, suggests that the age of *Suśruta* was prior to that of the *Mahābhārata*. The final recension of the *Samhitā* by *Nāgārjuna* was made around the second century B.C.E. The name of the text has also been mentioned in the *Kātyāyana* (which dates around the fourth century B.C.E.), which therefore led to say that the *Samhitā* was written at least two centuries before the birth of the Buddha.

Studies from the Western scholars suggest that the Indians had an influence on the Greek healing art.<sup>33</sup> Coincidences in science, art and philosophy have been found out. For instance,

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<sup>30</sup> *Suśruta Samhitā*, p. ii.

<sup>31</sup> *Ibid.*, He cites the reference while discussing the identity of *Suśruta* and *Divodāsa*, in the introductory part of the text. p. ii.

<sup>32</sup> *Ibid.*, p. iii.

<sup>33</sup> *Suśruta Samhitā*, Volume One, He mentions the text, ‘*India and Greece*’ written by Mr. Pocock, who has identified him with *Buddhaguru* or Buddha. p.viii.

gravitation and circulation of blood were initially known to the Indians which then spread amongst the Greeks or rather, they learnt it from the Indians. *Suśruta* was said to have been prior to *Caraka* in regard to the *Purāṇas* that unanimously describe *Suśruta* as a disciple of *Dhanvantari*, the ‘first propounder of medical science’.<sup>34</sup> *Suśruta* was the first to deal with the problems of practical surgery and midwifery. The commentators on this *Samhitā* were *Jejjaṭa*, *Gayadāsa*, *Bhāskara*, *Mādhava*, *Brahmadeva*, *Cakrapāṇi Datta* and *Dalhana* (around 12<sup>th</sup> century CE) who made use of all the previous commentaries in revising and collating the texts of the *Suśruta Samhitā*. Classification of chapters in the *Āyurveda* are the *adhyayana sampradanīya* which comprises one-twenty chapters that have been distributed among the three parts. Forty-six in part of definitive aphorisms (*Sūtra Sthānam*), sixteen in part dealing with the aetiology of diseases (*Nidāna*), ten in part explaining the anatomy and physiology of the human body (*śarīra sthānam*), forty in therapeutics (*Cikitsāsthānam*) and eight in part dealing with poisons and their antidotes (*Kalpa sthānam*). Along with these, the last section of the *Uttara Sthānam* consists of sixty-six chapters which deal with several major and minor diseases.

The *Caraka Samhitā* translated by P.V. Sharma starts with the discussion of the date and the authorship of the text, thereby proceeding over to a discussion of the eight sections, namely, the *Sūtra Sthānam*, the *Nidāna Sthānam*, the *Vimāna Sthānam*, the *Śarīra Sthānam*, the *Indriya Sthānam*, the *Cikitsā Sthānam*, the *Kalpa Sthānam* and the *Siddhi Sthānam* in the first two volumes. While the last two volumes discuss the different commentaries on the text and the last part of the fourth volume discusses the medicinal plants that were used in the *Caraka Samhitā*.

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<sup>34</sup> *Ibid.*, p. .x

*Caraka Samhitā* was said to have been initiated by the sage and scholar *Punarvasu Ātreya* and this is the only text available in the complete form. Other contemporary *Samhitās* of *Jatūkarna*, *Parāshara*, etc. perished while that of *Bhela* was found to be incomplete and *Hārīta* was claimed controversial.<sup>35</sup> Three distinct strata of authorship have been identified, that of *Agniveśa*, *Caraka* and *Dṛḍhabhala*. Regarding the date of the *Caraka Samhitā*, two redactions have been found. The text was said to be compiled in three different layers relating to three distinct time periods. As a result, *Ātreya* (the senior contemporary of *Agniveśa*), *Caraka* and *Dṛḍhabhala* needs to be discussed to throw light upon the *Caraka Samhitā*.

*Bhagavan Punarvasu Ātreya* is the eminent figure in the *Caraka Samhitā*. His concepts are elaborated in the form of conversation with his favourite disciple, *Agniveśa* or while concluding the discussion as the chairperson in symposia. *Ātreya* was said to have been trained in *Āyurveda* from his father *Atri*. *Agniveśa* was one of the leading disciples of *Ātreya* and the author of the *Agniveśa Tantra*. The date of *Pāṇini's Aṣṭādhyāyī* was fixed around the seventh century B.C.E. by Goldstucker.<sup>36</sup>

*Agniveśa* is mentioned in multiple *ganās*, therefore, it has been said that he existed long back before *Pāṇini*. In the *Caraka Samhitā*, *Āyurveda* is said to be intimately connected with the *Atharva Veda*. It shows that the School of *Ātreya* was founded after the *Atharva Veda*, rationalising its tradition. While on the second stratum stands *Caraka*, who was the first one to thoroughly refine the treatise of *Agniveśa* and enlarge it with his interpretations and annotations. His contributions were so spectacular that the original treatise in its new form

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<sup>35</sup> *Caraka Samhitā*, p. v.

<sup>36</sup> *Ibid.*, Volume One. trans. Sharma, P.V., He has cited from Theodor Goldstucker's work, *Panini: his place in Sanscrit Literature* which was published in 1861. p. xiii.

began to be known as the *Caraka Samhitā*, the original *Agniveśa Tantra* in brief (*Sūtra*) style was enlarged with his annotations (*bhāṣya*) by *Caraka*. Thus, *Caraka* was the *Bhāṣyakara* of *Agniveśa*'s work.

Some scholars say that *Caraka* was one of the branches of the black *Yajurveda* and the people following this branch formed a sect called *Caraka* and *Caraka*, might have been a person belonging to that sect. There was also a branch of *Atharva Veda* named *Vaidyacarana*, now extinct, which was perhaps more closely connected with the tradition of the *Vaidyas* who served people moving from one village to the other. This mobile character (*Carana*) might have been responsible for the nomenclature of *Caraka*. *Bhāvamiśra* said that '*Caraka* was the incarnation of *Śeṣa Nāga*', which is based on one hand on the identity of *Caraka* and *Patañjali*, and on the other hand gave rise to speculations that *Caraka* belonged to the sect of *Nāgas* who was powerful, and established footholds in several parts of the country.

Sylvan Levi mentioned that *Caraka* was the royal physician of Emperor *Kaniṣka* who belonged to the first or second century CE.<sup>37</sup> However, certain other evidence suggested that *Kaniṣka* was a staunch Buddhist while *Caraka* emphasized more on the Vedas and Brahmanism. Also, it was mentioned that *Caraka* was a free moving mendicant, who could have hardly stayed under the bondage of a royal court. *Aśvaghōṣa*, the poet attached to *Kaniṣka* mentioned '*Ātreya* as the propounder of medicine and has not mentioned about *Caraka*'<sup>38</sup>.

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<sup>37</sup> *Caraka Samhitā*, Volume One, Sharma suggests that this was taken from the Chinese versions of the Buddhist *Tripitakas*. p. viii

<sup>38</sup> *Ibid.*, Sharma cited from "C Kunhan Raja, *Survey of Sanskrit Literature*, p.277".

C Kunhan Raja said *Caraka* not to be a Sanskrit word but a Pahlavi one, ‘*Careka*’. Followers of the *Caraka* formed a separate group patronised by the Saka kings.<sup>39</sup> There are also many other popular verses that reflect on the identity of *Caraka* and *Patañjali* (an example of *Cakrapāṇi*’s commentary on the *Caraka Samhitā*). However, this is not true, as fixing the date of *Caraka Samhitā* is debated while in the case of *Patañjali*, it is decided unanimously to be mid-second century B.C.E. After looking at all of this external evidence, P.V. Sharma suggested that the date of *Caraka*, between seventh century B.C.E. and sixth century B.C.E.<sup>40</sup> While certain other evidence, stated that *Caraka Samhitā* stands between the fifth century B.C.E. and 200 CE, P. V. Sharma finally claims that the date should be near about 200 B.C.E, earlier than *Patañjali*.<sup>41</sup> *Dr̥ḍhabhala*, son of *Kapilabhala* and resident of *Pañcanadapura*, reconstructed the *Caraka Samhitā*, seventeen chapters in *Cikitsasthānam* and entire sections of *Kalpa Siddhi*. He completed the *Samhitā* in these respects by taking relevant materials from several treatises. He has been mentioned by *Jejjāṭa* (9<sup>th</sup> century CE). Date of *Dr̥ḍhabhala* can be fixed around the fourth century CE during the Gupta period.

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<sup>39</sup> *Ibid.*, Sharma has cited from the *Nāsika* Inscription, No.10., p. xiii.

<sup>40</sup> *Ibid.*, p. x.

<sup>41</sup> *Ibid.*, p. x.

## Historiography

I will briefly discuss some of the works that were previously done by scholars studying the history of medicine in ancient India. They have discussed various theories regarding the origin of the early Indian medicine from the pre-Vedic to the post-Vedic period. In this section, I have, therefore, summarised their opinions and have intended to comment on the different remedial approaches, the society witnessed over the time period.

### Medicine during the Vedic period

All the scholars trying to understand the antecedents to the later rational medical literature have dived into the details of studying the Vedic literature. The first work that I would like to bring forth is by Dominik Wujastyk in his work, 'The Science of Medicine', where he has mentioned that *Āyurveda* evolved organically from the medical traditions that were embedded in the earlier Vedic literature.<sup>42</sup> He added, that there was an apparent continuity between the Vedic concepts, especially from that of the *Atharva Veda*, which has also been mentioned in the *Suśruta Saṁhitā*.<sup>43</sup> It is true that there are preliminary descriptions about the human body parts and identification of the diseases along with their study in some of the verses of the *Atharva Veda*.

However, such verses remain scattered throughout the text. Kenneth. G. Zysk in his work, 'Religious healing in the Vedas', suggested that diseases during the Vedic period were given emphasis on the basis of a malignant spirit or a demonic being that was supposed to have been the cause and the remedies would be to perform certain charms or sacred utterances

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<sup>42</sup> Wujastyk, Dominik, 'The Science of Medicine', ed., Flood, Gavin, *The Blackwell Companion to Hinduism*, p.394.

<sup>43</sup> *Suśruta Saṁhitā*, Volume One, p.20.



along with rituals if necessary and also the use of different plant or animal parts as amulets or talismans. The Vedic people had immense trust on such remedies to serve as a cure for their diseases.<sup>44</sup> Prayers were offered to the Vedic deities like that of *Rudra*, *Soma*, *Agni*, *Maruts*, etc. so that their blessings would help one stay healthy and happy. In certain cases, special prayers accompanied with certain incantations and rituals were performed for a particular deity or a set of deities who were thought to have been angry and as a result of which the adverse effect on an individual was an ailment faced by the person.

In many cases, where the diseases were thought to have been caused by an external force or a spirit, the healer or the *bhiṣaj atharvan* who was the magical healer, played a significant role. If properly executed the rituals and the mantras at the designated auspicious time and place, the healer was to obtain the power necessary to ward off the evil spirit causing the disease to a far away place from the patient's house.<sup>45</sup> In certain cases, the spirits were also asked to move away into the bodies of the Shudras from that of the victim.<sup>46</sup>

Similar connections can be seen in the later medical treatises in the *Suśruta* and the *Caraka Saṁhitā* which I will discuss later, in the proceeding sections. Zysk also suggested how certain such legends had divinized the particular herbs and plants which were employed in the rituals, therefore, making them more efficacious.<sup>47</sup> K.D. Upadhyaya in his article, 'Indian Botanical Folklore', *Asian Folklore Studies*, discussed how various Gods and Goddesses came to be associated with different trees and plants and was started being worshipped. Both

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<sup>44</sup> Zysk, 'Religious Healing in the Vedas', p.7.

<sup>45</sup> Zysk, Kenneth, 'Mantra in *Āyurveda*: A study of the use of Magico-Religious Speech in Ancient Indian Medicine', ed., H. Alper, *Understanding Mantras*, State University of New York Press, New York, 1989. pp 123-124.

<sup>46</sup> *Ibid.* p.127.

<sup>47</sup> *Ibid.*, p.125.

the sentiments of adoration and fear prevailed simultaneously. He made a categorization of the flora: the mythological trees, the sacred trees and the trees and plants of a non-sacred character.<sup>48</sup>

J. Filliozat in his work, *The Classical Doctrine of Indian Medicine*, suggested that therapeutics in the Vedic period was essentially in the form of incantations and magical practices. The majority of the curative charms are formulae of exorcism, irrespective of the fact whether the disease aimed at is presented as being caused by the action of a demon or not.<sup>49</sup>

Not only were the hymns recited but they were accompanied by a ritual and the numerous plants and herbs that were used were given the role of magical ingredients rather than really medical.<sup>50</sup> And such plants later reappeared in the classical texts on Indian medicine but they were mostly employed because their efficacy had been empirically recognised and not because they formed part of the Vedic magical charms.<sup>51</sup>

### **The start of rational approaches towards medicine in the ascetic traditions**

It has been mentioned that the rise of the Buddhist monasteries played a pivotal role in the transition from the Vedic magical approaches to diseases and their cure, into much more systematic, scientifically sound and rational approaches in the post-Vedic period.

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<sup>48</sup> Upadhyaya, K.D., 'Indian Botanical Folklore', *Asian Folklore Studies*, Volume 23, No. 2, 1964. For instance, he mentioned how *Kalpataru* tree was seen to be the tree of eternity and was given a mythical beginning, while *Pipal* was regarded sacred, as was thought to have been the place of the Trinitarian deities- *Brahmā*, *Viṣṇu* and *Śiva* and therefore, how they were worshipped by different communities across the country. pp. 24-26.

<sup>49</sup> Filliozat, J., *The Classical Doctrine of Indian Medicine*, Munshiram Manoharlal Publishers, Delhi, 1964. p.131.

<sup>50</sup> *Ibid.*, p.133.

<sup>51</sup> *Ibid.* pp. 137-138.

Wujastyk suggested that such an evidence appears first in the literature of the earliest Buddhists with medical tales recounted in the *Tripitaka*.<sup>52</sup> An entire section of the *Mahāvagga* of *Vinaya Piṭaka* is concerned with the medicaments which show how the bhikkus who fell sick were asked to rely upon a therapeutic system based on substances such as diets and drugs.<sup>53</sup> Kenneth Zysk, in his study on the Buddhist *saṅgha* and the medical knowledge in, *Asceticism and Healing in Ancient India: Medicine in the Buddhist Monastery*, mentioned that the early Buddhist monasteries included infirmaries and had instructions to aid not only the monks but all those who were sick.

The Buddhists, the Jaina and the *Ājīvikas* that rose around the sixth century B.C.E., were referred as the *Śramaṇic* sects. Physicians were supposed to have been connected with the *Śramaṇas* and were a subgroup of the latter.<sup>54</sup> The *Śramaṇas* were said to have made their cures effective, mostly through the application of poultices and ointments.

Zysk here criticised Debiprasad Chattopadhyaya's work, *Science and Society in Ancient India*, for having agreed to the fact that the physicians in the early Vedic period were highly

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<sup>52</sup> Wujastyk, 'The Science of Medicine', He has cited from the Buddhist sources and mentioned how Buddha instructed his monks to care for each other in sicknesses they had abandoned the social structures which would have provided them with treatment if they had not left their families to become monks. p.397.

<sup>53</sup> Chattopadhyaya, Debiprasad, *Science and Society in Ancient India*, Research India Publication, Calcutta, 1977. p. 328.

<sup>54</sup> Zysk, *Asceticism and Healing in Ancient India*, he cites a passage from the writings of the geographer Strabo (ca 64 B.C.E. - 21 C.E.) who has communicated the ideas of Megasthenes (a special ambassador sent by the first Selucus to the court of Chandragupta Maurya.) suggesting an evidence of 'connection between the medical arts and the wandering ascetics who were addressed as the *Śramaṇas*'. pp. 27-28.

esteemed. Zysk rightly mentions the condition of the physicians who faced discrimination and rebuke from the priestly classes in the society.<sup>55</sup>

Buddha's eight-fold formula of the diseases included the three bodily humors or the *doṣas*, which were said to have been the central and the basic elements of the later *Āyurvedic* treatises. In the *Pāli* canon, a 'physician (*tikicchaka*) is the one who administers, purges and emetics' for checking the illnesses that arise from bile, phlegm and the wind (*tridoṣas*).<sup>56</sup> *Karman* or the effects of the past activities have been included as one of the causes in the eightfold enumeration of the diseases. Chattopadhyaya in his work argues that such a cause which has also been given significance in the later *Āyurvedic* texts like the *Caraka Samhitā*, is a 'superimposition' of the religious theory onto the rationalist medicinal system.<sup>57</sup>

Buddhist medicine also emphasized on the Four Noble Truths delivered by the Buddha which was said to have ensured freedom from rebirth. Buddha gave an importance on the use of medicine in the form of certain drugs which he said, would put an end to the diseases in a similar way, the *Nirvāṇa* put an end to grief.<sup>58</sup>

The Buddhist *saṅgha* or the monastic community soon became the 'principal vehicle for the preservation, advancement and transmission of the medical knowledge and it started taking shape around the mid-fifth century B.C.E.'<sup>59</sup>

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<sup>55</sup> *Ibid.*, He cites from the Late *Samhitās* and the early '*Brahmanas*' (900-500 B.C.E.) and has also given a passage from the Taittiriya *Samhitā* which mentions the impurity of a physician and that a Brahman should never practice medicine. Here, the story mentions how the *Aśvins* were purified by the *Bahiṣpavamāna Stotra* whom the Gods had relied upon them to cure the sacrificial victim by replacing its head. pp. 22-23.

<sup>56</sup> *Ibid.*, He also mentions that the external category of the disease causation, again is similar both in the Buddhist medical literature and the *Āyurvedic* texts. p.30

<sup>57</sup> Chattopadhyaya, *Science and Society in Ancient India*, pp. 329-331.

<sup>58</sup> *Ibid.*, p.348.

<sup>59</sup> *Ibid.*, *Science and Society in Ancient India.*, p. 350

The principle of the *saṅgha* life was such that one should treat oneself not to be ‘distracted from the spiritual life by hunger and moderately enough, not to be distracted from over-indulgence’.<sup>60</sup> Therefore, the focus was on the maintenance and restoration of a physical balance which was why medicine in the form of certain drugs and dietary regimen had become an important part of their life.

Medicines remained one of the necessary possessions and the ‘*Bheṣajya Khaṇḍaka* of the *Mahāvagga*’ in the *Vinaya Piṭaka*, specified five basic medicines for the monks and the nuns which were clarified butter, fresh butter, oil, honey and molasses. These were supposed to be used along with the other herbs and were also combined to make decoctions, drugs and ointments. This pointed out the similarities between the Buddhist medicines and those mentioned in the *Suśruta* and the *Caraka Samhitā*, for alleviating bile and wind derangements, especially during the autumn season.<sup>61</sup> Food and medicines were obtained through donations from pious laity for the monks and nuns who were forbidden to work. The act of nursing and social welfare was considered to be a great service.<sup>62</sup> The life and service of *Gīvaka Komārabhakkā* were described. He had learnt the art of medicine and surgery and became very popular and famous among the Buddhist community. Girindranath Mukhopadhyaya in his book, *History of Indian Medicine*, suggested that the etymology of the term *Komārabhakkā* meant children’s doctor. He suggested that *Gīvaka* particularly specialised in paediatrics and this was derived from one of the eight divisions of the science of medicine, *Kumārabhṛtyā* Science.<sup>63</sup>

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<sup>60</sup> Zysk, *Asceticism and Healing in Ancient India*, p.35.

<sup>61</sup> *Ibid.*, p. 37.

<sup>62</sup> *Ibid.* p.39.

<sup>63</sup> Mukhopadhyaya, Girindranath, *History of the Indian Medicine*, Oriental Books Reprint Corporation, Delhi, 1974. Volume Three, pp. 681-682.

Treatments were given for diseases concerning the eyes, head irritated by heat, disorders due to the affliction of wind, joint pains, swellings, snake bites, defective digestion, jaundice, skin disorders, burning in the body, wind in the abdomen and other ailments caused due to the *doṣas*. Extracts prepared from different roots, leaves, fruits and other plant matters, gums, resin and salt were used to prepare drugs, that became an integral part of treating diseases.<sup>64</sup>

Human anatomy was studied through the observation of decomposing bodies. The anatomy of animals was also taken into account. This was one of the other reasons why the physicians were considered impure by the Brahmins and the higher orders of the society.<sup>65</sup>

### **Rational therapeutics and *Āyurveda*.**

The Vedic medicine and heterogeneous medical community, especially, the Buddhist monastic tradition played a key role in the institutionalisation of medicine and how the knowledge of different drugs and medicine, along with the importance of diet and surgery was paving its way from an ascetic to a Brahmanical tradition. The later Hindu institutions started following the earlier models that had been set up, however, a major difference was seen.<sup>66</sup> The *Āyurvedic* texts, *Suśruta* and the *Caraka Saṃhitā*, laid more importance on the societal structure in combination with the medicine. Debiprasad Chattopadhyaya in *Science and Society in Ancient India* discussed in details, how religion constantly dominated the aspect of science and in this case, the medical knowledge.<sup>67</sup> The acknowledgement that both the texts gave to the Vedas and more importantly, the emphasis on maintaining right conduct

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<sup>64</sup> Zysk, *Asceticism and Healing in Ancient India*, p.43

<sup>65</sup> *Ibid.*, p.45.

<sup>66</sup> Wujastyk, 'The Science of Medicine', p. 399.

<sup>67</sup> Chattopadhyaya, *Science and Society in Ancient India*, p 35.

of life by paying respect to the Brahmans, the elderly, the cows and those important to the society was seen to be a way used by the physicians to maintain their position in the society besides the priestly class.<sup>68</sup>

Scholars like Filliozat and Wujastyk gave importance on the very fact that *yukti* and rational knowledge was becoming important, and was gradually replacing the supernatural therapy.<sup>69</sup>

Girindranath Mukhopadhyaya mentioned that there scarcely existed a difference between the *Āyurveda* and the modern scientific medicine.<sup>70</sup>

The rational therapeutics involved drugs and surgery, and both the *Caraka* and the *Suśruta Samhitā* emphasized on the same. Rudolf Hoernle in, *Studies in the medicine of Ancient India*, mentioned how dead bodies were studied, and human anatomy and the body parts were analysed since the earlier periods. Detailed understanding of the body parts and the features were given with a thorough scientific study of the four extremities, the head, the neck and the trunk.<sup>71</sup> A more systematic knowledge about the cause and effect of the disorders, and the effects and adverse effects of the treatments were studied. Scientific and a psycho somatic approach was taken as the *Caraka Samhitā* had mentioned.<sup>72</sup>

All the scholars studying both the texts emphasized on the particular fact, that the derangement of the *Doṣas* or the bodily humors, including the *vāta*, *pitta* and *kapha*, were

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<sup>68</sup> *Ibid.*, pp.10-12.

<sup>69</sup> Filliozat, *The Classical Doctrine of Indian Medicine*, p.3.

<sup>70</sup> Mukhopadhyaya, Girindranath, *History of Indian Medicine*, Volume Two, Oriental Books Reprint Corporation, Delhi, 1974. pp 32-33.

<sup>71</sup> Hoernle, A.F. Rudolf, *Studies in the Medicine of Ancient India*, Concept Publishing Company, Delhi, 1984. pp. 115-118.

<sup>72</sup> *Caraka Samhitā*, Volume One, p.12.

said to have been the basic cause behind the disorders within the body, along with the imbalance in the bodily *dhātu* (constituents) and *mala* (excretion).

Processes like that of bloodletting, leeching and various other techniques such as excision, incision, venesection, probing and suturing were also mentioned. Such processes were also carried out in the Vedic times but in a much more preliminary form and with crude implements. The central process of the body is digestion (*pācana*) that implied cooking or burning with the help of the body heat, which was then transformed into the lymph chyle or *rasa*. Tissues and blood transformed into flesh, fat, bones and marrow until the highest essence of the body was generated, which was the semen. Scholars like Wujastyk suggested that this was purely a male view of the body and no such equivalent picture was given in the context of women's metabolism.<sup>73</sup>

Scholars like Surendranath Dasgupta in his work, *History of Indian Philosophy*, raised the similarities between the philosophical commonalities of the *Nyāyā Vaiśeṣika Sūtra* School and that of the thoughts in the *Caraka Saṁhitā* - particularly the idea that the mind ceases in both yoga and in the state of moksha or liberation.<sup>74</sup> However, such thoughts have been questioned by Wujastyk, who said that the eightfold path of the yoga mentioned by *Caraka*, was quite different from that of the 'classical scheme of *Patañjali*'.<sup>75</sup>

However, Antonella Comba in one of the articles in the edited work, *Studies on Indian Medical History*, said that the *Caraka Saṁhitā* attributes 'oneness to the *Manas*' or the mind,

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<sup>73</sup> Wujastyk, 'The Science of Medicine', pp 398-399.

<sup>74</sup> *Ibid.*, Wujastyk cites from the work of Surendranath Dasgupta, *A History of Indian Philosophy*, who has given such a comparison however, he has questioned the idea. p 343.

<sup>75</sup> *Ibid.*, *The Science of Medicine*, p.406.



which is an instrument of the knowledge similar to the *Vaiśeṣika Sūtras*.<sup>76</sup> Filliozat remarked that both the texts gave traces of different currents of thoughts. The theory of the *Sāṃkhya*, which enumerates the ‘formative elements of the universe, is added on to particularly medical conceptions’.<sup>77</sup> In the classical medical texts, the body is seen as the composition of chief elements which form the ‘material content of all things in the universe’. Elements such as space or the emptiness (*ākāśa*), wind (*vāyu*), fire (*tejas*), water (*ap*), and earth (*pṛthvī*) are within the body and the Buddhist texts mention this thought as *vijñāna*.<sup>78</sup> These chief elements form the bodily constituents of the organism or the *dhātu*.

An interesting study was done by Francis Zimmerman in his work, *The Jungle and the Aroma of Meats*, where he drew a connection between the ecology and the different medicines that were prescribed. He mentioned that both, the *Suśruta* and the *Caraka Saṃhitā*, prescribes meat of certain birds, animals and reptiles for the use of medicinal purposes. It is true, not only in the case of these Brahmanical texts but even the earlier Buddhist sources. The Buddha had set a similar norm, pertaining to the intake of the flesh of animals and birds, and prohibited the consumption of human flesh. Zimmerman pointed out the use of meat in the *Suśruta Saṃhitā* particularly.

On its basis, he made a broad classification between the *jāṅgala* and the *anupa* meat.<sup>79</sup> What he basically tried to point out is the fact that the Brahmanical medical texts, based on the foundation of *Āyurveda*, prescribes and allows the intake of meat. However, it is important

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<sup>76</sup> Comba, Antonella, ‘*Caraka Saṃhitā* and the *Vaiśeṣika* Philosophy’, ed. Meulenbeld and Wujastyk, *Studies on Indian Medical History*, Motilal Banarsidass Publications, Delhi, 2001. p.44

<sup>77</sup> Filliozat, *The Classical Doctrine of Indian Medicine*, pp.26-27.

<sup>78</sup> *Ibid.*, p.27.

<sup>79</sup> Zimmerman, Francis, *The Jungle and the Aroma of Meats*, Motilal Banarsidass Publishers Private Limited, Delhi, 1999. pp. 112-113.

to understand that, they only allowed the flesh of animals which were healthy, belonging to a healthy ecological setup and those which were not suffering from any illness.

Therapeutics in both the medical texts mention that the remedies and cures for the diseases mostly, emphasize the action of the drugs, ailments, diet, the place of habitation, and also their effects on the mind, body, bile, phlegm or the wind.<sup>80</sup>

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<sup>80</sup> Filliozat, *The Classical Doctrine of Indian Medicine*, pp.29-30.

## **Plan of Work**

I will now, discuss the chapters very briefly that I intend to cover in my dissertation. I will be majorly looking on the various approaches that were taken from the Vedic to the post-Vedic period, to understand the diseases and provide remedies to the same. The major focus will be on understanding the differences in terms of the identification of a disease and attempts to study the remedies that were offered and the cause and effect of the same. I will discuss the gradual development of how in each of the time periods that I am looking at, the people took an attempt to understand a disease and provide a cure to the same. But my major emphasis will be on understanding the continuities that persisted from the earlier magical approaches in treating a disease to a much more rational and logical approach that was incorporated in the later medical texts.

Chapter Two will focus on the magical practices including charms and incantations, along with the blending of certain religious rituals to provide a cure for a disease or even in overcoming a difficulty. The *Atharva Veda* does not really give a logical connection to understand the cause and effect of the diseases. It's more of random in nature. Causes for the diseases or misfortune were attributed to certain factors other than those affecting the body internally, and also the evil spirits. The Vedic people were the first to identify the diseases and provide a remedy for the same through the use of certain herbs and plants. The *bhiṣaj atharvans*, who were the magical healers, helped in conducting such rituals and magic. Acts of exorcism were also performed in order to drive away a particular spirit or reduce the effect of an ill-omen. Mostly, the diseases were cured through charms and incantations, however, the use of certain plants and mention of their names to treat a particular disease became significant.

Preliminary discussion of bodily *doṣas* or humors attributed as the causes for a disease or a disorder within the body should also be noted. In this chapter, I will discuss some of the major diseases like fever, jaundice, leprosy, fractures and infected wounds along with minor ailments, such as the cure for falling hair or certain skin disorders. Certain love charms were also practised that was mostly initiated by the male members of the society towards the women they loved. Also, there are hymns in the text that discusses the charms and rituals like the *Puṃsavana*, regarding the conception of a male child. Prenatal care of the pregnant woman was also performed so that she did not get affected by any supernatural force, leading to her problems in conceiving. After the child was born, neonatal care and the rites associated with it, *Jatūkarna*, was performed. This chapter will, therefore, focus on studying the earliest possible remedial approaches that were undertaken to treat the diseases, with the means of certain decoctions of herbs, and practice of rituals accompanying them, with the performance of charms.

Chapter Three, discusses the ascetic traditions, especially the Buddhist textual sources that mention the medicaments that were required in the Buddhist monasteries. Not much of the Jaina sources were found to have discussed on medicine. I have used the English translations from the *Pāli*, of some of the major texts to understand the approaches the Buddhist community undertook, to understand or identify a disease and provide a cure to them. It is interesting to note that the Buddha prescribed certain herbs and plants along with the combination of a proper diet which had to be taken at the right time in right quantities. He did not include the use of any charm or ritualistic practices like that of the preceding Vedic period. He rather recorded certain observations which were included in the process of treating a disease. Not only combinations of such diets and drugs were to be followed but the Buddha also emphasized on the fact that the Buddhist community should maintain good

storage places for the drugs. The monastic community should use particular medicines only when required. Therefore, this short chapter is given as a link, to the development of a more systematic and logical understanding of a disease and its cure, with the focus on *Āyurveda*. Rather than going over to the discussion of the later medical texts, the *Suśruta* and the *Caraka Saṁhitā*, I have looked at the gradual development of the medical approaches. The earlier crude Vedic medical system was getting replaced by a more logical and scientific approach in the later Vedic period. However, the Buddhist monasteries and the Buddhist community were the first to initiate such healing processes. *Gīvaka Komārabhakkā* became a renowned surgeon who performed complicated surgeries like that of the cranium and the abdominal region within the body. This provides an important insight into how the Buddha had a relatively rational approach compared to the earlier Vedic traditions. This gradually helped define the role of the physicians and study of the human anatomy, in the later Brahmanical traditions with the coming up of two major medical treatises.

The Fourth Chapter is the final chapter followed by the conclusion, which discusses the two major medical texts of the post-Vedic period, the *Suśruta* and the *Caraka Saṁhitā*. They are based on the foundation of the classical medicine, *Āyurveda*. The *Suśruta Saṁhitā* mainly deals with the surgeries as a process of the treatment and cure for a disease, while the *Caraka Saṁhitā*, mentions several drugs, the diet that should be accompanied with them in order to recover from an ailment. I will discuss the volumes of the *Suśruta Saṁhitā*, the two volumes of *Caraka Saṁhitā* in details and focus on some sections from the other two volumes related to the commentary by *Cakrapāṇi*. Both these texts give a much clearer understanding of studying the diseases, the anatomy of the human body and the most important element being the bodily humors, derangement of which causes all the disorders within the human body. The concept of identifying the cause and effect of a disease on the human body has been

studied on the basis of understanding the concept of *tri-doṣas*. In this chapter, I will look at some of the major and minor ailments, both the texts giving an understanding of and providing remedies for the same. I will not only note the differences in the remedial approaches that is mentioned in both these texts but also try and understand the persisting similarities and connections with the earlier Vedic texts. The use of charms for certain diseases and the importance of spirits and *Grahas* along with the significance of dreams have been mentioned, besides the more rational explanations of the human body. The maintenance of a right conduct of life along with the right amount of diet is given importance in both the texts. A number of rituals have been mentioned in the process of initiating a physician to the profession. The physician was said to have been from either of the three twice-born castes. He had to become an expert in the practical skills of treatments and also well learnt in the theories. The most important point which should be noted is the fact that both these texts in their introductory sections give an acknowledgement to the *Atharva Veda*. Therefore, in this chapter, I will try to understand not only the differences both the periods witnessed, but most importantly, the similar Vedic connections that were still present in the later texts, even though they were based on scientific knowledge and a logical approach.

Chapter Two

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Diseases and the Remedies in the Vedic Period:  
Magico-Ritualistic approaches in the  
*Atharva Veda*

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## Introduction

The *Atharva Veda* has often been referred as a dark text, which was a later addition to the Vedic literature. However, this particular text did interest the later scholars, especially those working on the medicinal history of early India, even though it presents, scattered hymns on medicine. A basic knowledge of the origin and familiarity of the diseases and their treatment, given in this text, helped to systematise the later developing medical tradition. The *Atharva Veda* comprised magico-ritualistic practices in the form of charms and incantations. These were used not only for healing purposes and providing remedies for the major and minor diseases, but also dealing with the difficulties one faced. They completely relied upon the fact that diseases or even any sort of unhappiness that disturbed someone's daily life, were brought about by an external factor such as demonic beings or the malignant spirits. Such spirits were said to be unhappy with the victims who were suffering. In certain cases, particular deities were thought to be the cause, as a result of which, they were offered prayers, invoked and worshipped to seek remedies. Certain esoteric words and phrases became an integral part of the remedial measures along with the magico-ritualistic and religious rituals which were performed.<sup>81</sup> Exogenous factors were given importance, in order to explain the cause of a disease that remained and accordingly, the magical healers helped the people recover from a disorder or cope up with a difficult situation in life.

In this chapter, I look at the hymns of the *Atharva Veda* and one of its major ancillary literary text, the *Kauśika-Sūtra* in order to understand the general attitude towards explaining the cause of a disease and the approach undertaken to provide a cure. There are many other texts that serve to be the secondary literature of the *Atharva Veda* along with the different

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<sup>81</sup> Zysk, Kenneth.G., 'Religious Healing in the Vedas', *Transactions of the American Philosophical Society*, New Series, Vol.75, No.7, 1985, p. 30.



recensions that were found. I will give a brief discussion on the same, in the next section of my paper. The major focus given in this chapter is on studying the diseases and the remedies that were sought. Magic and environment were the two most important elements that were relied upon by the Vedic people. They hardly attributed the diseases to any rational or physiological causes. However, it is important to note that the *Atharva Veda* did mention about the *tri-doṣas*. The derangement of the *doṣas* or the bodily humors were held the most important cause of a disorder in the later medical texts. The *Atharva Veda* did not staunchly follow the concept of the *tri-doṣas* however, the mention of the same did make the later ‘physicians’, familiar in its effect on the human body. After the discussion on the sources that have already been looked at in the first chapter, the next section will majorly cover the hymns of the *Atharva Veda* discussing the different diseases as well as some of the associated elaborate rituals that have been discussed in the *Kauśika-Sūtra*.

### **Diseases and charms to cure them**

In the *Atharva Veda*, the hymns on medicine are quite scattered and the arrangement does not follow any specific way of dealing with the themes. Therefore, in order to make it more comprehensive, I have broadly tried to make a general classification of the diseases and their cures. I have also looked at the particular diseases which were associated with the demons or an external force and those thought to have been caused by the dissatisfaction of a deity. Initially, I will discuss the hymns that have been mentioned in the *Atharva Veda* regarding the various diseases and health.

Towards the end of this section, I will look at the sections from the *Kauśika-Sūtra* which was translated by Maurice Bloomfield that gives some added information on the healing rituals.

### **Charms against *Takman* (Fever)**

*Takman* or fever was seen to have been the chief malady and this term does not occur outside of the *Atharva Veda*. Many scholars who have given the translations refer to this as a malarial fever owing to the symptoms.<sup>82</sup>

However, Monier Monier Williams in his Sanskrit dictionary suggested that this disease was characterised by skin eruptions.<sup>83</sup> It is said that this fever becomes prevalent with the start of the annual rains, when *Agni*, who is referred to as the God of fire, comes in the form of lightning from the water of the falls, and in the form of rainfall flowing into the waters of the earth. In Book One, Hymn 25, the fever is personified, being addressed as a *devā* who is said to be a supernatural being, to whose influence the disease may be attributed.

Fever as well as *paittik jvara* or bilious fever, which is referred to as the ‘God of sickly yellow’, is also being addressed in this charm.<sup>84</sup> Homage is offered to the chilly fever, and especially to its burning glow. Since fever was referred to have been one of the major diseases that made a person weak, and cure was not easily sought, therefore the ‘chilly fever’ or the shivering one faced due to the rise of temperature within the body and the ‘burning

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<sup>82</sup> *Hymns of the Atharva Veda*, trans. Bloomfield, Maurice, Volume XII, Clarendon Press, Oxford, 1897. Bloomfield suggested that *balāsa*, cough and spasm were the symptoms of the malarial fever. p. 5.

<sup>83</sup> Monier Monier Williams, *A Sanskrit-English Dictionary*, Motilal Banarsidass Publishers, Delhi, 2011. p 431

<sup>84</sup> *The Hymns of the Atharva Veda*, Volumes One, trans. Griffith, R.T.H., E.J. Lazarus and Co., Benares, 1916., Book 1, Hymn 25.

glow' which was the heat within the body was offered prayers. This is an example that reflected on the idea how and when the patients became incapable in dealing with the conditions that led to a disruption in the normal body functioning. They found it more reliable to offer prayers to the fever itself in order to accomplish the desired result.

Three varieties of fever are mentioned in this particular hymn- the *anyeyús* (fever that lasts for twenty-four hours), *tritīyakas* (fever that lasts for forty-eight hours), *ubhayadyús* (fever that lasts up to seventy-two hours). All these fevers in the present day, have been identified as types of malarial fevers. In Book Five, it is stated that *Kúṣṭha* grass is being used in the fever, however, the application remains unclear in this verse.<sup>85</sup> The fever is said to have been transferred from the victim on to the *Mūjavans* (tribes living around Punjab) and *Mahavrishās* who are referred to as the hill tribes in the north-western parts of India.

The verse also refers to the fever, addressing it to find a *Dāsi* girl and strike her with its thunderbolt (probably, the high temperature and shiver one attains while suffering from this fever). A *Shudra* girl is being referred to here, on whom the fever is asked to 'fall upon and shake her with the rising temperature, leaving the victim instead'.<sup>86</sup> The *Atharva Veda* not only reflects on how the people dealt in with the diseases but also reflects the societal structure of the Vedic period. The people were careful not only to drive away a particular disease but also to address the same to affect the lower orders of the society. Fever is being worshipped along with the deity *Rudra*, who is thought to have been the sender of the disease and the death resulting from the same.<sup>87</sup> Worship is being paid to the *Dyayus* (the Heaven), the Earth and a particular plant (not mentioned, however, probably it is the *Kúṣṭha* plant as

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<sup>85</sup> *Ibid.*, Book 5, Hymn 22.

<sup>86</sup> *Ibid.*, Book 5, Hymn 22.

<sup>87</sup> *Ibid.*, Book 6, Hymn 20.

this is the plant, that is mentioned in the other hymns for the cure of fever). In a charm against fever, *Kúṣṭha* plant is being offered prayers in order to drive away and help in curing the fever. *Kúṣṭha* (*Costus speciosus*), is said to grow on the snowy mountains and high hills where the eagles are common. *Kúṣṭha* is personified and divinized for having a celestial origin, owing to its qualities that are said to be so ‘manifold and mighty’ (Book Five, Hymn 4). Here, a mythological story has been mentioned, where the Gods seek the *Kúṣṭha* plant, as an embodiment of endless life in the Heaven. The Gods sailed on the golden pathways and they carried the *Kúṣṭha* plant down to the earth on the golden ships. *Kúṣṭha* is addressed as the ‘benevolent friend of *Soma* and with all its might, it is addressed to cure and heal the maladies affecting the head, eye-weakness, bodily defect, with its god like vigorous power.’<sup>88</sup>

This plant is referred as the ‘God of the *Himāvant*’ who has the power to destroy every type of *Takman* and female spooks or spirits.<sup>89</sup> Here, it should be noted how a certain plant is given a mythical beginning. Importance is given to its magical attributes rather than any description of the respective physiological properties that help in curing the fever. However, even if irrational in nature the very use of this plant for treating fever, made them familiar with this plant. Such kind of familiarities was taken into consideration by the later medical texts as well, the only difference being the rational attitude towards studying the plant and its cause and effect on the disease.

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<sup>88</sup> *Atharva Veda*, trans. Griffith, Book 6, Hymn 20

<sup>89</sup> *Ibid.*, Book 19, Hymn 39. *Himāvant* means the Himalayan King.

### Headache and cough

In this hymn, lightning is offered prayers who is thought to have been the reason for a headache, cough and fever probably this being referred to as the common cold that generally occurs with a change in the weather conditions (Book One, Hymn 12). The climate conditions are also being noted when these people became more prone to such diseases. In the later medical texts, these particular conditions have been mentioned as well. It is noted that a change in climate and the temperature, affected the human body increasing the frequency of common cold and cough.<sup>90</sup> In the Vedic period, as usual, people failed to find a cause of the same and control its effects on the body. Therefore, the lightning is deified and asked to strike the trees and mountains instead of the joints of the victim and so that the person is gifted with comfort in the whole body. This again is indicative of a general body ache that is a present day symptom of common cold. A charm is being practised against cough, who is *asked* to leave the soul of the victim just as an ‘arrow flies swiftly to a long distance and also like the swift flood that rushes into the sea and the rays of the sun that comes from such a long distance’.<sup>91</sup>

### Jaundice and other related symptoms

The rising sun is particularly addressed and prayed to remove the sore disease and the yellowness of the skin. In this charm, the parrots and starlings (birds with greenish yellow tints and marks), the *hāridravas* (yellow wagtail) and *ropānākas* (thrush) are being referred to on whom the yellowness is being asked to get transferred.

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<sup>90</sup> *Caraka Samhita*, trans. Sharma, P.V., Jayakrishna Āyurveda Series, No.36, Chowkhamba Orientalia, Varanasi, 2014. *SutraSthāna*, p. 42.

<sup>91</sup> *Atharva Veda*, trans. Griffith, Book 6, Hymn 105.

It is being prayed so that the colour gets removed from the skin of the victim.<sup>92</sup> *Sāyaṇa* in his commentary mentions that this particular charm is to be practised under the *Haritalā* Tree, which Griffith cites in his translation while discussing this hymn.<sup>93</sup>

### **Excessive discharges from the body**

Discharges in the form of diarrhoea and dysentery are mentioned along with the other kind of discharges that might occur due to particular sickness but has not been clearly mentioned in the text. Book One gives a charm against acute dysentery.<sup>94</sup> The prayer is being addressed to *Parjānya*, the God of nourishment.<sup>95</sup> During the charm, a bowstring is to be twisted around the patient's body and then prayers are to be offered to *Prithvī* and *Indra*. *Kauśika-Sūtra* mentions the use of *Muñja* grass in this charm. *Muñja* (*Saccharum munja*) is a type of grass or rush that grows to about ten feet and is generally used in basket-work. In this context, the head of a stalk of the *Muñja* grass is to be tied with a cord and then suspended from the neck of the patient or to be otherwise, attached to his body. In the latter case, the application however remains unclear. As the discharged arrow hangs between the heaven and the earth, similarly the grass is said to stand between the patient's ailment and the disease, in this context, dysentery or the *Āsrāva*. The *Kauśika-Sūtra* however, adds that the patient, in this case, will also have to drink a mixture containing earth taken from the field. Along with it,

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<sup>92</sup> *Atharva Veda*, Book 1, Hymn 22.

<sup>93</sup> *Ibid.*, Book 1, Hymn 22.

<sup>94</sup> *Ibid.*, Book 1, Hymn 32.

<sup>95</sup> *Ibid.*, In this hymn, *parj*, is defined as the father of the shaft or the arrow. It also refers to moisture or the rain cloud.

a lump full of ants is to be anointed with sacrificial molten butter along with further treatment.<sup>96</sup>

In a hymn in Book Two, the spring water which is flowing through the mountains is used for the process of healing which is referred to as a potent remedy.<sup>97</sup> Fresh water from the springs is meant to be superior in checking discharges and removing pain. Such contexts of water, being the most popular remedy for cleansing and purifying purposes, have also been mentioned in the later medical treatises. Water as the most important cleansing agent is still believed by many to be used in the natural healing processes. The plant *Viṣāṇaka* was used to cure diseases caused by polluted wind, and was said to have come from ‘the saints of the heaven’.<sup>98</sup>

Griffith in his translation refers the disease similar to ‘rheumatism or *bāt* caused by the wind or *vāyu*’, but the fact that it is mentioned as a remedy against dysentery in Bloomfield’s work, remains unclear.<sup>99</sup>

### **Constipation and problems related to urine**

The charm against the suppression of urine as well as constipation is practised while reciting the prayer to the Gods *Varuṇa* and the Moon.<sup>100</sup> The victim in this case is required to discharge an arrow in the air, symbolizing free passage of the loosened contents of the stomach and the bladder of the patient.

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<sup>96</sup> *Atharva Veda*, Book 1, Hymn 32.

<sup>97</sup> *Ibid.*, Book 2, Hymn 3.

<sup>98</sup> *Ibid.* Book 6, Hymn 44.

<sup>99</sup> *Ibid.*, Book 6, Hymn 46.

<sup>100</sup> *Ibid.*, Book 1, Hymn 3.

*Kauśika-Sūtra* mentions that a decoction of certain medicinal herbs is also administered after the arrow is thrown.<sup>101</sup> Such acts by the patients were asked to follow but had no rational connection. It was more of random in nature.

The whole idea of throwing the arrow in the air as a metaphor for getting rid of the rejected elements from the bladder did convince the patients, at least for the time being, even though the proper cure was not being administered. However, the names of these particular herbs or plants being used, remain obscure.

### **Internal pain or colic**

The internal disorder followed with pain and recognised as the symptoms related to colic is said to be due to the ‘arrows of the God *Rudra*’ who is angry on the victim.<sup>102</sup> The limbs, the heart, the hundred arteries are affected which is distributed along with the limbs throughout the body. The poisons of the arrow are exorcised to bring relief to the victim. In this particular hymn, it should be noted that the *Atharva Veda* gives a very basic knowledge about the anatomy of the body.

Though, it has not delved into detailing or explaining the human physiology, mention of the heart, the limbs and the number of arteries is significant. These made the authors of the later medical texts and the physicians derive an elementary knowledge of the same, as they became familiar. This helped them in studying the human body in details.

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<sup>101</sup> *Atharva Veda*, Book 1, Griffith cites from *Kauśika-Sūtra*,

<sup>102</sup> *Ibid.*, Book 3, Hymn 2.



### **Dropsy and heart disorders**

In almost all the charms that are mentioned against dropsy which is a swelling of the soft tissues due to inflammation and accumulation of fluid, the God *Varuṇa* is being offered prayers.<sup>103</sup> Worship is offered to relieve the suffering victims from such inflammations and drive away all the evil spirits and misfortune that are the underlying reasons for the same.<sup>104</sup>

In the case of dropsy resulting from a heart disorder, which in the present day is known commonly as oedema that results in congestive heart and accumulation of fluids in the body, it is treated by using the water from the mountains of *Himāvant*. The freshly flowing water in the *Sindhu* is used for curing the heart ache. *Sindhu* is being personified as ‘the mistress of all the other rivers’ and is being worshipped to grant blessings so that its fresh running water serves to heal the pain in the victim’s eyes, heels and the forefeet.<sup>105</sup> Besides, the water, in general, is being worshipped and addressed as one of the most skilled physicians that was used in most of the healing processes or rather rituals. The *Kauśika-Sūtra* suggests a ritual that prescribes a hut to be erected on land between the confluences of the two rivers and such a place will be doubly potent. The patient is then placed in the hut where he is washed down with water and bunches of grass and rinsed off. Through the process, it is believed that the ‘dropsical water’ gets removed by the pure water sprinkled on him, and the patient is convinced that the illness will leave their body.<sup>106</sup> However, name of the grass that is used, remains obscure.

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<sup>103</sup> *Ibid.*, Book 4, Hymn 16.

<sup>104</sup> *Ibid.*, Book 1, Hymn 10, and Book 7, Hymn 83.

<sup>105</sup> *Ibid.*, Book 7, Hymn 83.

<sup>106</sup> Bloomfield Maurice, ‘The *Kauśika-Sūtra* of the *Atharva Veda*’, *Journal of the American Oriental Society*, Volume 14, 1890, Book 32, Hymn 14.

## Paralysis

Sun is being paid homage as a cure for paralysis. It is the brightness of the Sun that makes the waters, heaven and middle of the sea bright. The sun is prayed and oblations are being offered, to help relieve the numbness of the suffering victim.

## *Kṣetriya* or hereditary disease

*Kṣetriya* are referred to the hereditary diseases that come with an inheritance from the parents. A charm is practised against the *Kṣetriyasya*, which is said to be pulmonary consumption in this hymn.<sup>107</sup> In this charm, a straw of barley which is tawny-brown in colour is used with its silvery ears along with the stem of sesamum plant. Although, the process of the application remains unclear. In another hymn, the charm involves prayers to the Goddess of destruction, *Nirṛti*.<sup>108</sup> It is said that an inherited disease is also often caused by the curse of the kinswoman or *Druh* who is a demonic being or even under the fetters of *Varuṇa*. Prayer and worship is offered to the Gods, *Agni* and *Soma* along with the auspicious water that will help relieve the victim from the particular disease and the pain. Hymn 7 in Book Three, is a charm to drive away the *Kṣetriya*. And while this is being recited, not a plant or herb is being used rather the Roebuck's horn is used. Griffith adds on to this verse discussing that in the European medicine, the oil of the Hartshorn and the spirit of the Hartshorn were procured by distillation from the antlers of the stag (*Cervus elaphus*).<sup>109</sup>

Similarly, in this context, the horns of a Roebuck which is a kind of an antelope, is being used, which is supposed to contain ammonia meant for the cure of such inherited diseases,

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<sup>107</sup> *Atharva Veda*, Book 2, Hymn 28.

<sup>108</sup> *Ibid.*, Book 2, Hymn 10.

<sup>109</sup> *Ibid.*, Book 7, Hymn 3.

especially, pulmonary consumption. The buck is compared to a house, at the end of the hymn, with its legs that are the posts and the horns, the roof together that help unbind and drive away the chronic sickness from the victim's body. However, Weber in his work on the *Atharva Veda*, as Griffith suggested, mentions that this ceremony is performed at night in the open air under the constellations, which is metaphorically being addressed as a 'roof'.<sup>110</sup> The hymn continues with the preparation of the sufferer by bathing in the water. This was seen to be a major element in all the healing rituals. Water is endowed with the power to drive away all the maladies and has the power to give freedom from all sorts of permanent diseases. In reference to this particular hymn, Griffith cited Dr. J. Grill's work on the *Atharva Veda*, mentioned that 'the waters have a balm for all and are a component of all the medicines'.<sup>111</sup> The ceremony lasts till the starlight disappears and the dawn departs until the sun rises. Through the whole night, the patient is supposed to get cured of the chronic sickness.

Time was given importance while practising such charms and incantations, where a particular observance or a ritual was supposed to be performed on a particular day or time. It did not really have a rational basis, but such factors like the time or a particular place were given significance, where they failed to provide a convincing explanation for a particular disease. In the *Kausika-Sūtra*, an amulet consisting of 'a clod of earth, and some earth from an ant-hill, sewn up in the skin of an animal is to be bound to the patient'.<sup>112</sup>

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<sup>110</sup> *Ibid.*, Book 3, hymn 7.

<sup>111</sup> Dr. J. Grill, 'Hunderd Leider des Atharva Veda', cited in, *Atharva Veda*, trans. Griffith, Vol One, Book 3, Hymn 7.

<sup>112</sup> Bloomfield, *Kausika-Sūtra*, Book 26, 43.

## Leprosy

The plant *Rajanī* (*Curcuma longa*) is being used for the treatment of leprosy.<sup>113</sup> It is derived from the word *ranj* which means colour. This particular plant is addressed to expel the leprosy of the patient concerned, removing the spots on his skin and the ashy hue, thereby filling the victim's skin with the dark colour of the plant. It is also addressed to take away the colour of the victim's skin affected with leprosy and absorbing the skin colour, into the dark colour of the plant, making it darker.

Whether the plant should be used on the skin of the affected patient, has not been mentioned. The plant is deified and offered prayers in the charm to help the victim get back his original skin colour.

## Sores or *apacits*

*Apacits* are the sores and scrofulous swellings that occur in parts of the body. It is said that fifty-five or seventy-seven sores affect the neck and ninety-nine the shoulders.<sup>114</sup> The *Atharva Veda* mentions that *Sūrya*- the sun and *Kandramâs*, the moon will prepare a remedy that will help in falling of the sores and perishing the *galunta* or the swelling. In the *Kauśika-Sūtra*, fifty-five leaves of the *parāsu* plant are to be burnt, but first, the leaves are boiled to extract the sap, which is then smeared on the sores with a wooden stick or a spatula. Smearing is repeatedly performed, also at times mixed with the powdered shell and the saliva of dog and to make it more effective, the patient is then subjected to the bites of leeches,

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<sup>113</sup> *Atharva Veda*, Book 1, Hymns 23 and 24.

<sup>114</sup> *Ibid.*, Book 6, Hymn 25.

gnats and other insects. This process is believed to drive away the disease by absorbing the infected fluid in the swelling.

Such acts, of using leeches and other insects to help absorb the infected blood, have also been followed in the later days where the medical treatises have mentioned the physicians to use the same. These acts of bloodletting or preliminary surgery were the first to be mentioned in the *Atharva Veda*, which has been a significant surgical procedure in the later days. Often such swellings occur in the body parts especially, that of the neck, axilla, back and the groins. The underlying cause is the infection of the body by diseased fat and phlegm.<sup>115</sup> In another case, *jālāṣa* or urine is suggested as a remedy for scrofulous sores that comes from *Rudra*'s arrows.<sup>116</sup> In *Kausika-Sūtra* however, it is suggested that *jālāṣa* is the foam of the cow's urine, which is used for moistening the sores. The wounds are also smeared with grass-pollen. The glandular swellings of the neck are suggested to be hit by black arrows, having 'bunches of wool tied to their points' and 'shot from a black-stringed bamboo bow'.<sup>117</sup> In the *Atharva Veda*, an amulet is made from a lute string and 'three fragments of the plant *Vīriṇa*', is then tied on the patient.<sup>118</sup> Bloomfield suggests that this was a venereal disease that was being cured with the amulet. It should be noted that in cases of certain diseases, the *Atharva Veda* did rely upon natural approaches in the form of using certain herbs, plants, or cow's urine in this case, apart from the practice of rituals. The text never gives an emphasis or mention the cause and effect of using these products on the

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<sup>115</sup> *Ibid.*, Book 6, Hymn 25

<sup>116</sup> *Ibid.*, Scrofulous sores are referred as *ganda-mālā*.

<sup>117</sup> Bloomfield, *Kausika-Sūtra*, 32, 8-10.

<sup>118</sup> *Atharva Veda*, Book 7, Hymn 76.

diseases. However, such facts were taken into consideration by the later day physicians, who incorporated these in the process of providing remedies and treatments.

### **Fractures and wounds**

Book Four gives the charm to mend a broken bone where, a plant called *arundhatī* has been referred, which is said to be some sort of a creeper, probably a variety of bindweed, which is taken and is tied around the injured limb.<sup>119</sup> It is said that the way this climbing plant binds the trees around which it grows, in a similar manner, it will bind fast the injured limb. Along with this, the charm is recited and prayer is offered to *Dhātar*, the God who fixes and preserves, to help in the process of mending the broken bone. He is asked to help the victim to regain strength, and grow healthy bones, helping the person stand erect. At the end of the charm, it is said that the '*ribhus*' who were thought to have been the surgeons, helps in joining limb with limbs like a 'smith who fixes the portions of a car'.<sup>120</sup> The reference of the surgeons should be noted here and also that a minor surgical procedure was involved, the details of which remain obscure. It is interesting to note that even though the charm is performed, it is followed by the act of a minor surgery (joining of the broken limbs) where the *ribhus* or the surgeons have been asked to help. Besides, the *plākṣa* tree or the fig tree (*ficus infectoria*), the *aśvattha* (*ficus religiosa*), the *khadira* (*acacia catechu*), and the *dhava* (*grislea tomentosa*) along with the *arundhatī* were said to have been to cure wounds.<sup>121</sup>

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<sup>119</sup> *Atharva Veda*, Book 4, Hymn 12.

<sup>120</sup> *Ibid.*

<sup>121</sup> *Ibid.*, Book 5, Hymn 5.

Peppercorn was used to cure wounds especially, from that of the stabs during the battles but the process of application remains unclear.<sup>122</sup>

### **Charms against the disease-causing worms**

There exists several atharvanic hymns intended for the destruction of all sorts of worms that cause diseases. *Indra's* millstone has been referred to in order to crush the worms of different species. (Hymn 31, book 3). Names of different worms are mentioned- the seen, the invisible, the *Kururū*, the *alandus* and the *chhalanas* which are to be crushed into pieces. Worms such as the *Avaskava* and the borer that are more harmful to the human body are bruised to pieces. The ritual mentioned in the *Kauśika-Sūtra* mentions that the worms be mixed with ghee and wound from right to left along the shaft of a black spotted arrow which is then to be smashed. The broken arrow is to be laid on the priest, facing southwards, and the patient sitting next grinds up the dust and places wood on the fire, thus symbolically burning the worms in his body if any of them exist.<sup>123</sup> Also in the *Atharva Veda*, the rising sun (*Āditya*) and the setting sun are invoked and prayed to destroy the four eyed, variegated, and whitish worms.<sup>124</sup>

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<sup>122</sup> *Ibid.* Book 6, Hymn 109.

<sup>123</sup> Bloomfield, *Kauśika-Sūtra*, Book 27, 14; and

Stutley, Margaret, *Ancient Indian Magic and Folklore: an Introduction*, Motilal Banarasisidass Publishers, Delhi, 1980. pp. 24-25.

<sup>124</sup> *Atharva Veda*, Book 2, Hymn 32.

### **Impotence and disorders related to virility**

To cure impotence and restore virility, the tree *kapitthaka* (*feronia elephantum*) was used.<sup>125</sup> Besides, the other plants *ucchuṣmā* (a type of an itchy plant) and *parivyadhā* (canella berries plant or *karṇikāra* tree (*Calamus fasciculatus*)), are dug up with an iron instrument and two decoctions are made from them, which is then poured into the milk. Next, a drawn bow is placed on the lap of the patient, who then drinks the mixture.<sup>126</sup> This process is thought to cure the illness and help the patient regain strength.

### **Menstruation, other bleedings of the wounds and pregnancy**

The *Atharva Veda* mentions a charm against the bleeding from wounds and those that are caused by disordered menses.<sup>127</sup> Such wounds are probably referred to the wounds in the genital areas within the body. *Kauśika-Sūtra* suggests the use of pads filled with sand and for staunching blood, dust and sand was sprinkled on the wound.<sup>128</sup> There are hymns related to the conception of the male child. Certain incantations were performed on the pregnant women where the God *Pūṣan* (the god of fertility and nourishment) was offered prayers so as to shower blessings on the pregnant lady, helping her in conceiving a male child.<sup>129</sup> Also, there are charms that are mentioned against the demonic spirits that were thought to have been the reasons behind miscarriage and delivery complications. Charms have been

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<sup>125</sup> *Atharva Veda.*, Book 4, Hymn 4.

<sup>126</sup> Stutley, *Ancient Indian Magic and Folklore: an Introduction*, pp.26-27.

<sup>127</sup> *Atharva Veda*, Book 1, Hymn 7.

<sup>128</sup> Bloomfield, *Kauśika-Sūtra*, Book 26, Hymn 10.

<sup>129</sup> *Atharva Veda*, Book One, Hymn 11.



mentioned where they have been used to enhance the physical attractiveness of women. Not many disorders related to gynaecology is mentioned in the *Atharva Veda*.

### **Growth of hair**

The plant *Nitatnī* has been mentioned, which is offered prayers while performing a charm to help strengthen the growth of hair and regain the strength of the old hair along with the growth of new ones.<sup>130</sup> And the parts of the scalp which face loss of hair, are to be sprinkled with the leaves of this herb or its powder. Also, the other plant, *Jāmadagni* is used to make the roots of the hair firm and help expansion in the middle.

This particular plant is worshipped and addressed so as to help the hair grow as ‘reeds in the form of black cluster, on the head’.<sup>131</sup> *Kauśika-Sūtra* prescribes a potion that is to be made out of the *Nitatnī*, *jīvī* and *ālākā* plants which need to be poured or rubbed, during the day over the head of the patient.<sup>132</sup>

### **Insanity**

The *Atharva Veda* has a single charm related to insanity however, it is still interesting to note, that mental illness is mentioned in the text categorised as an ailment. *Agni* is being worshipped during the charm where the God is asked to help the person get freedom from madness and help in soothing and making his mind calm. The priest narrates that a remedy is prepared cunningly where, the *Apsarās*, *Indra*, *Bhaga* are invoked to restore the victim

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<sup>130</sup> *Ibid*, Book 6, Hymn 136.

<sup>131</sup> *Ibid.*, Book 6, Hymn 137.

<sup>132</sup> Stutley, *Ancient Indian Magic, and Folklore: an Introduction*, pp.32-33.

from madness, and drive away the demonic force or the malignant spirit that robs the person of sense. Not only in the *Atharva Veda*, but also in the later medical texts, the physiology of the brain is not really given importance. As a result, mental disorders and insanity were believed to have more supernatural connections rather than any alterations in the brain physiology. The mind was seen in a philosophical context and therefore, even in the later medical treatises, insanity was thought to have been caused by not following a right conduct of life or caused by exogenous factors. Therefore, the diseases related to the functioning of the brain and problems like insanity and other mental illnesses, were left untreated and may never have been attempted to understand or provide a cure.

### **Relief from the various types of poison, sting and insect bites**

The *Atharva Veda* mentions the use of poisoned arrows in the Vedic warfare which necessitated such charms to counter poison.<sup>133</sup> Therefore, the poison was driven away from the arrows and this was also maintained for the poisonous plants that grew in the mountains, in order to make them innocuous. While the charm is performed and the hymn recited in a soft tone, obeisance is given to *Takṣaka*, the chief of the serpents. This was accompanied by the person who was performing the charm, sprinkles the water and sips it, that was used during the charm. Other than the poison of the arrows, the snake venom was countered through worshipping *Varuṇa* who was believed to have granted blessings to the priests, so that the priest's spell counteracted the snake's own poison and the venom returned to the reptile itself.<sup>134</sup>

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<sup>133</sup> *Atharva Veda*, Book 4, Hymn 6.

<sup>134</sup> *Ibid.* Book 5, Hymn 13.

Poisons of the other snakes and sting and bites of the other insects such as scorpions, adders were dispelled by using a sweet and fragrant plant, called *mādhuka*.<sup>135</sup> Similar kind of charms for driving away the insects and getting rid of the poison from the snake bites, continued even in the later texts, the details of which I will discuss in the chapter on the later medical texts, both the *Suśruta* and the *Caraka Saṃhitā*.

These were some of the diseases mentioned in the *Atharva Veda* that affected both, the internal and external parts of the body. However, there are several other unidentified diseases that were thought to have been caused by the presence or ill-omen of *Rākṣasa*, *Apsarās* and *Gandharvas* who were often exorcised and drove away. They were thought to have cast spells on the people adding to the difficulties of the latter. Such diseases, therefore, involved acts of exorcism which was part of the witchcraft, that has also been briefly discussed in the *Atharva Veda*.

## Conclusion

Not only did the Vedic people identify the various symptoms and associated them with certain diseases, but they completely believed that these were caused by the demonic beings and malignant spirits and in some cases, by the deities' dissatisfaction with the victim. In the case of latter, they were invoked and worshipped to seek remedies. Sacred utterances and certain esoteric words and phrases became an integral part of the remedial measures, along with which the magico-religious rituals were performed.<sup>136</sup> Such magical approaches, use of charms and an emphasis on practising religious activities were common. Worship was

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<sup>135</sup> *Ibid.* Book 7, Hymn 56.

<sup>136</sup> Zysk, 'Religious Healing in the Vedas', pp .i-xv, xvii, 1-311.

offered to the deities and respect was given to those important to the society, along with certain natural forces that men could not have naturally controlled. These purported to help everyone with their daily problems, by giving people an idea of avoiding a misfortune that would have affected the health and prosperity of the people. Religion was therefore blended into medicine, in the form of performing certain rituals and magical practices. And even the priests who helped to carry out such rituals and charms encouraged the unaware suffering people, who became weak and therefore, became easily convinced. These people gave importance to such religious practices in hope, that they could be able to control the fear of the unknown or an uncertainty, in terms of a disease or even a daily problem.

Mythology played a significant role in such healing rituals. Certain plants and herbs were used not majorly on the basis of their medicinal properties, but because they had mythological stories about their origin and connections with certain deities. Hence, in many of the rituals, certain plants and trees are deified and offered prayers which, is thought to be a part of the healing process.

Filliozat in his work also mentioned how the plants and their properties were seen as magical ingredients rather than having medical or chemical properties that would help in treating a disease.<sup>137</sup>

It is quite interesting to note, that besides identifying the symptoms and the diseases, the Vedic people were also taking account of the observation of certain plants, herbs and trees, scrutinizing and closely studying them. However, what needs to be kept in mind, is the fact that such plants and herbs were attributed supernatural healing powers, rather than understanding an underlying rational cause or their practical benefits. Physiological factors

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<sup>137</sup> Filliozat, J., *The Classical Doctrine of Medicine*, Munshiram Manoharlal Publishers, Delhi, 1964. p. 133.

did not play a role, only the religious and magical inclinations and the popular beliefs, interested the common people. Such plants and trees were not being studied on the basis of their properties and understood on a scientific or a rational approach. However, it is still important to note, that this was the time when certain plants started getting deified and held a sacred while, many were associated with stories and legends. Thus, this resulted in the Vedic people getting more familiar with the plants and herbs which indirectly, also helped in the conservation of the latter. And such plants were studied in details by the physicians in the succeeding centuries.

Although the *Atharva Veda* has been given less importance in comparison to the other Vedas owing to its subject related to charms, magical healing and witchcraft, it is considered to be the basis of the later day medical approaches, that were developing gradually. During the Vedic period, certain crude implements were used for minor surgical operations, but no details were provided. But, this was the first text that dealt with the identification of the diseases and made an attempt to provide healing through the practice of magical charms, spells and worship.

The later doctrines of the medicine, the *Suśruta* and the *Caraka Samhitā* regarded the rational doctrine of *Āyurveda*, to have been secondary or ‘*upāṅga* to the *Atharva Veda*’.<sup>138</sup> Owing to the numerous magic rituals and a reliability on them in order to establish control over the supernatural factors causing diseases and difficulties, the *Atharva Veda* gives an interesting insight into the common people. This very facet of the *Atharva Veda* makes it different from the other Vedas. The belief on the magical formulae for the fulfilment of aspirations, made the people rely on and have faith. Magic was becoming synonymous with the transcendent

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<sup>138</sup> *Ibid.*, p.1.

power. The Vedic people found it to be more convincing that, the solutions to the earthly problems could be attained through accomplishing the right means of worship and performing certain charms or chanting of esoteric words or phrases. It can be actually doubted that such healing processes benefit the victim in getting cured every time. However, these were the methods that were sanctioned through the religion and the religious authorities hence, nobody really questioned them. In such cases, where the patient was left uncured, often they were said to have committed a wrong action, justifying the failure of the treatment. This had also been the case in the later periods, even though a scientific and rational attitude started developing among the people. The common people not only involved themselves in using such magical formulae, as a part of certain ritual practices but also started incorporating them into their daily life. They started believing in the powers of such amulets made with plants, or worshipping a certain deity accompanied with a ritual, to have cured them from such painful diseases. Chanting of certain phrases and words repetitively, became quite integral to the healing processes and treatments that were given. The Vedic people were convinced to such an extent, that they even used these charms and acts of exorcism, to solve the problems they encountered each day.

Nothing could have shaken their faith on such charms and supernatural powers. And this had a subtle impact on their psychology. As a result, even if these remedies did not directly benefit their physiology or help in curing an ailment, the people still attached supreme importance to such explanations and solutions that were provided. This, eventually led even the later medical texts to acknowledge the *Atharva Veda*, and pay due respect.

### Chapter Three

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## Beginning of the rational approach to diseases and their remedies through the Buddhist Medical tradition

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## Introduction

The ascetic traditions brought over a transition in the aspect of medicine and the treatment of diseases from the Vedic period. The Vedic medicine focused more on the magico-ritualistic approaches in identifying and providing a cure for the major and minor ailments. Use of charms, incantations, and utterances was integral to the healing therapy. During the Vedic period, diseases were mostly attributed to certain external forces and emphasis was given more upon a religiously based medicine where prayers were offered to the Vedic deities.

The transition was gradually brought over by the rational post-therapeutic approach that the post- Vedic medical treatises offered which was based on the foundation of the classical science of medicine, the *Āyurveda*. The Buddhist tradition became important in paving the way to such scientific approaches and organizing the whole medical tradition accompanied with the identification of the diseases and providing a more rational remedy to the same. Buddhist monasteries or the *saṅgha* facilitated this transition from a magico-religious system to a rational approach to the use of flora and fauna to make drugs.

Besides, the general interaction between the *Bhikkus* in the *saṅgha* and the Buddha in the context of imparting the religious discourse, the Buddha dealt with the problems the *Bhikkus* faced out of which one included the regular health issues that became a major concern. The Buddhist sources show, how the Buddha not only kept suggesting rather prescribing certain food items and herbs that could be used for the medicinal purposes, but also emphasizing on following the path of the Four Noble Truths and the eightfold path that was thought to have brought an end to the human suffering.

In my essay, I will be discussing how the Buddhist tradition helped pave the way from a magical approach to a much more physiological approach in the context of human health,



anatomy, the diseases and the disorders and finding remedies to the same along with their treatment. The Buddha suggested a number of items that served a medicinal purpose but what needs to be noted is the fact that how he bases his suggestions and remedial approaches in the form of empirical evidence. Drugs that were prescribed or certain remedies that were asked to undertake by the *Bhikkus* were mostly on the basis of a trial and error method. Next, I will be discussing the cure that involved proper pathological and scientific treatments that were given by the famous physician or the *tikkichhaka (cikitsaka)* during the Buddhist period, *Gīvaka Komārabhakka*. Not only did he prescribe certain drugs and food items that were used as drugs but he also undertook several preliminary and major surgical operations as a cure or process in treating a disease.

The later medical texts, both the *Caraka* and the *Suśruta Saṃhitā* explained the aetiology of the diseases and the rational therapeutics involved drugs and surgery. Detailed understanding of the human body was done and discussed at length. The Buddhist monastic tradition played a key role in the institutionalisation of medicine, and how the knowledge of different drugs and medicines along with the importance of diet and surgery, was paving its way from an ascetic to a Brahmanical tradition. The later Hindu institutions started following the earlier models that had been set up, however, with a more systematic understanding of the diseases and their cause and effect on the human body and the benefits and contraindications of the drugs prescribed.

The sources that I have referred here for my essay are the English translations of the *Pāli* texts, The *Mahāvagga* Section of the *Vinaya Piṭaka*, translated by Rhys Davids and Hermann Oldenberg published in the Sacred Books of the East, Volume XVII, 1882. The *Vinaya Piṭaka* is said to have been compiled after the Buddha's death in 483 B.C.E.

The next source that I have referred to is the *Milinda Pañha* or ‘The Questions of King *Milinda*’, translated by Rhys Davids.<sup>139</sup> I have also referred to some sections from ‘The Long Discourses of the Buddha, A translation of the *Dīgha Nikāya*’.<sup>140</sup>

## **Diseases, diagnosis and their remedies**

In this section of my essay, I will be discussing how the Buddhist tradition perceived the idea of the bodily disorders and the diseases along with the diagnosis that was done. At the beginning, I will be looking at the monastic tradition and how the Buddha prescribed certain remedies for the *Bhikkus* who were suffering in the *Vinaya Piṭaka*. Next, I will be referring to the diagnosis and the treatments undertaken by the physician *Gīvaka Komārabhakkā*. And next, I will look at the *Milinda Pañha*, and discuss about how the same tried approaches towards diagnosing bodily suffering and making an attempt to end it.

### **The *Vinaya Piṭaka***

The sixth *Khandhaka* or the *Mahāvagga* section of the *Vinaya Piṭaka* is concerned with the medicaments which show how the *Bhikkus* who fell sick had to rely upon certain prescribed food items that were used as medicines and adhere to a diet.<sup>141</sup>

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<sup>139</sup> ‘*The Questions of King Milinda*’, trans Davids Rhys. Clarendon Press, Oxford, 1890

<sup>140</sup> ‘*The Long Discourses of the Buddha, A translation of the Dīgha Nikāya*’, trans. Walshe Maurice, Wisdom Publications, Boston, 1987

<sup>141</sup> *Vinaya Texts*, Part Two, trans. Davids Rhys and Oldenberg Hermann, Motilal Banarsidass Publishers, Delhi, 1965, p. 41.

This section of the text suggests a continuous interaction between the Buddha and the *Bhikkus* in the *saṅgha* wherein, the Buddha has been seen suggesting a list of certain items that could have served the medicinal purposes of the monastic community.

The first section describes how the *Bhikkus* were attacked by the hot season and vomited the rice-milk they had eaten, as a result of which, they turned lean, rough and yellow in colour. These *Bhikkus* were attacked by the hot season while the Buddha stayed at *Sāvattthī* in the *Getavana*, the park of *Anātha Piṇḍika*. Out of their illness, they became ill-favoured and yellowish in colour with veins standing out of the limbs. After asking *Ānanda* who was one of the principal disciples of the Buddha, the latter got to know that the *Bhikkus* were suffering from the hot season. Five medicaments were prescribed by the Buddha, which was clarified butter or *ghee*, butter, oil, honey and molasses.<sup>142</sup> These were asked to be used at the right time by the *Bhikkus* and also generally during the other times. The Buddha in the need of the *Bhikkus*, permitted the use of fats of bears, fish, alligators, swine of asses, if received and mixed at the right time, to be partaken of with oil, as medicine.

It should be noted here how the animal fats were prescribed by the Buddha for medicinal purposes and had also been mentioned in the later medical treatises, especially the *Caraka Saṃhitā* where a wide variety of fats such as goats, crow, tortoise and crocodile have been used.

The Buddha allowed the use of roots as medicine which comprised turmeric, ginger, *usīra* (the fragrant root of *Andropogon muricatum*), *bhaddamuttaka* (nut grass or *Cyperus*

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<sup>142</sup> *Ibid.*, Part Two, p. 42.

*rotundus*), *ativiṣā* (*Aconitum heterophyllum*), to be used for medicinal purposes and these were said to have been also used to impart flavours to the hard and soft foods.<sup>143</sup>

Such roots were asked to be stored ‘life-long’ and consumed only when required.<sup>144</sup>

Needless consumption of the same was said to have been a *dukkhatā* offence.

In order to extract the juice from the roots or prepare them as drugs, the Buddha had also suggested the use of *piṣaṇa śilā* or *piṣaṇa poto* which was the mortar and the pestle.

*Udūkhala* and *musala* or the grindstone and the muller were also said to have been used.<sup>145</sup>

Similarly, on the request of the *Bhikkus*, Buddha prescribed the use of astringent decoctions, leaves including *nimba*, *kuṭaja*, *tulasī* which could also be used as the flavouring agents in

food, fruits like *pippala*, *viḍaṅga*, marica peppers, *āmalaka* and *harītaka*.<sup>146</sup> Gums including *hiṅgu lac*, *sipātikā*, *taka-panni* were suggested along with the use of different salts including

sea salt, black salt, rock salt, kitchen salt, and red salt.<sup>147</sup>

‘*Belatthahasīsa*, who was the superior of the venerable *Ānanda*’ had a disease of the thick scabs and his robes stuck to his body.<sup>148</sup> The Buddha prescribed the use of *chunam* which was lime, to be used as a medicine for the itch, boils or discharges or scabs or for an ill-smelling body.

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<sup>143</sup> *Ibid.*, Hard food included cakes, fruit and meat while soft food included boiled rice and curry. p. 44.

<sup>144</sup> *Vinaya Texts.*, p 45.

<sup>145</sup> *Ibid.*, p.45.

<sup>146</sup> *Ibid.*, pp. 45-47.

<sup>147</sup> *Ibid.*, p. 48.

<sup>148</sup> *Ibid.*, p. 48.

For the healthy, the use of dry dung, clay and colouring matter were used, that was to be made with the help of a mortar and pestle. In order to sift the *chunam*, the Buddha allowed the use of *chunam* sieve or a cloth sieve.<sup>149</sup>

In another case, one of the *Bhikkus* were identified by a disease that was non-human or rather can be said that no one could have identified the symptoms and diagnosed the same. He went to a place where swine were slaughtered and ate the raw flesh after which he felt better and also drank the fresh blood after which his sickness abated.<sup>150</sup> When this was informed to the Buddha he sanctioned the use of raw blood and flesh of swine in cases of such non-human sickness. It is quite interesting to note how the *Vinaya Piṭaka* has reference to such acts of eating flesh and blood and most importantly, the Buddha allowing the same for the medicinal purposes. However, the cause and the nature of the disease remains unclear in the text. This also suggested how Buddha relied upon empirical evidence and based his prescriptions on a trial and error basis.

For the diseases of the eyes, the Buddha allowed the use of eye ointments including the black collyrium, (which had also been mentioned in the later medical text, *Suśruta Saṃhitā*), along with *geruka* (yellow ochre pigment), *kapalla* (soot taken from the flame of a lamp), *rasa* (made with vitriol) and *sota* (made with antimony) ointments.<sup>151</sup> In order to add fragrance to the ointments, the Buddha suggested the use of sandal wood, *tagara* flower juice, black *anusāri* (A kind of dark fragrant sandal wood), *kālīya* (another kind of sandalwood), and *bhaddamuttaka* (a perfume made from nut grass or *Cyperus rotundus*). To keep them fresh and purified, pots and saucers dusted over with certain herb powders were asked to be used.

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<sup>149</sup> *Vinaya Texts*, p.49.

<sup>150</sup> *Ibid.*, p.49.

<sup>151</sup> *Ibid.*, p. 50.

Materials that were used to make the box were bone, ivory, horn, *nala* seed, bamboo, wood, or lac, or the shells of fruits or bronze or the centre of the chank shell out of which the lid could be made.<sup>152</sup>

And the boxes were allowed to be sewed with thread. Ointment containers and sticks were made out of the mentioned items and the use of gold and silver was strictly prohibited by the Buddha. Fingers were to be used to rub the ointments on the affected eye.<sup>153</sup>

*Pilindavachha* had a headache and the Buddha proposed the idea of using a little oil on the head to which the victim did not get relief. He then asked to practice the act of taking the medicine through the nose, where the nose ran, and a spoon was asked to use, but even after this method, the medicine reached the nose in unequal proportions, and it did not provide the relief.<sup>154</sup> Finally, sniffing of the aroma through the use of pipes were prescribed which helped the victim ease the suffering. This gave a perfect example of how the Buddha continued his suggestions for the diseases on a trial and error basis. He did not really go into the details of understanding the cause and the effect of a particular drug or medicine in case of a disease. What he rather understood and observed was the fact that certain food items or drugs and the methods to which they were applied and used gave relief to the monastic community. Whenever a particular person suffering from a disease felt better with the use of a particular medicine or a remedy, the Buddha did not hesitate to incorporate and prescribe the same for latter such conditions.

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<sup>152</sup> *Vinaya Texts.*, p. 51.

<sup>153</sup> *Ibid.*, pp. 52-53.

<sup>154</sup> *Ibid.*, pp. 53-54.

For the wind in the stomach, the Buddha prescribed the use of a decoction of oil, strong drinks were allowed to be mixed with the oil.<sup>155</sup> However, when the Buddha observed that such drinks caused intoxication amongst the *bhikkhu*, he strictly asked to maintain the proportions of such drinks in the mixture to prevent such cases.

Neither the colour or the taste or the smell of the strong drink should be sensible and such oil decoctions were asked to be stored in three kinds of pots - bronze pots, wooden pots and shells of fruits.<sup>156</sup>

For rheumatism, procedures such as sweating by the use of several herbs, the names of which remains unclear were to be used along with the procedures of steam baths, hemp water and hot baths in medicated waters.<sup>157</sup> Bloodletting procedure was to be followed by the use of a horn which was a preliminary surgical procedure often used in the Vedic period, with the use of leeches to suck out the infected blood from an affected area in the body. And a similar procedure continued till the later times which has been mentioned in the *Suśruta Saṃhitā* as well. However, an important thing that should be noted in this case was that bloodletting failed to treat the patient and a remedy could not be offered.<sup>158</sup> What was prescribed by the Buddha, therefore, could have been several ways and methods to ease the pain and treat the condition temporarily rather than providing an effective cure for the same.

In the case of boils and blisters, decoctions of astringent herbs were used and *sesamum salve* was given and compresses necessary to tie up the sore with cloth and bandages.<sup>159</sup>

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<sup>155</sup> *Ibid.*, p 55.

<sup>156</sup> *Ibid.*, p. 55.

<sup>157</sup> *Ibid.*, p.56.

<sup>158</sup> *Ibid.*, p.57.

<sup>159</sup> *Ibid.*, p.58.

In the case of pain and itching, the mustard powder was prescribed to be sprinkled which could give temporary relief and fumigation was also carried out. If flesh formed on the wound before the whole discharge could come out, the Buddha asked the use of lancet to cut open the flesh and later, use oil to close up the wound.<sup>160</sup>

For snake bites, four kinds of filth were asked to use including the dung, wine, ashes and clay. However, the application of the same remains unclear. In the case of poison, use of an emetic as a decoction of dung was prescribed by the Buddha.<sup>161</sup>

At one time a *bhikku* had suffered from a disease which was said to have been caused by hostile sorcery and had been referred to as the '*ghara-dinnaka*'.<sup>162</sup> The exact cause, nature and the symptoms of the disease have not been mentioned. However, owing to the definition of this particular disease as has been suggested in the translated version of the text, it then becomes interesting to note how the Buddha offered a much more natural remedy. He prescribed drinking a decoction of the soil, turned up by the plough. For such a disease that was thought to have been caused by an external or an unnatural force, such a remedy was asked to follow. On the other hand, it is interesting to note how the later medical texts, based more on a rational and scientific approach in many cases, identify diseases or certain disorders of the body due to such unexplained reasons thought to be an external or supernatural force, to which they do not really emphasize on treating the same naturally, unlike by the Buddha.

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<sup>160</sup> *Vinaya Texts* p. 58.

<sup>161</sup> *Ibid.*, p.59.

<sup>162</sup> *Ibid.*, Rhys Davids and Oldenberg in the translated version suggests that the term '*ghara dinnaka*, suggests a disease arising from a philter or a potion when given, 'brings another into one's power'. p. 60.



In the case of constipation, decoction of the ashes of burnt rice was given. While in the case of jaundice, a decoction was suggested that had to be made of the cow's urine.<sup>163</sup> In the case of skin diseases, the body was to be anointed with perfumes the names of which remains unclear.

In one case, it has been mentioned that a *bhikku* suffering from a 'superfluity of humors in the body' is suggested a purgative, clarified gruel, use of natural juice and meat broths.<sup>164</sup>

Therefore, the Buddhists already mention the significance of the bodily humors the wind, bile and the phlegm or the three *doṣas* (*vāyu*, *pitta* and *kapha*) as has also been the basis of the explanation of the causes of the bodily disorders in the later medical texts. The foundation of *Āyurveda* or the classical science of medicine that developed later was based on *tri-doṣas*, to explain and understand the bodily functions. The derangement of *tri-doṣas* caused the diseases, and their functioning properly was emphasized in the process of treatment and offering remedies.

Collecting the five kinds of medicine- *ghee*, butter, oil, honey and molasses, and their storage for seven days were allowed by the Buddha. The Buddha also had suggestions in cases of mixing and preservation. He prohibited the adulteration of molasses with flour and cane-dust, except in such quantities as to make it firm. Kidney beans that grew out of a dung heap were allowed to be used.

In cases of wind in the stomach, *tekatula* gruel or gruel that contained three pungent substances, as ginger and two kinds of pepper were consumed.<sup>165</sup>

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<sup>163</sup> *Ibid.*, pp. 60-61.

<sup>164</sup> *Ibid.*, p. 63.

<sup>165</sup> *Ibid.*, p.64.

Fresh *tila* seeds and fresh honey were also the other two that was asked to be taken as part of the diet. The Buddha said that the *Bhikkus* could eat the food that was earlier refused. However, such food could only be used for consumption when offered before the meal time. In the case of fever, edible lotus stalks of various kinds were to be consumed and during its scarcity, the Buddha allowed to eat things that grew in the woods and ponds.<sup>166</sup> The Buddha also allowed the consumption of fruits which had not yet developed seeds in it, in certain cases.

This could possibly have been allowed by the Buddha in cases of the scarcity of fruits that had seeds in it or their unavailability or during the times of journey when the *Bhikkus* travelled, and faced the unavailability of the seeded fruits that were ready for consumption.

Once a *Bhikku* suffered from a fistula. A physician named *Ākāśagotta* lanced it and cut it open. To this, the Buddha criticised him, saying that he was such a fool.<sup>167</sup> He said that since the affected part of the body was tender, the knife difficult to guide and the wound was difficult to treat. Those who allowed this was to be guilty of the *thullakkaya* offence. The *Khabbagiya Bhikkus* once performed a surgical operation using a clyster, to which the Buddha again rebuked and commented, that no surgical operations were to be performed within a distance of two inches around the anus, and a clyster was not to be used. Those who will do it will be guilty of the *thullakkaya* offence again.<sup>168</sup> Clearly, the Buddha becomes angry of certain forms of surgical operations. In the first case, he goes against a professional physician, *Ākāśagotta*, however, he doesn't really give a proper justification for the disapproval he makes. He randomly, however, with much confidence suggests that if such

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<sup>166</sup> *Vinaya Texts*, p. 76.

<sup>167</sup> *Ibid.*, 78-79.

<sup>168</sup> *Ibid.*, p.79.

an operation is performed, one becomes guilty of an offence. Since not much rational or scientific explanations are given by the Buddha supporting his arguments, it can be said that much of the decisions on the remedial measures taken by him were more of a casual nature.

In Benares, a devout laywoman *Suppiyā* went from monastery to monastery or the *Vihāras* and from cell to cell, enquiring as to who fell ill and whether she could be of any help to procure things for them.<sup>169</sup>

A certain monk had taken a purgative and said that he wanted some meat broth. The killing of cattle was prohibited on that particular day, so *Suppiyā* could not obtain meat for preparing the broth. She cut a piece of flesh from her thigh, got the broth of it prepared by the maid servant and sent it to the monk.<sup>170</sup> The Buddha cured her miraculously of the pain but got extremely annoyed with the monk remarking him to be a fool to have had human flesh. The *Bhikkus* were asked to be very careful about what they consumed, especially flesh, since men who ate human flesh committed a grave offence. The Buddha also prohibited the *saṅgha* from eating the flesh of an elephant, or a horse, dog, serpent, lion, tiger, panther, bear and hyena.<sup>171</sup> However, in other contexts, the flesh of some species of animals were allowed by the Buddha for medicinal purposes as they gave relief to the *Bhikkus* from certain diseases. Therefore, the Buddha asked the *bhikku saṅghas* to be extra careful and enquire about the meat they consume to understand from where the flesh was procured. Fish was allowed and the Buddha referred to it as pure in three cases- if one does not see, does not hear or suspect that it had been caught specifically for the purpose of the consumption of the *Bhikkus*.

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<sup>169</sup> *Ibid.*, p. 80.

<sup>170</sup> *Ibid.*, p.81.

<sup>171</sup> *Ibid.*, p.83.

Therefore, the Buddha allowed the use of certain flesh for the *Bhikkus* in the context of the latter's ignorance of the same. If it is consumed unknowingly, then the action was not referred to be a grave crime.<sup>172</sup>

A Brahman presented rice-milk to the Buddha accompanied with honey lumps for food, to which the Buddha said, that there were tenfold merits of rice-milk.<sup>173</sup> It should be noted that the Buddha never hesitated to incorporate the ideas of others, in this context a brahmana who was altogether from a different community.

The Buddha remarked, 'He who gives rice-milk, gives life, gives colour, joy, strength, the readiness of mind, rice- milk when it is drunk, removes hunger, dispels thirst, sets right the bodily humors, purifies the bladder, and promotes digestion'.<sup>174</sup> Food including sweets and meat was allowed for the *bhikkus* by the Buddha. Sugar was allowed to be taken as much as the *Bhikkus* liked. He also allowed the sick, the eating of sugar, and to the healthy, the drinking of sugar-water.<sup>175</sup> The Buddha also gave a list of the loss and gain an evil doer and a well-doer achieves.<sup>176</sup> The evil doer remains in poverty, evil reports abroad enters the society shy and confused, dies anxiously and take rebirth into a state of woe. While the well-doer becomes rich through the industry, good reports enter society confident and self-possessing, dies without anxiety and takes rebirth in a happy state.

The Buddha allowed a drug store to have been built. Drugs collected for the use of the *Bhikkus* were not to be kept out doors.

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<sup>172</sup>*Vinaya Texts.*, p.85.

<sup>173</sup>*Ibid.*, p.88.

<sup>174</sup> *Ibid.*, Part Two, p. 89.

<sup>175</sup> *Ibid.*, p. 93.

<sup>176</sup> *Ibid.*, pp. 91-92.

Vermin could eat them and thieves could carry them away, so the Buddha asked to choose a *kappiya bhūmi* to keep the drugs in it.<sup>177</sup> A *kappiya bhūmi* could be of four kinds, one that has become so by proclamation, an ox stall, a building belonging to laymen and a duly chosen one. Eight kinds of drinkable things were allowed by the Buddha including the mango syrup, *jambu*, plantain, *moka*, grape juice, honey and syrup made from the edible root. All the juices were allowed except for the juice prepared from corn. All the juices from flowers except the liquorice juice were allowed and the juice of sugarcane was also allowed by the Buddha for the *Bhikkus*.

The superior of venerable *Belatthasīsa*, superior of the *Ānanda*, had a disease of thick scabs and the discharge resulted in his robes sticking to his body.<sup>178</sup> The *Bhikkus* therefore, moistened the robes thoroughly with water so as to loosen them. Seeing this, the Buddha next asked all the *Bhikkus* to use an itch-cloth for whosoever suffered from itch, boils, discharge or scabs on the body. The itch cloth was allowed to be used which was a cloth that shouldn't be more than four spans in length and two in breadth. The Buddha in some sections of the *Vinaya Piṭaka* also asks for the nursing of the *Bhikkus*, by the other *Bhikkus*. He always mentioned that since, the *Bhikkus* left their friends and family and stayed all by themselves, the other fellow *Bhikkus* were responsible for taking care of them when needed, especially during their sickness.

The Buddha gave importance on the dietary regimen of the *Bhikkus* besides suggesting them medicines and appropriate diet in a particular disease. Food that may be eaten at any time

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<sup>177</sup> *Ibid.*, pp. 121-122.

<sup>178</sup> *Ibid.*, p.143.

during one's life was said to have been lawful, when mixed with food that may be eaten at any time within seven days and is not lawful beyond seven days.

The *Dīgha Nikāya* mentions the following ritual rinsing and bathing, giving emetics, purges, expectorants and phlegmagogues, giving ear, eye, nose- medicine, ointments and counter ointments, eye surgery, surgery, pediatry, and using balms to counter side-effects of previous remedies. However, it has been mentioned in the text where the Buddha is addressing the monks, that these were refrained by the ascetic *Gotama*.<sup>179</sup>

The very use of such words suggested an existence of the same, and awareness about similar methods and facts about the medicinal approaches in the Buddhist tradition.

### **Diseases and their diagnosis by *Gīvaka Komārabhakka***

The eight *Khandhaka* or the section on the dress of the *Bhikkus* describe *Gīvaka Komārabhakka* who was a physician during the sixth-century B.C.E. He was mainly the physician to the king *Bimbisāra*. *Sālavatī* who was a courtesan at *Rāgagaha* conceived a boy, however, owing to her profession the child was thrown away on a dust heap by the maid servant.<sup>180</sup> The royal prince, *Abhaya* took the boy with him to the palace and he was nursed and taken care of. They gave him the name *Gīvaka* and was addressed as *Komārabhakka*, as he was nourished by the royal prince. *Gīvaka* once told *Abhaya* that he wished to learn the art of a physician, and *Abhaya* agreed. He went to a renowned physician in Taxila and the doctor there accepted him as his student. After learning the art for seven years, *Gīvaka* wanted to join the profession, but his teacher wanted to test his knowledge. So, he asked

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<sup>179</sup> 'The Long Discourses of the Buddha, a translation of the *Dīgha Nikāya*', trans. Walshe, Maurice, p.73.

<sup>180</sup> *Vinaya Texts*, p 175.

*Gīvaka* to take a spade and roam around Taxila and bring him something that was not medicinal. *Gīvaka* roamed all around as instructed but came back to his teacher empty-handed, claiming that there was nothing that he found, which did not serve a medicinal purpose.<sup>181</sup> The physician became contented with *Gīvaka*'s awareness about the subject and granted him formal permission to join the profession as a physician. Later, *Gīvaka* became renowned in undertaking surgical operations and helped cure the royal community, the monastic community and as well as the common people.

*Gīvaka* cured the *Setthi*'s wife at *Sāketa*, who was suffering from a disease for seven years, and no physician had been able to cure her.<sup>182</sup> Initially, the *Setthi*'s wife did not approve of *Gīvaka*, but then he said that he wanted to cure her for free and charge only if she benefitted from his treatment. *Gīvaka* asked for a bowl of *ghee*, and he boiled it up while mixing various drugs. He then ordered the patient to lie down on her back in the bed and gave the drug through her nose. Soon the butter that had been given through the nose, came out through the patient's mouth and the *Setthi*'s wife was restored to health after she spit it out. Contented with *Gīvaka*'s expertise, she offered him four thousand *kāhāpanas* and the other members in the house, contributed some more owing to the great job that had been performed by *Gīvaka*.

The Magadha King *Seniya Bimbisāra* suffered from a fistula and his garments were often stained with blood. Hearing from *Bimbisāra*, *Abhaya* asked *Gīvaka* to cure the king. *Gīvaka* took some medicine (that has not been mentioned) on his nail and went to the palace.<sup>183</sup> He

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<sup>181</sup> *Ibid.*, p.176.

<sup>182</sup> *Ibid.*, p.176.

<sup>183</sup> *Ibid.*, p.179.

healed the fistula through the process of anointing. Being restored to health, the king offered him ornaments of five hundred of his wives. *Gīvaka*, however, refused to take them.

The *Setthi* at *Rāgagaha* suffered from a disease of the head for seven years. He was asked to lie down on one side for seven months and the other for the other seven months. He was then tied to the bed, and *Gīvaka* cut through the skin of his head, drew apart the flesh, and took out two worms. He then closed up the sides of the wound, stitched up the skin on the head and anointed it with salve. The *Setthi* was restored back to health and offered a hundred thousand *kāhāpanas* to *Gīvaka*.<sup>184</sup>

The son of the *Setthi* suffered from an entanglement of his intestines because of which, he could not digest either rice-milk, or the food he ate, nor was he able to ease himself. He grew lean, disfigured and discoloured and became yellower in colour. *Gīvaka* tied him fast to a pillar cut through the skin of his belly and drew the twisted intestines and disentangled them putting back to their original position.<sup>185</sup> He stitched the skin together, anointed it with salve after which the *Setthis'* son regained health and *Gīvaka* was given sixteen hundred *kāhāpanas*.

King *Paggota* of *Uggenī* or *Ujjaini* was suffering from jaundice. *Gīvaka* boiled up some *ghee* along with different drugs in such a fashion that the colour, smell and the taste of the same changed and became similar to an astringent decoction.<sup>186</sup>

Once, the Buddha had a disturbance in the bodily humors and fell sick. He asked *Ānanda*, who then approached *Gīvaka* saying that the Buddha wanted to take a purgative. *Gīvaka*

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<sup>184</sup>*Vinaya Texts*, p.181.

<sup>185</sup>*Ibid.*, p.185.

<sup>186</sup>*Ibid.*, p. 187.



asked *Ānanda* to rub the Buddha's body with fat for a few days. Later *Gīvaka* himself went to the Buddha with three handfuls of blue lotuses.<sup>187</sup> He asked the Buddha to smell the first handful of lotuses ten times to help him purge. After the first a second handful of lotuses and then, a third handful was given to Buddha, to the smell of which, he purged finally. The Buddha's derangement of the bodily humors made him purge twenty-nine times rather than thirty, following which, he was advised to take a bath for purging again. *Gīvaka* prescribed the Buddha to abstain from liquid and food until his body was completely restored.

*Gīvaka*, therefore, became renowned and popular by undertaking surgical operations such as the laparotomy of the intestines and intricate cranial surgeries.

In later times *Suśruta* became much more famous for his surgical operations and methods, which has been discussed at length in the *Suśruta Saṃhitā*. However, the Buddhist tradition, along with *Gīvaka*, already had a knowledge and awareness of the possibility of undertaking surgeries as part of the treatment process wherever required.

Detailed pathological approaches and scientific methods were undertaken to better understand a disease, provide treatment and use surgical operations, if necessary. The preliminary basis of surgery evolved to an advanced form with *Suśruta Saṃhitā*, and the use of drugs by *Caraka*. A major difference of the early Buddhist tradition was the rarity of analysing and understanding the human anatomy and describing the same in a detailed manner in textual sources. Bodily humors were given importance and their derangement was believed to have caused the disorders and diseases that afflicted the human body.

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<sup>187</sup> *Ibid.*, pp. 191-192.

### **Diseases and their diagnosis in the *Milinda Pañha***

‘*The Questions of King Milinda*’, translated from *Pāli* by Rhys Davids, discusses the conversation between the Greek King Menandros or *Milinda* and the Buddhist sage, *Nāgasena*. This was composed around circa first century CE.

*Nāgasena* draws on the analogy of the physician and the surgeon curing the sick. The text discusses the effects of the bodily humors- the wind, phlegm and bile and the union of the three in affecting the human body to cause several disorders, that can lead to premature death of a person. In this context, *Nāgasena* explained to the king, seven other causes considered to be normal, that could lead to premature death (death before the old age). The seven other causes were thirst, starvation, snake bite, poisoning, falling into the fire, falling into water, and being wounded by a dart and the inability to find a surgeon thereafter.<sup>188</sup> The three other major causes that could lead to death were ‘*karma*, excessive journeying and excessive strenuous activities’.<sup>189</sup>

The *Milinda Pañha* also emphasizes the Buddhist doctrine of the Four Noble Truths, and the eightfold path that could lead to the ultimate end of one’s suffering.<sup>190</sup> I will discuss in the proceeding sections of my essay on how truth, and the path to the same, was said to have been followed to end the human suffering. Besides, the text also mentioned a number of purgatives and emetics that were used as a part of treating diseases. At one place, the text also discusses a man affected by cutaneous eruptions all over the body, and his cure by a physician through the proper administration of drugs at the right time and in right quantities.

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<sup>188</sup> *The Questions of King Milinda*, trans. Rhys Davids Part Two, pp. 161-162.

<sup>189</sup> *Ibid.*, p. 162.

<sup>190</sup> *Ibid.*, pp.217-218.

The most important thing to be noted is that the text lays emphasis on the fact that medicine and *karma* each serve different roles. *Nāgasena* mentioned that for those tormented by poison, medicine was the solution and for those wanting to get rid of evil dispositions, *Nirvāṇa* was the solution.<sup>191</sup> It has been mentioned clearly that a disease that affects the human body has nothing to do with the *karma* or the one who is suffering from evil deeds. Even the Buddha suffered from bodily disorders. Therefore, as per the texts, medicine and the role of the physicians were given special importance by the Buddha.

### **Impact of *Karma***

The literal definition of *karma* or *kamma* in *Pāli* is action, and in Buddhist doctrine, the Buddha defines it as any deliberate act, be it good or bad.<sup>192</sup> A good act will lead to benefits of the well-doer, while the evil doer would suffer from evil dispositions. This has already been discussed in the *Vinaya Piṭaka*, where the Buddha while delivering religious discourses, refers to the gain and loss one suffers according to their acts. He emphasizes that any karmic act is the exercise of choice, good or bad.<sup>193</sup>

In the *Milinda Pañha*, *Nāgasena*, while conversing with King *Milinda*, mentions that three causes have been attributed to the birth of men - the *karma* born, 'men born from a season and born from a cause'.<sup>194</sup> Besides, *karma* has also been said to be one of the reasons that led to premature death. *Nāgasena* added in the text, that the Buddha referred *karma* to have been the cause, for the variation between individuals. When the king asked *Nāgasena* to cite an example, the latter mentioned how vegetables varied since each came from different

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<sup>191</sup> *Ibid.*, p. 218.

<sup>192</sup> *Dīgha Nikāya*, trans. Walshe, Maurice, p.33.

<sup>193</sup> *The Questions of King Milinda*, Part Two, p.35.

<sup>194</sup> *Ibid*, p 107.

seeds- some were sour, some pungent, while some acidic, astringent, sweet, or salty. Similarly, in the case of human beings, each person has a separate nature and a set of distinct characteristics. Each has their own set of *karmas* and it is *karma*, that divides them into low, high and the like-divisions. *Karma* has also been given importance on how one faces consequences in life. *Nāgasena* gives an instance that one does not plough the field after they are hungry, neither dig the well after being thirsty. It's one's precious efforts that help decide their future. While discussing one's deeds *Nāgasena* explained that when an animal eats hard pieces of gravel while having food, it gets destroyed in most cases, as it reaches the lower part of the abdomen. In cases of an embryo is inside, it doesn't get destroyed, only because of the influence of *karma*. Therefore, even if the beings are present in the purgatory, they are still not destroyed, because of the effects of *karma*.<sup>195</sup> However, it has always been emphasized that the bodily disorders and *karma* are not related. Diseases can only be cured by physicians and medicines, while *Nirvāṇa* can be achieved only through good *karma*.

The Buddhist doctrine lays importance on the idea of the *karma* and how it affects the human life in a very similar way to how the later texts on medicine - both the *Suśruta* and the *Caraka Saṃhitā* – upheld the importance on the code of conduct in life. It has been mentioned, how exogenous factors and certain malignant spirits, along with the adverse outcome one faces, depends on the ill conduct in one's life. Though rational and scientific in approach, this adds a major difference between the early Buddhist texts discussing the diseases and remedies, and the later texts that still attached great importance to such supra

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<sup>195</sup> *The Questions of King Milinda*, Part One, p. 109

bodily influences, including one's *karma* and conduct of life to understand the physiology of the human body. On the other hand, though Buddhist tradition laid great importance on *karma*, it always treated both the aspect of the bodily disorders and the *karma* separately.

### **The Self and the sensory perception of humans**

In Buddhist doctrines, the self has been dealt in a philosophical context rather than scientific. The same kind of definitions of self has been given in the *Āyurveda*, where the human body is defined as the seat of consciousness. In the Buddhist doctrine, the Buddha explained the same to one of the questions by the *Lichhavīs*.<sup>196</sup> The Buddha mentioned that one who attains enlightenment and realises it by his own super-knowledge and preaches *Dhamma* experiences a bliss in himself. The experience of preaching *Dhamma* is addressed as being blissfully perfect from the very beginning till its end. It results in a freedom that is similar to the freedom from debt, or from sickness, or from slavery.<sup>197</sup>

The being who follows the noble eightfold path and practices morality and *Dhamma* attains the realisation of things. This leads to the state of *Nirvāṇa*, where the being is detached from the sense-desires. He is detached from unwholesome states, and it is said that there is no part of the entire body that remains untouched by the bliss, attained from this freedom and detachment. Therefore, the Buddha believes that the soul is neither different from the body nor the same.

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<sup>196</sup> *Dīgha Nikāya*, p. 156.

<sup>197</sup> *The Questions of King Milinda*, Part Two, p. 181.

The mind when focussed upon knowledge, attains realisation and vision through the bodily organs. After attaining the ultimate realisation, they do not feel that ‘anything is further left’.<sup>198</sup>

*Milinda Pañha* suggests that the living principle, within which the image is seen, forms through the sensory organs – vision through the eyes, hearing sounds through the ears, taste through the tongue, smell through the nose, and the mind, responsible for understanding the righteousness and the *Dhamma*.<sup>199</sup> *Nāgasena* said, that it is by reason of the eye and the other sense organs that help in the rise of sight, contact, sensation, idea, thought, abstraction, sense of vitality and attention. A succession of cause and effect results from the simultaneous working of the five sense organs. It is here that the sight of a particular image arises, helping in the occurrence of the thought perception in the mind.<sup>200</sup> This happens quite naturally. Where there is thought perception, there is always a sensation and an idea, and conceived intention, reflection, and an investigation of the mind.

In the later medical texts as well, the supreme self or the *parama-ātmanā* has been said to be of an eternal nature and it possesses the knowledge that comes through the mind, intellect and the sense organs.<sup>201</sup>

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<sup>198</sup> *Dīgha Nikāya*, p. 157.

<sup>199</sup> *The Questions of King Milinda*, Part One, p. 86

<sup>200</sup> *Ibid.*, p.89.

<sup>201</sup> *Caraka Saṃhitā*, Volume One, p.402.

## **The truth as the ultimate medicine**

The Buddhist sources lay importance on following the Four Noble Truths and the eightfold path preached by the Buddha, to cease suffering in one's life. Both the *Vinaya Piṭaka* and the *Milinda Pañha* interestingly brings the discussion on following the four-noble truths, while discussing human diseases and their remedies. It has always been emphasized by the Buddha, that truth has been the ultimate medicine to all human suffering. Even when King *Milinda* asked *Nāgasena* about the 'antidote and the medicine bazaar of the Buddha', the latter mentioned that truth, and following the paths leading to truth, is the ultimate medicine aimed at the cessation of pain, sorrow, and all evil dispositions.<sup>202</sup> The four noble truths were the truth as to sorrow, the truth as the origin of the sorrow, cessation of the sorrow, and the truth as the path leading to the cessation of the sorrow. The Buddha focuses significantly on the attempt to alleviate the sorrow in the first place. It should be understood that both the diseases and medicine were separate from attaining *Nirvāṇa*, which put an end to grief. Only medicine could treat the physiological disorders, but the ultimate pain that humans went through, because of the evil dispositions within, couldn't have been treated by the medicines and drugs. The Buddha laid significant emphasis on following the Four noble truths and the eightfold path, which served to be the sole and ultimate medicine, ending such suffering.<sup>203</sup> When one follows the same correctly, they attain *Nirvāṇa*. One faces pain in the initial stage of *Nirvāṇa*, but with its gradual progression, the pain finally alleviates and the being is free from all desires and suffering.

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<sup>202</sup> *The Questions of King Milinda*, Part Two, p.217.

<sup>203</sup> *Ibid.*, p.218.

The *Dīgha Nikāya* points out that the validity of the whole doctrine of *karma* and rebirth is dependent on conventional truth, and as soon as one attains enlightenment, the minds stop focussing on the idea of one's own self and the desires arising from the same.<sup>204</sup>

## Conclusion

The Buddhist medical tradition served as the transition of medicine from the earlier, mainly magical and ritualistic Vedic form, to the later, more rational, scientific and physiological form, that aimed towards explaining the human body, and the impact of diseases on it. Thus, the drive to cure or prevent bodily ailments led to the detailed analysis of the related drugs and surgical procedures. The Buddhist monasteries acted as the foundation for defining the significance of certain food items and herbs that were categorised under particular medicinal purposes. Though more of it was based on a random, trial and error methodology, this was the earliest and the nearest rational approach which was undertaken, often unintentionally, to understand diseases and seek remedies for the same.

The Buddha relied more on empirical evidence to understand a particular disease or disorder that affected the *Bhikkus* of the *saṅgha*, and never hesitated to incorporate the ideas and suggestions of the others, that could help the *Bhikkus* in general. The continuous interaction between the *Bhikkus* and the Buddha reveals the former's deep respect towards the latter. The Buddha was informed about every move, or before any decision was undertaken by the *Bhikkus*. The Buddha was seen to be concerned not only regarding the health and well-being of the *Bhikkus* but also their daily lifestyle and dietary regimen.

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<sup>204</sup> *Dīgha Nikāya*, pp.72-73.



He was the one who looked after what the *Bhikkus* consumed, and how and when particular food items should be consumed and procured, or in the cases of scarcity what the *Bhikkus* should do.

The Buddha, therefore, not only engaged himself in delivering religious discourses and giving an understanding of the four noble truths and the eightfold path for attaining *Nirvāṇa*, but also solutions to the day to day problems that the *Bhikkus* faced. He even asked the *Bhikkus* to look after each other in times of need, owing to the fact that they had left their families and stayed by themselves. The Buddha not only delivered a formal speech regarding the *Dhamma* and the *Nirvāṇa* but was also concerned about setting up daily norms for the *Bhikkus*. With time, the wandering ascetics of the Vedic period, who were mostly categorised as the healers or the *śramaṇas*, came to be identified as physicians. It was then that the role of the physicians and the use of medicine in the form of diets and drugs started gaining significance. The later texts on medicine did lay importance on the same, analysing them in a more detailed form. However, the earliest complicated surgical operations carried out by *Gīvaka*, was pivotal in making the role of a surgeon important in the society.

What should be noted, is the fact that change did start taking place gradually, from magical practices to much more rational and physiological explanations, in the context of explaining the human body and the diseases. However, the later texts like that of the *Suśruta* and the *Caraka Saṃhitā* both still laid emphasis on the idea of certain external factors or malignant spirits that caused certain unexplained diseases. Code of conduct was important in order to continue with a healthy and perfect life. Deities were offered prayers and in certain cases, charms and incantations were still being used to treat the diseased and ease their suffering in a similar manner like that in the Vedic period.

Both the texts attach great importance to the Vedic text, *Atharva Veda* acknowledging the same for being secondary to the foundation of the *Āyurveda*.

Therefore, it is interesting to note that although the Buddha did not give logical explanations to diseases and certain food items, that he particularly asked to use as medicines, he did not rely upon any charms, incantations or religious practices, to provide solutions for the daily problems in the life of the *Bhikkus*. Rather *karma* and medicine have been given separate roles. The concept of the bodily humors in the Buddhist tradition and the *tri-doṣas* in the later *Āyurveda* were similar. Both held the same view that the derangement of the bodily humors could affect the human body.

Besides, laying importance on the aspect of the truth and following the eight-fold path, it was said that *Nirvāṇa* could help end one of the major human pains- grief, which no medicine could take care of. The Buddhist community, thus gradually became not only the principal foundation of the attainment of enlightenment and *Nirvāṇa* but also one of the major institutions to have helped in the development and preservation of the medical knowledge. They composed a list of items that were categorised as medicines to treat each disease. The Buddha was practical in understanding the basic fact, that the well-being of the *Bhikkus* or the common people, did not just lay on alleviating sorrow or grief, but also maintaining a healthy lifestyle, and a physical balance.

Chapter Four

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A Rational approach to diseases  
and their treatment:  
A study of the  
*Suśruta* and the *Caraka Saṃhitā*

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## Introduction

The *Atharva Veda*, was focused more on the magical approach is towards identifying diseases and providing remedies for the same. With time, they gradually started getting replaced by a more scientific and rational approach. For the Vedic medicines, sacred utterances and charms were integral to the process of healing or treating a disease. Diseases were attributed to certain external forces, spirits, or demonic beings. Therefore, external factors that did not affect the human body, was given more importance. In the later medical treatises of the *Suśruta* and the *Caraka Saṃhitā* (which were based on the concept of *Āyurveda*), the emphasis was laid on studying the causes of diseases and physiology of the human body. The cause was attributed to the disequilibrium of the bodily *doṣas*, namely, the *Vāyu*, the *Pitta* and the *Kapha*. These *doṣas* were believed to have been the fundamental reason behind the diseases affecting the human body. Explanations of the diseases, along with a discussion on the human anatomy, the body parts, and the features, gave a more scientific basis to diseases and their remedies that were offered in the texts. *Āyurveda* involved the aetiology of the diseases, symptomatology and therapeutics. It also focused more on the path, by which a person, devoid of any disorder, could live happily and enjoy the normal lifespan of a hundred years. *Yukti Vyapāśraya* (rational and the scientific approach) was becoming more important than the *Daiva Vyapāśraya* (the supernatural therapy).<sup>205</sup> The *Caraka Saṃhitā* mentioned that it was the *tridoṣa* and ‘psyche’s interaction’ that affected each other during disorders.<sup>206</sup>

The *Atharva Veda* had mentioned certain plants and herbs that were used in the form of poultices or talismans. These were worn or applied on the body or prepared into drugs for

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<sup>205</sup> *Caraka Saṃhitā*, p. xxii

<sup>206</sup> *Ibid.*, Volume One, *Vimānā Sthāna*, pp 325-326.

intake, although much of this information remains scattered. In the later texts, especially the *Caraka Saṃhitā*, an entire chapter has been devoted to the study of medicinal properties of plants, complete with a list of certain medicinal plants and herbs in the last section. The importance of surgery, as well as the use of medicine and drugs, was also emphasized in the treatment of certain diseases. The properties of the drugs and medicines that were useful to the human body, their usage, and their contra-indications of *overdoṣage* or wrong administration by the physician, was also given prime significance.

The role of the 'Physician' gradually gained importance over time since the advent of the Vedic period. In the early ages, the magical healers or the *bhiṣaj atharvans* were the healers, who also specialised in surgical forms of treatment. They slowly became more specialised and skilled with their expertise in the field of medicine in the later ages, where they came to be addressed as the physicians. The *Atharva Veda Saṃhitā* was acknowledged by both these texts as a subdivision or *upāṅga* to the same. These texts, therefore, considered the *Atharva Veda* secondary to *Āyurveda*. Some of the verses in the *Ṛg Veda*, especially the Tenth *Mandala*, which mention about the medicinal plants and herbs have also been mentioned in the texts. I will now briefly discuss each of these texts and glance through each of them and how they identified certain diseases and gave a rational approach to them.

The oldest principal texts on Indian medicine are the *Suśruta* and the *Caraka Saṃhitā*. Both of them offers a detailed study of the major and minor diseases that affected the human body, and the remedial approaches that were used besides the medicine. There is not much of a difference between both the texts. However, one of the major distinguishing features is that *Suśruta Saṃhitā* discusses, more on surgical operations that were involved in treating both the major and minor diseases, while the *Caraka Saṃhitā* focuses more on the pathological

aspects while discussing the different medicines used in treating the diseases. But there are differences in the authorship and the date of composition of both the texts.

Both the texts have delved into the detail of discussing the definitions of the classical science of Indian medicine - the *Āyurveda*. The texts also discuss in detail, the three major *Doṣas* that has been the chief element of study in *Āyurveda*. It is the derangement and imbalance of the bodily *doṣas* which, causes diseases. I will discuss separately, each of these books at length, thereby reflecting on the ideas about how both the classical texts emphasize a rational approach, not only based on identifying diseases or treating them, but also towards explaining the human anatomy, features of the human body and the self, the therapeutics, and those medicinal plants and herbs that have been of use. More importantly, I will reflect on the idea of the transition in the context of both aetiology and therapeutics of the diseases. Earlier methods of identifying and treating the diseases were mainly based on a magical and religious approach.

Individual experiences in the aspect of cure and hygiene were being collected all throughout from the earlier time period which was codified and thus, formed the basis of the present *Āyurveda*. The verses in the Vedas gradually led to the progress of the medical knowledge. The *Atharva Veda* gave an identification of the diseases by their names; though the remedies for treating them involved magico-ritualistic approaches through various charms and spells, often accompanied with prayers to the different Vedic deities like that of *Indra*, *Soma*, *Rudra*, *Agni*, etc. However, verses on the diseases, medicine and surgery lay scattered throughout the text. *Suśruta* held the opinion that the *Atharvan* was pre-eminently a surgeon himself. There were different physicians who practised the art of healings in the Vedic India- the *Śalya Vaidyas* who were the surgeons, *Bhiṣajs* were the physicians and *Bhiṣaj atharvans*, the magic doctors or magical healers.

And towards the later period, a number of sects came up, identified as the *Rogaharas* (physicians), *Śalyaharas* (surgeons), *Viśaharas* (poison curers), *Krityaharas* (demon doctors) and *bhiṣaj atharvans*. *Suśruta* claimed that the names of a thousand and one medicinal drugs had been mentioned in the *Ṛg Veda*. The *Samhitā* also emphasized that there laid scanty and confused information on embryology, midwifery, child management, and sanitation in the Vedas from where he derived a basic knowledge. These were included in the compilations while creating the *Samhitā*, which to this day is nothing less than a scientific treatise.

The basic concepts of *Āyurveda* that evolved during the Vedic period, were further crystallized, refined and improved in the *Caraka Samhitā*. They were placed on a sound scientific footing so that all physiological and pathological phenomena were interpreted logically. Philosophical concepts of *Pañcamahābhūta* was studied in application to the human body.<sup>207</sup>

It was *Caraka Samhitā* that added the rational and scientific approach (*Yukti-Vyapāśraya*) to the earlier supernatural therapy (the *Daiva-Vyapāśraya*). *Yukti* was added as one of *pramāṇa* (means of valid knowledge) and it was emphasized to work according to rationale (*Yukti*). *Caraka* always stressed that proper theoretical knowledge (*jñāna*) should always be correlated with practical skill (*karma*). For the advancement of knowledge and research, the method of discussion among experts was adopted and mandated. It has been mentioned in the text, that Lord *Ātreya* was mostly seen presiding over such discussions.

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<sup>207</sup> *Caraka Samhitā*, p. xxii.

The text of the *Caraka Saṃhitā* analyses humans through a ‘psychosomatic approach’.<sup>208</sup> It terms happiness and sadness as the final consequences of health and disease respectively, which consequently affects the whole of a person.

These became the five means of examining a disease in a human being. *Āyurveda* relies completely on nature and it is only to provide assistance to nature, that drugs or other therapeutic measures were applied. It emphasizes on following a path that would help a person live a healthy life for hundred years. Basically, both the texts mention the use of a combination of drugs and decoctions, accompanied with proper diet and a right conduct of life. Medicines and surgical procedures were relied upon only when they were required.

Plants and certain herbs were studied analytically throughout the Vedic period.<sup>209</sup> However, study on the morphology and pharmacological activity of the medicinal plants and other drugs began during the post Vedic period. These studies have been documented in the *Caraka Saṃhitā*. Mostly plants were used as drugs, and the knowledge of plants in respect of name, form, properties, actions, and therapeutic uses was essential for physicians. Basic concepts such as *rasa*, *guna* (character), *vīryā* (vigour), *vipāka* (post digestion), and *prabhava* (origin) were studied rationally for interpreting drug action and these are described systematically in the text.<sup>210</sup>

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<sup>208</sup> *Caraka Saṃhitā*, p. xxiii.

<sup>209</sup> *Ibid.*, Volume One, Here *Osadhi sukta* of the *Rg veda* and certain portions of the *Atharva Veda* has been mentioned which give scattered information about the plants and herbs. p. xxv.

<sup>210</sup> *Ibid.*, *Vimānā Sthāna* p. 343.



*Āyus* means the conjunction of the body, sense organs, mind, and self, also known as *dhari*, *jīvita*, *nitiyaga* and *anubandha*. Scholars of *āyus* regards *Āyurveda* to be the most virtuous, which is good for the human beings.<sup>211</sup>

Now I will discuss how both the texts give an understanding of the human anatomy, the diseases that affected the body and the treatments they mention.

### **Anatomy and physiology of the human body**

Food consumed by human beings are digested with the help of their internal heat and ultimately assimilates in their system, giving rise to the lymph chyle or the *rasa*. The Lymph chyle has been described to be extremely thin and forms the essence of the assimilated food. It is primarily present in the heart, from where it flows through twenty-four vessels to the remotest parts of the body. Ten are 'up coursing, ten are down coursing, while four of them flow in a lateral direction.<sup>212</sup> The *rasa* constantly soothes and percolates throughout the body which further contributes to its growth, supporting life. Blood has been identified as the origin of the body that helps to maintain the vitality and therefore, should be preserved with great care. When vitiated by the deranged bodily wind, the blood becomes frothy, transparent and quick coursing. However, in its natural healthy form, it is vivid red in colour. Molecular construction of the body and dissection of the body was performed, in order to study the epidermis and the dermis, number and branches of blood vessels, and the nerves that lie embedded in the muscles.<sup>213</sup>

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<sup>211</sup> *Suśruta Saṃhitā*., Volume One, *Sūtra Sthāna*, p. 13.

<sup>212</sup> *Ibid.*, *Śarīra Sthāna*, pp.136-141

<sup>213</sup> *Ibid.*, pp 156-161.

Vital parts of the body that are identified, is referred to as the *marmas*. In total, there are one hundred and seven *marmas*, divided into five classes such as *māṅsa marma*, *sirā marma*, *snāyu marma*, *asthi marma* and *sandhi marma*. Eleven *māṅsa marmas* include the vulnerable muscle joints, forty-one *sirā marmas* include the veins, twenty-seven *snāyu marmas* include the vital ligament unions, eight *asthi marmas* include bone unions, and twenty *sandhi marmas* include more vulnerable joints. Besides, there are seven hundred *sirās* in the human body.<sup>214</sup> *Sirās* are vessels that help to carry the blood, and support by sustaining and nourishing the organism owing to their contractibility and expansibility. The *sirās* originate from the umbilical region in the body and spreads throughout the body - upwards, downwards and obliquely.<sup>215</sup> The life of an organism is present in the vessels surrounding its navel, which forms their starting point. Therefore, it has been mentioned that such *sirās* should not be opened by the surgeon as this can become dangerous for the human body.

The eye has been described in anatomical detail with the specific mention of the *Nayana-budbuda* (the eye ball). It has been described to be of two-fingers in diameter and two fingers and a half in circumference. It is almost round in shape and consists of all the five elements which comprise the universe. The element of the solid earth (*bhū*) contributes to the formation of the eye muscles, the element of heat or *Agni* in the blood courses through its veins and arteries, the gaseous element or the bodily wind or *Vāyu* contributes to the formation of the black part or iris, in which the pupil is located, and the *jala* or the fluid within the eye forms the white part, while the space or the *Ākāśa* forms the lachrymal ducts

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<sup>214</sup> *Suśruta Saṁhitā*, pp. 172-173.

<sup>215</sup> *Ibid.*, Vol. Two, *Śarīra Sthāna.*, p. 212.

through which the secretions are discharged.<sup>216</sup> Black portion of the eye or the *Kṛṣṇamaṇḍala*, which forms one third part of its whole extent, while the *Dr̥ṣṭi* or the central part of the retina, is the macula lutea that occupies only one-seventh part of the black portion.

The *Caraka Saṃhitā* describes both the body and mind as the locations of disorders as well as pleasures. *Punarvasu* gave detailed knowledge about the human body, where he draws a similarity between a person and the universe, stating that both are equal since both of them comprises innumerable constituents.<sup>217</sup> Consciousness is embedded within the human body, comprising five *Mahābhūtas* and the *dhātus*, or constituents.

The food consumed gets transformed through various factors such as body heat that helps in digestion. *Vāyu* helps in the absorption of the nutrients while, the moisture produces looseness and unctiousness, generating softness. A balanced use of food helps maintain a healthy equilibrium of *dhātus* within the body.

The seventh chapter within the *Śarīrasthāna* describes the human body at length. The body is divided into six parts - two upper extremities, two lower extremities, head-neck and the trunk, including the chest and the abdomen. There exists six layers of skin in the body, and three hundred and sixty bones, including the teeth sockets and nails.<sup>218</sup> *Cakrapāṇi* mentioned in the *Caraka Saṃhitā* that the number of bones mentioned in the text was 360 while that in the *Suśruta Saṃhitā* is 300 while the modern anatomy mentions it to be just 206 bones.<sup>219</sup> Ten regions where the vital breath is present, have been identified as the head, throat, heart, navel, anus, bladder, *ojas*, semen, blood, and flesh.

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<sup>216</sup> *Ibid.*, Volume Three, *Uttara Tantra*, pp. 25-28.

<sup>217</sup> *Caraka Saṃhitā*, Volume One, p.440.

<sup>218</sup> *Ibid.*, *Śarīra Sthāna*, pp 455-457.

<sup>219</sup> *Ibid.*, Volume Three, pp. 376-377.

The other fifteen parts identified are the visceral organs that include the liver, spleen, kidney, urinary bladder, stomach, rectum, anus, small intestines etc.<sup>220</sup> The physician having a detailed knowledge about all the body parts and their work, could only successfully treat all the diseases.

### **Definition of the self**

Both the texts give a more philosophical definition of the self rather than an anatomical or biological explanation of the same. The ‘Supreme Self or the *Param-ātmana*’ has been said to be of an eternal nature, and the knowledge it possesses ‘comes through the mind, intellect and the sense-organs’.<sup>221</sup> *Āyurveda* does not define the human body as a set of biological processes. The ‘*Puruṣa* or the self-conscious organic individual’ has been described as the resultant of the combination of the ‘soul and the primary material principles’. All the medical acts and processes within the human body are restricted to the *Puruṣa* alone.<sup>222</sup> The *Suśruta Saṃhitā* mentions the supreme nature or the *prakṛti* – which is defined as the predecessor of all created beings which is ‘self-begotten’ and connotes the three fundamental virtues- the *sattva*, *rajas* and *tamas*. Hearing, touch, sight, taste and smell form the subjects of the five intellectual organs of man, whereas the capabilities of speech, handling, pleasure and locomotion belong to the *karma indriya* successively.

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<sup>220</sup> *Caraka Saṃhitā, Sūtra Sthāna*, pp. 232-233.

<sup>221</sup> *Ibid.*, Volume One, p.402.

<sup>222</sup> *Suśruta Saṃhitā*, Mention of the created world is composed of the two distinct classes, such as the mobile and the immobile which are further sub divided into *agneya*- hot and *saumya*- cool. The animated world has been further subdivided into four different categories amongst which the ‘*Puruṣa* or the subjective personality is the greatest because all the other life forms were made to minister to the wants of the man on the earth’. p.9.

The *Īśvara* or the God is said to be the presiding deity that looks after the sense of egoism in the *puruṣa*. Both the *puruṣa* and *prakṛti* have been said to be the eternal realities. Both of them are ‘eternal and omnipresent’.<sup>223</sup>

*Caraka Saṃhitā* claims that every person is gifted with his own individuality and normal variations. This forms his unique constitution, termed as the *Prakṛti* that distinguishes him from the other individuals. The mind, self and body form a tripod, on which the world stands. The living body is the *puruṣa* (person). The Supreme Self is changeless and is the cause of consciousness. With the conjunction of the mind, body, properties of *Bhūtas* and sense organs, it is eternal and sees all the actions.<sup>224</sup>

The mind transcends the five identified sense organs, also known as the *sattva*. Its action is dependent on its objects and the accomplishments of self. Sense organs are capable of discerning their objects only when they are identified by the mind. Visual, auditory, olfactory, gustatory and tactile are the five sense organs, while, *Ākāśa*, *Vāyu*, *tejas*, *ap* and *pṛthvī* are the five matters of the sense organs.<sup>225</sup> Eyes, ears, nostrils, tongue and skin are the locations of the sense organs and five sense objects are sound, touch, vision, taste and smell.

The *Śarīra sthāna* discusses on the self and the *Puruṣa*, which is the consciousness. The mind is defined as the entity, responsible for the production of knowledge, even when comes in contact with the ‘self, sense organs and sense objects’. Two of the qualities of the mind are ‘subtleness and oneness’.<sup>226</sup>

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<sup>223</sup> *Ibid.*, Volume Two, p.116.

<sup>224</sup> *Ibid.*, Volume Two, Five elements- *pṛthvī*, *ap*, *tejas*, *vāyu* and *ākāśa*. Properties respectively are *gandha*, *rasa*, *rūpa*, *sparśa* and *śabda*. p. 118.

<sup>225</sup> *Caraka Saṃhitā, Sūtra Sthāna*, p.54

<sup>226</sup> *Ibid*, p. 398.

The personal self is known as the cause, from which all the sources of valid knowledge are known. The supreme self is eternal and has no source of origin, while the personal self is the ‘aggregate of all the entities, born of ignorance, aversion and desire’.<sup>227</sup> At the time of its cessation, the self gets detached from the pleasurable entities and those attached more to ego, are subject to the origin and destruction of self. The mind remains unconscious but active, while the self always brings forward the consciousness and therefore, has the power to become omnipresent. However, if put in a body, the self becomes restricted to the bodily sense organs. The beginning of the self and continuity of the body have been both said to be unknown. *Mokṣa* or emancipation is possible only through the absence of *rajas* and *tamas*. Detachment from their sources of conjunction results in the absence of rebirth.

### **Diseases and their diagnosis**

The *Suśruta Saṃhitā* defines diseases in respect of the *puruṣa* (the man), who is the carrier of any particular disease that proves a source of torment or pain to him. Four types of diseases have been broadly classified in the text - traumatic or extraneous in origin (*Āgantuka*), bodily (*Śarīra*), mental (*Mānasa*), and natural (*Svābhāvika*) in origin.<sup>228</sup> Physicians should look upon four factors of food, conduct in life, earthly elements and time, as the ‘accumulators, aggravators and pacifiers of the deranged bodily humors’ (the *Doṣas*)<sup>229</sup>.

With these classical texts on medicine, the role of the physician was gradually becoming more important. Entire sections of the chapters in both the texts describe the role of the

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<sup>227</sup> *Caraka Saṃhitā*, p.402.

<sup>228</sup> *Suśruta Saṃhitā*., Volume One, *Sūtra Sthāna*, p. 14.

<sup>229</sup> *Ibid.*, p.15

physician, the set of skills one must possess, the other eligible conditions to become a physician, the process of their initiation and even their social responsibility.

Initiation in the profession was imparted to a student belonging to one of the three, twice-born. He should be young and born in a family with a good background. He should be desirous of learning, be strong, energetic in action, contented and of a good character. He must have proper self-control, a well retentive memory, intellect, courage along with a pure mind and body. He should have the power of simple and clear comprehension, must have a command and a clear understanding of the things studied, and should also possess with the necessary qualifications of thin lips, thin teeth and tongue, straight nose, large, honest, intelligent eyes, with a kind face and contented frame of mind. As a professional, he must be polite in his speech and dealings, and be usually 'painstaking in his efforts'.<sup>230</sup> The mode of initiation was done by a Brahman preceptor, which involved a procedure in which a 'square sand cushion or platform, measuring a cubit in length and breadth, was laid out on a plot of smooth, levelled and sacred ground. The procedure should be conducted under the influence of any auspicious phase of the moon or an astral combination, such as the *Kranam* or *Karanam* and in a direction of the compass held most auspicious to that end. The cushion or the platform should be plastered with a solution of water and cow dung, and blades of *Kuśa* grass should be strewn over it. Then the gods, the *brahmins* and the physicians should be worshipped with 'oblations of flowers, fried paddy, gems and sun-dried rice'.<sup>231</sup>

The preceptor should lay down on a blade of *kuśa* grass tied up in the form of a knot, and the *Brahman* should sit along the side of the sacred cushion to his right, and kindle the sacred

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<sup>230</sup> *Ibid.*, pp. 16-18.

<sup>231</sup> *Ibid.*, Volume One, *Sūtra Sthāna*, p. 18.

fire close to his seat. After soaking the wigs of the four sacrificial trees of *khadira* (*Acacia catechu*), *palāśa* (*Butea monosperma* or the flame-of-the-forest), *devadāru* (*Cedrus deodara*) and *vilva* (*Aegle marmelos* or the Bael tree) or *vāṭa* (*Ficus benghalensis* or the Banyan tree) along with *uḍumbara* (*Ficus racemosa* – a type of fig tree), *aśvattha* (*Ficus religiosa* or the sacred Fig tree) and *mādhūka* (*Bassia latifolia* or *Mahua* Plant) in curd, honey and clarified butter or ghee, he should perform the rite of *Homa*, according to the rules of the (*darvī*) *homa* ceremony. After which the *Mahā Vyāhṛti Mantras* are recited and libations of clarified butter need to be offered into the sacrificial fire. The *svāhā mantra* must then be repeated in the honour of the Gods and the celestial physicians or the Rishis. The Brahman preceptor could initiate a student belonging to any of the twice born castes, while the *Kṣatriya* preceptor can initiate a student of *Kṣatriya*, a *Vaiśya* can initiate a student of his own caste, and a *Śūdra* student of good character and family background, may be initiated by omitting the *mantras* instructed to be recited on such an occasion. The disciples were asked to help the *brahmins*, elders, the preceptors, the friends, the honest, the helpless and those living at a close distance, as well as the relatives and the kinsmen, with the medicinal knowledge the disciples acquired. Treating the latter with medicines without charging for any remuneration, would result in a shower of blessings by God.

They were also instructed, not to medicinally treat a professional huntsman, a fowler, a habitual sinner, or those who were degraded in life. Through this path, they would acquire friends, fame, wealth and all that they desired in life.<sup>232</sup> However, if the preceptor himself treated the disciples in an unjust manner, he was blamed and regarded committing a sin, and all his great knowledge was regarded vague and useless.

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<sup>232</sup>*Suśruta Saṃhitā*, pp 19-20



It should also be noted, that a physician well versed in the principles of *Āyurveda* but an inexpert in his art and medical practice, loses his awareness and knowledge to treat a disease, while a physician experienced in his art but unfamiliar with the knowledge of *Āyurveda*, is to be condemned by all the good people and such a physician deserves capital punishment at the hands of the king. Such classes of physicians can never be trusted, owing to their half knowledge and in-expertise. A student in the discipline of medicine who is pure, obedient to the preceptor and is determined to his work, and learns with dedication all the procedures, will arrive at the end of the science.<sup>233</sup> After attaining the knowledge with the completion of the theoretical studies, the student was required to cultivate fine speech and constant practice in the art, in order to attain perfection. The chapter dealing with the general explanations – *Pravāsanīyamādhyayam*, explains that the preceptor while imparting the knowledge of medicine, should explain each *śloka* and the disciple should hear everything attentively. In order to gain perfection, a student should study as many allied branches of science and philosophy as possible.<sup>234</sup>

I will now discuss some of the diseases mentioned in both the texts and look at how their causes and symptoms were studied, and a prediction was done after which the progress of the disease was analysed to provide a cure.

Obesity was said to be a reason behind the changes in the condition of the lymph chyle. The lymph chyle that originated from the assimilated food of a person had a tendency to increase the quantity of the bodily *Kapham*.

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<sup>233</sup> *Ibid.*, *Sūtra Sthāna*, pp. 75-77.

<sup>234</sup> *Ibid.*, pp.78-79.

One who is in the habit of eating just after finishing a full course meal, or is addicted to sleeping during the daytime, or leads a sedentary lifestyle devoid of any physical exercise, is also subject to the accumulation of *Kapham* leading to weight gain and disorders related to obesity.<sup>235</sup> In the later sections of the commentaries on *Caraka Saṃhitā*, *Cakrapāṇi* suggested the use of honey in order to its desaturating property that would help in lessening the fat.<sup>236</sup>

It is interesting to note how the lifestyle and one's daily routine has been emphasized as one of the major reasons in the maintenance of a healthy body. The texts mention that swellings of an inflammatory nature are generally caused by the action of deranged *Vāyu*, *Pittam*, *Kapham* or blood, and also can be of a traumatic origin due to an external cause.

The texts mention that the diseases of the urinary tract or *nidānam prameha*, occur to those who mostly lead a sedentary lifestyle that eventually leads to the derangement of the bodily humors.<sup>237</sup> Early symptoms involved, sensation in the palm of the hands, soles of feet, the heaviness of the body, and shortness of breath. General characteristics of the *nidānam prameha* include a copious flow of cloudy urine, followed by abscesses and eruptions, which should be regarded as the combined action of the deranged *doṣas*. All types of *Prameha*, when left untreated, ultimately develops into *Madhumeha* or diabetes mellitus. The patient suffering from the latter gets distressing symptoms and the disease tends to become incurable.<sup>238</sup>

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<sup>235</sup> *Suśruta Saṃhitā* , pp. 106-107.

<sup>236</sup> *Caraka Saṃhitā*, Volume Three, p. 180.

<sup>237</sup> *Ibid.*, *Cikitsā Sthāna*, pp. 277-278.

<sup>238</sup> *Ibid.*, pp. 286-288.

Cutaneous affections or *Kuṣṭha* in general is thought to be caused by the injudicious conduct of life, such as consuming large quantities of unwholesome food or improper applications of medicated oil, clarified butter, intake of food at the wrong time, or voluntary suppression of natural urges of the body.<sup>239</sup>

Difficult labour or *mūḍha garbham* has also been discussed in the texts. It has been pointed out that eating inordinate quantities of *Śakas* and alkaline substances, use of purgatives and use of medicines to induce labour pain can, bring about abortions and tends to expel the foetus from the womb.<sup>240</sup> The child tends to sever from the uterine wall with its ‘placental attachment’ owing to a kind of ‘*abhighātam*’ (uterine contraction).<sup>241</sup> The foetus thus severed and dislodged from its position, leads to peristalsis in the uterus, and induces constant spasmodic contraction of the intestinal cavities and muscles causing pain in the liver and spleen.

The next section that discusses on the aspect of toxicology is the *Kalpasthānam* which mentions about the general poisoning through smoke or use of poisoned ornaments. In such cases of poisoning drugs, *muṣika* (small water fern or *Salvinia cucullata*) and *arjaka* (white *tulasī* or holy basil plant) should be tied round the wrists of a king as prophylactics to guard him against any sort of poisoned food or things. The king has been advised in the *Samhitā* to always be careful in using such food and drinks that are inclusive of poison destroying properties.<sup>242</sup> Different types of poison including root poison, leaf poison, flower, fruit or

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<sup>239</sup> *Ibid.*, pp. 346-348.

<sup>240</sup> *Ibid.*, pp. 404-406.

<sup>241</sup> *Ibid.*, p. 406

<sup>242</sup> *Suśruta Samhitā*, *Kalpa Sthāna*, pp. 673-675.

bark poison has been warned about. Such poisons aggravated the bodily *Vāyu* in virtue of its parching quality and vitiates the blood and the *Pitta* through its heat generating properties. It overwhelms the mind and tends to disintegrate the limbs and the muscles in virtue of its sharpness and penetrates into and deranges the minutest capillaries owing to its extreme subtle essence. It speedily proves fatal spreading throughout the body annihilating the root principles (*dhātus*) as well as the *doṣas* and the *mala* of the body, through the power of disintegration and does not adhere to any spot owing to its non-viscidness. It therefore baffles the efficacies of the other drugs and becomes irremediable on account of the extreme lightness of its potency and it cannot be easily assimilated owing to its innate indigestibility.

The last section of the *Suśruta Saṃhitā* which is the *Uttara Tantra* is a supplementary part of the treatise that mentions about certain eye diseases, diseases pertaining to the ears, that of the head and symptoms and treatments of some other major diseases like that of fever, jaundice, heart diseases, diarrhoea, asthma, insanity and others.

The *Pāṇḍu-roga* or jaundice was said to have been caused by the deranged bodily *Doṣas* resulting from eating clay or salts or saline tasted articles or strong liquors and also sleeping during the daytime. This results in contamination of the blood that gradually results in the yellowish skin colour. *Pāṇḍu roga* has been divided into four distinct types each due to the imbalance in the *vāta*, *Pitta* and *Kapha doṣas* and the fourth results from a combination of all the deranged *doṣas*. The disease is referred as the *pāṇḍu roga*, owing to the yellow colour of the skin that is an effect of the same.<sup>243</sup> Diagnosis of the disease is generally done with a set of initial symptoms that follow the onset of the disease, including cracking of the skin, a desire for eating clay, swelling of the eye-lids, yellow colour urine and stool, vomiting and

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<sup>243</sup>., *Suśruta Saṃhitā*, Volume Three, *Uttara Tantra*, Chapter on the *Pāṇḍu roga Pratiśedha*, p. 269

indigestion. The next major symptom that develops, is the black colour of the eyes and skin marked with the appearance of prominent black-coloured veins, black coloured stool and urine, and blackness of the face and the finger-nails. These mainly occur due to the *vātajā* type of *pāṇḍu*.

Jaundice caused due to the derangement of *Pitta* and *Kapha* includes symptoms like that of the yellowness of the eyes and skin, urine and stool, the face and the finger nails. In the case of a *Kapha doṣa* derangement, the colour of all the above parts mentioned develops whitishness. Besides these prominent symptoms, the patient also develops an aversion to food, thirst, vomiting, epileptic fits, weakness, exhaustion and a pain in the region of the heart.

The first chapter of the *Uttara Tantra*, which is the *Aupadravikam-madhyāyam*, gives specific descriptions of diseases, which form the ‘subject matter of the *Śālākya Tantra* (diseases of the eye, ear, nose and throat) as had been narrated by the king of *Videha*’. This supplementary text includes aetiology and symptomatology of diseases peculiar to infants and women and also diseases mentioned in the six books of the Practice of Medicine (*Kāya Cikitsā*) compiled by the holy sages. It also mentions diseases like that of *Upasarga* (demonology) and those of traumatic origin.<sup>244</sup>

Eye diseases have been identified in the text, to be caused by the derangement and aggravation of *Doṣas* for reasons such as diving in water immediately after an exposure to heat and sun, constant gazing at distant objects or remaining awake till late hours in the night, over excessive indulgence in worry or grief, or intake of products like *Śukta*, *āranāla* (fermented rice water), *māṣa* pulse and *kulattha* pulse. Seventy-six types of eye diseases

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<sup>244</sup> *Ibid.*, Volume Three, *Uttara Tantra*. pp. 1-3.

have been mentioned in details along with their symptoms and treatments. For instance, an accumulation of the deranged *doṣas* which makes the eye-lashes rough and sharp pointed and gives painful eyes, known as the *Pakṣma-kopa*.<sup>245</sup>

Ear diseases and ear ache have been said to occur due to deranged *Vāyu* and *Kapha*. Twenty-eight different types of ear diseases have been mentioned in the chapter on ear diseases-the *Karṇa-gata roga vijñānīya*.<sup>246</sup>

Eleven diseases pertaining to the head (*śiro-roga-vijñānīya*) have been identified, of which, four kinds respectively have been found to occur due to the action of the deranged *Vāyu*, *Pitta* and *Kapha*.<sup>247</sup>

Symptoms and treatment of fever have also been discussed in one of the chapters at length. To the query of the disciples, the divine physician *Dhanvantari* explained, that ‘fever is the king of all the bodily distempers’ as it affects the whole of the body. In its presence, the creature departs from life. Thus, it is ‘hailed as the lord of the ailments and none, but a God or a man can bear the heat of fever’.<sup>248</sup> It is rather the divine element in men, depending on *karma*, that enables a person to bear the intolerable heat of fever, whereas the other animals (lower to the humans) become weak under its influence. Fever or *jvara* is marked by the arrest of the flow of perspiration, increased heat, body pain and the numbness of limbs.<sup>249</sup>

Eight types of fever have been identified and primarily all of them are brought on through the derangement of the three bodily *doṣas* separately, or any two of them in combination or

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<sup>245</sup> *Suśruta Saṁhitā*, Section on the pathology of the diseases of the eye lids. p.15.

<sup>246</sup> *Ibid.*, pp. 106-107.

<sup>247</sup> *Caraka Saṁhitā*, pp. 131-133.

<sup>248</sup> *Ibid.*, pp. 212-214.

<sup>249</sup> *Ibid.*, *Nidāna Sthāna*, p. 253.

by extraneous causes. When the *doṣas* are deranged by their aggravating causes, they bring an attack of fever, especially in the hours of their specific dominance. The *Kapha* is aggravated in the morning, *Pitta* at noon and *Vāyu* in the evening. Deranged *doṣas* enter into the *āmāśaya* and then into *rasa* (lymph chyle) by their heat (*uśman*). *Doṣas* mixed with the *rasa* obstruct the *rasa* and sweat-carrying ducts, impairing the digestive system and spreading all over the body.<sup>250</sup>

The texts list an extensive array of factors that could cause an aggravation of the fundamental vital principles of the body, ultimately leading to the manifestation of fever. These factors include any kind of blow, or presence of any other affections in the organism, suppuration (of an existing boil or an ulcer of the body), over-fatigue, introduction of poisonous substances into the human digestive system, infringement of any habitual rule of diet and conduct, sudden change of seasons or smelling a poisonous herb or a flower, grief, malignant influences of stars or planets (at the time of birth), dynamics of deadly incantations or charms, curses from the Brahmans or the superiors, dread or anxiety, and injudicious conduct of life.

Symptoms of fever include fatigue, aversion to work, paleness in complexion, a rise in temperature, the presence of a bad taste in the mouth, tearfulness of the eyes, constant yawning, lethargy, disrelish for food, depression, the darkness of vision and a feeling of creeping cold in the body. Different types of fever have been discussed at length, for example the *vātajā* fever, the *Kaphaja* fever, the *Pittaja* fever arising out of the derangement of *doṣas*.

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<sup>250</sup> *Suśruta Saṁhitā*, Volume Three, *Uttara Tantra*, pp. 242.

While the *tri-doṣaja* fever, resulting out of a combination of the deranging *doṣas* and the *āgantuka* fever that results from an external blow or an injury.<sup>251</sup>

*Caraka Saṃhitā* mentions that a disturbance in the functioning of *Tridoṣa* leads to bodily disorders. It mentions that men are not machines and therefore, can't be operated equally and with a uniform law. Scientific methods of diagnosing diseases took perception and inference into account. The first section, the *Sūtrasthāna* starts with defining disease and its role as a great obstacle for human beings, destroying their wealth and life. The sages meditated and saw *Indra* as their saviour. It is said that they thought only the God of the Gods, *Indra*, can tell the correct means of amelioration of diseases.<sup>252</sup> Perverted, negative and excessive use of time, intellect and sense objects, is the threefold cause of both psychic and somatic disorders.

Good physicians should be endowed with memory, be proficient in rational management and must have self-control and presence of mind to be capable of treating a patient, with a combination of drugs.

Psychological disorders like envy, grief, fear, anger, aversion and vanity are also said to be caused by intellectual error. It should be noted that these were never given a rational cause or understood as a habit. People suffering from these were given justifications that they such disorders were a result of their misconduct.

The three types of diseases identified were innate, exogenous and psychic. Innate arises due to the bodily *doṣas*, exogenous is caused by *Bhūta* (spirits and organisms), poisoned air, fire, trauma, etc.

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<sup>251</sup> *Caraka Saṃhitā, Sūtra Sthāna*, pp. 249-250.

<sup>252</sup> *Ibid.*, pp. 137-139.



While, psychic is caused by the non-fulfilment of desires and facing of the undesired.<sup>253</sup> *Agniveśa* in the *Samhitā* asks the need for a physician if there was a natural termination of a disorder, then where the requirement for a physician comes. *Punarvasu* answered that the bodily *dhātus* are brought back to the equilibrium and balance, which is the essence of the treatment of disorders (therapeutics). Balancing the *dhātus* is the function of a physician, and as a reward, physicians are granted longevity and happiness.

The *Vimānāsthāna* discusses the sections on how a physician should gain his knowledge by complete dedication to the study of *Āyurveda* and a proper disciplined conduct of life that involves respecting his mentor or teacher.<sup>254</sup> It also specifies that there exists a three-fold source of knowledge related to the characters of the diseases - authority, perception and inference.

The *Nidāna Sthāna* and the *Cikitsā Sthāna* furnishes a list of major and minor diseases and focuses on the symptoms and treatments of the same. I will discuss only a few of them in details.

One of the most common and major diseases is *jvara* or fever, which is said to be the earliest of the somatic diseases in the *Caraka Samhitā*. It arises from eight causative factors- *vāta*, *Pitta*, *Kapha*, *vāta-Pitta*, *Pitta-Kapha*, *vāta-Kapha-Pitta* and exogeneous factors.<sup>255</sup> The over use of light, cold substances, non-unctuous enema, over-exercise or suppression of natural urges can lead to vitiation of the *vāta*. After entering the *amāśaya* (stomach), the vitiated *vāta* gets mixed up with the body heat. This is accompanied by the initial *dhātu*, produced by the digestion of food (*rasa*). The vitiated *vāta* combines with the initial *dhātu*,

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<sup>253</sup> *Ibid.*, pp. 141.

<sup>254</sup> *Ibid.*, *Vimānāsthāna*, pp. 351-352.

<sup>255</sup> *Ibid.*, *Cikitsā Sthāna*, pp. 26-28.

ultimately blocks the *rasa* carrying channels. Consequently, sweat that affects the *Agni*, takes out the heat from the process of digestion and spreads it throughout the body leading to a rise in temperature, or fever.

Symptoms include frequent fluctuations of temperature with extreme severities, roughness and reddishness of nails, eyes, face, urine, stool and skin, shifting pain throughout the body, numbness in the feet, pain in the waist, joints, sides, back and an overall fatigue. Additional symptoms including anorexia, salivation, malaise, yawning, and sensations in teeth also appear.

*Pitta* gets vitiated by the excessive use of hot, sour, saline and pungent food, along with exposure to intense sun or fire, anger or grief. In a similar way, the *Pitta* fever arises with symptoms of nausea, inflammation of mouth, diarrhoea, greenishness or yellowness of nails and eyes.

Excessive use of heavy, sweet, unctuous, cold substances, accompanied with day sleep and a sedentary lifestyle, leads to the vitiation of *Kapha* within the body, resulting in *Kapha* fever. Such fevers generally occur during the morning or early night, and mostly during the spring season. Certain exogenous agents, including spells and curses, along with the effects of evil organisms, can also result in fever. No other disease is said to be more complicated than fever, and is referred to as the king of all the diseases in both the *Caraka* and *Suśruta Saṃhitā*.

*Kuṣṭha* or Leprosy arises when three *doṣas*, and four *dūṣya śarīra dhātus*- *tvac, māṃsa, rakta* and *lasīkā* gets affected. There is no leprosy that is caused by vitiation of only one *doṣa*. However, the types of *Kuṣṭha* arising from similar sources have a difference in pain, colour,

symptoms and effects. If *Vāta* is predominant, *Kāpāla Kuṣṭha* arises. If *Pitta* is dominant, *audumara Kuṣṭha* arises. When *Kapha* dominates, *maṇḍala Kuṣṭha* arises.

When two bodily *doṣas* becomes predominant, their combined effects give rise to different types of *Kuṣṭha*. When *vāta* and *Pitta* predominate in combination, *ṛśyajihva kuṣṭha* arises. When *Kapha* and *vāta* dominates, *sidhmā Kuṣṭha* arises and in aggravation of all the *doṣas*, *Kākaṇaka Kuṣṭha* arises.<sup>256</sup> In cases of *Kuṣṭha* with minor symptoms, surgical acts of venesection and scraping were also carried out. Symptoms include excessive perspiration, abnormal skin colour, piercing pain, burning and itching, and pus. A person who neglects the disease in the first stage is regarded dead after a time because it tends to become more complicated to treat and incurable.

Insanity or *Unmāda* is again said to be caused by derangement of *vāta*, *Pitta*, *Kapha*, *saṃnipāta* and certain exogenous causes.<sup>257</sup> ‘People with distressed minds, aggravated *doṣas*, consumption of dirty or unsuitable food items, irregular diet habits, application of tantric practices improperly, and also those minds inflicted with anger, greed, fear, confusion and intellect becomes unstable. Insanity has been defined as the wandering of the mind, intellect, consciousness, knowledge, memory, and conduct’.<sup>258</sup> Exogenous causes include certain acts of violence or pleasure. It has also been mentioned that insanity caused by one’s own deed through intellectual error can never be remedied by the Gods or the forefathers or the *rākṣasas*. One should in such cases regard oneself as the doer of happiness and unhappiness and follow the path without any fear.

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<sup>256</sup> *Caraka Saṃhitā, Cikitsā Sthāna*, pp.129-131.

<sup>257</sup> *Ibid.*, *Cikitsā Sthāna*, p. 161.

<sup>258</sup> *Suśruta Saṃhitā*, Volume Three, *Uttara Tantra*, p 388.

*Dhātus* of the body gets increased by prolonged use of certain food properties. For instance, blood by blood, fat by fat, etc.<sup>259</sup> Components of the body are of two types *Caraka Saṃhitā* mentions, that of the waste products, those which cause affliction in the body if kept within the body and the assimilable products, which have twenty properties beginning with heaviness and ending with liquidity and *dhātus* from *rasa* to *śukra*.<sup>260</sup>

Besides these, the *Śarīra Sthāna* describes a whole section on embryology and development of the foetus. Though, not much attention is given on the subject of gynaecology however, ailments associated with pregnant women are given emphasis on. The mention of words such as ‘menstrual blood’ and the ‘ovum’ or the ‘uterus’ have been discussed in the context of pregnancy and child birth. However, the *Suśruta Saṃhitā* deals with chapters discussing the diseases that affected the mammary glands of women and also genital diseases like hernia. It is rather mentioned that the semen or the *śukra* of the man is ‘constituted of four quarters, the *vāyu*, *agni*, *pṛthivī*, and *ap* and originated from the *rasās*.<sup>261</sup>

The next chapter on the embryology discusses the factors on which the birth of a male or a female child is dependant. It is mentioned that when the zygote within the female body is dominated by sperm from the male, a twin is born either male or female. While the dominance of ovum results in a female child and dominance of the sperm in a male child.<sup>262</sup> And in case of the birth of a hermaphrodite the ovum and sperm gets damaged within the zygote that leads to the same.

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<sup>259</sup> *Suśruta Saṃhitā*, Volume One, *Śarīra Sthāna*, p.447.

<sup>260</sup> *Ibid*, p.450.

<sup>261</sup> *Caraka Saṃhitā*, p. 412.

<sup>262</sup> *Ibid.*, p. 413

While, certain external factors like the jealousy of the parents can also be an important cause. Besides, the text claims that multiple children can be conceived by a pregnant woman on account of her ‘past deeds and also God’s pleasure’.<sup>263</sup> Eight types of genetic sexual disorders are described in the text, however, all of them are attributed to one’s past actions and have not been given a rational cause.<sup>264</sup>

Development of the foetus and the differences in its shape, complexion or sense organs were thought to have been caused by the ‘defects of genes, the self, past deeds, time and mother’s food and behaviour and vitiated *doṣas*’.<sup>265</sup> The physique and the psyche of the foetus remains dependant not only on the past actions but also by *rajas* and *tamas*. Apart from these factors, delivery of a healthy foetus majorly depended on the proper nourishment of the mother. It was produced by an aggregate of the mother, father, self, suitability, nutrition and the ‘psyche as an associate in the act’.<sup>266</sup> In fact, the *Caraka Saṃhitā* mentioned that the embryo had its origin in the mother’s womb and therefore, certain features of that of the skin, blood, flesh, fat, liver, spleen, kidneys, urinary bladder were said to have been the maternal entities.<sup>267</sup> No parent was allowed to remain childless. The *Suśruta Saṃhitā* also discusses the It is important to note that this text, for the very first times, gives a detailed discussion on pregnancy and the development and delivery of the foetus. It also gives information on the post-natal care and the importance of the wet nurses and the mid-wives. Their roles were significant, helping in the delivery and the newly born child’s care.<sup>268</sup> The *Atharva Veda*

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<sup>263</sup> *Ibid.*, p. 413.

<sup>264</sup> *Ibid.*, p. 414

<sup>265</sup> *Ibid.*, p. 416.

<sup>266</sup> *Ibid.*, p. 424.

<sup>267</sup> *Ibid.*, p. 421.

<sup>268</sup> *Suśruta Saṃhitā*, p, 221. The wet nurses were supposed to carry out certain natal rites and maintain the diet of the child as well as the mother, taking care of the both.

also discusses sections on embryology however, not particularly detailing the sections. The major factors which in the later medical texts have been described to be the cause of the birth of a male or female child, was left undiscussed in the *Atharva Veda*. The latter showed more interest on performing certain charms and spells in order to help the pregnant woman conceive a male child and get rid of the evil spirits leading to a miscarriage.

### **The concept of the *tri- doṣas***

The *Suśruta Saṃhitā* focuses on one of the major elements in the *Āyurveda*, which is the humors or the *doṣas*. The human body is constituted of the bodily humors (*doṣas*), excretions (*mala*) and the fundamental principles (*dhātus* of blood, marrow, etc.).<sup>269</sup> Three major elements are that of the *Vāyu*, the *Pittam* and the *śleṣhma* or *kapha*. *Vāyu* imparts motion to the body, carrying of the sensations of the respective sense organs, the passing down of food due to its receptacles, separation of excretions from the assimilated food and retention and evacuation of urine and the other fluids. *Pittam* is responsible for the pigmentations and colouring of the skin, digestion and metabolism, nutrition of the protoplasmic cells, preservation of the eye sight, maintenance of the body temperature, origination of intellect and helping in maintaining the *Agni karma* or the thermogenetic potency in the body. *Śleṣmaha* helps to lubricate the interior of the joints, contributing to the gloss of the body, and aiding in the formation of healthy granules in sores, adding to the size of the body, building fresh tissues, increasing strength of the tissues and giving firmness to the limbs. Loss of the bodily *Vāyu* is followed by a state of languor, shortness of breath and speech, uneasiness and loss of consciousness. Loss of *Pittam* is marked by the dullness of

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<sup>269</sup> *Suśruta Saṃhitā*, Volume One, *Sūtra Sthāna*, p. 33.

complexion, diminution of the body heat and an impaired digestive system. Loss of phlegm or the *śleṣhma* or *Kapham* is marked by dryness, the sensation of internal burning and feeling of emptiness in the stomach, looseness of joints, weakness and insomnia. Remedies include growth or formation of the humors lost or deteriorated.

The concept of *tri-doṣa* was also studied at length in terms of properties, physiological and pathological functions in the *Caraka Saṃhitā*. *Doṣas* have been mentioned where, *Vāyu*, *Pitta* and *Kapha* are the three somatic *doṣas* and *rajas* and *tamas* are the psychic ones.<sup>270</sup>

### **Treatment of the diseases**

Implements that have been mentioned in the *Suśruta Saṃhitā* included crude implements of the earlier period like that of the bits of glass and bamboo skin. It has also been pointed out that the quartered animals during the Vedic sacrifices gave an excellent scope and materials that helped to study the anatomy. *Suśruta* became the first one to have classified the surgical operations into five different kinds- *Āhārya* (extraction of solid bodies), *bhedya* (excising), *chedya* (incising), *eṣya* (probing), *lekhya* (scarifying), *sīvyā* (suturing), *vedha* (puncturing), and *visrāvaṇa* (evacuating fluids).<sup>271</sup> Besides, the *Saṃhitā* recognizes one twenty-five types of instruments, constructed after the shapes of beasts birds, and authorises the surgeon to devise new instruments according to the exigencies of each case. Even a light refreshment was said to have been offered to the patient before undergoing any surgical treatment. He has also referred to the process of fumigation of the sick room with the vapours of plants like that of white *mustard*, *bdellium*, *nimva* leaves and resinous gums of *sāla* trees, etc.

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<sup>270</sup> *Caraka Saṃhitā, Sūtra Sthāna*, pp. 6-7.

<sup>271</sup> *Suśruta Saṃhitā, Sūtra Sthāna*, p. 72.

Surgery was to be employed only when the affected vital energy of the patient was not strong enough to effect the cure. *Suśruta* was also the first one to have successfully demonstrated the transplantation of the skin flaps and discovered plastic and rhinoplastic operations.<sup>272</sup>

*Sūtrasthānam* discusses a chapter on the use of leeches, the process is known as the *Jālaūka vicaraṇīyamadhyāyam*.<sup>273</sup> Leeches are to be applied where the patient would be found too old, or in case of a physically weak woman or an infant or a person of an extremely timid position and those who are not fit to be surgically operated upon. Blood vitiated by the deranged wind or bile and phlegm should be respectively ‘sucked through a horn, by leeches and a gourd like appliance (*alāvu yantra*) or whichever is available at the time, irrespective of such vitiation, whenever such bleeding or sucking would be found to be imperatively necessary’.<sup>274</sup> Leeches should be used in sucking the blood vitiated through the action of the deranged bodily wind. Leeches that are born in water are possessed of sweet or soothing properties and therefore, is used in sucking the blood vitiated through the action of the deranged phlegm or *Kapham*. The part out of which blood is to be sucked should first be scarified or slightly cut in two three places. Then the mouth or the open end should be covered with a thin piece of muslin tied around its edges should be placed over it and sucked with the mouth through the aperture at its tip or top end equipped with a lighted lamp placed in its inside. However, a person bitten by certain venomous leeches can suffer from fever, burning, drowsiness. Leeches after the blood sucking is completed should be sprinkled with *saindhava* or rock salt so that they fall off.

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<sup>272</sup> *Ibid.*, pp.238-239.

<sup>273</sup> *Suśruta Samhitā*, pp. 98-100.

<sup>274</sup> *Ibid.*, *Sūtra Sthāna*, p. 104.



Treatment of blood or *Śoṇita varṇanīyamadhyāyam* has also been mentioned. The process of bloodletting as a form of surgical treatment has also been mentioned.<sup>275</sup> It is basically of two types- the scarification process and the venesection. A knife like instrument should be driven straight and speedily so as to make a straight incision which does not injure the narrow veins or arteries. However, certain points are kept in mind during the process, for instance, bloodletting done on a cloudy day or with a wrong incision or performed on a patient with an empty stomach with little or no outflow of blood can be dangerous. Vitiating blood if fails to find a way out of the body can give rise to itching or swelling like conditions in which case, bloodletting should be performed. It is followed by certain side effects such as feeling of light headedness and dizziness.

Person accustomed to bloodletting enjoys immunity from all types of diseases especially that of the skin, sarcotoma or malignant tumours, oedema, ovarian tumours and erysipelas (red patches on skin due to bacterial infections). In case of excessive flow or haemorrhage, the mouth of the incision should be rubbed with a composition of the powders of *lodhra* (lotus root), *priyaṅgu* (medicinal plant & perfume), *mādhūka* (mahua) and *śalmali* (Silk cotton tree).<sup>276</sup> Four measures for the stoppage of bleeding has also been mentioned which includes that of the contraction of the affected part (*sandānan*), thickening of the local blood (*skandanam*), process of setting up a suppuration in the wound (*pācanam*) and cauterization or (*dāhanam*).

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<sup>275</sup> *Suśruta Saṁhitā*, p. 12.

<sup>276</sup> *Ibid.*, *Sūtra Sthāna*, pp. 15-16.

People with obesity are prescribed drugs with medical compositions of *guggulu*, *śilājī*, *gomūtra*, *triphalā*, *mudga*, *koradūṣa*, *śyāmaka* and *uddālaka* that have anti-fat properties helping in cleansing the internal channels within the body along with daily physical exercise.

Ulcers or swellings are said to be treated with proper bandages and medicinal plasters in cases of inflammatory swellings. A bandage is also applied as it is thought to help in the rapid process of healing keeping the joints steady as well as helping keep the area purified and clean.

One hundred and one surgical instruments have been mentioned and the surgical appliances have been divided into six different groups- the *svastika*, the *sandaṃśa*, the *tāla*, the *nāḍi yantras* and the *śalākā* besides the minor or accessory appliances *upayantras*. The *svastikas* were the forceps that were again divided into twenty-four sub classes. All the instruments were made out of iron and the mouths of all these appliances were usually made to resemble those of birds and beasts.

Therefore, they were made to resemble the mouths of some particular animal in shape or otherwise according to the suggestions given by the experienced physicians, in consideration of the directions laid down in the Shastras.<sup>277</sup> Appliances should also neither be made too large nor too small and they should be made with great attention, also provided with convenient handles. The *sandaṃśa* are the tongs which were used to withdraw any thorn like substances from below the skin, flesh, veins, or nerves. The *tāla yantras* were used to extract splinters from inside the nose, ears and other external channels or passages of the body. The *Nāḍi yantras* were the tubular instruments like that of a syringe which were used for extracting any *śalya* that had pricked into the external canals or passages of the body or for

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<sup>277</sup> *Suśruta Samhitā*, p. 57.

inspecting the seat of affection as in the case of piles, etc. or for sucking blood or simply as accessories to other surgical appliances. Minor surgical accessories included substances such as ropes, silk thread, bark and inner skin of the trees, creepers, linen, stones, large and oval shaped pebbles, hammer, palms of the hands, soles of the feet, fingers, tongue, the teeth, the nails, hair, mane of horses, a magnet, alkali, fire and medicine, and such acts such as spitting, straining, exhilaration and intimidation. Intelligent surgeons should exercise their judgement and determine the nature of the surgical operations required for a particular disease. An appliance that is too thick or made of an inferior quality metal should never be used as a surgical instrument. An intelligent physician was to make his surgical instruments made by a skilful and an experienced blacksmith and of pure, strong and sharp iron steel. It is interesting to note how these texts keep emphasizing the importance of the physician in terms of his capability to judge a particular situation. Not only were they expected to attain expertise in medical theories and surgical practices, but also excel as a responsible person who had to have a sharp presence of mind and dedication for the profession.

*Cikitsā Sthanam* mentions the therapeutics for fractures, crushed and dislocated joints. It is prescribed that they should not be shaken and cold lotions or washes and medicated plasters should be applied to the part. A joint is spontaneously reset to its natural or normal state or position after the ‘correction of its deformity incidental to a blow or hurt having been affected. The fractured and the dislocated part should be first covered with a piece of linen soaked in clarified butter and then properly bandaged’.<sup>278</sup> Similar details have also been suggested in the work of Girindranath Mukhopadhyay who discusses the processes of surgical operations in the texts.

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<sup>278</sup> *Suśruta Samhitā*, Volume Two, *Cikitsā Sthāna*, pp 279-280.

In the case of haemorrhoids or *arśas*, the remedial measures suggested are the employment of active medicinal remedies, application of an alkali, actual cauterization and surgical operations.<sup>279</sup>

In cases of urinary disorders, milk, *yavāgū* (a gruel), decoction or an alkali prepared with clarified butter and certain herbs like *vasīra* (*Achyranthes aspera*), *śatāvarī* (*Asparagus racemosus*), *kubjaka* (*Eleocharis dulcis* or the Water Chestnut plant), helps in preventing the action of the deranged *Vāyu* causing the disintegration of *aśmarī* (urinary calculi).<sup>280</sup> In such cases, a regulation of diet and conduct is mentioned along with the intake of matured grain of *Śāli* (red rice), *ṣaṣṭika* (a variety of quick growing rice), barley, wheat, *uddālaka* (another type of rice), etc. boiled along with the soup or a decoction mixed with *nimva* leaves. People habituated to a meat diet should be given the cooked flesh of *jāṅgala* animals devoid of all fatty matter.<sup>281</sup> This is a very interesting point that has been discussed in details by Francis Zimmerman in his work, *The Jungle and the aroma of meats*'. Here, he mentions how *Āyurveda* gives importance to the idea of meat consumption of certain birds and animals in the form of drugs. Different kinds of meat if taken in right proportions mixed with the right additives were said to have given excellent results to cure disorders within the body.

To be more precise, as even Zimmerman points out that each meat had its own taste and properties which was used to bring the balance of the bodily humors.

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<sup>279</sup> *Suśruta Saṃhitā* p. 298.

<sup>280</sup> *Ibid.*, p.409.

<sup>281</sup> *Ibid.*, Volume Two, *Cikitsā Sthāna*. p.347.

For instance, *jāṅgala* meats of the healthy animals were required to calm all sorts of humors with their astringent taste.<sup>282</sup> Meats with a sweet flavour and cold property were easy to digest and the nutrients were absorbed by the body more easily.

In the case of the patients suffering from diabetes or *madhumeha*, *śilājatu* which is heated by the rays of sun in the months of *Jyēṣṭha* and *āṣāḍha* has been mentioned which helps cure all distempers of the body. The presence of six kinds of metals in *śilājatu*, such as tin, lead, copper, silver, gold and black-iron, in their essential form are said to be effective. This gives a hint that the later medical texts also started getting familiar with the aspect of mineralogy. The mention of these minerals and their properties which helped to cure a particular disease gives an idea about their attempt to understand not only the physiology of the flora and fauna but also incorporate certain minerals in the form of drugs.

Remedies for the snake bite include certain *mantras* where the physicians are required to be well versed in the *mantras* of anti-venomous potency. They had to bind a ligature of cord consecrated with appropriate *mantras*.<sup>283</sup> And for the successful application of the *mantras*, the person should devotedly worship the gods with offerings of perfumes, flower garlands, edibles, and animal oblations. This is similar to the Vedic period where such charms have been mentioned in the *Atharva Veda* for snake bites, insect bites and other poison.<sup>284</sup> The physicians during this period were also required to have a knowledge of such *mantras* that would include certain esoteric phrases and charms. The recitation of such charms was often accompanied by certain rituals and offering worship to Gods.

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<sup>282</sup> Zimmerman Francis, *The Jungle and the aroma of meats: an Ecological theme in the Hindu Medicine*, pp. 105-106.

<sup>283</sup> *Suśruta Saṁhitā, Kalpa Sthāna.*, pp. 733-735.

<sup>284</sup> *Atharva Veda*, Book 4, Hymn 6; Book 5, Hymn 13.

Of the seventy- six kinds of eye diseases, eleven should be treated with incision operations (*chedya*) while nine with scarification (*lekhyā*), five with excision (*bhedya*), fifteen with venesection (*vyādhya*) and twelve should not be operated at all.<sup>285</sup> Besides the operations, decoctions and certain drugs are given along with the application of specific poultices on the inflamed area while certain affections are treated by bloodletting procedure.

In cases of ear infections, treatments include fomentation procedures with the fumes of *vilva* (*Aegle marmelos* or bael), *eraṇḍā* (long pepper) roots, *ārka* (*Calotropis gigantea*), *kapittha* (*Limonia acidissima* L.), *dhūstūra* (*Datura stramonium* or thorn apple), *ajagandhā* (*Cleome gynandra* or Stink weed), *aśvagandhā* (*Withania somnifera* or Indian ginseng), barley and bamboo, boiled in *āranāla* (fermented rice gruel) and administered in the manner of *nāḍi-sveda* (fomentation through a pipe). Besides, these eardrops made out of the juices of *kapittha*, *mātuluṅgā* (*Citrus medica* or Citron) and *ārdraka* (*Zingiber officinale* or Indian Ginger) were mixed together and applied lukewarm in the case of an earache.<sup>286</sup>

Treatment for fever includes fasting but only in cases of fever not arising from the deranged *Vāyu* and also till the deranged *doṣa* remains intact. Boiling water is also given that helps in the restoration of the *Pitta* and the *Vāyu* to the normal state, cleansing the internal passages of the body and helps in easy movement of the *doṣas* in the body. While the effect of cold water does the reverse, therefore it should be avoided. Besides, *peya* (water boiled with bitter drugs like *gāṅgeya* which is the root of a type of grass, *nāgara* - most likely ginger, or a variant of ginger, *parpaṭa* - *Hedyotis corymbosa* and red sandalwood) should be given. Diet

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<sup>285</sup> *Suśruta Saṁhitā*, Volume Three, *Uttara Tantra*, pp.103-104.

<sup>286</sup> *Ibid.*, p. 112.

includes diluted barley gruel or *yavāgū* and parched corn mixed with honey and water along with meals of rice and meat soup.

In the case of jaundice or *pāṇḍu roga*, the patient is made to vomit with the compounds containing powdered *Hārītaki* mixed with honey and clarified butter. Drugs possessing purgatory properties are taken in combination with clarified butter along with the intake of *nikumbha* cooked in an adequate quantity (eight *palāśa*) of the urine of a she-buffalo and is prescribed daily. Decoctions made out of powdered dead iron mixed with *Viḍaṅga* or powdered *haridrā* and *tri-phalā* have also been suggested to be licked by the patient along with the accompaniments of honey and clarified butter.<sup>287</sup> In cases where the patients are said to have an 'edematous swelling with an emaciation of the abdominal region,<sup>288</sup> or if he is suffering from fever and diarrhoea lying in a sub-comatose state, it has been asked to the physician to leave the patient since the disease becomes incurable. The acts of purgation have been followed also in the Buddhist monastic tradition where even the renowned physician, *Gīvaka* made the Buddha vomit with the use of the smell of several lotus flowers.<sup>289</sup>

*Caraka Saṃhitā* starts with the quadruplets of drugs (*bheṣaja catuṣka*) which itself speaks for the importance given to the study of drugs in the *Saṃhitā*.<sup>290</sup> Drugs have been divided into fifty groups according to pharmacological action and such is the most valuable contribution of the *Caraka Saṃhitā*. Drug has been said to be of three types- 1) some pacifier

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<sup>287</sup> *Ibid.*, Chapter on *pāṇḍu roga*, many other combinations of drugs and medicinal herbs have been suggested out of which only a few of them commonly used have been mentioned here. With these the aggravated *doṣas* are said to be gradually eliminated from the system. p.272.

<sup>288</sup> *Ibid.*, Volume Three, *Uttara Tantra*. In the section on the prognosis of the disease, p.276.

<sup>289</sup> *Vinaya Texts*, trans. David, Rhys and Oldenberg, Hermann, p.192.

<sup>290</sup> *Caraka Saṃhitā, Sūtra Sthāna*, p 12.

of *doṣas*. 2) Some drug vitiates *dhātus* 3) some is taken responsible for maintaining normal health and also has been divided into certain types- of animal and of plant origin. Also, honey, milk, bile, fat, marrow, blood, flesh, skin, faeces, bone, ligament, horn, nail, hoof, hairs were used. Drugs of vegetal origin are of four types- *vanaspati* (fruits), *vīrudh*(diffuseness), *vānaspatya* (flowers and fruits) and *oṣadhi*.

The second chapter discusses about the five types extract preparations – juice, paste, decoction, cold infusion and hot infusion. Besides fifty great extractives have been categorized into ten groups. Fat is said to be of four types- ghee, oil, muscle fat and marrow. A drug if remains unknown is said to be fatal like poison, fire and thunderbolt and also if badly administered can result in complications. While with proper administration, a sharp object also becomes the best drug. *Pañcakarma* or the five measures may be applied to those having presence of *doṣas* after performing unction and sweating with due consideration of *doṣage* and time.<sup>291</sup> The quantity of a particular drug to be taken and the time and place have been given importance throughout both the texts. In fact, there are separate chapters in the *Caraka Saṃhitā* that deals with the dietetic regimen and the influence of each season on the same.

In all types of *jvara* or fever, intake of ghee cooked with proper drugs have been recommended. One should be given light food with beneficial vegetable soups or soup of the meat of wild animals till ten days for alleviation of fever.<sup>292</sup> Meat in the form of drugs have been allowed in these texts which remained a stronghold of the brahmans. However, it was always mentioned that only certain wild animals who were healthy were to be chosen.

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<sup>291</sup> *Caraka Saṃhitā* , pp 13-14.

<sup>292</sup> *Suśruta Saṃhitā*, Volume Two, *Cikitsā Sthāna*, p.68.



The defected animals were prohibited from use. Also it was necessary to understand what such animals fed on. Depending on the food they consumed and the ecological condition they were in, an animal was prescribed for use. All kinds of procedures including massages with different herbs like that of *kuṣṭha*, *pippalī*, *aśvagandhā* and many others have been mentioned along with fomentation methods in certain cases of fever. Surgical procedures like blood-letting was to be carried out for fever that did not subside by cold, hot or unctuous substances. Diet is also important that helps bring the *dhātus* in balance, helping further to reduce fever has also been important.

*Kuṣṭha* predominantly from the *vāta* is treated with administering ghee while those located in the upper part of the body near the heart, should be made to vomit by administering *Indrayava* (*Chonemorpha antidysenterica* or *Indrajab*), *mādhūka* mixed with *nimba* leaves. Besides these drugs made out of *triphalā* (three fragrant fruits), *trikaṭu* (three spices), *musta* (species of grass), *saptaparṇa* (*Alstonia scholaris*), *nimba*, *pippalī*, *haridras* (Turmeric) and many others are used in the form of decoctions with honey and ghee that helps alleviating swelling, itching and burning of skin rashes, anaemia, numbness, boils and leukoderma. Often powders of tin, lead and iron have also been mentioned as accompaniments to certain decoctions especially administered for *Maṇḍala Kuṣṭha*. Diet includes light cereals and more of bitter vegetables while heavy, sour substances, milk, curd, jaggery, sesame and marshy fish are to be prevented.<sup>293</sup>

Remedial measures for insanity include recitation of certain *mantras*, wearing roots and gems, auspicious rites, offering gifts, oblations, maintaining religious rules and vows, fasting, visit to religious places, etc.

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<sup>293</sup> *Ibid.*, Volume Two, *Śarīra Sthāna*, pp. 131-133.

A number of drugs have been of mention that are used in cases of treating insanity but besides those, *Pramathas*, the attendant of *Rudra* who moves around the world, is to be worshipped, in the process of rapid recovery from insanity.<sup>294</sup> Not a single description is given about the physiology of the brain and its malfunction that could result in mental illness. It can be said that the early physicians were not really aware about the knowledge of brain anatomy and were hence, unable to understand and provide a cure for such disorders. Therefore, these mental illnesses were often attributed to exogenous and supernatural factors.

It should be noted that both the texts emphasize that the only objective that therapy has to maintain is an equilibrium of the bodily *dhātus* by reducing the increased ones and vice versa.

Treatment therefore gains its importance in helping the bodily humors and the *dhātus* start working in their original form getting rid of the elements that creates an imbalance of the same.

### **Dietary regimen and the importance of code of conduct in one's life**

The *Suśruta Saṃhitā* notes that it is interesting how one's diet, their lifestyle and daily routine was emphasized to have been one of the major reasons in the maintenance of a healthy body.<sup>295</sup> For instance, certain types of winds can have different effects on the body

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<sup>294</sup> *Suśruta Saṃhitā*, Volume Three, *Uttara Tantra*, pp. 390-391.

<sup>295</sup> *Ibid.*, *Uttara Tantra*, pp. 397-399.

which has also been given significant importance in the *Samhitā*. The cold and sweet nature of east wind aggravates the blood and *Pittam* giving rise to an acid digestive reaction.

It also aggravates the disease in a patient suffering a wound or an ulcer. It is highly efficacious to fatigued persons. The southern wind which is more of a light nature and can have an astringent like taste is the best of the winds that imparts vigour to the eyes, increasing the strength, soothing blood and the *Pittam*, without aggravating the bodily *Vāyu*. Similarly, the northern wind is also good for the body as it increases the strength and the running secretions from the different orifices of the body. It proves extremely salutary to patients suffering from consumption and effects of poison. While the west wind on the other hand, characterized of a non-slimy and dry nature results drying up the *Kapham* in the body producing a parched condition diminishing the bodily strength. A chapter discussing the rules of health (*Svastha-Vṛtta-adhyāya*) has been given. Particular diets and rules of conduct have been advised for each season including the *Varṣā* or the rainy season, autumn, *hemanta* or winter, spring and summer. Other than this, twelve different kinds of food have also been mentioned which are the ‘cold, hot, *snigdha* (demulcent), *rūkṣa* (non demulcent), liquid, dry, taken once a day, twice a day, with medicines, in smaller quantities and those taken for subsistence’.<sup>296</sup>

The *Caraka Samhitā* laid emphasis on *svabhāvoparama* (recession by nature) and all drugs and dietetic regimens. *Caraka Samhitā* deals with the promotion of life and also gives importance on the code of conduct and preventive measures for diseases.<sup>297</sup>

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<sup>296</sup> *Ibid.*, Volume two, p.402.

<sup>297</sup> *Caraka Samhitā*, Volume One, *Sūtra Sthāna*, pp. 33- 35.

Diet and the quantity of diet have also been given importance on. *Caraka Saṃhitā* mentions that whatever quantity of food consumed, if got digested in time without disturbing the normalcy, should be regarded as the measure of proper quantity. And this would provide strength, complexion and happy life to a person. Certain food is also not meant for consumption such as the meat of an emaciated animal. Zimmerman in his work, *The Jungle and the Aroma of Meats*, points out the meat of animals that were particularly favoured according to an ecological habitat they belonged to. The *Caraka Saṃhitā* for instance, mentioned how the diet that combined fish and milk was to be prohibited. This was supposed to obstruct the channels owing to the ‘conflicting *vīrya*’ that would lead to the derangement of blood.<sup>298</sup> It was also prescribed the meat of domestic, marshy and aquatic animals should be avoided, which also led to the excitement of the *doṣas*. The important thing that the text suggested was the awareness of the use of certain food items in the diet that excites the *doṣas* and causes a derangement should be avoided. Though, flesh of certain animals were allowed to be a part of the diet however, some were said to be fatal for the human body.<sup>299</sup> The animal and bird flesh was a part of the diet in the form of medicines, for example, gruel which was prepared with beef juice and soured with pomegranate helped alleviating intermittent fever.<sup>300</sup> A whole range of chapter is devoted to the different food items and the combinations of diet based on season, a particular disease, or those that affected the humors of the body. Zimmerman in his work, rightly pointed out the importance of each of the decoctions, made out of different flora and fauna and the additive mixtures for treating the diseases.

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<sup>298</sup> *Ibid.*, p. 412.

<sup>299</sup> *Ibid.*, For instance, the meat of peacock when cooked in fire and consumed with castor oil, could lead to instant death while, hot honey if consumed, when suffering from hot flashes, resulted in death as well.

<sup>300</sup> *Caraka Saṃhitā*. Juices made out of chicken were also used to decrease pain in the seminal passages, p. 17

Seasons have also been regarded significant in one's diet in a similar fashion as the *Suśruta Saṃhitā* discusses. Proper conduct has also been specified, for instance, wise people should not indulge excessively in physical exercise, laughter, speech, travelling on foot, sexual intercourse and night vigil and also should alienate himself from all the habitual malpractices. Adoption of good practices should also be in similar way. Such kind of norms have been consistently laid down in both the texts. Thus, not only was the role of the physician defined by certain set of rules, but even the people were made aware of the societal rules that they had to follow. These would then help them attain a healthier life. It is interesting therefore, to understand the emphasis on the external factors besides, an importance on the scientific understanding of the human anatomy, to analyse the occurrence of a disease.

After ascertaining the disorders with the help of different signs and symptoms of *doṣas*, one should treat them, if they are curable, by prescribing therapies contradictory to the etiological factors paying due consideration to *doṣa* and time. One should get the accumulation of *doṣas* expelled in the first month of spring, rainy season and winter.

Emphasis is placed in a similar way like that in the *Suśruta Saṃhitā*, on the fact that one should always worship Gods, *brahmans*, elderly people, teachers and one should also not take over other's possessions. One should only adopt auspicious conduct along with 'keeping oneself clean and tidy besides, being honest'.<sup>301</sup> In short, the people were expected to follow the rules and make it a norm to pay respect to the important sections of the society.

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<sup>301</sup> *Ibid.*, Code of good conduct has been mentioned, p.56.

## The unexplained connections

Certain favourable and unfavourable prognosis in diseases in the context of certain omens and dreams have also been mentioned in the *Samhitā*. Messenger from a ‘different caste would indicate an unfavourable termination of a disease’.<sup>302</sup> Sight of certain things for a physician just starting on a professional call to meet a patient, have also been thought as inauspicious such as that of the sight of a parched corpse or of a withered tree or *palāśa* branch. While a gentle, cool, breeze blowing from the direction of his destination was regarded as an auspicious omen by the physician. Curse, imprecation, or wailing as well as sobs, groans or vomiting should be regarded as an obstacle to the physician. Certain dreams also affect the state of health of a patient. If the patient dreams of ‘going towards the south on back of an elephant or on that of any carnivorous animal, or sees himself carried towards the quarter by a dark woman with dishevelled hair clad in a blood-shed red garment laughing’, this can indicate the doom of the patient. Also members of ‘vile castes’ in the dreams or ghosts or anchorites can indicate an impending disease.<sup>303</sup> A chapter has also been dedicated on the mode of preserving the life of a king whose soldiers are on a march. One of the common practices of the enemy under such circumstances is to poison the wells on the roadside. Priests well versed in the Vedas and the physicians conversant with the curative virtues should protect the king jointly from death.

The last section of the *Suśruta Samhitā* also mentions a set of rules for maintaining one’s health and certain diseases brought over by the superhuman influences.

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<sup>302</sup> *Suśruta Samhitā*, Volume One, *Sūtra Sthāna*, p. 270.

<sup>303</sup> *Ibid.*, p. 280.

There can be several causes that leads to an aggravation of the fundamental vital principles of the body, leading to fever. Exogenous factors like any kind of blow or presence of any other affections in the organism, suppuration (of an existing boil or an ulcer of the body), over-fatigue and poison into the system can cause a derangement of the humors. Also, not following a habitual rule of diet and conduct, sudden change of seasons or smelling a poisonous herb or a flower, through the experience of grief, malignant influences of stars or planets (at the time of birth), dynamics of deadly incantations or charms, curses from the *brahmans* or the superiors, dread or an anxiety, injudicious conduct of life, can also be the other reasons a person suffered from an ailment.

A section of the *Uttara Tantram* deals with the origin of nine *grahas*, which are the nine presiding deities- *Skānda* and the others- of the nine diseases of infant life and they were created by the gods *Agni*, *Mahādeva* and the goddesses *Kṛttikā* and *Umā* for guarding the person of- the new-born *Guha*. The importance of the *grahas* have been identified in both the the *Samhitās* because ‘they attack the children of iniquitous parents and it is therefore that a child attacked by malignant *grahas* becomes incurable’.<sup>304</sup> As a result, the *Samhitā* has specified children of the families to worship and attend the gods, the *Pitṛs* or the departed fathers, Brahmans, the pious, the preceptors, the seniors and the guests. They were also required to maintain specific rules of cleanliness and virtues, with granting alms to beggars and live on food prepared by the others. Observance of such norms would protect the lives of the infants. There are innumerable *grahas* and their tutelary divinities that roam around the world which can possess a person.

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<sup>304</sup>*Suśruta Samhitā*, *Uttara Tantra*, pp. 135-139.

For instance, under the malignant influence of the *Āsura Graha* a person speaks ill of the gods, *brahmans* and the preceptors and on the other hand, a person under the influence of the *Gandharva Graha* moves around happily.<sup>305</sup>

The *Indriya Sthāna* is the section in the *Caraka Saṃhitā* that discusses on the signs of life and death, for example, ‘if one sees the rays of light without the clouds or lightening when there are no clouds, attains death’.<sup>306</sup> If one hears the sound when there is none, the person should be considered dead. Certain other signs have also been mentioned which a physician should take account of when treating a patient besides understanding the symptoms. In cases of dreams where one sees a spiny creeper growing in the cardiac region has a chance of getting affected by *gulma* or heart disorders or if one sees darkness while awake, dies of epilepsy.<sup>307</sup> Besides a list of such signs and omens have been prescribed for the physician to remember. He should also take a note of the various physical abnormalities that cannot be treated. For example, if a patient who is already weak, suffers from hardness of bowels and diarrhoea, will rarely survive; also, if a patient gets fainted with violent movements of the body without having any relief and reduced strength and diet, faces death eventually. The last part of this section gives a list of auspicious and inauspicious signs and omens in the same way the *Suśruta Saṃhitā* discusses, that has an effect on one’s health.<sup>308</sup>

Exogenous factors and certain malignant spirits along with the adverse outcome one faces due to ill conduct in life has been discussed in the *Atharva Veda*. And to ward off the diseases, often prayers with oblations, rituals and sacred utterances were made to a deity or

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<sup>305</sup> *Caraka Saṃhitā*, pp. 500-501

<sup>306</sup> *Ibid.*, *Indriya Sthāna*, pp. 504-505.

<sup>307</sup> *Ibid.*, p. 505.

<sup>308</sup> *Suśruta Saṃhitā*, Volume Three, *Uttara Tantra*, pp. 145-146.



a set of deities. Similar connections can be seen in both the later texts, *Caraka* and *Suśruta Saṃhitā*. The chapter on toxicology (*Kalpa Sthāna*) for instance, mentions the use of certain *mantras* where the physician needs to be well versed in the *mantras* of the anti-venomous potency and should bind a ligature of cord consecrated with the appropriate *mantras*.

I would like to add a note on the chapter that discusses dreams and ill omen. It is mentioned that a dream where one sees a spiny creeper growing in the cardiac region, had a chance of getting affected with heart disease or if one sees darkness while awake, dies of epilepsy. Though, this is an illogical explanation, however, an obscure connection may have existed owing to the similarity in the symptoms one faces during the respective diseases mentioned. In this context, one has a symptom of shiver and black out or blurred vision during epileptic attacks, which might suggest a rather unexplained and obscure link to the dream. This can actually therefore, suggest why certain auspicious and inauspicious signs and dreams were given emphasis not only by the people but also by the physician. Enquiry was to be made about such dreams and omens, while treating a patient's case for the first time.

## Conclusion

Both the texts give a rational and scientific approach looking at the causes and effects of certain major and minor ailments along with the detailed study of the human parts and the body. However, it is interesting to note that both of them acknowledge the Vedic understanding of the human body, the diseases and the cure that was provided. Even though certain properties of drugs and substances was said to have been used in the process of treatment, in certain cases, *mantras* and offering worships to the Gods and the Brahmins remained integral to the process of the treatment.

The other thing that these classical medical treatises look at, are the lifestyle and the daily routine and conduct of a person in one's own life that help one achieve not only a healthy body but also *mokṣa* and peace of the self. Self has been defined and studied in a more philosophical and spiritual approach, where the mind and the consciousness have been looked upon with great attention. It has also been mentioned that the authoritative scripture is the Vedas and no other source of learning could be in disagreement with the Vedas. Therefore, one should always pay due respect to the same. The learned should see things in reality with the 'lamp of knowledge provided by the noble persons'.<sup>309</sup> Authority of a person has been defined as the freedom from *rajas* and *tamas*, endowed with the strength of penance and knowledge.

Though the scientific approaches and methods of diagnosis and treatment of diseases are being looked upon, an emphasis is more on the prevention of the disorders in the first place by the maintenance of a healthy lifestyle accompanied with proper diet, right conduct and

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<sup>309</sup> *Caraka Saṃhitā*, Volume One, *Sūtra Sthāna*. p..71.

physical exercise that can help one achieve an equilibrium in the bodily constituents or the *dhātus*.

Medicinal approaches based on a scientific understanding was gradually setting in however, it should be noted how the earlier uses of healing practices in the form of the use of magic and *mantras* and the sacred utterances along with offering oblations and paying respect to the God, the brahmans, the cows and those important to the society continued. It is true that most of such magico-ritualistic approaches gives more of a kind of random, irrational and illogical methods and in most cases, casual and obscure explanations while studying the cause and effect of the diseases and the reaction of the human body to the same. However, it still serves as an alternative remedial approach in many parts of the country even in the present day. Mostly, in cases where the more popular and rational medical approaches fail to provide a cure to the patient with his ailment, such magical healing processes are still relied upon. And the very importance of it, can be traced back to the days when these texts which were based on the rational footing of scientific knowledge, did not fail to acknowledge the significance of such approaches.

## Chapter Five

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# Conclusion

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Though the scientific approaches and methods of diagnosis and treatment of diseases have been looked upon, an emphasis has been placed on the prevention of the disorders in the first place by the maintenance of a healthy lifestyle accompanied with proper diet, right conduct and physical exercise that can help one achieve an equilibrium in the bodily constituents or the *dhātus*. Medicinal approaches based on a scientific understanding was gradually setting in. However, it should be noted how the earlier uses of healing practices in the form of the use of magic and mantras and the sacred utterances along with offering oblations and paying respect to the God, the brahmans, the cows and those important to the society continued.

Although, the Brahmanical tradition relied more on such religious practices and rituals, the heterogeneous tradition of the Buddhist monastic community relied on a trial and error method. The Buddha often based his prescriptions on empirical evidence. He gave a combination of particular herbs and plants as well as certain food items that were categorised as drugs. Explanations of their chemical or medicinal properties were never mentioned nor the cause and effect, on curing a particular disease in the human body. However, the monastic community in most of the cases, chanced upon such food items with which they found a cure, and in such cases, the Buddha incorporated such items, under the category of drugs for a particular disease. The Buddhists also believed that the equilibrium of the humors were important for a healthy body. Earliest forms of complicated and major surgeries were already being performed by *Gīvaka*, even before *Suśruta*, who attained expertise in carrying out rhinoplasty operations. It is mentioned that the Buddhist community and the *Pāli* sources on medical knowledge, served to be an important development that connected with the later Brahmanical texts of *Suśruta* and the *Caraka Saṃhitā*.

It should also be noted that all the texts on the medical knowledge, both the Sanskrit and the *Pāli* sources, mention numerous flora and fauna which were to be used for the purpose of treatment. In the later texts especially, the *Caraka Saṃhitā*, a proper catalogue is given which mentions a list of medicinal plants. Coming over to the use of fauna, it is important to point out that meat was an important part of the diet and served the purpose of an important drug. It was mainly used to bring back the deranged bodily humors in their original form. Meat of certain animals, birds, fish, and reptiles were prescribed but all of them had to be in a healthy condition and not emaciated. The Buddha in the *Vinaya Piṭaka*, mentioned the use of the flesh of some animals, birds and fish to be consumed only for medicinal purposes. However, it could not be consumed if there was an intentional killing of the animal. Human flesh was also prohibited and consumption of the same was a great sin, that was considered for punishments. This also presents an interesting facet about the early medical knowledge of treating the diseases. The people took consideration of each of the materials that were available, which possibly could be procured and used for the medicinal purpose. This led to a categorisation of the plants and animal flesh, that remained integral to the process of curing a disease, even if not systematically organised each time.

In the Vedic period and also in the later medical texts, magic blended with religion and started manipulating medical knowledge. Men continued to observe such rules till the later days, not because they necessarily supported such practices. Rather, they were familiar with such beliefs with which they grew up and therefore, it continued to share a meaningful part in their life. In the recent days, often such magical rituals and charms have been associated with superstitious beliefs.

But they continue to survive in order to help convince people, to control the fear of the unknown. Keith Thomas in his most renowned work on magic frequently discusses the influence of superstition and defines it as ‘an unorganised series of survivals of earlier cult practices’.<sup>310</sup> And therefore, holding onto such beliefs were means to simply justify unknown occurrences and overcome certain difficulties.

It is true that most of such magico-ritualistic approaches gives more of random, irrational and illogical methods and in most cases, casual and obscure explanations while, studying the cause and effect of the diseases and reaction of the human body to the same. However, it still serves as an alternative remedial approach in many parts of the country even in the present day. Mostly, in cases where the more popular and rational medical approaches fail to provide a cure to the patient with his ailment, such magical healing processes are still relied upon. And the very importance of it, can be traced back to the days when these texts which were based on the rational footing of scientific knowledge, did not fail to acknowledge the significance of such approaches.

The Vedic people along with the development of the later medical treatises which continued, found it easier to reconcile magic with religion. All the difficulties that could not be described and even, certain ailments that people failed to get cured from, were linked to the misfortunes and ill omens attributing them to supernatural factors. When all the other human agencies failed to give an explanation, such magical rituals and offering worship to the deities, were thought to be the saviours, that would help one accomplish whatever they wish.

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<sup>310</sup> Thomas, Keith, *Religion and the Decline of Magic: Studies in Popular Beliefs in Sixteenth and Seventeenth Century England*, Penguin Publishers, UK, 2003. p. 7.

The suffering patient often sought their refuge in such unscientific, superstitious, magical remedial approaches and explanations and even at times just certain coincidences. These served as the last resort when most of the scientific methods applied, decoctions, drugs and surgical methods failed to provide the people a cure. Thus, it can be said that though these *Āyurvedic* treatises were making their way into a much more rational and scientific world of medical knowledge with a transition from the earlier magical and superstitious approaches, much of the connections persisted, even if they remained scattered and obscure throughout the earlier texts. And such approaches besides the more scientific remedies and cures have accompanied to the plethora of medical knowledge till the present day.



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