



PRE CLINICAL STUDY ON THE ROLE OF AHARA AS RASAYANA IN THE MAINTENANCE OF HEALTH

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Abstract :

Rasayana is one among *Ashtang Ayurveda*. *Rasayana*, though concerned primarily with improving the health status, it is also used for curative purposes. *Acharya Dalhana* has mentioned *Asasrika Rasayana* under which *Rasayana* can be taken in the form of *Ahara*. So a Pre-clinical study was planned to study the role of *Ahara* as *Rasayana* in maintenance of health. Volunteers fulfilling the pre-determined inclusion and exclusion parameters were included as part of study. The sample was determined through means of random selection from the population living in and around the city of Dehradun, Uttarakhand, India, consisting of 501 individuals of either gender of the age composition between 18 to 40 years. The results had been obtained by Personal Interviews. The *Rasayana* assessment criteria consisted of *Deha-Bala*, *Indriya -Bala* and *Aarogya* as mentioned in *Ayurvedic* texts. The observed average seemed to be very near to the expected average. The results reveal that volunteers taking best *Ahara* responded positively to the effects of *Rasayana*.

Key words- *Ahara*, *Rasayana*, *Deha-Bala*, *Indriya-Bala*, *Aarogya*, Survey.

Introduction:

Health is purely dependent upon *Ahara*. Indulgence in *Mithya Ahara* (Inadequate Diet) leads to vitiation of *Dosha*, thus producing diseases. *Acharyas* has said that if a person follows proper regimen of *Ahara*, he will be getting all benefits of *Rasayana* such as optimum *Deha -Indriya Bala*, *Aarogyata* etc.

Today is the era of erroneous lifestyle in which people are not able to follow the rules of healthy and happy living due to unawareness or due to their personal, social or professional obligations and our peoples are prone to suffer from premature ageing and a number of diseases such as Obesity, HT, DM-2, Hyperacidity, Stress etc. In the past decade life span has increased but quality of life has deteriorated comparatively due to invasion of sedentary life style and fast food in our culture. Condition can turn even more worse if steps not taken at time.

Acharyas had said that regular consumption of *Ahara* such as *Dugdha*, *Ghrta*, *Godhuma*, *Mudga*, *Kukkuta Mamsa*, *Madhu*, *Saindhava Lavana* etc. helps to acquire the properties of *Rasayana*.

Today, World is looking towards preventive and rejuvenative measures, So considering the importance of subject, this pre-clinical study had been planned on the population of Dehradun. In the present study *Ahara* is taken as subjective parameter and is assessed for *Rasayana* effect.

The data obtained through the questionnaire survey was applied with statistical methods to establish the effect of *Aharadravyas* in classics in the context of *Rasayana* out of 33 *Ahara dravyas* mentioned as *Rasayana*.

This observation is limited to geographical conditions of the area of the study which may vary with the place. Hence the results of this study would be an eye opener to educate the subjects of *Rasayana*.

Objectives Of The Study:

To study the role of *Ahara* as a *Rasayana* through a questionnaire.

Materials And Methods:

Population of either gender living around Dehradun, Uttarakhand, India were considered for the study. Population of 501 with age group between 18 to 40 yrs were considered for the study. The prescribed performa was filled after asking question from the persons.

Sampling Method:

The sample was selected randomly from the population, consisting of age group 18-40 years of either sex with features satisfying the inclusion criteria.

Inclusion criteria:

Age Group: Persons between 18 to 40 yrs age group, Irrespective of Socioeconomic Status and gender

Exclusion criteria:

Persons below 18yrs & above 40 yrs were excluded.

Persons with Congenital anomalies.

Pregnant females were excluded.

Patients with other major chronic systemic diseases.

Assessment Criteria:

The cases were studied using subjective parameters.

Subjective Parameters:

The grading was done by understanding and wisdom as referred by *Acharya Charaka* for *Rasayana* properties:e.g

Deha Bala, Indriya Bala and *Aarogya*

About Questionnaire:

Questionnaire prepared included *Ahara* which are mentioned as *Rasayana* for the maintenance of health . Questionnaire contains only specific *Ahara* listed in classics and effect of *Ahara* based on the concept of food articles like *Swasthya vardhaka*, *Vrishya*, *Pathya* ,*Brinhana* , *TriDosha shamaka* and other properties. All *Vrishya Ahara dravyas* are considered as *Rasayana* by *Acharya Charaka*. In present study individuals consuming the mentioned *Ahara* often in their diet were taken.

Following *Ahara dravyas* were taken for the study which act as *Rasayana*:

1) *Dugdha* -It has same qualities as of *Ojas* and is also mentioned under *Ajasrika Rasayana*¹.It is sacred, *Balya* (constructive tonic), *Vrishya* (spermatogenic), *Vajikarana* (aphrodisiac), *Rasayana* (rejuvenative), *Medhya* (improves intellectual power), *Sandhanam Asthapana*, *Vaya Sthapana* (increases longevity), *Ayushya* (imparts vitality), *Jeevnam* (growth promoting), *Brihmanam*, potentiates *Vamana* (emetics) and is a laxative, increases *Ojas* because it possesses similar properties, and is most beneficial for the young, the old and the emaciated people with consumptive pulmonary lesions and is said to be *Pathya* for those who have become weak due to hunger, sexual intercourse and physical exercise².

2) *Ghrta*- *Ghrta* alleviates *Vata* and *Pitta*, it is conducive to *Rasa Dhatu*, *Shukra Dhatu* and *Ojas*. *Ghrta* is mentioned under *Ajasrika Rasayana*. It increases *Smriti*, *Medha*, *Kanti*, *Swara*, *Lavanya*, *Sou- Kumarya*, *Ojas*, *Tejas*, *Balya*, *Ayushya*, *Vrishya*, *Medhya*, *Vaya-Sthapanam*, *Guru*, *Chakshushya*³.

3) *Ushna Jala*- *Ushna Jala* is *Deepana* and is said to be *Pathya* always. It increases *Jatharagni*, good for voice, *Laghu* and *Pachana*⁴.

4) *Madhu*- It has been explained by *Acharya Sushruta* that intake of *Madhu*, *Ghrta*, *Dugdha* and *Jala* separately or combinedly in the morning time acts as *Rasayana* and stabilizes age⁵.

5) *Godhuma*- *Godhuma* is restorative alleviator of vitiated *Vata*, *Madhura*, *Sheeta* in *Veerya*, *Jeevaniya*, *Brimhan*, *Vrishya*, *Snigdha* and stabilizes the body⁶.

6) *Saindhav Lavana*- *Saindhava Lavana* is said to be *Chakshushya*, *Hridya*, *Ruchikara*, *Laghu* increases *Jatharagni*, *Snigdha*, *Madhura*, *Vrishya*, *Sheeta*, pacifies all the *Doshas* and is best among all the salts⁷.

7) *Mridvika*- It is *Brinhaniya* (nourishing), *Vrishya* (aphrodisiac), *Madhura*, *Snigdha* and *Sheeta* in *Veerya*. In *Ashtang Sangrah*, it is said to take *Mridvika* regularly for the maintenance of health and elimination of diseases⁸.

8) *Dadima*- It is said to take *Dadima* regularly for the maintenance of health and elimination of diseases⁹.

9) *Khajur*- *Khajur* is *Madhura*, *Brinhaniya* (nourishing), *Vrishya* (aphrodisiac), *Guru*. *Sheeta* in *Veerya*¹⁰.

10) *Kadar*- *Acharya Vagbhata* explained that *Kadar* is *Brinhana*, *Guru*, *Sheeta* in *Veerya*¹¹.

11) *Vatama*, *Akshota*, *Mukulak* and *Uruman*- They are *Guru* in digestion, *Ushna* in *Veerya*, *Snigdha*, *Madhura* in *Rasa*, promotes *Bala*, alleviator of *Vata*. *Brinhan*, *Vrishya* (aphrodisiac) and aggravator of *Kapha* as well as *Pitta*¹².

12) *Amla*- It is one of the three major contents of *Triphala*. *Acharya Charaka* said to take regularly for the maintenance of health. It cures *Raktapitta* and *Prameha* and it is said as best *Vrishya* and *Rasayana*¹³.

13) *Narikel*- *Acharya Sushruta* explained that *Narikel Phala* is *Madhura* in *Rasa* and *Vipaka*, pacifies *Vata* and *Pitta Dosha*, promotes *Bala*, *Snigdha*, *Brinhana* and *Sheeta* in nature¹⁴.

14) *Aaruk*- It is sweetish, palatable, *Brinhanam* (nourishing) and easily digestible. It does not aggravate much of *Doshas*¹⁵.

15) *Pakva Aam*- Mature fruits of *Amra* alleviate *Vata* and promotes *Mamsa*, *Shukra Dhatu* as well as *Bala* (strength)¹⁶.

16) Tank- Tank is *Laghu* in nature, *Vrishya* (aphrodisiac), very tasty and alleviates all the three *Doshas*. It is also called as *Amritphala*¹⁷.

17) *Ikshu Rasa*- *Ikshu rasa* is *Vrishya* (aphrodisiac), *Sheeta* in potency, laxative, *Snigdha*, *Brinhan* (nourishing), *Madhura* in *Rasa* and aggravates *Kapha*¹⁸.

18) *Kadaliphala*- *Pakva Kadaliphala* is *Snigdha*, *Sheeta*, *Madhura* in *Rasa*, *Vrishya* (aphrodisiac), nourishes *Rasa*- *Raktadi Dhatus*, promotes appetite, increases *Mamsa* and used in anorexia, thirst and eye diseases¹⁹.

19) *Lasuna*- *Lasuna* is *Snigdha*, *Ushna*, *Teekshna*, *Katu*, *Pichhila*, *Guru*, laxative, *Madhura* in *Rasa*, *Balya* (strengthening) and *Vrishya* (spermatogenic), improves *Medha* (retentive power of memory), voice, complexion and eye sight, and is helpful in the union of fractures of bones²⁰.

20) *Palandu*- *Palandu* aggravates *Kapha* and alleviates *Vata*, but it does not alleviate *Pitta*. It is useful as a food. It is *Guru* and *Vrishya* (aphrodisiac). It promotes strength and appetite²¹.

21) *Mudga*- *Acharya Charaka* said to take *Mudga* regularly for the maintenance of health²².

22) *Masoor*- It is *Sheeta* in *Veerya* and *Laghu*.

23) *Apakva Muli*- It pacifies all the three *Doshas*²³.

24) *Vaastuka*- *Vaastuka* is palatable, *Katu* in *Vipaka*, increases *Jatharagni*, *Pachaka*, *Laghu*, increases *Bala* and *Shukra Dhatu* and is useful in spleen disorders, *Raktapitta*. *Arsha*, *Krimi* and pacifies all the three *Doshas*²⁴.

25) *Patol*- *Patol* is a *Pathya* and *Vrishya*. It is *Hitkara* for heart, is vermicidal, *Madhura* in *Vipaka* and increases appetite²⁵.

26) *Sunthi*- *Sunthi* helps in promoting power of digestive fire, is *Vrishya* (aphrodisiac), *Grahi* and *Hridya*. It clears the pathway of *Dhatus* (*Srotas*), increases digestion, *Laghu*, sweet in *Vipaka*. *Snigdha*, *Ushna* and pacifies *Kapha* and *Vata Dosh*²⁶.

27) *Kukkuta Mamsa*- *Kukkuta Mamsa* is *Snigdha*, *Ushna*, *Vrishya*, *Brinhana*, increases voice, *Balya* and best in eliminating *Vata Dosh*²⁷.

28) *Rohu Matasya*- *Rohu Matsya* is *Madhura*, *Guru*, alleviates *Vata*, increases *Raktapitta*. *Ushna* in *Veerya*, *Vrishya*, *Snigdha* and promotes the production of *Mala*²⁸.

29) *Sharkara*- *Sharkara* is said to be *Vrishya*, and is useful in the patients of tuberculosis, injury and *Raktapitta*²⁹.

30) *Navneetaka*- *Navneetaka* is *Vrishya* (aphrodisiac), *Sheeta*, increases strength and complexion, promotes digestive fire³⁰.

OBSERVATIONS & RESULTS:

Showing the number of individuals consuming *Ahara Dravyas*

Ahara	Total No. of Individuals	Percentage
<i>Dugdha</i>	322	64.3%
<i>Ghrita</i>	331	66%
<i>Ushna Jala</i>	313	62.4%
<i>Madhu</i>	273	54.5%
<i>Godhuma</i>	489	97.6%
<i>Saindhav Lavana</i>	116	23.1%
<i>Mridvika</i>	334	66.6%
<i>Dadima</i>	384	76.6%
<i>Khajur</i>	387	77.2%
<i>Kadar</i>	434	86.6%
<i>Badam</i>	372	74.3%
<i>Mukulak</i>	218	43.5%
<i>Akshot</i>	259	51.7%
<i>Amla</i>	377	75.2%
<i>Narikel Phala</i>	441	88%
<i>Aaruk</i>	294	58.6%
<i>Pakwa Aam</i>	481	96%
<i>Uruman</i>	136	27.1%
<i>Tank</i>	447	89.2%
<i>Ikshu Rasa</i>	444	88.6%
<i>Kadliphala</i>	408	81.4%
<i>Lasuna</i>	458	91.4%

<i>Palandu</i>	490	97.8%
<i>Mudga</i>	478	95.4%
<i>Masoor</i>	475	94.8%
<i>Apakwa Muli</i>	403	80.4%
<i>Vaastuka</i>	320	63.8%
<i>Patol</i>	313	62.4%
<i>Sunthi</i>	456	91%
<i>Kukkuta Mamsa</i>	335	66.8%
<i>Rohu Matasya</i>	298	59.4%
<i>Sharkara</i>	490	97.8%
<i>Navneetaka</i>	264	52.6%

DISCUSSION:

Discussion on the role of Ahara as Rasayana

Dietetic status of volunteers has been grouped under *Ahara*. It was recorded to assess the relation between the intake of diet and *Rasayana* properties and it was observed that out of total 501 volunteers, 322 (64.3%) were consuming *Dugdha* and 331 (66%) were consuming *Ghrta*. These both are considered under *Ajasrika Rasayana*.

It was observed during the survey that out of 501 volunteers, 273 (54.5%) people consume *Madhu*, 489 (97.6%) people take *Godhuma*, 490(97.8%) take *Sharkara*, 116(23.1%) people take *Saindhava Lavana*, 478(95.4%) people consume *Mudga*, 475(94.8%) consume *Masoor*. *Madhu* is said to be pacifier of all the three *Doshas* and *Godhuma*, *Sharkara*, *Saindhava Lavana* are said to be *Vrishya* along with *Swasthya Vardhana* and *Pathya*. And all *Vrishya Dravyas* are said to be *Rasayana* by *Acharya Charaka*.

It was observed during the survey that out of 501 volunteers, 377 (75.2%) consume *Amla*, 384 (76.6%) consume *Dadima*, 334 (66.6%) consume *Mridvika*, 387 (77.2%) consume *Khajur*, 373(74.3%) consume *Badam*, 313 (62.4%) consume *Ushna Jala*, 264 (52.6%) consume *Navneetaka*, 335 (66.8%) consume *Kukkuta Mamsa* and 298 (52.6%) consume *Rohu Matsya*. *Amla* is said to be *TriDosh Shamaka*, *Vrishya* etc., *Dadima* is *Swasthya Vardhaka*. *Khajur*, *Navneetaka* and *Badam* are *Vrishya* and *Madhura*. *Ushna Jala* is said to be *Pathya*, *Kukkuta Mamsa* and *Rohu Matsya* are *Vrishya* and *Brinhana*. The consumption of all these as *Ahara Dravyas* may act directly or indirectly as *Rasayana*, as all these help in acquiring *Uttama Rasadi Dhatus* in the volunteers surveyed.

Out of 501 volunteers, 458(91.4%) volunteers consume *Lasuna*, 490 (97.8%) consume *Palandu*, 408 (81.4%) consume *Kadliphala*, 481(96%) consume *Pakva Aam*, 441 (88%) consume *Narikel Phala*, 403(80.4%) consume *Apakva Muli*, 320(63.8%) consume *Vaastuka*, 313(62.4%) consume *Patol* and 444 (88.6%) consume *Ikshu Rasa*. *Lasuna* is *Vrishya* as well as *Rasayana*, *Palandu*, *Kadliphala*. *Pakva Aam*, *Narikel Phala*, *Sunthi* and *Ikshu Rasa* are *Vrishya*. *Apakva Muli*, *Vaastuka* are *TriDosh Shamaka*, *Patol* is said as *Pathya*, pacifies all the three *Doshas* and *Vrishya*. As all *Vrishya Dravyas* act as *Rasayana*, this may be the reason of *Uttama Deha Bala*. *Indriya Bala* and *Aarogya* in the volunteers consuming these *Ahara*.

It was observed that 434(86.6%) consume *Kadar*. 294 (58.6%) consume *Aaruk*, 136(27.1%) consume *Uruman*, 447 (89.2%) consume *Tank*, 259 (51.7%) consume *Akshot* and 218 (43.5%). *Kadar* is *Vrishya*. *Uruman*, *Akshot* and *Mukulak* are *Vrishya* and *Brinhana*. *Tank* is *Vrishya* and alleviates all the three *Doshas*. The reason behind less consumption of *Mukulak*. *Uruman* and *Akshot* may be due to their less availability all over the year and as most of the volunteers belonged to Middle Class, they are not able to afford all these due to their high cost.

DISCUSSION ON RESULTS:

Subjective criteria have been scientifically translated into Objective criteria for analysis and to reach a statistical conclusion in the study.

We understand that moving from the Subjective to the Objective is highly complex and problematic in terms of scientific studies. Objectification involves quantification of attributes and in order to retain accuracy of observation, keeping it free of bias, from the observer as well as the observed, great care has been taken to follow universally acceptable norms. The same criterion of quantification of results has been applied to our study with regard to health.

For instance, we have adopted the approach of indexing an expected average of *Rasayana* criteria, with which observed average can be compared.

Table No.32 - Showing Expected and Observed Average

Count of volunteers	INPUT-Ahara	OUTPUT- Rasayanas Expected Average	OUTPUT- Rasayanas Observed Average
Group 1 <i>Ati Uttama</i>	217.85	7.75	7.645
Group 2 <i>Uttama</i>	198.89	7.25	7.203
Group 3 <i>Samanya</i>	177.66	6.75	6.797

The survey was conducted on 501 individuals. As per the sample taken each individual is allotted the input points (*Ahara* and *Vihara*) and output points (*Rasayana*). Individuals were then sorted out according to the input points in descending order. This order has further been divided into 3 categories of 167 volunteers each in *Ati-uttama*, *Uttama* and *Samanya*. Each category is carrying corresponding output points of *Rasayanas*.

It is found that the *Ati-uttama* category which practiced best *Ahara* and *Vihara* received maximum output of *Rasayanas*. The next category obtained the second best level of *Rasayanas*. The third category of individuals corresponded with the least number of *Rasayanas*.

Observed average happened to be close to the expected frequency.

Here, we can see that

- a) Group I volunteers bearing numbers between 1 to 167 in ascending order were taking best *Ahara* as a result getting best *Rasayana* effects.
- b) Group II volunteers bearing numbers between 168 to 334, were taking less *Ahara* as compared to Group I volunteers and were getting lesser effects of *Rasayana* as compared to Group I.
- c) Group III volunteers bearing numbers between 335 to 501, were although taking good *Ahara*, but it was lesser as compared to Group I and II volunteers and correspondingly though they were getting effects of *Rasayana*, but certainly it was lesser than Group I and II volunteers.

From this study, it can be concluded that *Ahara* is directly proportionate to *Rasayana* benefits. The study also correlates to the findings and explanations made by one of the most influential classical writers of *Ayurveda* Acharya Vagbhata in *Ashtang Hridya*.

Many centuries ago result of their findings revealed that if a person follows proper *Ahara* he will get all the benefits of *Rasayana*.....

CONCLUSION:

> Pre Clinical study on the role of *Ahara* and *Vihara* as *Rasayana* in maintenance of health has shown positive results which shows proper *Ahara* and *Vihara* usage is directly proportional to the *Rasayana* properties (health).

► Maximum no. of persons were having *Samagni*, *Madhyama Koshtha* and *Prasannata* and were found to be good on *Rasayana* Assessment Criteria. This can be attributed to the *Ahara* properties (*Swasthya Vardhaka*, *Dhatu Samyakara*, *Pathya*, *Medhya*, *Rasayana*, *Vrishya* etc.) followed by the volunteers, which proves centuries old definition of health. i.e *SamaDosha Samagni Prasanna-aatmaindriya.... Swastha Iti abhidhiyate*.

► 2/3rd out of total volunteers were consuming *Dugdha*, and *Ghruta* on regular basis, which can be the reason behind *Rasayanavat* Properties (good health) found among volunteers, moreover Acharya Sushruta included them under '*Ajasrika Rasayana*' and Acharya Charaka has also said '*Ksheerghrita Abhyasanaam Rasayananaam*'

► As our study has shown positive results, so it is clear that promotive aspect of health can be acquired by *Rasayanic Ahara* by one who practise *Ahara* well according to the classics

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