Review Articles

Concept of Ahara in relation to Matra, Desha, Kala and their effect on Health

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Abstract

For evaluation of the effect of Ahara on Health in relation to Matra, Desha and Kala, an interview based survey study was carried out by simple randomized selection of healthy and unhealthy individuals. It was found that consideration of Matra, Desha and Kala in aspect of Ahara taking were found beneficial for health.

Key words: Ahara, Matra, Desha, Kala, Health.

Introduction

Despite spectacular biomedical advances and massive expenditures, death rates in the developed countries have remain unchanged; and also life expectancy. Like so many others in situations in contemporary society, medicine has come under heavy fire. Medicine, as practiced today, has begun to be questioned and criticized. Their arguments have been based on certain facts such as:

1) With increased medical costs, it has not increased benefits in terms of health.
2) The expectation of life has remained low and infant and child mortality rates high in many developing countries, despite advances in medicine.
3) Many studies showed that significant improvements in longevity had been achieved through improved food supplies.

For this they developed “social medicine” which has varying meanings attached to its label. By derivation, social medicine is the study of man as a social being in his total environment and then treats by preventive and promotive aspects like food, habits etc. But in Ayurveda this concept is present from the beginning of life. In the very beginning of any Ayurveda Shastras, the aspect of health promotion as well as the social medicine is described.

The healthy body as well as the diseases are nothing but the out come of Ahara. Out of all the factors for maintenance of positive health, properly food taking occupies the most important position because diet or Ahara is the basic medicament other than any substance. Though one is not able to sustain life without Ahara. In today’s fast paced life, many norms regarding diet & regimen have been compromised which is showing the overall declining status of health in the society. Ahara and its related codes and conducts have been long forgotten by the human being; hence to evaluate this ancient science of dietetics this study was undertaken.

For this total positive health, Ayurveda has given three sub pillars- Ahara, Nidra and Brahmacharya, which comes under the social medicine. Here Ahara, has been enumerated first, which shows its importance. Nature manages it earlier to create living being on the earth. Breast milk is the first and well-balanced food for the newly born baby. Emphasizing the importance of mother the term “Ma” has been defined as humanity is nourished at whose breast and civilization cradles in whose lap. The milk that has got its more or less direct bearing on Ahara taken by her; it plays decisive role in development, sustenance, reproduction and termination of life. It is a well known fact that, Ahara, supplies bio-energy to body. This bio-energy is supplied by proper and adequate nutrition in the form of its essential constituents viz. protein, carbohydrates, fats, minerals, vitamins and water. Through centuries food has been recognized as important for human being, in health and diseased state. Ayurveda, the science of life has not only emphasized on Ahara but also entire quality of it. For this entire quality Matra, Desha and Kala have their own importance. Out of these the factor Desha and Kala are said to be unavoidable causes for any individual in relation with Ahara. Matra is also having as much as importance as Desha and Kala because this is the only factor which could be under influence of an individual. So, the physician conversant with these factors will find no difficulty in ascertaining Hita and Ahita Ahara, for the particular persons.

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Aims & Objectives

1. To find out effect of Ahara, Matra, Kala and Desha on health conceptually.
2. To find out effects of Ahara as per Matra, Kala and Desha on health practically through survey study.

Material & Methods

The study was carried out under two headings, viz. Conceptual study comprises of the review of the available literature in the ancient classical texts, literature in modern science concerned with this principle, scientific journals, dissertations, research paper etc. to develop the concept. Whereas for the survey study, the patients who visit the O.P.D. & I.P.D., I.P.G.T. & R.A., G.A.U., Hospital, Jamnagar, suffering from any disease; as well as some healthy volunteers, have been selected and searched out for the cause of illness and health by analyzing their dietetic factors of Ahara like Matra, Desha and Kala. Data on outcome measurements were collected at baseline from 72 subjects (persons) in the healthy group and 132 subjects in unhealthy group.

The method adopted in this study was simple randomized selection by interview based survey. A special proforma was prepared for the present study to collect the relevant data from the healthy and unhealthy group of people. Assessment was done to understand the effect of Ahara in relation to Matra, Desha, Kala on Swastha as well as on Rogi, as Ahara is one of the main cause of health and disease. There was no treatment group in this study, so no any more specific criterion were needed. The data was consolidated by way of tabulation. Rearrangement and grouping according to requirement and standards are done, thus summarizing tables from data tabulation which give meaning to the information collected.

Exclusion Criteria: The persons who were suffering from chronic as well as any acute diseases and those needing the emergency treatment were excluded from this study.

Observation

Out of 204 persons in both groups maximum number of persons i.e. (46.08%) belonged to the age group between 20 to 40 years. Majority of persons were male (69.61%), 80.39% persons were Hindu, 66.18% were from middle class, 34.80% were students, 87.75% were having addiction of tea, 52.94% were having irregular bowel habit, 40.69% taking excess sleep. In dietary habits maximum i.e. 73.53% persons were vegetarians, out of which 51.47% were taking Madhura Rasa and more than 65% were taking Guru and Snigdha Gunas dominant Ahara. The 59.33% were having pravara abhyavarana Shakti, 40.69% were having Avara Jarana Shakti. In symptoms of Matravat Ahara taken Parshvayoh ipatanam, Anati gauravam Udarasya, Kukshi Aprapidanam were found more than 70% person. More than 85% persons were found Atopa, Alasya, Gauravam Udarasya, Kukshi Prapidanam in Atimatravat Ahara Lakshana. Atoptikaram Udavartakaram Vatavikaraayatana were found more than 80% in heena matravat Ahara lakshana.

In both of groups 35.29% were taking Matravat Ahara, out of which 55.55% persons in group A were taking Matravat Ahara, while in group B only 24.24% persons were taking Ahara according to Matra. Total 73.04% were taking Deshanusara Ahara in both groups, out of which 90.28% in group A and 63.64% persons in group B were taking Ahara according to Desha. The 39.22% persons were taking Kalanusara Ahara in both groups in which, 48.61% in group A and 34.09% in group B were taking Ahara according to Kala.

Results

Table 1: Effect of Matravat Ahara on health

| Matra          | Healthy | Unhealthy | Total | Chi-Square | P Value |
|----------------|---------|-----------|-------|------------|---------|
| Matravat       | 40      | 32        | 72    | χ² =20.01  | < 0.001 |
| Amatravat      | 32      | 100       | 132   |            |         |
| Total          | 72      | 132       | 204   |            |         |
(χ² > 20.01, D.F. -1, p< 0.001 Highly Significant)

Table 2: Effect of Desha Nusara Ahara on health

| Desha          | Healthy | Unhealthy | Total | Chi-Square | P Value |
|----------------|---------|-----------|-------|------------|---------|
| Deshanusara    | 65      | 84        | 149   | χ² =14.70  | <0.001  |
| Deshaviruddha  | 7       | 48        | 55    |            |         |
| Total          | 72      | 132       | 204   |            |         |
(χ² >14.70, D.F. -1, P < 0.001 Highly Significant)
Discussion

Though Ahara has been classified on several grounds, the Panchabhautic classification of Dravya will supersede than other classifications which are based upon the Vipaka, Virya and Prabhava etc. Ultimately all the classifications are also signifying the changes at the Panchamahabhautic level only.

Modern science has particularly described Ahara according to the nutritional value of its components. They have not described about Hita, Ahita, Pathya, Apathya Ahara etc. for each individual.

Panchamahabhautic Ahara during digestion gets disintegrated into Bhautika Gunas, Tanmatras and then into Trigunas. And in this Trigunatmaka form it acts on the Mana. Hence its importance has been described on only at the somatic or psychological factors but not at the spiritual level.

Ahara Vidhi Vidhana and Dwadasha Ashana Vichara. These are the code and conducts for taking diet of any dietetic science having physiological and functional consideration eg. Natidrutam will lead to improper mixing of Bodhaka Kapha which hampers Sanghata leading to indigestion and Nativilambitam i.e. by taking food very slowly, enzymes responsible for digestion will come late in contact with food and in an irregular manner and this will result in irregular digestion.

The modern dietetic science emphasizes more on Parigraha aspect of Matra, as it specifies the quantity of Carbohydrate, Fats, Proteins etc. in Ahara; whereas, Ayurveda gives equal importance to both types of Matra i.e. Sarvagragha and Parigraha.

Desha is such a factor which is to be understood in three ways in relation to Ahara, i.e. Bhoomi, Ahara Dravya Desha and Atura Desha. It is common to a larger mass of people.
but its effect regarding the Ahara taken by an individual will change in accordance to this.

Modern science is not thinking in a different way about Desha but presenting in own way. It also says that the study of disease is really the study of man and his environment. Hundreds of millions of people are affected by preventable diseases originate in the environment in which they live. For human beings the environment is not limited, as it normally is for plants and animals, to a set of climatic factors.

The aspect of Human host is well defined in Ayurveda when Acharyas said about Vyadhit Desha Pariksha. So Vyadhit Desha Pariksha is one of the vital aspects of understanding the patients before starting the Pariksha. The examination of it should be done not only before Cikitsa but also before taking the food. Hence one should always take Ahara according to Bhoomi Desha as well as Atura Desha.

Considering the most important causative factor for the proper benefits of Ahara the involvement of Kala is on each and every state of Ahara Dravya as well as it’s all the stages of Ahara consumption.

Here for achieving maximum benefits of the consumed Ahara, the Kala related to the consumer also needs to be taken into consideration, i.e. His Awastha, both in terms of Swasthya or Rugna and Vayah too, Nityaga Kala i.e. The ruts, Time of the Day, etc. where ever there is a Dravya and the existence of Kala there is always Parinamnan. Hence Kala has an impact on the principles governing Ahara. To decide the frequency, the longevity of day and night, age, Prakriti, etc. need to be taken into consideration e.g. on long days frequency will be more and vice versa.

Kala is the constant factor which is the basic cause for the Parinamnan of immature substance to gets its maturity and maturity to its destruction i.e. for Utpatti-Sthiti-Pralaya. Nothing is left behind which can not be affected by the Kala. Desha is the second factor which also influences the every aspect of substance because of its intimate relation with it. Kala and Desha both go hand in hand but still Kala is one which is having always superior in them.

Most of the persons were taking Santarpajanajya Ahara and remaining were taking Apatarpajanajya Ahara in this study. Madhura-Amla and Lavana Rasas, which are having mostly Jala and Pruthvi dominance categorized under Santarpajanajya Rasas and remaining three Katu, Tikta and Kashaya Rasas categorized under Apatarpajanajya. The basic point of discussion is that the classification according to Guru and Laghu Gunatmakah Ahara is having mutual relation between Matra of that particular Ahara.

The second point is that this region i.e. Desha is said to be Jangala Sadharana Desha according to privileged climatic conditions. The textual references shows that Jangala Sadharana Desha is having dominancy of Tikta- Kashaya Rasa and Ruksha Guna. This dietary pattern is in harmony of this particular Desha also.

Maximum of the people surveyed depended upon Sarvagraha Rashi Parimana i.e. there is no consideration of individual Ahara Ghataka Parimana due to the socio-economic status in the middle and lower class. The consideration of Sarvagraha Rashi Parimana depends upon the major meal constituents like Dala, Chaval and Roti etc., but still Ayurvedic concept of Shad-Rasatmaka Ahara is lacking behind and it is also difficult task to get information about each and every ingredient of each and every individual. This type of lacuna always remains in subjective type of survey study. Modern dietetics on the subject of this, is though seem to be appropriate regarding Parigraha Rashi Parimana in various conditions but it is also having its own limitations.

There is no much of difference seen in Abhyavaharana Shakti between the healthy and unhealthy, but marked difference is seen in the Jarana Shakti in the healthy volunteers as it was less in unhealthy. That is why most of the unhealthy persons found were suffering from the GIT disturbances. Abhyavaharana Shakti is indicative of intake of food quantity, it differs from person to person and time to time and also according to moods and mental health. Jarana Shakti is the mirror of digestion it mostly depends on the nature of food articles and status of Agni. In unhealthy persons though Abhyavaharana Shakti was found good, however it may be interpreted as the other factors influencing the same; such as the arrival of the habitual meal time, the sight, taste, or smell of food, condiments and seasonings, or even the thought of food. In some diseased states there is an almost constant and insatiable appetite. This is called as counterfeit hunger. At this stage if any person eats food he becomes unhealthy.

The maximum number of an individual were taking Matravat Ahara in group A, while in group B more than 75% of persons were taking Amatravat Ahara. The persons who were taking Amatravat Ahara in group A still fall under healthy criterion because of the other factors like Agni, Koshta, Prakuti, Vayam Shakti and Vaya etc. factors may be influencing the effect of Matra.

Maximum number of the healthy volunteers as well as the unhealthy were seen to take diet according to Desha, which is higher as compared to the other factors. This shows that maximum of the people accept the influence of Desha on Ahara.

Prapta Kala is that Kala which is considered best time for taking food. Above Bar Diagram (Fig. No. 5) shows that less than 50% persons of both the groups were seen to take Kalanusara Ahara. The increased pace of life, changes in life style, competition mania as well as the change in the structure and perspective of family as well as society may be basic cause behind it. If person is unable to take his food in the Prapta Kala, obviously it will be either Aprapta Kala or Atita Kala ultimately throw person in the mouth of disease. Those Swastha volunteers not considering Kala in relation to their diet may have better Agni to adjust to the Hetus. But
it will eventually give rise to Doshika vitiation, and definitely in future it will terminate into disease. The persons who were taking Ahara according to Kala but remain unhealthy, because he does not understand the difference between Appetite and hunger or true hunger and counterfeit hunger.

Diet should be taken according to Desha as the habit of taking diet and diet material varies place to place. The graph given above shows maximum persons were taking diet according to Desha but they are unhealthy as they are not considering the Kala and Matra. Again main cause behind it may be the easy availability of diet material of the particular Desha. In the above graph maximum persons were healthy, those who are taking Ahara according to Matra and Kala. But Kala determines the result of health of a person as those who are considering only Kala were healthier than those who are obeying the other code and conducts of Ahara like Desha and Matra, etc. It shows Vyapaktya of Kala.

Conclusion

In the conceptual part it has been found that all the authors of Ayurveda have emphasized on Ahara as well as Ahara in relation to Matra, Desha and Kala and also their beneficial or harmonious effect on health. All the three aspects as Matra, Desha and Kala are playing individually major role in context of health and illness. About 55.55% of the healthy volunteers were seen to have Matravat Ahara, clearly indicating the importance of Matravat Ahara in maintaining Swasthya.

Since maximum of the healthy as well as unhealthy people gave consideration to Desha in relation to Ahara, it can be excluded as a factor for Vyadhi Janana. But Kala is a factor which is considered the least hence could be a major factor for Vyadhi Janana.

The study conducted shows an equal importance of all three factors, but Kala dominates over the other two.

References

1. J. E. Park And K. Park, Text Book of Preventive And Social Medicine, 12th Edition, 2002.
2. Ibid. (1).
3. Charaka Samhita, Ayurveda Dipika Commentary of Chakrapanidatta. Sutrasthan, 30/26, Edited by Vaidya Jadavji Trikamji Acharya, Chaukhamba Sanskrit Sansthana Varanasi, 5th Edition, 2002. pp.187.
4. Ibid. Charaka Samhita, Sutra Sthana, 1/67, pp. 19.
5. Ibid. Charaka Samhita, Sutra Sthana, 28/45, pp. 181.
6. Vrdhha Jivaka, Kashyapa Samhita, revised by Vatsya, Edited by Pandit Hemaraja Sharma,Khila Sthana,4/6, 8th edition Chaukhamba Sanskrit Sansthana, 2002.
7. Ibid. Charaka Samhita, Sutra Sthana, 1/35, pp. 74.
8. Ibid. (1).
9. Ibid. Charaka Samhita, Vimana Sthana, 1/24-7, pp.237.
10. Sushruta Samhita, Nibandhasangraha Commentary of Shri Dalhanacharya, Edited by Jadavji Trikamji Acharya, Uttara. 64/56, Chaukhamba Orientalia Varanasi, 7th Edition 2002. pp. 812.
11. Ibid. Charaka Samhita, Vimana Sthana, 1/24-8, pp. 237.
12. Ibid. Charaka Samhita, Vimana Sthana, 1/21 (1-4), pp. 235.