COMPREHENSIVE STUDY OF *SAMANA VAYU DUSHTI* IN INFORMATION TECHNOLOGY (I.T.) PROFESSIONALS

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ABSTRACT

Health hazards are blooming up all over the world. Sedentary life style is a core part of it. Particularly the causative factors like *Sheeta Bhojana, Ajeerna Bhojana, Vishama Bhojana, Akala Shayana* are commonly found in IT professionals undergoing shift duties, irregular food habits, working in AC environment. These are the leading causes of '*Samana Vayu Dushti*' given in classical texts. Thus to analyze literary findings on practical grounds, questionnaire regarding causes and symptoms of *Samana Vayu Dushti* was designed. Survey study of 150 females divided into two groups 75 from IT and 75 from Non IT was carried out. Findings of these two are noted and concluded. Conclusion - After comparing the results in two groups, causes of *Samana Vayu Dushti* are significant in IT group. Total No. of females in IT sectors 55 / 75 and in Non-IT sector are 26 / 75 are having *Ama and Ajeerna* symptoms. Thus functioning of *Samana Vayu* is hampered which leads to *Agni Dushti* and indigestion. Hence it can be concluded that *Samana Vayu Dushti* is significant in IT professionals.

Key words: *Samana Vayu Dushti*, *Samana Vayu* , IT , Non IT

INTRODUCTION

Tridoshas are the basic components of our body. Amongst *Tridoshas*, *Vata i*s considered to be prime *Dosha* because of its ability to vitiate other body elements independently, being the prime element behind all body functions. There are five types of *Vata Doshas* in which *Samana* is said to be "*Agnisahayavana*". The role of '*Samana Vayu'* in digestion process is significant.

It resides adjacent to *Agni*, accepts the ingested food, digests it with the help of *Agni*, brings about separation between *Sara & Kitta* parts & then delivers these products for further mechanism.

According to *Ashtanga Sangraha[1]*, *Samana Vayu* along with enlightening *Agni* controls the entire physiology (*Avalambana*) of *Dosha, Mal, ukra, rtava, A bu, Swedavaha Srotas s. Avala bana* would literally mean to give stability, strength, to that *Srotas*. Hence it plays a vital role in maintenance, well-being & abnormalities related to these factors.

As a consequence of Urbanization and Industrialization health hazards are blooming up in various fields and one of the leading professions is Information technology (I.T.). If we try to trace the

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causative factors of their health hazards it is very well evident that they cause vitiation of many Sharira *Bhavas* and one of them is *Samana Vayu.* Hence to analyze these literary findings on practical grounds survey study based on causes and symptoms associated with *Samana Vayu* was conducted and final outcomes were noted.

AIM -

To study group of symptoms of *Samana Vayu Dushti* through survey study in Information Technology (I.T.) professionals.

OBJECTIVES -

*   To study *Samana Vayu* in detail.
*   To study causes of *Samana Vayu Dushti* in detail.
*   To study symptoms of *Samana Vayu Dushti* in detail.
*   To establish association between causes and symptoms of *Samana Vayu Dushti* on the basis of literary & survey study.

MATERIAL AND METHOD –

All *Ayurvedic* treaties along with necessary allied literature were taken into consideration.

METHODOLOGY –

*   **LITERARY STUDY**
*   Classically explained causes of *Samana VayuDushti*[2]
*   *Vishama Bhojana*
*   *Shita Bhojana*
*   *Ajeerna Bhojana*
*   *Sankeerna Bhojana*
*   *Akala Shayana*

*   Classically explained symptoms and diseases due to *Samana Vayu Dushti*[3]
*   *Shoola*
*   *Gulma*
*   *Grahani*

Along with the diseases mentioned above, all *Pakwamashayaja diseases* i.e. diseases associated with *Koshtha* are taken into consideration. (*Pakwamashaya* word is stated as synonym for *Koshtha*)[4]

As symptoms of *Samana Vayu Dushti* are not directly mentioned it is thought that due to vitiation of *Samana Vayu*, initially indigestion will occur and *Ama* and *Ajeerna* symptoms will be present in initial phase. Therefore these symptoms need to be assessed in primary phase of *Samana Vayu Dushti.*

TABLE NO. 1: Symptoms of *Ama* and *Ajeerna*

No.	Symptoms of *Ama*[5]	Symptoms of *Ajeerna*[6]
1.	*Srotorodh*	*Vishtambha*
2.	*Balabhramsha*	*Sadana*
3.	*Gaurav*	*Shiroruja*
4.	*AnilaMoodhata*	*Moorccha*
5.	*Aalasya*	*Bhrama*
6.	*Nishthiva*	*Prushthagraha*
7.	*Klama*	*Katigraha*
8.	*Malasanga*	*Jrumbha*

*   **SURVEY STUDY**

To suspect *Samana Vayu Dushti* and to determine the group of symptoms of *Samana Vayu Dushti* in IT professionals following survey study was conducted –

*   Total 150 samples were surveyed.
*   They were divided into two groups IT professionals and Non- IT professionals.

*   In each group 75 – 75 cases were taken.
*   These two groups were compared for causative factors and symptoms or diseases associated with *Samana Vayu Dushti*.
*   25 – 25 cases of each IT and Non-IT group were studied for objective parameter.

Inclusion and exclusion criteria -:

1.   Inclusion criteria – (for both groups)

- Individuals between the age group of 20 to 45 years were taken.
- Individuals with minimum one year work experience were taken.
- Only female candidates were taken for survey study.

2.   Exclusion criteria –

Individuals having any major complications which need emergency medical intervention were excluded.

Objective assessment criteria -:

Agni is not directly perceptible. But can be inferred. Thus a non-invasive, safe method was adopted to assess *Agni.*

        Initially weight of the individual was taken before having meal. Weight of the whole meal including water was taken. For all individuals day to day diet (meal) was given i.e. *Roti + Sabji, Dal + Rice* in order to avoid error in assessing digestive capacity. After having meal weight of the

individual was again measured. It showed increase in weight as per corresponding weight of the meal taken. Then after every hour up to 5 hours weight of the person was measured. In between these 5 hours person was not allowed to eat anything. Final reading of weight was compared with initial weight taken before meal. Weight reduced per hour in both groups was measured. This experiment was done only on 25 individuals from each group because of time constrain. Only once individuals were subjected for this experiment.

Hence with this experiment weight loss in grams after every hour was measured and compared in both groups.

▪ **Statistical Analysis –**

All the compiled data was analyzed statistically with following tests -:

- CHI SQUARE TEST
- Z TEST FOR PROPROTION
- INDEPENDENT T TEST

RESULTS –

TABLE NO. 2 - Causes of *Samana Vayu Dushti*

Causes	IT (n = 75)	Non-IT (n = 75)	P value
1. Sankeerna Bhojana	35	14	0.000
2. Ajeerna Bhojana -	34	18	0.006
• *Guru Bhojana*	62	40	0.000
• Indigestion	33	12	0.000
• *Adhyashana*	30	9	0.000
• Stress while having food	12	5	0.07(Marginally Sign)
3. Akala Shayana	25	9	0.004
4. Sheeta Bhojana	21	9	0.014

Out of 5 causes of *Samana Vayu Dushti – Sheeta Bhojana, Ajeerna Bhojana, Sankeerna Bhojana* and *Akala Shayana* these 4 causes are statistically significant in IT professionals compared to Non-IT group.

Amongst 4 of the above there are sub-factors which are more significant. In *Ajeerna Bhojana*

there are 10 sub factors amongst them - Indigestion, *Guru Bhojana, Adhyashana* these three causes that are most significant, Stress while having food is marginally significant. Indigestion means having food before the previous meal is not completely digested particularly at breakfast.

TABLE NO. 3 – Stress One of The Causative Factor

Causes	IT (n = 75)	Non-IT (n = 41)	P value
Stress at Office	46	10	0.001
Stress (Home + Office)	15	4	0.000

Stress is one of the most important causative factors found significant in IT professionals compared to Non IT group. (In Non IT group only 41 females are working hence n = 41 is considered)

TABLE NO. 4 – *Vishama Bhojana*

Cause	IT (n = 75)	Non-IT (n = 75)	P value
Vishama Bhojana	10	12	Not significant

Out of 5 causes of *Samana Vayu Dushti,Vishama Bhojana* is not a significant causative factor in both groups.

TABLE NO. 5 - Total Causes Of *Samana Vayu Dushti*

Causes	IT (n = 75)	Non-IT (n = 75)	P value
Causes	33	12	0.000

33 / 75 females from IT group and 12 / 75 females from Non IT group are exposed to causative factors of *Samana Vayu Dushti*. Hence causes of *Samana Vayu Dushti* are statistically significant in IT group compared to Non IT group.

SYMPTOMS OF *SAMANA VAYU DUSHTI*
Following different symptoms are observed in survey study.

TABLE NO. 6:- Ama *and Ajeerna* Symptoms

Symptoms	IT (n=75)	Non-IT (n=75)	P value
Shiroruja	26	8	0.004
Daha	24	11	0.012
Amlodgar	18	7	0.016
Malaviba dha	16	2	0.000
Bhrama	8	2	0.049
Adhmana	18	11	0.147 (not significant)
Chhardi	17	10	0.136 (not significant)
Gaurav	14	7	0.099 (not significant)

Total 18 symptoms of Ama and Ajeerna are present in which *Shiroruja, Daha, Amlodgar, Bhrama, Malavibandha* these are statistically significant group of symptoms of *Ama and Ajeerna* in IT professionals compared to Non-IT. Though *Adhmana, Chhardi, Gaurav* these symptoms are not statistically significant on comparison they have higher value in IT group than Non IT group. Hence are considerable. Thus *Ama* and *Ajeerna* are prominently seen in IT professionals.

TABLE NO. 7: Other Group of Symptoms
Following symptoms are seen in these groups of diseases -:

Group	IT	Non-IT	P value
Rasa-Dush i	31	14	0.038
Rakta- Dushti	15	7	0.147(not significant)
Shakhagata Pitta Dushti	7	0	0.025

- Symptoms of *Rasa Vaha Srotasa Dushti* (*Khalitya, Palitya, Tvak Raukshya, Gaurava, Hrullasa, A gamarda, Jvara, Pa uta, Ashraddha*)and *akhagata Pitta Dushti*

(Sheeta Pitta, Hasta –Pada Tala Daha, Sarvanga Aushnya) are most significant in IT group compared to Non IT group.

- *Rakta Dushti* symptoms *(Vidradhi, Arsha ,Parikartika, Tvak Vaivarnya, Shopha, Pitikotpatti)* are not statistically significant on comparison they have higher value in IT group than Non IT group. Hence are considerable.

Reviewing all observations it can be stated that *Samana Vayu Dushti* not only hampers *Agni* but also have capacity to create further abnormalities related to *Dhatus.*

OBSERVATIONS REGARDING OBJECTIVE PARAMETER -:

Comparison of weight loss per hour in both groups –

In objective assessment weight loss per hour in grams is compared between IT and Non IT group. It is observed that for every hour weight loss in grams is more in Non IT group compared to IT group which is statistically Significant.

DISCUSSION

Causes of *Samana Vayu Dushti* **- :**

- As factors like working in AC environment, late work hours, shift duties, excessive eating are common in IT professionals, *Sheeta Bhojana, Ajeerna Bhojana, Sankeerna Bhojana and Akala Shayana* these 4 causes of *Samana Vayu Dushti* are prominently seen.

1. Indigestion - Indigestion of late night meal is commonly found in IT professionals.
2. *Guru Bhojana* – Most of the employees are having *Poha, Idli* etc food items for breakfast every alternate day or at least twice a week. Thus *Guru Bhojana* is a prominent causative factor in IT professionals.
3. *Adhyashana* – Due to work pressures and AC environment false feeling of hunger increases which leads to habitual eating.
4. Stress while having food – Due to work pressure, working lunch is commonly seen in IT professionals. Thus it leads to indigestion.

- **Symptoms and diseases due to** *Samana Vayu Dushti* **-:**

Though there are no direct indicatives of symptoms they are inferred and categorized after survey study –

1. *Ama and Ajeerna* **symptoms -:**
- Total No. of females in IT sectors 55 / 75 and in Non-IT sector are 26 / 75 are having symptoms of *Ama and Ajeerna.*
- Presently most of the symptoms are mild, few are moderate. But they are worth mentioning. These symptoms may turn hazardous to health in a long run.

2. *Pakvamashayaja Gada* **-:**

Diseases like *Ajeerna* – specially Vish abdhajeerna*, Vidagdhajeerna, Abhya tara Arsha, Urdhvaga Amlapitta* are found in IT professionals. As these are young candidates with maximum 5 years of working experience, only few cases of these diseases are found but they are noteworthy.

3. **Other diseases -:**

In the following group of diseases *Samana Vayu* is indirectly responsible for these pathologies.

- *Srotasa Dushti* **-:**
1. *Rasa Dushti* **– :**

It is most significant in IT professionals compared to Non IT group. As *Guru, Sheeta, Ati Matrashana* these causes of *Rasa Vaha Srotasa Dushti* are same as that of causative factors of *Samana Vayu.* It is the most significant abnormality found in IT group. It might be hazardous if not treated in early stage.

2. *Rakta Dushti* **–:**

Diseases like *Arsha, Parikartika, Vidradhi, Bhagandara Pidaka* that of *Rakta-vaha Srotasa* are found to be prominent which were not previously present. Hence it can be concluded that factors vitiating *Samana Vayu* and *Agni* along with other factors like *Vidaha, Ushna Ahara Sevana* which are directly affecting *Rakta-Vaha Srotasa* lead to these diseases. Thus pathogenesis initiates with *Samana Dushti* and these are accelerating factors.

- *Shakhagata Pitta Dushti* **:**

As mentioned above *Samata* is prominent in IT group. If *Sama Pitta* is driven towards *Shakha* due to causative factors like AC, exercise after having food, *Chhardi Vega-Dhara a* then it leads to *Shakhagata Pitta Dushti* and associated symptoms.

- *Krimi-***:**

Many of the cases have symptoms of *Shleshmaja Krimi. Ajeerna Bhojana, Sankeerna Bhojana, Klinna Bhojana* these causative factors of *Shleshmaja Krimi* are same as that of *Samana Vayu Dushti*. Thus *Krimi* can also be one of the parallel diagnoses found in IT professionals.

- ▪ **Objective assessment criteria – :**

As per the weight of food material consumed, weight should reduce every hour as digestion process is initiated. But in IT group weight loss is declined compared to Non IT group. Because of *Ajeernashana* and other causative factors, as years pass on digestive capacity may become weak. That may further lead to indigestion and related disorders.

CONCLUSION

- Causes of *Samana Vayu Dushti* are significant in IT professionals (p value – 0.000)
- Symptoms of *Samana Vayu Dushti* –
1. *Ama and Ajeerna* symptoms are significant in IT professionals.
2. *Pakvamashayaja Gada* are significant in IT professionals.
3. Symptoms of *Rasa Vaha Srotasa Dushti* is significant in IT professionals with (p value – 0.038)
4. Symptoms of *Shakhagata Pitta Dushti* is significant in IT professionals with (p value – 0.025)

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