CLINICAL STUDY ON THE ROLE OF *MANASIKA BHAVAS* IN THE AETIOPATHOGENESIS OF *GRAHANI ROGA* AND ITS *UPSHAYATMAK PARIKSHAN* WITH *BILVADI YOGA* AND *BRAHMI VATI*

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ABSTRACT

Grahani is considered the prime seat of *Agni* responsible for the digestion and absorption in the *Annavaha Srotas*. Improper lifestyle, faulty dietary practices, and indulgence in *Asatmya Ahara–Vihara* have led to the rising prevalence of *Grahani Roga*. Factors like *Laulya* (mental restlessness) and *Prajnaparadha* (intellectual errors) aggravated by *Asatmyaindriyarthasamyoga* act as causative agents, disturbing the normal process of *digestion*. In addition, *Manasika Bhavas (Bhaya, Krodha, Shoka, Dvesha, Vishada, Chinta) Dushti* further contributes to the pathogenesis, making the *Samprapti Vighatana* more challenging. This leads to chronicity (*Yapya Avastha*) of the disease. Although patients with *Grahani Roga* are commonly encountered in clinical practice, differentiating it from other disorders with similar symptomatology is often difficult and recurrency is a challenge. Through *Upshayatmaka Parikshana* we can differentiate it as well as overcome the symptoms of *Grahani Roga.*

KEYWORDS: *Manasika Bhavas, Agni, Grahani Roga, Prajanaparadh, Annavaha Srotas.*

INTRODUCTION

Ayurveda is the pioneer of medical and philosophical knowledge. It describes *Ayu* (life) as an amalgamation of *Sharira* (Body), *Indriya* (senses), *Satva* (*Mana*) and *Atma* (soul) that together governs all the process in the body. Infact the *Vedas*, the *Upnishadas* also describes the same inter-relationship of body and mind.

Grahani holds prime importance in the human body. According to our *Acharyas*, *Grahani* is framed for holding the food for its digestion as it is the home for the *Jatharagni*(various enzymatic secretions) and provides nutrition to the body. *Jatharagni* is influenced by the *Ahar* and *Vihar* one follows and its vitiation results in disease.

रोगाःसर्वेऽपिमन्देऽग्नौसुतरामुदराणि तु। (A.H.Ni. 12/1)

There is description of 3 types of *Agni* according to *Acharya Charak* (which is further of 13 types):

1. *Jatharagni(1), 2. Dhatvagni(7), 3. Bhutagni(5)*

Jatharagni holds the prime importance among these.

Grahani Roga is among the *Ashtamahagada* as mentioned by *Acharya Vagbhatta* because it reduces the *Bala* and *Oja*.

वात व्याधि अश्मरीकुष्ठ मेहोदरभगन्दराः ।

अर्शाशि ग्रहणीत्यष्टौ महारोगाः सुदुस्तरा। (As. Hr. Ni. 8/30)

People knowingly consume food (or *Ahar*) that should be avoided such as junk, oily, spicy food etc. We are surrounded by the taste and smell of it and can't help but to indulge in it. This aspect actually shows the longing or gluttony which in *Ayurveda* means "*Laulya*". *Grahani Roga* highlight the *laulya* for food that definitely comes from the three causes of illness i.e. *Asatmendriyarthsamyoga, Prajnapradha* and *Parinam*. When the senses do not act properly or deviates from the normal functioning is *the Asatmya- indriyarth- samyoga. Prajnapradha* is the *vibhramsa* of *Dhi, Dhriti and Smriti* (memory) where inspite of knowing that the action is wrong one still continues to indulge in the process. *Parinam* is the *kala* which is subjected to the seasonal variation, diurnal variation and ageing. These unthoughtful

eating habits along with disturbed cycle of sleep-awake, over working or sedentary life and increased screen time disturbs the *Agni*.

Along with the *Ahar and Vihar*, the mental health is equally important for better digestion and overall health. We face stress, anxiety, anger issues related to our work place or personal issues, sleep deprivation, fear of missing out or exam related stress, overthinking, all these either over stimulate or suppress the digestion and directly cause the disease. *Acharya Sushruta* has mentioned that the vitiated *Manasika Bhavas* like *Irshya, Bhaya, Krodha and Matsarya* disturbes digestion-

ईर्ष्याभयक्रोधपरिक्षतेन लुब्धेन रुग्दैन्यनिपीडितेन ।

प्रद्वेषयुक्तेन च सेव्यमानमन्नं न सम्यक् परिणाममेति ।। (Su.Su.46/508)

Although the *Manasika Bhavas* (*chinta, shoka, bhaya, krodha*, etc.) are not directly mentioned in the etiopathgenesis of *Grahani Roga*, but are closely linked with *Agni*. Since *Grahani* involves *Rasavaha* and *Annavaha srotas*., *Acharya Charak* has described *Manasika Bhavas* in *Rasavaha srotodhusti*. It is evident that *Manasika Bhavas* and *Ahar-Vihar* has lead to improper digestion by vitiation of the *doshas* specially the *Apan Vayu, Pachak Pitta* and *Kledak Kapha* along with the *Ama* formation, *Agnimandya*, *Sroto Dushti* and thus *Grahani Roga*.

In contemporary times, lifestyle changes, increased stress, and altered mental states have led to a rise in psychosomatic gastrointestinal disorders. Modern medicine recognizes conditions like Irritable Bowel Syndrome (IBS), where psychological stress and emotional disturbances play a key role in symptom severity and chronicity. As *Grahani Roga* is closely aligned to IBS for its modern aspect, this parallel strengthens the need to evaluate *Manasika Bhavas* scientifically in *Grahani Roga.*

Need of This Research Work

Faulty lifestyle and eating habits have led to a rise in gastrointestinal disorders. Prevalence of Irritable Bowel Syndrome (IBS) in India is estimated to range from 0.4% to 4.2%, according to a 2023 consensus statement from the Indian Neurogastroenterology and Motility Association. *Grahani Roga* now accounts for nearly 69% of OPD cases. Its chronicity makes it difficult to manage, but *Ayurveda* provides sustainable improvement in bowel function by addressing root causes rather than only suppressing symptoms. **Grahani Roga** correlates with IBS in modern terms. Although classical texts do not directly connect *Manasika Bhavas* with

Grahani, both *Charaka* and *Sushruta* emphasize that emotions like *Chinta, Bhaya, Krodha,* and *Shoka* impair *Agni*, which is central to pathogenesis.

Although a lot of researches have been executed on the *Grahani Roga*, the need for this Research work has addresses both physical and psychological dimensions of the disease.

Why these drugs were choosen?
- *Bilvadi Yoga* consists of *Deepan- Pachan* and *Sangrahi dravyas* that work on the Agni and prevents *Aam* formation and,
- *Brahmi Vati* consists of *Medhya, Rasayana. Balya, Deepaniya* effect that acts as an anti-depressant and emotional stabilizer.

AIMS AND OBJECTIVES
- To study etiology, pathogenesis of *Grahani Roga*
- To assess role of *Manasika Bhavas* in *Grahani Roga*.
- To evaluate the *Upshayatmak Parikshan* of *Bilvadi Yoga* and *Brahmi Vati* for assessing symptoms of *Grahani Roga.*

Hypothesis

An assessment of *Manasika Bhavas* in *Grahani Roga* and its *Upshayatmak parikshan* with *Bilvadi Yoga* and *Brahmi Vati*.

- **Null hypothesis (H_0)**

There is no significant difference in the improvement of *Grahani Roga* between the group receiving *Bilvadi Yoga* and the group receiving the combination of *Bilvadi Yoga* and *Brahmi Vati.*

- **Alternative hypothesis (H_1)**

There is a significant difference in the improvement of *Grahani Roga* between the group receiving *Bilvadi Yoga* alone and the group receiving the combination of *Bilvadi Yoga* and *Brahmi Vati.*

PLAN OF STUDY
1. Conceptual Study
2. Clinical Study
3. Observation and Result

4. Discussion

5. Summary

6. Conclusion

CONCEPTUAL STUDY

1. **Literary Review:** Here, historical as well as modern literature was compiled from classical texts of *Ayurveda*, various previous research work done, periodic magazines, scientific journals, monographs and other sources.

2. **Drug Review:** This part includes the description of the drugs *Bilvadi Yoga* and *Brahmi Vati* used in the present research work.

CLINICAL STUDY

MATERIAL AND METHODS

SELECTION OF PATIENTS

Total of 60 patients diagnosed with *Grahani Roga* were selected from the OPD and IPD of the Departments of *Roga Nidana* and other departments of Government Ayurveda College and Hospital, Varanasi. Two groups, A and B were made irrespective of Age, Gender and Religion.

CRITERIA FOR DIAGNOSIS

A specially designed proforma was used for documentation of signs and symptoms as per the classical and allied texts. Patients were diagnosed based on clinical features, physical examination and laboratory investigation.

After confirming the diagnosis, one group(A) was given tiral drug *Bilvadi Yoga* and the other(B) was given *Bilvadi Yoga* along with *Brahmi Vati*.

INCLUSION CRITERIA

• Patient between age group 18 to 70 years are included in study.

• Patients were selected irrespective of their sex, occupation and caste.

• Patient with signs and symptoms of *Grahani Roga*.

• Patients with signs and symptoms of *Manasika Bhava dushti*.

EXCLUSION CRITERIA

• Age below 18 and above 70 years patients.

- Suffering from malignancies and chronic systemic diseases like uncontrolled hypertension, diabetes.
- Patients having any anatomical deformity in Digestive tract.
- Mentally retarded person/psychologically disabled person.
- Drug addicted person.

Investigations

- Routine Haematological examinations- Hb%, TLC, ESR was done before and after treatment to see patient's general condition and to rule out any other pathology. These investigations were not the part of diagnostic criteria for *Grahani Roga*.

Dietary restrictions: The patients were strictly advice to follow the restriction regarding food, food habits and life style.

ASSESSMENT CRITERIA

On the basis of Etiopathological factors (Ch.Chi. 15/44)

SAMANYA NIDAN

Aharaja Nidan	Viharaja Nidan	Chikitsa Asamyak Prayog
Abhojana, Ajirna, Atibhojana, Vishamasana	*Vega Dharana, Ratri jagarana, Diva svapa, Ati vyayam*	*Vaman, Virechan, Sneha Asamyak -prayoga*
Guru, Sheet, Dushita atiruksha, bhojan		

VISHISHTA NIDAN

VATAJ GRAHANI	PITTAJ GRAHANI	KAPHAJA GRAHANI
Katu, Tikta, Kashaya rasa	*Katu, Amla rasa yukta aahar*	*Guru, Atisnigdha, Sheetabhojan*
Atiruksha, dushit bhojan	*Ajeerna*	*Atibhojana*
Pramitaashan	*Vidahianna*	*Bhukta matra swapna*
Anashana	*Kshar (alkaline food)*	
Vega nigraha		
Atimaithun		

SUBJECTIVE CRITERIA

Muhurbaddham/ muhurdravam	Consistency of stool passing daily is normal	0
	Passing hard and loose stool (1 – 2 times)	1
	Passing hard and loose stool (3–4 times)	2
	Passing hard and loose stool (>5times)	3
Durgandhita Mala	Stool with normal smell	0
	Passing stool with slight foul smell	1

	Passing stool with moderately tolerable foul smell	**2**
	Passing stool with severe intolerable foul smell	**3**
Udgara Pravitti	after 1hr of taking food with no taste.	**0**
	before 1hr of taking food with taste relieved by sweets, water and antacids.	**1**
	occurs daily for two to three times for ½ - 1 hrs, not relieved by sweets, water and antacids, etc	**2**
	Even small amount of fluid regurgitates to patient's mouth	**3**
Picchila Mala	stool with no unctuousness.	**0**
	stool with mild unctuousness.	**1**
	stool with moderate unctuousness.	**2**
	Passing of stool with severe unctuousness.	**3**
Vidaha	No complain of burning sensation.	**0**
	Burning sensation occasionally after taking spicy food.	**1**
	Burning sensation every time after taking spicy food.	**2**
	Burning even after normal food	**3**

Questionnaire related to Assessment of *Agni*

| Questions		Grading
What option describes best of your ability to digest food?	I am unable to digest even small quantity of food	0
	My ability to digest food keeps varying. Sometimes I am able to digest food other time I am not	1
	I am unable to digest almost all sorts of food items when consumed in appropriate quantity	2
	I am able to digest large quantity of food even in large quantity	3
What effects do you observe in digestion due to disturbances in your lifestyle? (disturbed sleeping pattern, emotional disturbances)	Digestion gets disturbed due to slight variation in lifestyle	0
	Digestion gets disturbed due to appreciable disturbances in life style	1
	Digestion gets disturbed but easily gets adapted to variation in life style	2
	Digestion is not affected due to disturbances in life style	3
How do you define capacity to digest heavy meals in terms?	Digestion mostly takes longer than normal	0
	Time taken for proper digestion takes little longer than normal	1
	Digestion is completed in normal time	2
	Digestion occurs quite quickly than normal	3
How do you feel after complete digestion of meals?	I frequently feel heaviness in abdomen and body	0
	I occasionally feel slight heaviness in abdomen and body	1
	I mostly feel lightness in abdomen and body	2
	I feel lightness in abdomen and body quite early after having meal	3

GRADING OF *MANAS BHAVA PARIKSHA*

In Charaka Samhita (Ch. Vi. 4/8), *Manasika bhava*s **and their methods of Examination are mentioned. Here, in this study an attempt is made to provide the objectivity by scoring each Bhava as follows:**

|		
BHAYAM	No fear	**0**
	Fearful only at reasonable cause	1
	Fearful only at unreasonable cause	2
	Always fearful emotions	3
KRODHA	No violent tendencies	0
	Violent thoughts very rarely	1
	Violent, Sadistic functions more oftenly	2
	Frequent thoughts with violence and sadistic nature	3
SHOKA	No feeling of Inferiority complex	0
	Feeling of inferiority and sorrow at occasions	1
	Often feels Inferiority complex	2
	Weeps and feels inferior quite frequently	3
DVESHA	No revenging tendency at all	0
	Thoughts of revenge only at few events	1
	Often gets thoughts and acts of revenge	2
	Thoughts and acts of revenge always	3
VISHADA	No depressed mood	0
	Depressed mood only in reasonable causes	1
	Depressed mood with unreasonable causes	2
	Always depressed with fearful emotions	3
CHINTA	No worry	0
	Anticipation of the worst occasionally	1
	Anticipation of the worst frequently	2
	Exessive worry with irritation	3

OBSERVATION AND RESULTS

Age wise distribution
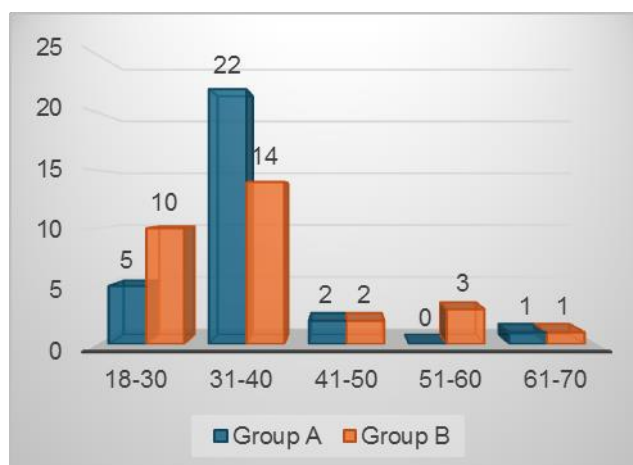
Gender wise distribution
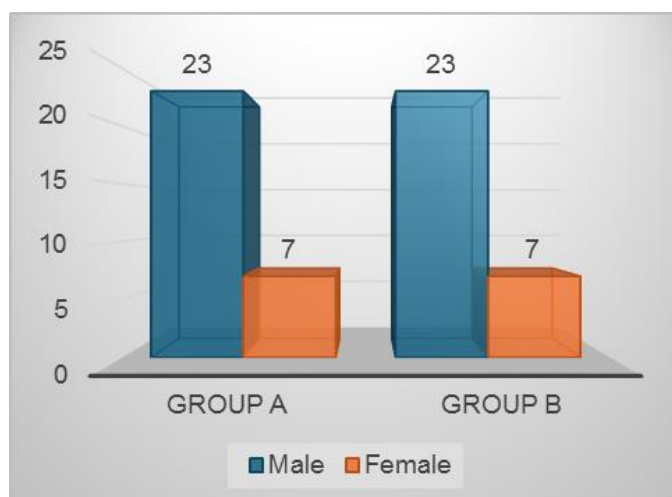
Religion wise distribution
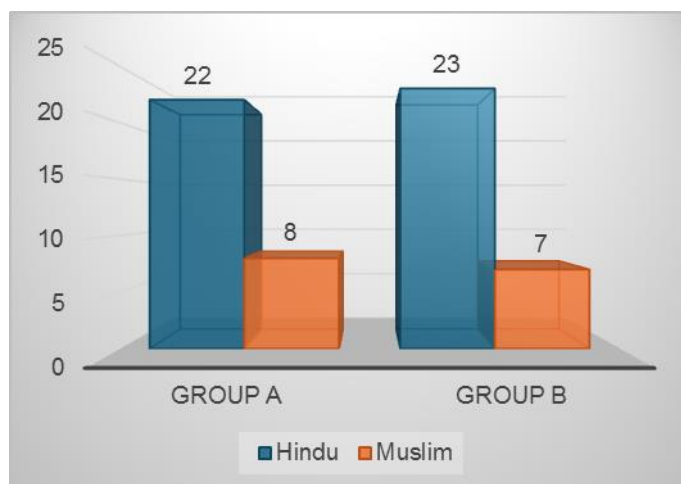
Marital status wise distribution

Socio-Economical status wise distribution
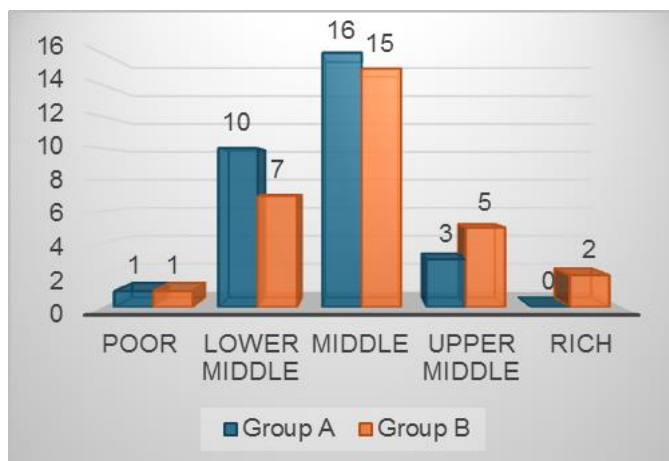
Occupation wise distribution
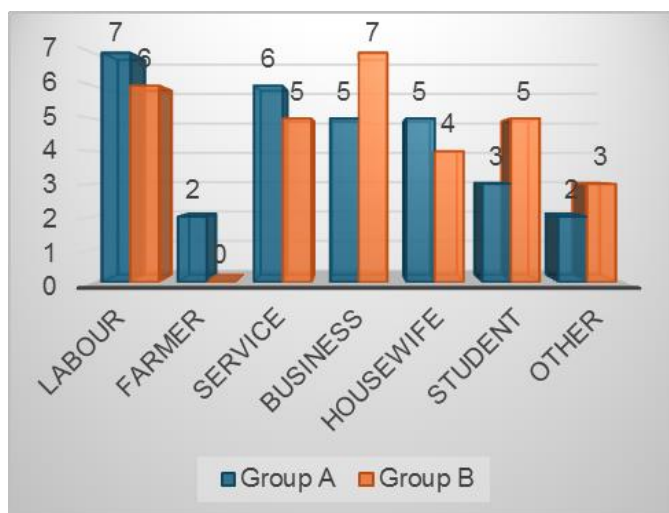
Distribution according to History of working hours
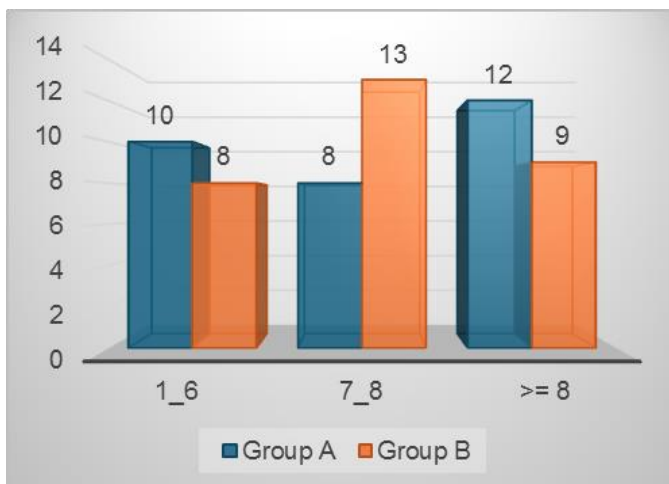
Distribution according to Education
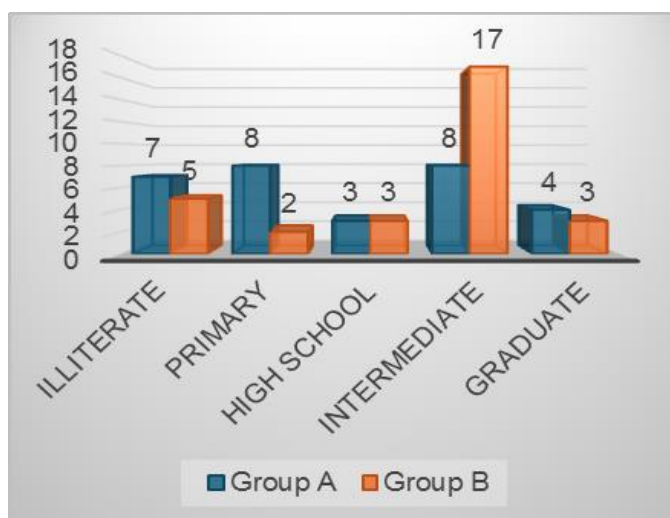
Distribution according to Desha
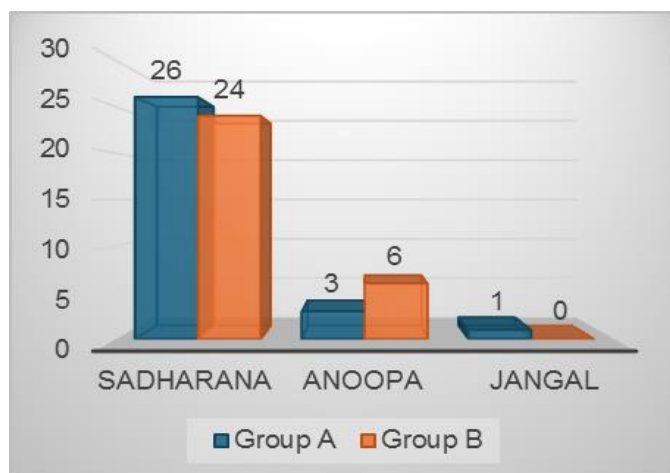
Distribution according to Habitat
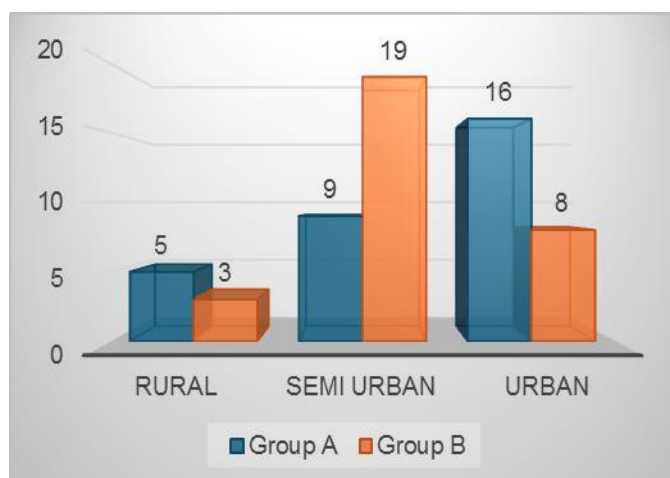
Distribution according to Agni

Distribution according to Koshtha
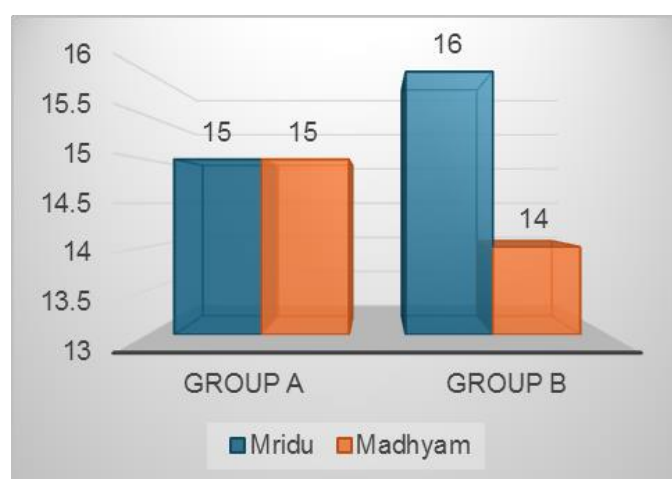
Distribution according to Course completed

Distribution according to History of Past Illness
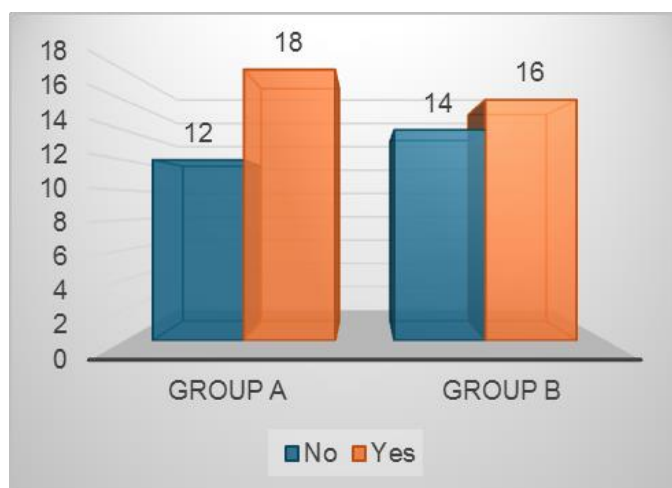
Distribution according to Treatment History

Distribution according to Family history

Distribution according to Diet
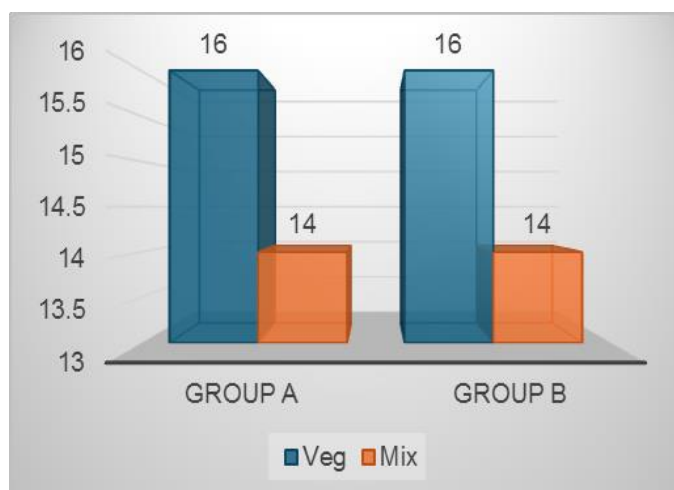
Distribution according to Diet pattern
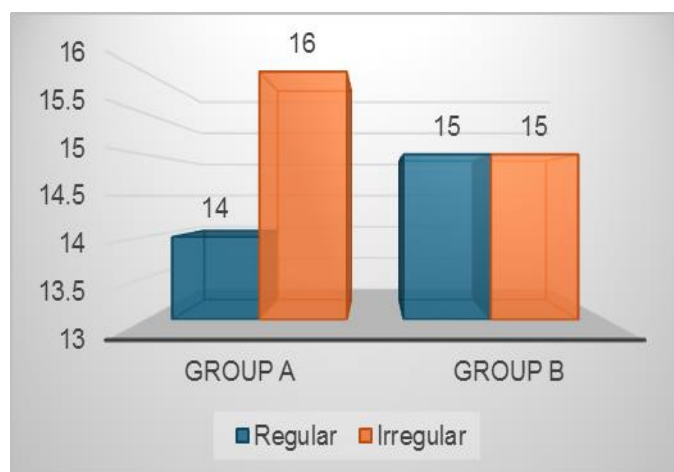
Distribution according to Dietary Habit
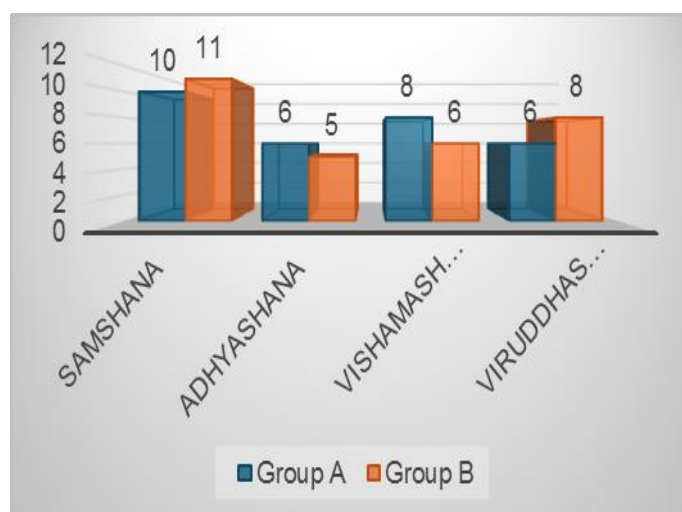
Distribution according to Water Intake
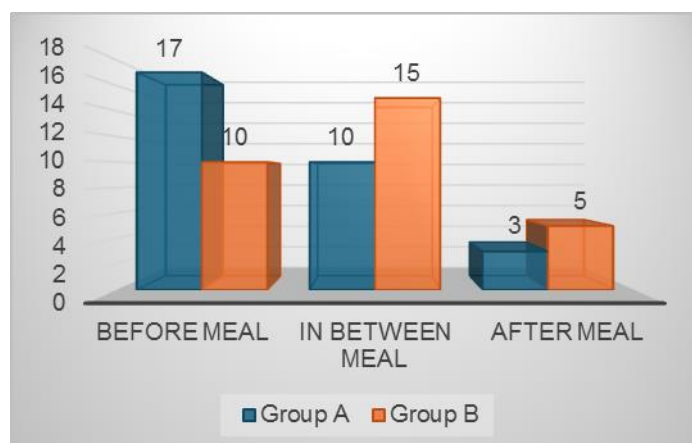
Distribution according to Frequency of Water Intake

Distribution according to Addiction
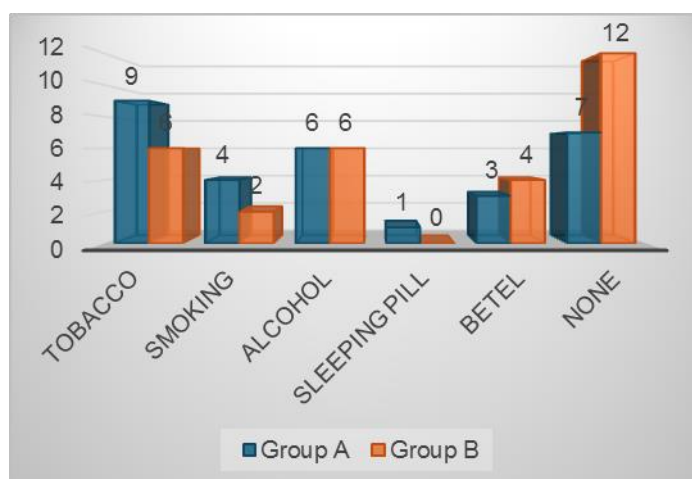
Distribution according to Supplementary Diet
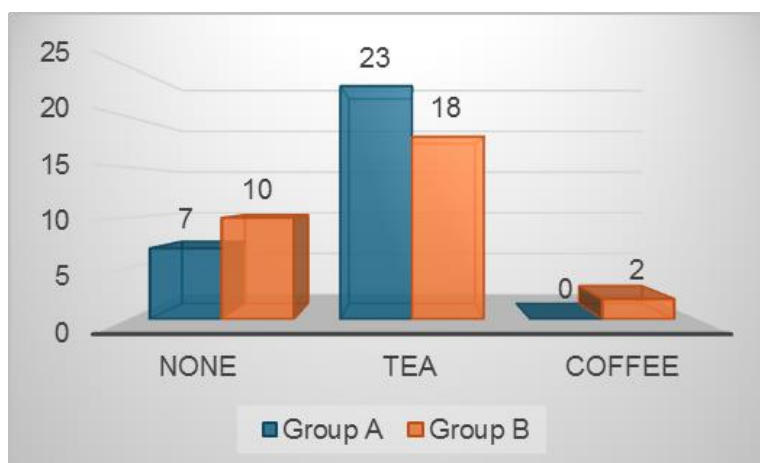
Distribution according to Bowel Habit
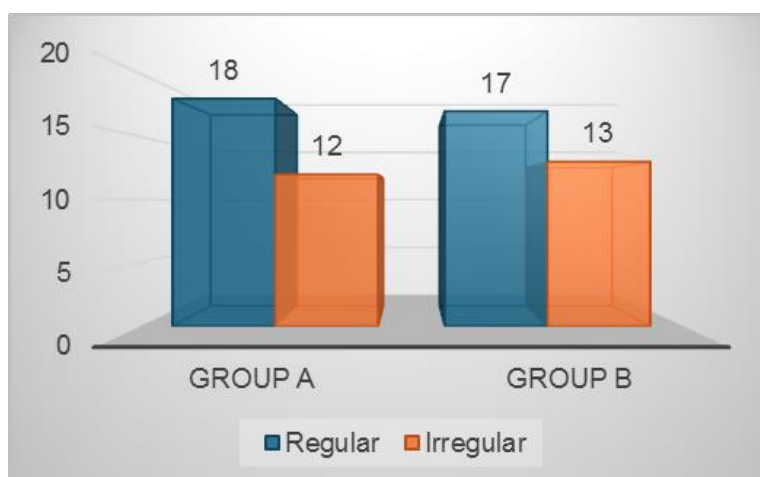
Distribution according to Urine
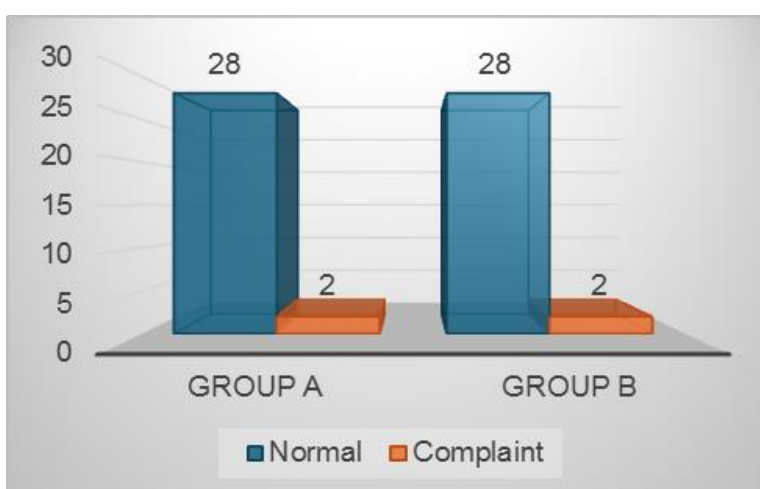
Distribution according to Frequency of Micturition
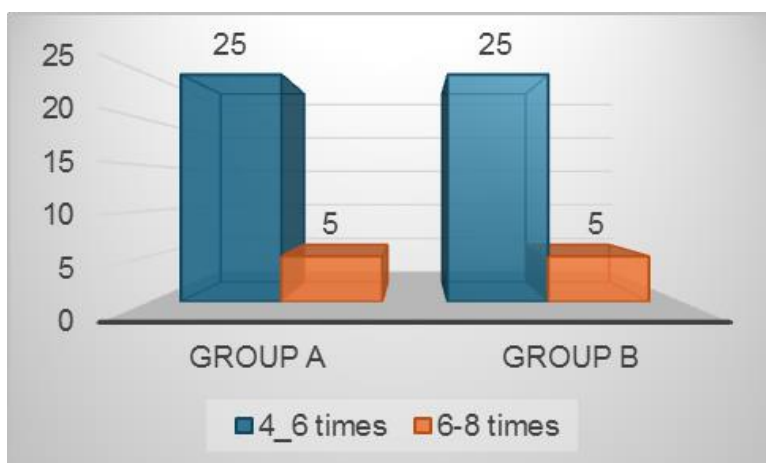
Distribution according to Dominant Rasa
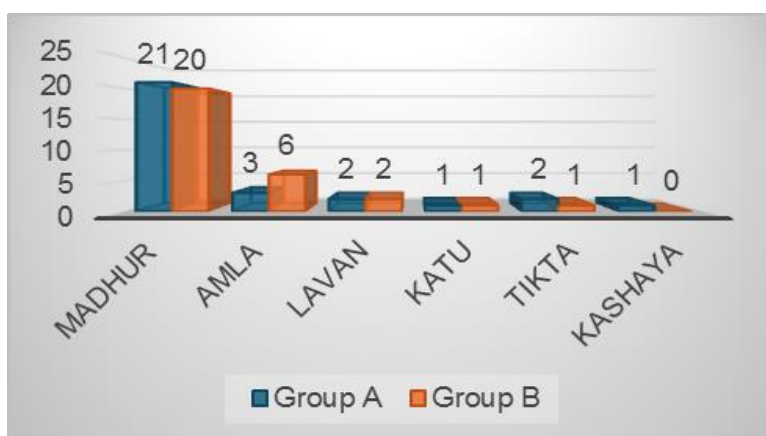
Distribution according to Nutrition
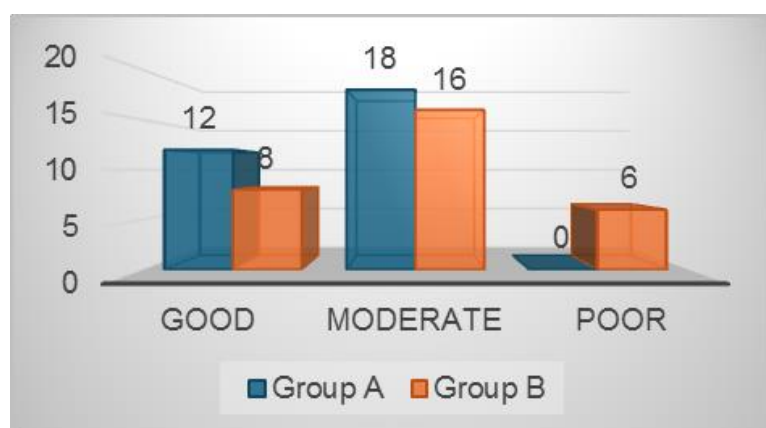
Distribution according to Manas Prakriti
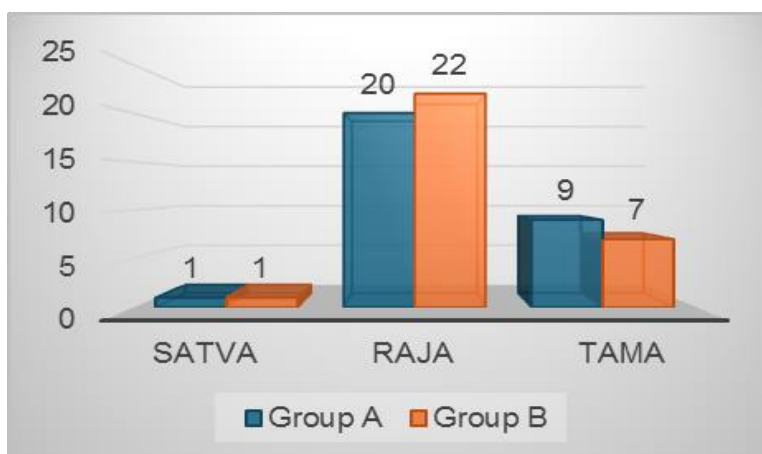
Distribution according to Sharirik Prakriti
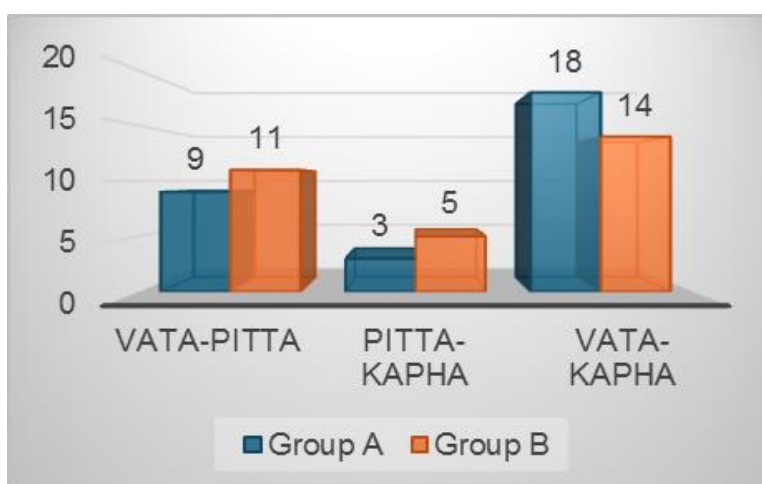
Distribution according to Sara
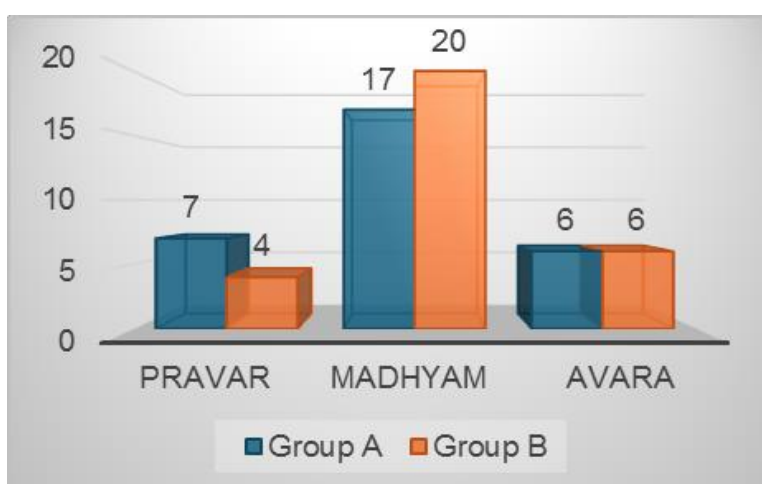
Distribution according to Satva
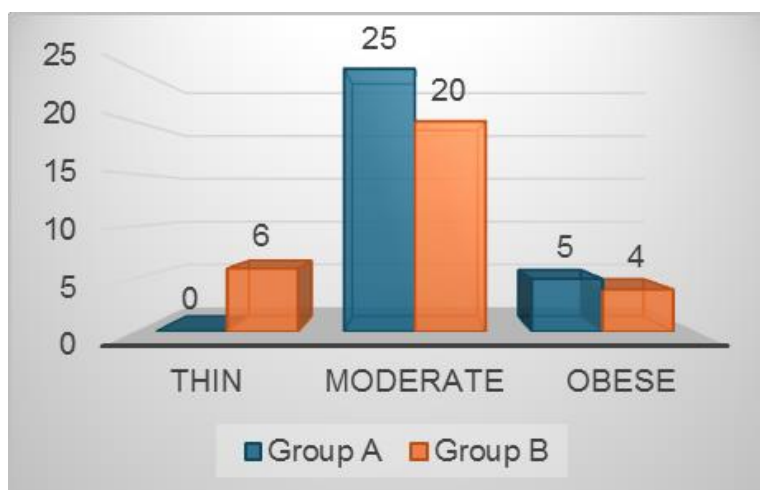
Distribution according to Samhanan
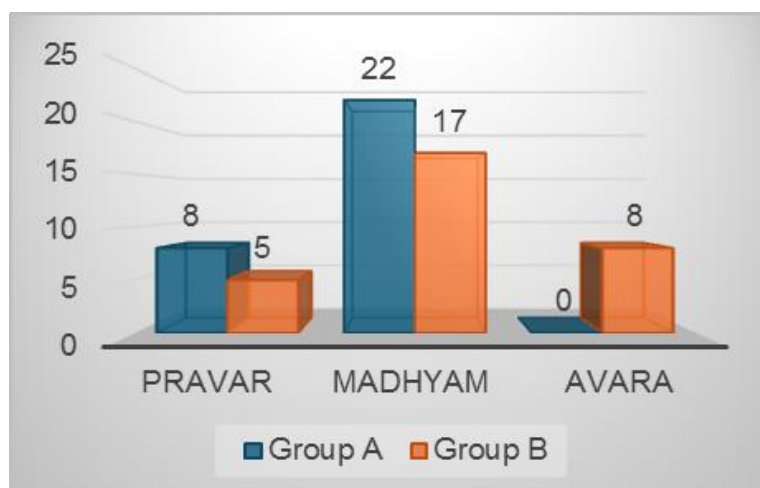
Distribution according to Pramana
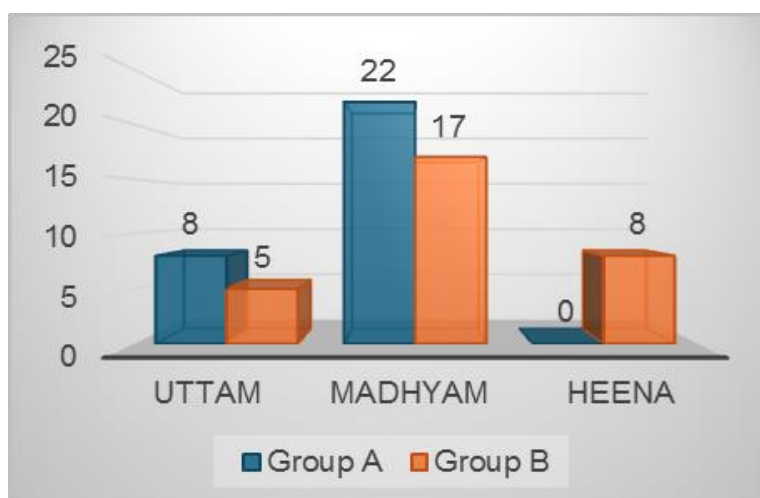
Distribution according to Vyayama Shakti
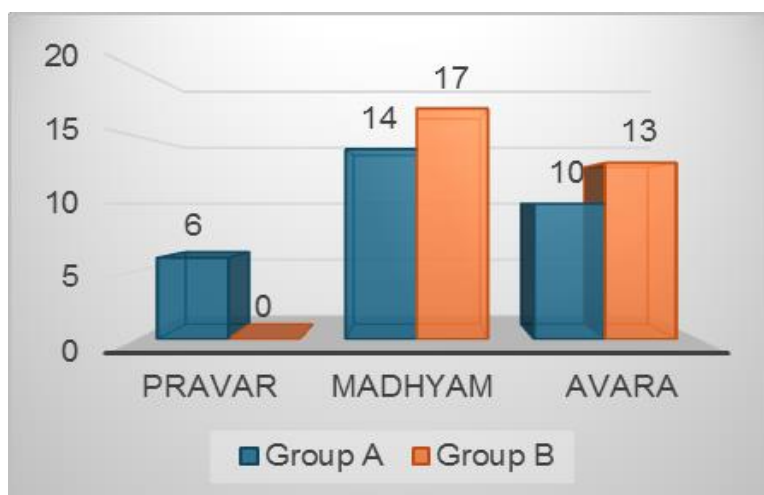
Distribution according to Aahara Shakti
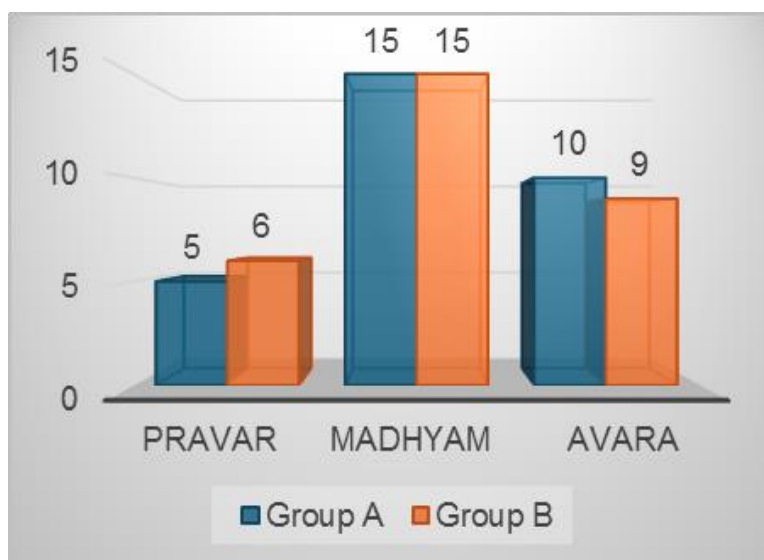
Distribution according to Srotodushti Pareeksha
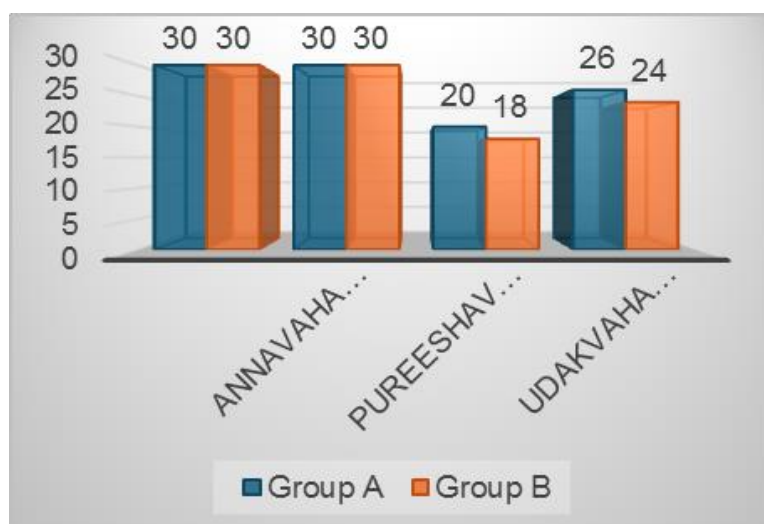
Distribution according to Chronicity
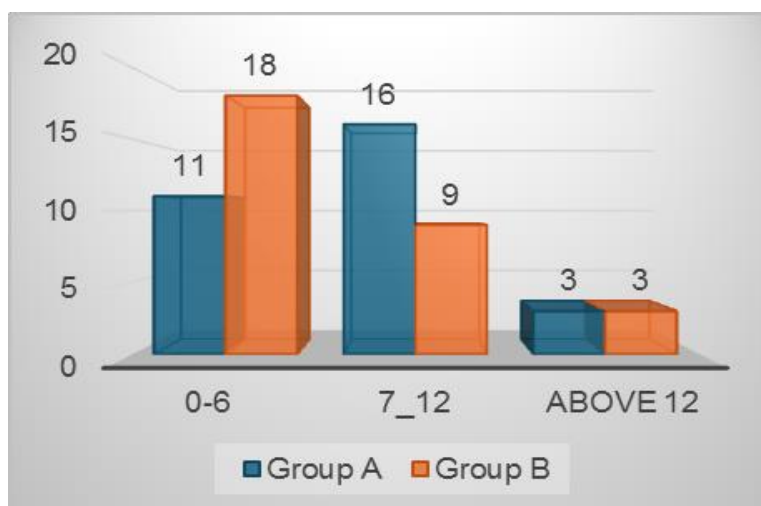
Distribution according to Types of Grahani roga

Distribution according to Aharaja, Viharaja and Manasika nidan
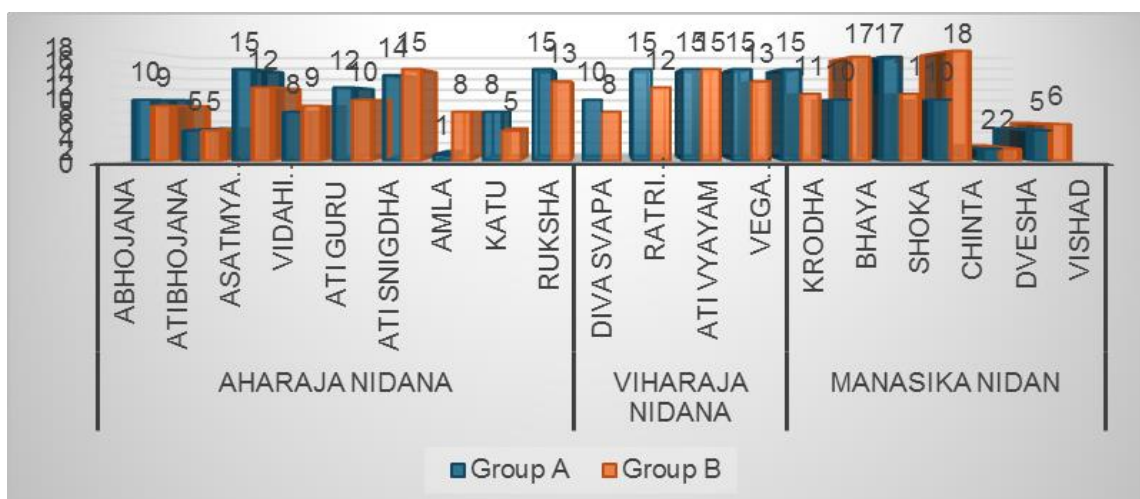
Distribution according to Improvement in Associated symptoms
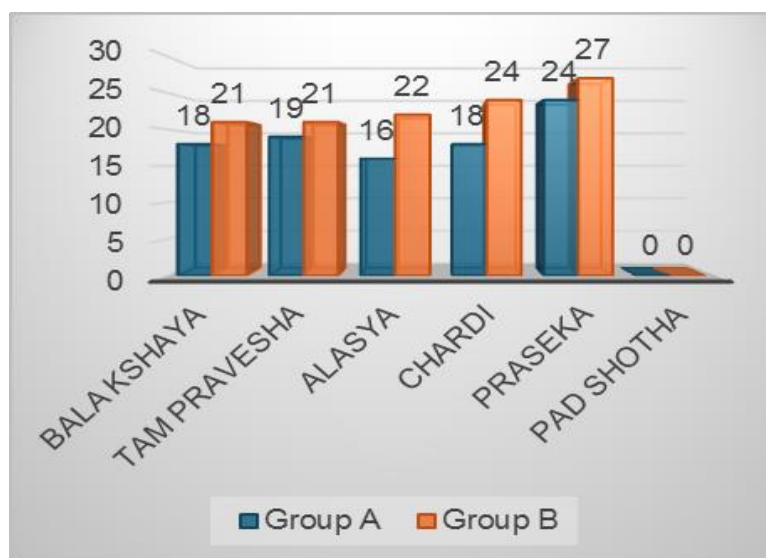
Before and after treatment result- Muhur Baddham Muhur Dravam
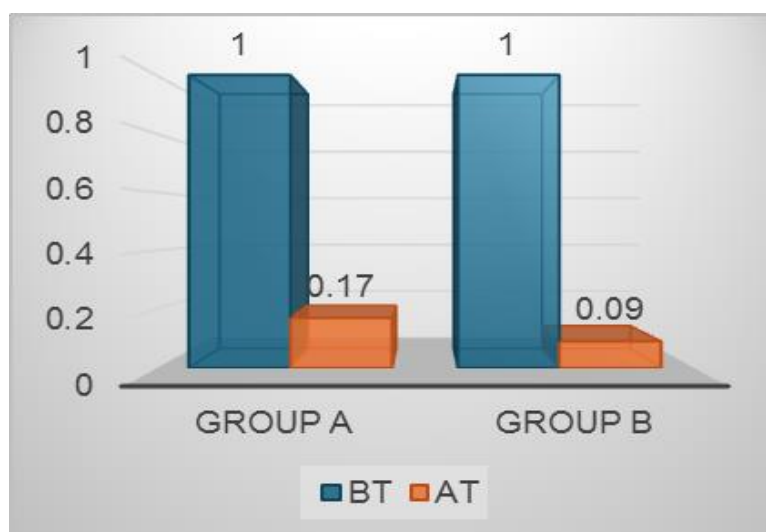
Before and after treatment result- Durgandhita Mala

Before and after treatment result- Udgara Pravritti

Before and after treatment result- Pichhila Mala

Before and after treatment result- Vidaha

Before and after treatment result- Bhaya

Before and after treatment result- Krodha

Before and after treatment result- Shoka

Before and after treatment result- Dvesha

Before and after treatment result- Vishad

Before and after treatment result- Chinta

Comparison between group A and B- objective parameters

Comparison between group A and B- Subjective parameters
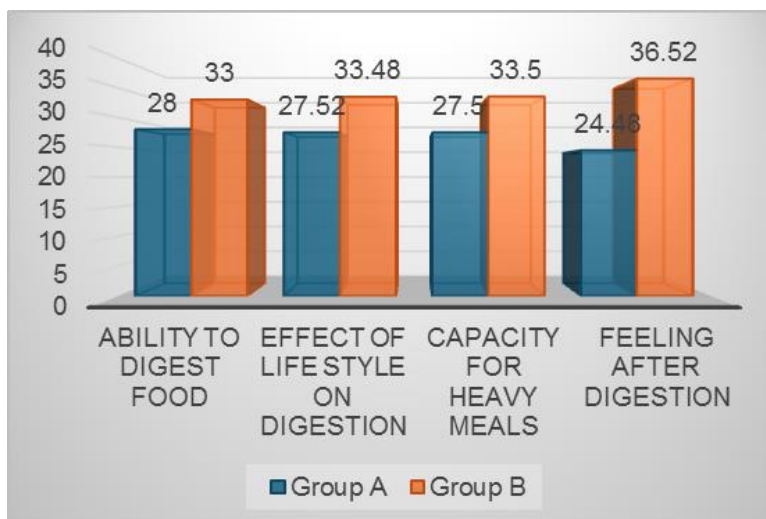
OVERALL EFFECTS
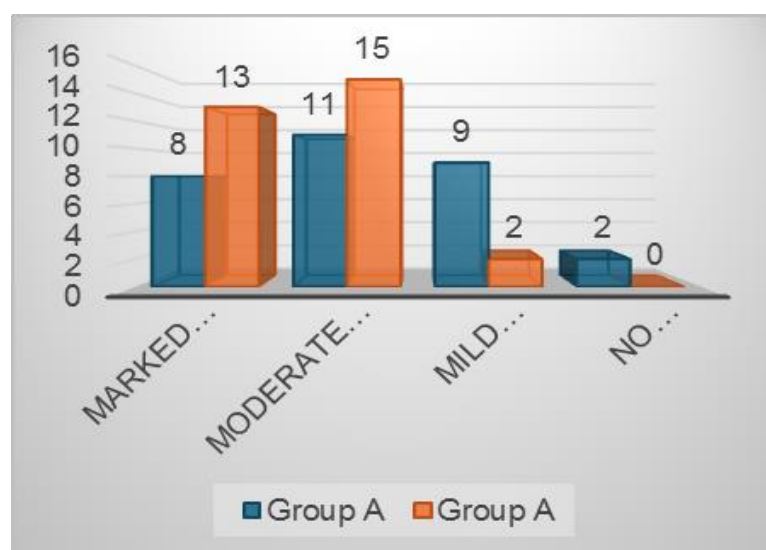
Chi-square test, Wilcoxon signed rank test, Mann Whitney U test was applied.

DISCUSSION

A total of 65 patients were registered for the trial, out of which 3 from group A and 2 from group B had dropped out. The discussion on the research was carried out on 60 patients as follows:

Age distribution: The majority of patients in both groups belonged to the age group of 31–40 years (Group A, 73.3% and 46.7% in group B), followed by 18–30 years (16.7% and 33.3% in each group). Smaller proportions were observed in higher age ranges: 41–50 years (6.7% in each group), 51–60 years (0% and 10%) and 61–70 years (3.3% in each group). This indicates that the condition under study was more prevalent in the third decades of life, a period considered to be highly productive and stressful (*Ati Chintana*) which may predispose individuals to lifestyle-related or psychosomatic disorders. Statistical analysis (Chi-square test) showed no significant difference ($p > 0.05$) between the two groups, confirming that the groups were comparable in terms of age distribution.

Gender distribution: In both Group A and Group B, males formed the majority with 76.7%, while females accounted for only 23.3% of the study population. This indicates a predominance of males in the sample, which may be due to higher healthcare-seeking behaviour of males, sociocultural factors or due to more outside working culture, consuming *Visham Ahara*, lack of exercise and unhealthy routine.

Religion Distribution: 73.7% in group A and 76.7% in group B, were Hindu while 26.3% and 23.3% were Muslim showing the geographical predominance of these two communities in the surrounding area or in Varanasi.

Marital Status: 86.7% in group A and 66.7 % in group B were married and 13.3% in group A and 33.3 % in group B were unmarried, indicating that married person due to more responsibilities and stress is more susceptible to *Grahani Roga*.

Socio-Economic Status: Middle (53.3% and 50% in respective groups) and lower middle class (33.3% and 23.3%) people were more affected followed by Upper middle class (10% and 16.7%) and Poor (3.3% in each group). This might show that due to financial problems and easy availability of treatment and care in Government hospital, majority of this class seeks medical help here.

Occupation: Labour class (23.3% and 20%), business class (16.7 and 23.3%), servicemen (20% and 16.7%) and housewife (16.7% and 13.3%) are more affected. Labourers were more prone to this disease due to excessive hard work (leading to Vata prakopa), stress, lack of nutrition and financial support. Business and Service population also have more stressful but sedentary lifestyles, followed by housewife who have irregular eating habits (*Paryushita Bhojan/ Sheerna Anna*) with less nutritional contents along with stress of family causing digestion related disorder. *Vega vidharana* is also one factor in disease causation.

History of working hours: There was a mixed working hour timing culture with 1-6 hr (33.3% and 26.7%), 7-8 hr (26.7% and 43.3%) and >8 hr (36.7% and 30%). Working hours surely impact the process of Digestion as understress eating vitiates the *Jatharagni*.

Education: Majority of the patients, 26.7% in group A and 56.7% in group B had completed intermediate education followed by primary (26.7% and 6.7%) and High school (10% in each group) education. 13.3% and 10% were graduates and 23.3% and 16.7% were illiterate in each group. Despite education, dietary irregularities (unaware of dos and don'ts regarding *Ahara Vidhi Niyam*) were common due to work-related stress and lifestyle habits.

Desha: Majority of the patients (86.7% in group A and 80% from group B) were from *Sadharan desha*, as most of the patients are from Varanasi itself.

Habitat: Patients from Semi-urban (30% and 63.3%) and Urban (53.3% and 26.7%) habitat were more affected because of more usage of processed and packed foods, which are high in sugar, unhealthy fats, low in fiber along with stressful lifestyles. Rural habitat (16.7% and 10%) population had less occurance.

***Agni*:** Majority of patients were having *Mandagni* with 63.3% and 60% while *Vishamagni* were 36.7% and 40% in each group which is the main cause for vitiation of the *Doshas*. *Mandagni* causes *Aruchi, Ajeerna*, while *Vishamagni* causes *Muhur baddham- muhur drava mala pravritti* and *Udgara pravritti* due to *Vata* aggravation. *Mandagni* is due to irregular and unhealthy eating habits along with work stress culture that vitiates *Manasika Bhavas* which disturbs the *Srotasas* (*Rasavaha, Annavaha, Pureeshavaha* and *Manovaha*).

***Koshtha*:** Patients with *Mridu Koshtha*, 50% in group A and 53.3% in group B and *Madhyam Koshtha* with 50 % and 46.7% signifies equal incidence of *Grahani* dysfunction. The study

shows minimum occurance of *Grahani Roga* in *Krura Koshtha*. As the sample size was small, it is less to conclude on this.

History of Past illness: More than half of the patients (60% and 53.3%) had suffered from a similar illness earlier, while the others (40% and 46.7%) had no history of past illness. Recurrent abdominal infections were common due to fast food culture, poor hygiene, over use of antibiotics leading to disturbed gut flora and irregular eating habits (*Adhyashana, Vishamashana*) and disturbed mental health which aggravates the disease. Persistant *Nidana Sevana* (causative factors) lead to *Agni and Sroto dushti* with *Tridosha Prakopa*.

Treatment History: Majority (73.3% and 76.7%) of the patients had not taken any treatment, only 26.7% and 23.3% patients had taken the treatment in each group. This shows the ignorance of people, leading to the chronicity and poor prognosis of the disease.

Family History: Over 56.7% and 50% in each group had reported no family history of the disease, while 43.3% and 50% in each group, had a history in their family. No direct relation was found between *Grahani Roga* and family history. However, indulgence in causative factors (*Nidana Sevana*) plays a significant role in *Agni Dushti*. As per the p value, it was statistically insignificant.

Diet: Majority (53.3% in each group) consumed a vegetarian diet. This reflects the common dietary practices of the region. In Varanasi, most people are vegetarians, typically consuming pulses, rice, chapati and veggies.

Dietary Pattern: 46.7% and 50% of patients in each group had regular dietary habits, while 53.3% and 50% had irregular dietary pattern, due to eating late at night that leads to *Vata Prakopa*, burnden over the liver and also to *Pragyaparadha* contributing to *Agni Dushti*.

Dietary Habits: Distribution of *Samashana* (33.3% and 36.7%), *Adhyashana* (20% and 16.7%), *Vishamashana* (26.7% and 20%) and *Viruddhashana* (20% and 26.7%) signifies that majority of patients had unhealthy eating habits that contribute to *Mandagni* and *Vishamagni*.

Water Intake: Majority of patients consume water before (56.7% and 33.3% in each group) and in between (33.3% and 50%) the meals that causes *Mandagni*. **Frequency of water intake** was 6-7 times 53.3% and 50% in respective group.

Addiction: The majority of patients had habit of chewing Tobacco (30% and 20 %) and Alcohol (20% in each group), whereas 23.3% and 40% had no addiction. Smoking was observed in 13.3% and 6.7% of cases, Betel in 10% and 13.3% and only a small proportion took sleeping pills. Thus, tobacco and alcohol emerged as the most common form of addiction. Nicotine in tobacoo relaxes the lower oesophageal sphincter (LES). This relaxation permits the backflow of stomach acids into the oesophagus, causing heartburn, acid reflux and in severe cases, gastro-oesophageal reflux disease (GERD), which may progress to throat or oesophageal cancer. Moreover, smoking or chewing tobacco diminishes the digestive action of saliva, thereby impairing food breakdown and ultimately leading to *Agni Vaishamya.*

Alcohol impairs the muscle movement in the small and large intestines, contributing to diarrhoea. Moreover, alcohol inhibits the absorption of nutrients in the small intestine and increases the transport of toxins across the intestinal walls, that may contribute to the development of alcohol-related damage to the liver and other organs.

Supplementary diet: Tea (76.7% and 60% in respective groups) was the commonest supplement people were consuming apart from their dietary intake with majority of them having it at any time of the day. This shows their unthoughtful eating habit.

Bowel Habit: Majority of the patients had regular bowel habit with 60% and 56.7% while irregular Bowel habit was 40% and 43.3% in each group. Because of *Grahani Dushti*, *Apana* and *Samana Vayu* vitiates causing *Pureeshavaha sroto dushti* leading to irregular Bowel habit.

Urine: 93.3% in each group had normal colour and odour of Urine, with 83.3% in each group having normal **frequency** of micturition of 4-6 times.

Dominent *Rasa*: Majority of patients had *Madhur rasa* (70% and 66.7%) as the dominant rasa in their diet followed by *Amla* (10% and 20%), *Lavan* (6.7% each), *Tikta* (6.7% and 3.3%), *Katu* (3.3% each) and *Kshaya* (3.3% and 0%). Taking *Madhur rasa* after meal disturbs the *Ahar paka vidhi.*

Nutrition: Majority had Moderate (60% and 53.3%) followed by Good (40% and 26.7%) nutrition and only 20% in group B had poor nutritional status signifying *Grahani dushti* due

to *Mandagni* and *Ama formation* along with *Rasavaha, Annavaha* and *Pureeshavaha sroto dushti.*

DISCUSSION ON *DASHAVIDHA PARIKSHYA*

***Manasika Prakriti*:** *Rajasik* (66.7% and 73.3% in respective groups) had contributed the majority of the patients followed by *Tamasik* (30% and 23.3%) while *Sattvika Prakriti* (3.3% each group) being the least. This supports that *Rajasik Prakriti* is more susceptible to *Grahani Roga* due to more indulgence in *Prajnaparadha* which also elevates the *Tamasik gunas* causing *Manovaha Srotas Dushti.*

Sharirik Prakriti: In the present study, majority of patients were *Vata-Kaphaj* (60% and 46.7%) prakriti followed by *Vata-Pittaj* (30% and 36.7%) prakriti and *Pitta-Kaphaj* (10% and 16.7%) were the least.

Sara (56.7% and 66.7), **Satva** (83.3% and 66.7), ***Samhanana*** (73.3 % and 56.7%) and ***Pramana*** (73.3% and 56.7%) in majority of the patients were of *Madhyam Pramana*. This shows the general representation of these parameters in the society. Also, these types are more prone to psychosomatic disorders.

***Vyayama Shakti*:** Majority of the patients in both the groups (46.7% and 56.7%) were had *Madhyam pramana* indicating '*bala'* of the patients to be *Madhyam* in the study followed by *Avar* (33.3% and 43.3%) and *Pravar* (20% and 0%). It suggests reduced capacity of intestinal mucosa due to *Agni Dushti.*

MANDAGNI → *AMOTPATTI* → *GRAHANI DUSHTI* → *AHAR RASA* → *DHATU KSHAYA*

***Aahara Shakti*:** Majority had *Madhyam* (50% in each group) followed by *Avar* with 33.3% and 30% while *Pravar* with 16.7% and 20% *Ahar Shakti*. *Mandagni* cause reduced appetite or *Aruchi*.

Srotodushti: *Rasavaha* and *Annavaha srotas* involvement was in 100% patients, followed by *Pureeshavaha* (66.7% and 60%) and *Udakavaha* (86.7% and 80%) *srotas* indicating that all the four *srotasas* were involved in the vitiation of Agni and causing *Grahani Roga.*

Chronicity was between 0-6 months (36.7% and 60%) and 7-12 months (53.3% and 30%) in majority of the patients. Only 10% of the patients in each group had complain of *Grahani Roga* above 12 months.

Types: Majority of the patients were of *Vataj Grahani* (50% in respective groups) followed by *Pittaj* (33.3% and 30%) and *Kaphaj* (16.67% and 20%) *Grahani*.

DISCUSSION ON ETIOLOGICAL FACTORS

Aharaja Nidana **(dietary causes**)- Consumption of *Asatmya Bhojana* with 50% and 40%), *Ruksha* with 50% and 43.3%, *Ati Snigdha* with 46.7% and 50% and *Ati guru* with 40% and 33.3% was highest followed by *Abhojana* (skipping meals) with 33.3% and 30%, *Vidahi bhojana* was 26.7% and 30%, *Katu* (pungent taste) was 26.7% and 16.7%, *Amla Ahara* with 3.3% and 26.7% and *Atibhojana* (overeating) was 16.7% in both groups was the least. These dietary patterns vitiates the *Jatharagni* leading to *Ama* formation which further obstructs the *Srotasas.*

Viharaja Nidana **(lifestyle-related factors)-** *Ati Vyayam* (excessive physical activity) was 50% in each group followed by *Ratri Jagarana* (late-night waking) which was 50% and 40% in respective groups. *Vega Vidharana* (suppression of natural urges) was 50% in group A and 43.3% in group B. *Diva Svapa* (daytime sleeping) was 33.3% and 26.7%. Constant doing of these *Nidanas* cause *Tridosha prakopa* and *Agni* vitiation. These *Nidanas* are mentioned by our *Acharyas* as the main causative factors for *Grahani Roga* causation.

Manasika Nidana **(psychological causes)-** *Shoka* (grief) was notably high in both groups with 56.7% and 36.7% respectively. *Krodha* (anger) was more prominent in Group A (50%) than in Group B (36.7%). *Bhaya* (fear) was found 33.3% in group A and 56.7% in group B and *Chinta* (anxiety/worry) with 33.3% and 60% in respective groups. *Dvesha* (hatred) with prevalence of 6.7% in each group, *Vishad* (depression) with 16.7% and 20% was the least reported. This signifies that all the patients were suffering from some kind of *Manasika Bhava dushti* along with *Agni vaishamya*.

Associated symptoms: There was relief in associated complaints of *Bala Kshaya (60% and 70%), Tam Pravesha (63.3% and 70%), Alasya (53.3% and 73.3%), Chardi (60% and 80%) and Praseka (80% and 90%)* with no patients with complain of *Pad Shotha* were found in the study.

Bala Kshaya and *Alasya* was due to improper *Dhatu poshana*, which was corrected by the *Deepan -Pachana* and *Srotoshodhan* properties of the drugs.

Tam Pravesha was probably due to *Grahani daurbalya*, *Vata* and *Pitta* vitiation which was controlled by the *Pachana guna* of the drugs.

Chardi was due to *Mandagni, Srotorodha and Udan Vayu Prakopa* which was improved by the *Deepan-Pachana*, *Srotoshudhikara* and *Vata – Kaphahara* properties of the drugs.
Pad Shotha was not found in any of the patients.

STATISTICAL ANALYSIS

Improvement in **Muhur Baddham / Muhur Drava Mala Pravritti**: Group A with 83.3%, while in Group B it was 91%. The results in both groups were found to be highly significant. However, when comparing the two groups, the difference was significant ($p < 0.05$), indicating that group B is more effective to reduce '*Muhur Baddham Muhur Dravam'*. Vitiated *Samana Vayu, Apan Vayu* along with *Pachaka Pitta* leads to *Agni Dushti* resulting in alternating Bowel movements. *Vata* causing *Baddha mala* and *Pitta* causing *Drava Mala Pravritti. Bilvadi Yoga* works on the *Agni* through its *Deepan-Pachana, Sangrahi Karama* while *Brahmi Vati* acts on the *Vata-Pitta doshas* and stress related gut motility changes. Thereby together they correct *Agni Dushti*, reduces *Ama* formation and stabilises bowel movement and restore the *Adhara-Adheya* relation between *Grahani* and *Agni*.

Improvement in **Durgandhita mala:** Group A had shown 95.8% and Group B had shown 98.5% improvement**.** The results in both groups were found to be highly significant. *Durgandhita Mala Pravritti* is produced due to presence of *Ama* in *Mala* and due to *Visra Guna* of *Pitta*. Most of the drugs in both groups had *Ama Pachaka*, *Shoshaka, Deepana, Pachana* properties, which helped to cure *Durgandhita*.

Picchila Mala Pravritti was improved to 47.3% in group A and 63.6% in group B. *Picchila Mala Pravritti* produced due to *Sama Mala*. The *Katu, Tikta, Kashaya Rasa* and *Ruksha, Laghu,Ushna* guna of *Bilvadi Yoga* counteracts *Jala* and *Prithvi mahabhuta* which is the basis of *Picchila* acting as *Kaphashoshaka and Sroto Shodhaka.*

Udgara Pravritti had improved to 42.9% in group A, 90.9% in group B had shown improvement. Both of the values were equally statistically significant. The effect of therapies in group B is better than A probably due to effect of *Brahmi Vati* on *Manasika Bhavas*. The

food material in *Grahani Roga* cannot be properly digested due to excessive *Ama* formation because of the *Agnimandyata* due to vitiated *Manasika Bhavas*. The *Margavarodha* of *Vayu* due to *Ama*, generates *Pratiloma gati* which suppresses the normal peristaltic movement. *Vayu* is the "*tantra yantra dhara*", supposed to be the neurological factor which governs all the movements, including peristalsis. The food material becomes stagnant due to lack of peristalsis and excessive *Ama*. The upward reflux is performed by the *Pratiloma gati* of *Udana* and *Apana Vayu* resulting in *Udgara pravritti*. Contents of Group B, includes *Deepana, Vatanulomana, Tridosha Shamaka* and *Medhya* properties which reduces Stress and *Ama* formation and *Udgara Pravritti* decreases.

Vidaha was improved by 57.9% in group A and 83.3% in group B, the p value obtained was equally statistically significant in both the groups as there was a tie.

According to pathology explained earlier, the food material in *Grahani* cannot be digested due to the presence of excessive *Ama*. *Manasika* etiological factors vitiate the *Agni*, leading to vitiation of *Pitta* which produces *Anna Vidaha*. The food material becomes stagnant due to reduced peristalsis and excessive *Ama* which attains *Shukta bhava* leading to *Vidaha*. The drugs in Group B have *Deepana* properties, along with *Madhur rasa* dominance which relieves the symptom *Vidaha* in Group B.

Subjective parameters for *Manasika Bhavas*
Group B had more significant improvement in *Manasika Bhava Dushti* like *Bhaya* (53.7%), *Krodha* (63.6%), *Shoka* (62.5%), *Chinta* (68.9%), *Dvesha* (83.3%) and *Vishad* (73.6%). While percentage of improvement in group A was, *Bhaya* (16.7%), *Krodha* (48%), *Shoka* (36.4%), *Dvesha* (0%), *Vishada* (63.6%) and *Chinta* (34.4%). This signifies that group B with *Bilvadi Yog*a and *Brahmi Vati* due to its *Deepan, Pachan, Srotoshodhan* and *Medhya* properties had more significant results in improving the symptoms of *Grahani Roga*.

Subjective parameters for Assessment of *Agni*
Ability to digest food had improved more in group B (43.8%) than group A (20.5%), effect of change in lifestyle on digestion improves more in group B with 48.7% than in group A with 24.4%, Capacity for heavy meals had improved more in group B with 53.9% than in group A, 35.7% and Feeling after Digestion had improved more in group B (57.2%) than in group A (38.5%) highlighting a meaningful difference between the groups for this parameter with p value 0.004.

Combination of '*Bilvadi Yoga* and *Brahmi Vati*' was significantly effective in reducing symptoms of *Grahani Roga* compare to *Bilvadi Yoga* alone.

Discussion on Objective parameters

All patients taken for the study were examined for Haemoglobin level, TLC and ESR, before and after the trial. There was reduction in grades of Hb (13.1% and 27.3% in respective group). However, this change was not statistically significant ($p = 0.358$).

TLC (1.8% and 7.1%) with $p = 0.564$, indicates that the treatment did not significantly influence white blood cell count.

ESR (23.6% and 25.2%) with $p = 0.003$, indicating a clear decrease in inflammation or disease activity following the intervention.

Percentage wise improvement in Chief and Associated Complaints

In chief complaints, on *Muhurbaddha / Muhurdrava Mal pravritti* Group B shows better results (91%) than group A (83.3 %). *Durgandhitaa Mala Pravritti* was almost equally relieved in both the group (Group A 95.8% and Group B 98.5%). *Udgara Pravritti* was improved to 90.9% in Group B. In *Pichhila Mala* and *Vidaha* there was tie in the two groups. Although *Vidaha* was relived up to 83.3% in group B.

In associated symptoms, *Bala Kshaya* was improved in 70% of the patients in group B which is better than group A with 60%. *Tam Pravesha was* relieved in 70% in group B which is better than group A with 63.3%, *Chardi* was improved in 80% in group B than in group A with 60%. *Aalasya* improved in 73.3% in group B than in group A with 53.3%. *Praseka* was improved up to 90% in group B which is greater than group A with 80% and *Pad Shotha* were relived 00% in both the groups as there were no patients with this complain.

Discussion on probable mode of action of the therapy

GROUP 1: *Bilvadi Yoga*

Due to its *Laghu, Ruksha and Tikshna Guna* and *Katu, Tikta, Kashaya Rasa*, it works as *Kaphashamaka*. On the other hand, it clears *Vata* with *Tikshna Guna* and *Ushna Veerya*. By the *Agnideepana* properties of all drugs, it increases the strength of *Jatharagni*. *Agni* and *Grahani* have *Ashraya-Ashrita-Sambandha*. Therefore, it works on *Grahani* as well. Through *Laghu* and *Tikshna Guna* of drug, it enters into *Sukshma Srotasa* and clears *Ama*. It acts as

Amapachaka and *Agni Deepaka* which finally reduces symptoms like *Muhur Baddha* and *Drava Mala Pravritti*, *Durgandhita Mala*, *Udgar Pravritti*, *Pichhila Mala* and *Vidaha*.

GROUP 2: *Bilvadi Yoga* **and** *Brahmi Vati*

Besides *Bilvadi Yga*, this group was also given *Brahmi Vati*.

Brahmi Vati consists of *Madhur*, *Tikta*, *Katu rasa* and *Laghu guna*, along with *Ushna Veerya* that acts as *Agnideepaka* and also *Amapachaka*. Most of the drugs have *Medhya Prabhava* that soothes *Snayu, Indriya* and *Mana* with Adaptogenic and Anxiolytic effect, helps in relaxing the mind and body, supplying oxygen to the brain improving the availability of nutrients. *Brahmi Vati* works on *Manovaha Srotas* by improving *Buddhi, Smriti* and *Medha* thereby reducing *Manasika Bhavas vitiation*. Also, by pacifying *Raja*s and *Tama*s while enhancing the Sattva guna. *Brahmi* enhances serotonin and GABA activity that calms fear and anxiety.

- *Tridoshahara* property - Leads to proper function of *Prana Vayu, Samana Vayu, Apana Vayu*, *Pachak pitta* and *Kledaka Kapha*
- *Deepana-Pachana* property - Improve the status of *Agni* and treating *Sroto Vikara* (*Annavaha, Rasavaha* & *Raktavaha*)
- *Grahi* property - Relieved the abdominal pain, decrease diarrhoea with decrease in the number of wet feces.
- *Krimighna* property - Checks the secondary infection
- *Medhya* property – Improves *Dhi, Dhriti* and *Smriti*, pacifies *Manas Doshas* (*Rajas* and *Tamas*)
- *Rasayana* property – Promotes longevity, *Bala prada,* overall health.

OVERALL EFFECT OF THERAPIES

- Patients in Group A had shown 26.7% of **marked improvement**, 36.7% showed **moderate improvement**, 30% with **mild improvement** and only 6.7% patient with **no improvement**.
- In group B, 43.3% had shown marked improvement, 50% had shown moderate improvement, 6.7% had mildly improved and no patients with no improvement. So, it was clear that group B is more effective than group A.

SUMMARY AND CONCLUSION

Present study entitled, "Clinical study on the role of *Manasika Bhava*s in the aetiopathogenesis of *Grahani Roga* and its *Upshayatmak Parikshan* with *Bilvadi Yoga* and *Brahmi Vati*" to evaluate the relationship between *Manasika Bhavas* and *Grahani Roga*. It comprises of six parts, viz., Introduction, Conceptual study, Drug review, Clinical study, Discussion, Summary and Conclusion.

The volume begins with Introduction part; it is an important part of any subject presentation before the detailed description.

Second volume begins with conceptual part. In this volume the first chapter dealt with the concept of Agni and Ama, its etymology, definition, properties, classification, symptoms.

Third chapter of this volume contain *Grahani* type, *Nidana, Purvaroopa, Rupa, Samprapti, Sadhya Asadhyata, Upadrava, Chikitsa* principle and some modern disease co-relation. The next volume emphasises on *Mana* and *Manasika Bhavas* which incorporates the etymology, definition, causes of its vitiation, types, functions. The third volume consists of Drug Review, along with probable mode of action on *Samprapti* of *Grahani Roga* is described.

Next section of this study entitled clinical study commences with details of description of selection of patient and method adopted for research work. Observation analysis of 60 patients attending from O.P.D. and I.P.D. of Govt. Ayurveda College and Hospital, Varanasi has been presented and result obtained from patients who completed the course of therapy, have been presented in Tabular form projecting the effect of therapy on classical symptoms of *Grahani Roga*.

Dose and duration: The trial drug *Bilvadi Yoga* (in both the groups) was administrated 6gm/day in two equal divided doses in morning and evening after meal with *Gau Dugdha* as *Anupana*. The other group was given both *Bilvadi Yoga* and *Brahmi Vati*, with the dose of *Brahmi Vati* as 4 Vati/day in two equal divided doses in morning and evening after meal and advised for *Gau Dugdha* (cow milk) as *Anupana*. Duration for both groups is 4 weeks. Although, there was indication for *Aja Dugdha* (Goat milk) as *Anupan* in the reference of *Bilvadi Yoga*, but because of its low accessibility in the nearby surrounding, it was replaced by *Gau Dugdha*.

SUMMARY

- Maximum patients were from 31-40 year of age, typically prone to GIT disorders due to altered lifestyles.

- The prevalence of disease was found higher in the Males of Hindu Religion and most of them were married population with intermediate education and majority of the patients were labour, business, Service and Housewife that indicates how sedentary or over working hours, irregular eating habits can vitiate the *Agni* and *Manasika Bhavas*. Majority belonging to *Sadharana Desh* like in this case Varanasi.

- Majority of the patients were from Middle class and Lower middle class, belonging to Urban and Semi-Urban areas, consuming processed and packed food, living unhygenic and stressful lifestyle.

- Patients had history of similar past illness and some had family history also**.**

- Most of the patients were found to have irregular dietary habit and vegetarian diet as a common practice in the Region.

- *Vishamashana, Virudhashana and Adhyashana* was observed along with *Samashana.* Majority of the patients were taking *Madhur Rasa* in the diet while tea as a supplementary diet.

- Maximum of patients had *Mandagni* and *Mridu Koshtha*

- Almost half of the patients were taking water before meal which is one of the reason for *Mandagni*. While the frequency of water intake was normal.

- Tobacco chewing constitutes the majority of Addiction followed by Alcohol and Smoking.

- Maximum of patients were having normal urine and frequency of micturition.

- Most patients with *Vata-Kapha Sharirik Prakriti*, *Rajas Pradhana Manasika Prakriti*. Most of the patients had *Madhyam Vikriti, Madhyama Sara*, *Satva*, *Samhanan*, *Pramana*, *Aahara Shakti Vyayama Shakti*.

- *Rasavaha and Annavaha srotas* was majorly affected that signifies the *srotasas* involved in the *Grahani Roga.*

- *Vataj Grahani* was more commonly found followed by *Pittaj* and *Kaphaj Grahani* with Chronicity of six months and one year.

- Majority of patients were doing *Ratri jagarana, Ati vyayam* and *Vega vidharana* that shows the latenight working culture that disturbs the circadian rhythm, causes irritability, reduced digestive strength due to vitiated *Sharirik* and *Manasika Doshas.*

- There was improvement in Associated symptoms of *Bala Kshaya, Tam Pravesha, Alasya, Chardi* and *Praseka.*

- Improvement in subjective parameters with Chief complains of *Muhur Baddham Muhur Dravam, Durgandhita Mala, Udgara Pravritti, Picchila Mala* and *Vidaha* along with improvement in complain of *Manasika Bhava* vitiation of *Bhaya, Krodha, Shoka, Dvesha, Vishad* and *Chinta* was more in group B than in group A.

- With *Gau Dugdha* also patients got relived and no any serious complain was identified.

OVERALL EFFECT OF THERAPY

In group A (*Bilvadi Yoga*): 8 patients (26.7%) had Marked improvement

    11 patienrs (36.7%) had Moderate improvement

    09 patients (30%) had Mild improvement.

In group B (*Bilvadi Yoga with Brahmi Vati*): 13 patients (43.3%) had Marked improvement

    15 patients (50%) had Moderate improvement

    02 patients (6.7%) had Mild improvement

COMPARISION OF BOTH GROUPS

Group B (***Bilvadi Yoga with Brahmi Vati***) showed better response than group A in Chief complaint of *Muhur Baddham-Drava Mala Pravritti* with p value 0.021. Whereas there was equal (A=B) effect of both trial drugs in *Durgandhita, Pichchil mala, Udgar pravritti and Vidaha.* Highly significant results were found in parameters of *Manasika Bhavas* like *Bhaya, Krodha, Shoka, Vishad*, *Chinta* with $p<0.001$ and significant in *Dvesha* with P value 0.021 along with significant improvement in *Manasika Bhavas*.

- Overall, the data indicates that *Bilvadi Yoga* in combination with *Brahmi Vati* was more effective compared to *Bilvadi Yoga* alone reducing the symptoms of *Grahani Roga.*

Effect of *Bilvadi Yoga*

In group A, 30 patients completed the trial. Patients got relieved in *Grahani Roga* symptoms with Chief complain of *Muhur Baddha – Drava Mala Pravritti,* equal relief in parameter of *Durgandhita Mala, Udgar pravritti, Picchila mala, vidaha* was observed.

CONCLUSION

- The end of this study it is concluded that null hypothesis (H0) is rejected and alternate hypothesis (H1) is accepted.

- Today, most of the people are suffering some kind of stress either personally or professionally, with disturbed lifestyle, eating habits, overthinking, insecurities and other problems.

- *Grahani* can be correlated to *Manasika Bhavas* based on the fact that *Agni* gets vitiate when the *Manasika Bhavas* gets vitiated and *Agni* and *Grahani* shares *Adhar* and *Adheya* relationship.

- *Rajasika* and *Tamasika* guna aggravates the *Manasika Bhavas.*

- *Bilvadi Yoga works* on the *Agni* through its *Deepan -Pachana, Anulomana* effect while *Brahmi Vati* works through its *Medhya* property works on the *Manovaha Srotas* and strengthens it.

- *Bilvadi Yoga* along with *Brahmi Vati* is more effective than *Bilvadi Yoga* alone in reducing the symptoms of *Grahani Roga* due to involvement *of Manasika Bhavas* vitiation.

- No hazardous effects have been reported by the patients during the study or in follow up, which is very important in acceptance of *Ayurveda*, worldwide.

- As the study sample was very small, further study of larger group of patients may help to understand detail mode and site of action of the drugs.

- The present study was a humble try in search of a better management of this disorder and it is fulfilled up to some extent.

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