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## RECONNOITERING CORELATION OF STATUS OF AGNI AND STRESS COPING CAPACITY: AN OBSERVATIONAL STUDY

Kavyashree R. N.<sup>1</sup>\*, Neha D. Gadgil<sup>2</sup> and Jayaprakash A. N.<sup>3</sup>

<sup>1</sup>Assistant Professor, Department of Kriya Sharir, S.S Agrawal Institute of Ayurveda, Navsari, Gujarat.

<sup>2</sup>Associate Professor Department of Kriya Sharir, Sri Lal Bahadur Shastri Smarak Rajakiya Ayurved Mahavidyalaya, Prayagraj, Uttar Pradesh.

<sup>3</sup>Associate Professor Department of Rasa Shastra and Bhaishajya Kalpana S.S Agrawal Institute of Ayurveda, Navsari, Gujarat.

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\*Corresponding Author
Dr. Kavyashree R. N.
Assistant Professor,
Department of Kriya Sharir,
S.S Agrawal Institute of
Ayurveda, Navsari, Gujarat.

#### **ABSTRACT**

The ancient life science known as Ayurveda addresses mental, emotional, and spiritual aspects of health and well-being to provide a holistic approach to wellness. Among its core concepts is *Agni*, the metabolic fire which plays a pivotal role in maintaining homeostasis, impacting both physical and mental health. In modern life, stress is a prevalent issue, and Ayurveda recognizes its profound impact on the body, especially on *Agni* interfering with its normal activity resulting in anxiety, fatigue, and reduced coping abilities. This article aims to explore the relationship between *Agni* and stress-coping mechanisms, highlighting how disturbances in *Agni* can contribute to poor stress management. In this study, 450 volunteers were selected based on specific inclusion and exclusion criteria. *Agni* Assessment Scale and Stress Coping Resource Inventory Scale were used to assess participants, and the data were analysed to explore the relationship

between the two. The study indicates a significant relationship between *Agni* and stress-coping capacity. Individuals with balanced *Agni* demonstrated a higher ability to manage stress effectively, while those with impaired *Agni* showed reduced resilience in coping with stress. This suggests that maintaining optimal *Agni* is crucial for enhancing stress-coping mechanisms.

KEYWORDS: Agni, Mandagni, Vishamagni, Tikshnagni, Stress Coping Capacity, Dosha's.

#### INTRODUCTION

Ayurveda, one of the oldest systems of medicine, focuses on a preventive and curative approach to maintaining health.<sup>[1]</sup> Rooted in the understanding of the body's intricate physiological processes, Ayurveda places significant emphasis on the concept of *Agni*. It is often referred to as the digestive fire, is not limited to the gastrointestinal system but is viewed as the energy behind all metabolic and transformational processes in the body. This includes digestion, absorption, assimilation, and even the regulation of mental functions.

In Ayurveda, stress is viewed as a major factor that disrupts the balance of the body's Dosha's and *Agni*. The modern lifestyle, with its fast pace and constant demands, exacerbates stress, leading to a variety of health challenges. The body's ability to handle stress is intrinsically linked to the strength of its *Agni*. When *Agni* is balanced (referred to as *Samagni*), the body maintains proper digestion and a clear, calm mind. However, disturbances in *Agni*—such as *Mandagni* (weak *Agni*), *Tikshnagni* (hyperactive *Agni*), or *Vishamagni* (irregular *Agni*)<sup>[6]</sup>—can lead to improper digestion, toxin accumulation, and impaired cognitive functions, directly affecting how one responds to stress.

#### **Need of study**

The growing prevalence of stress-related disorders in modern society demands for a deeper exploration of holistic approaches that can enhance resilience and overall well-being. According to Ayurvedic texts, the strength of Agni not only affects physical digestion but also influences mental clarity and emotional stability, which are critical in coping with stress. Given the increasing burden of stress-related health issues, there is a compelling need to investigate how the status of Agni influences the body's ability to manage stress. Understanding this correlation could offer new insights into preventive care, promoting mental resilience and physiological harmony.

#### **Research question**

Is there any correlation between status of Agni and Stress Coping Capacity?

#### **Hypothesis**

 $\mathbf{H_0}$  – There is correlation between status of *Agni* and Stress Coping Capacity.

 $\mathbf{H_1}$  – There is no any correlation between status of *Agni* and Stress Coping Capacity.

#### **AIM**

To assess the correlation between status of *Agni* and Stress Coping Capacity.

#### **OBJECTIVE**

To assess status of Agni in the individuals

To assess the Stress Coping Capacity in the individuals

To evaluate the correlation between status of *Agni* and Stress Coping Capacity.

#### MATERIALS AND METHOD

#### Litreture review

In Ayurveda, *Agni* (The digestive fire) is regarded as the cornerstone of health, responsible for all metabolic and transformative processes in the body. According to *Acharya Charaka*<sup>[1]</sup> in *Grahani Chikitsa* and *Acharya Sushruta*<sup>[3]</sup> in *Prameha Chikitsa* both explained When *Agni* is weak, the digestive system fails to properly process food, resulting in incomplete digestion. This undigested food turns into *Ama*<sup>[2]</sup> toxic byproduct that accumulates in the tissues and organs, blocking channels (Srotas) and disrupting the flow of energy and nutrients. The accumulation of *Ama* in the mind creates a *Tamasic* state, characterized by lethargy, confusion, and lack of motivation. Impaired *Agni* disrupts the balance of *Vata*<sup>[8]</sup>, which governs mental functions. When *Vata* is disturbed, it leads to heightened anxiety, nervousness, and an inability to handle stress effectively. When *Pachaka Pitta* is disturbed due to stress, Aggravated Pitta affects digestion, which leads to the formation of Ama and weakens the body's overall energy and resilience. As in Ayurveda, the mind and body are interrelated, and one's wellbeing has an immediate effect on the other. The mind and body are intimately connected through the functioning of *Agni*. Impaired *Agni* can affect mental and emotional stability.

#### **Inclusion criteria**

Healthy volunteers, irrespective of gender, caste, or religion, aged 18 to 30 years, who were studying at Parul University were enrolled.

#### **Exclusion criteria**

Persons with systemic disorders, psychosomatic disorders, those who practice yoga, meditation, or pranayama as part of their daily routine, and pregnant or lactating women.

#### Study design

One time observation study, 450 Volunteers Studying in Parul University Vadodara, Gujarat.

#### **OBSERVATION AND RESULT**

Table No. 1: Distribution of volunteers according to their abhyavarana shakti.

Interpretation of Abhyavarana Shakti	Frequency	Percent
Heena (10 - 16)	50	11.1
Madyama (17 - 23)	242	53.8
Uttama (24 - 30)	158	35.1
Total	450	100.0

Abhayavarana Shakti wise distribution of volunteers showed that maximum number i.e., 242 (35.1%) had Madyama Abhyavarana Shakti, 158 (35.1%) had Uttama Abhyavarana Shakti and 50 (11.1%) had Heena Abhyavarana Shakti.

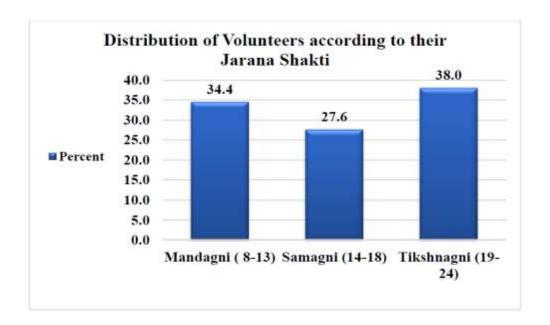


Table No. 2: Distribution of volunteers according to their jarana Shakti.

Interpretation of Jarana Shakti	Frequency	Percent
Mandagni (8-13)	155	34.4
Samagni (14-18)	124	27.6
Tikshnagni (19-24)	171	38.0
Total	450	100.0

Jarana Shakti wise distribution of volunteers showed that maximum number i.e., 171 (38.0%) had *Tikshnagni*, 155 (34.4%) had *Mandagni* and 124 (27.6%) had *Samagni*.

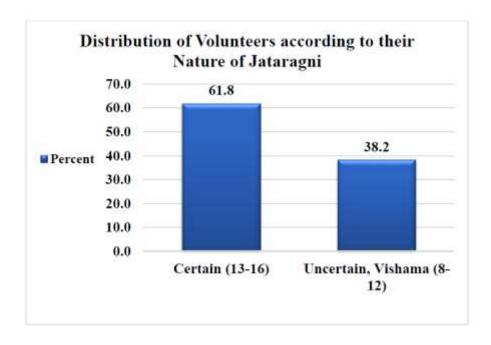
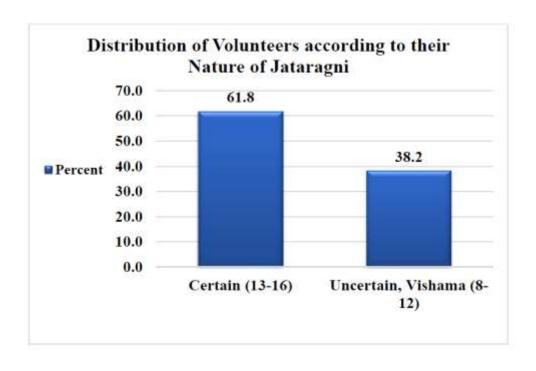


Table No. 3: Distribution of volunteers according to their nature of jataragni.

Nature of Jataragni	Frequency	Percent
Certain (13-16)	278	61.8
Uncertain, Vishama (8-12)	172	38.2
Total	450	100.0

Nature of Jataragni wise distribution of volunteers showed that maximum number i.e., 278 (61.8%) had Certainty, 172 (38.2%) had Uncertainty



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Table No. 4: Distribution of volunteers according jataragni vinishchaya.

Jataragni Vinishchaya	Frequency	Percent
Mandagni	75	16.7
Samagni	128	28.4
Tikshnagni	95	21.1
Vishamagni	152	33.8
Total	450	100.0

Jataragni Vinishchaya wise distribution of volunteers showed that maximum number i.e., 152 (33.8%) had *Vishamagni*, 128 (28.4%) had *Samagni*, 95 (21.1%) had *Tikshnagni* and 75 (16.7%) had *Mandagni* 

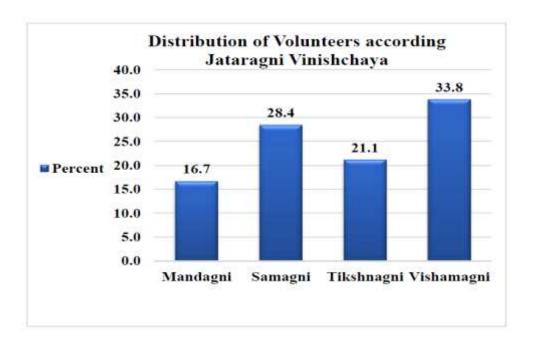


Table No. 6: Distribution of Volunteers according to their Stress Coping Capacity and *Jataragni Vinishchaya*.

	Frequency			
Jataragni Vinishchaya	Above Average Stresscoper (2.5 - 3.4)	Average Stresscoper (1.5 - 2.4)	Below Average Stresscoper (less than 1.5)	Total
Mandagni	32	43	0	75
Samagni	95	33	0	128
Tikshnagni	71	24	0	95
Vishamagni	35	116	1	152
Total	233	216	1	450

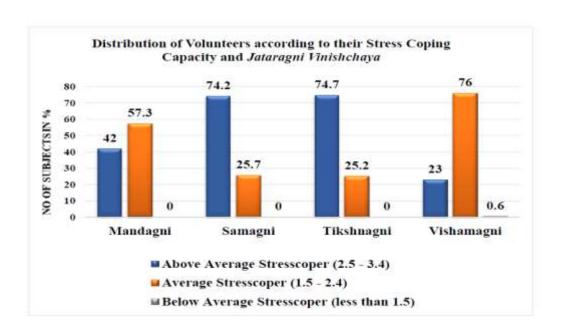
Distribution of Volunteers according to their Stress Coping Capacity and *Jataragni Vinishchaya* showed that maximum number i.e., Among 450 subjects.

75 Subjects had *Mandagni* in that 32 were Above Average Stresscoper and 43 were Average Stresscoper.

128 Subjects had *Samagni* in that 95 were Above Average Stresscoper and 33 were Average Stresscoper.

95 Subjects had *Tikshnagni* in that 71 were Above Average Stresscoper and 24 were Average Stresscoper.

152 Subjects had *Vishamagni* in that 35 were Above Average Stresscoper, 116 were Average Stresscoper and 1 was Below Average Stress Coper.



Above-Average Stress Copers predominantly had **Samagni** (74.2%) and **Tikshnagni** (74.7%), while Average Stress Copers had **Vishamagni** (76%) and *Mandagni* (53.3%).

Table No. 7: Correlation of Jataragni with Interpretation of Stress Coping Capacity Score.

Fisher's exact test	Abyavarana Shakti	Jarana Shakti	Jataragni Vinishchaya
test statistic value	29.151	60.978	103.911
p – value	0.000	0.000	0.000
Level of Significance	HS	HS	HS

- ✓ Fisher's Exact Test was applied to test association between and Interpretation of Abyavarana Shakti, Jarana Shakti and Jataragni Vinishchaya and Interpretation of all scores of Stress Coping Capacity
- $\checkmark$  Test shows **p** value 0.000 (less than 0.05) which is **Highly Significant.**

#### **DISCCUSION**

Agni is intricately related to the body's ability to cope with stress. Balanced Agni promotes efficient digestion, healthy immune function, stable neuroendocrine responses, and optimal nervous system regulation, all of which are essential for maintaining homeostasis under stress. In individuals with above-average stress-coping capacity, it was observed that they predominantly had Samagni and Tikshnagni, while those with average stress-coping capacity exhibited Vishamagni and Mandagni. This difference can be attributed to Manasika Bhavas (mental states) such as excessive fear (Atibhaya), worry (Atichinta), and anger (Atikrodha), which primarily vitiate the Doshas, especially Sadhaka Pitta. [6] When Sadhaka Pitta is disturbed by these negative emotions, it mixes with Pachaka Pitta, leading to the disturbance of Agni. Psychological factors such as grief, fear, anger, sorrow, and stress negatively affect digestion. Stress impacts the gastrointestinal system through the gut-brain axis, [9] and its major physiological effects include: alterations in gastrointestinal motility, increased visceral perception, changes in gastrointestinal secretions, increased intestinal permeability, impaired regenerative capacity of the gastrointestinal mucosa, reduced mucosal blood flow, and adverse effects on intestinal microbiota. Additionally, psychological variations such as anxiety, [7] stress, and depression significantly reduce salivary flow rates, affecting the digestive process.

#### **CONCLUSSION**

The study results highlighted a highly significant correlation between Status of *Agni* and Stress-Coping Capacity among the volunteers, as evidenced by the p-value of 0.000 (less than 0.05). Above-Average Stress Copers predominantly exhibited *Samagni* and *Tikshnagni*, while Average Stress Copers showed a higher prevalence of *Vishamagni* and *Mandagni* respectively.

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