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## Original Research Article

Prevalence of *Manasikahetu* (Psychological factors) in patients suffering from *Ajirna* (Indigestion)Manasi Gajanan Oak<sup>1</sup>, Mrudula Vinayak Joshi<sup>1\*</sup>, Vinayak Nilkanth Joshi<sup>1</sup><sup>1</sup>Dr. D. Y. Patil Ayurved College & Research Centre, Dr. D. Y. Patil Vidyapeeth (Deemed to be University), Pimpri, Pune, Maharashtra, India

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## ABSTRACT

**Background:** In Ayurveda, digestive power is compared to fire and is also called Agni. The weakening of digestive power (*Mandagni*) by various reasons, lead to dyspepsia or indigestion and the state called as *Ajirna*. Different symptoms like abdominal distension and hard stools detrimentally affect the lives of patients suffering from **Ajirna**, often leading to psychological disturbances.

**Objective:** Study focuses on the elucidation of the prevalence of psychological issues in patients suffering from *Ajirna*.

**Statistical Analysis:** Descriptive data of 100 pre-diagnosed patients, showing definite relation to causative factors was analyzed using numbers and percentages. Chi square test was also used to correlate the data.

**Materials and Methods:** This cross-sectional observational study included the pre-diagnosed patients of *Ajirna*, from the age group of 20 to 60 years. A structured and pilot-tested 14 item questionnaire was used to collect data.

**Results:** In our study, 67% of the patients suffered from chronic indigestion, and 33% from acute indigestion. *Ajirna* patients were majorly affected by hard stools (89%), abdominal distension (85%), and incomplete defecation or bloating (54%). Other noteworthy factors are 72% of the patients showed excessive water intake per day and restraining from defecation reflex (70%). Almost 90% of the population was sentimental, with 76% was short-tempered and 72% restraining the crying reflex. The frequent emotional breakdown was noticed in 71% of the patients, and 40% suffered from grief regularly.

**Conclusion:** Our study suggests the correlation of chronic digestive problems with psychological factors (*Manasikahetu*) in *Ajirna* patients. Therefore, treatment of *Ajirna* along with associated psychological ailments will be crucial for effective outcome.

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## 1. Introduction

Psychological well-being can be considered as equally essential as physical well-being. With good psychological health, one can work well, feel happy during leisure time, and contribute to society. In special cases, chronic health issues could affect mental health. If untreated, it may result in depression and suicide.<sup>1,2</sup> It was previously shown that the patients suffering from physical illnesses such

as inflammatory polyarthritis, diabetes mellitus, psoriasis, migraine, asthma, or epilepsy had a higher risk for self-harm.<sup>3</sup> In a recent report in USA concluded that sleep disorders, renal disease, migraine, HIV/AIDS, chronic obstructive pulmonary disorder, congestive heart failure, cancer, traumatic brain injury, and even back pain have been linked to increased suicide risk.<sup>1</sup> The study further identified that the risk of suicide become doubled with the increased morbidity-associated with the disease. Clinicians treating patients with physical illness less frequently detect

\* Corresponding author.

E-mail address: [mrudula.joshi@dpu.edu.in](mailto:mrudula.joshi@dpu.edu.in) (M. Vinayak Joshi).

psychological disorders. Management of mental illness by decreasing the feeling of burdensome and educating the carers and patients can effectively increase the quality of life.<sup>4</sup> Hence, it is vital to treat both the physical as well as mental aspects of the disease.

The digestion of food plays a vital role in good health. In modern medicine, dyspepsia is described as indigestion in addition to acid build up and the distress with empty stomach. Symptoms attributed to dyspepsia are vomiting, difficulty in swallowing, appetite loss, anaemia, and weight loss. Modern medicine suggests proton pump inhibitors for dyspepsia management, along with tricyclic anti-depressants or prokinetic therapies.<sup>5</sup>

According to *Ayurveda*, the origins of a disease could be physical or mental, or both.<sup>6</sup> *Mithyayog*, *Ayog*, and *Atiyog Kaal*, *Buddhi*, and *Indriya* are the main causative factors of any disease where involvement of both body and mind is inevitable.<sup>6</sup> In physical ailments, first the *tridoshas* get affected, and later the *rajas* and *tamas doshas* become strained. On the other hand, in mental disorders, the *rajas* and *tamas doshas* get affected first, leading to the disturbance of the *tridosha* in the body. Once the *tridosha* of the body gets involved, it potentially disturbs the psychological component i.e., *Manas* (mind); especially *rajas* and *tamas dosha*. In *Ayurveda*, digestive power is compared to fire and called as *Agni*. However, the occurrences of indigestion or dyspepsia (*Mandagni*) due to various reasons often leads to psychological distress and the presence of undigested food inside the body is known as *Ajirna*. The primary symptoms of *Ajirna* are indigestion, anorexia, tenesmus, vomiting, fever, body ache, yawning, giddiness, fainting, headache, malaise, and abdominal distension.<sup>7</sup> *Ajirna* is classified as per the vitiation of the different *doshas*: *Vishtabdh Ajirna* (*Vata dosha*), *Vidagdha Ajirna* (*Pitta dosha*), and *Aam Ajirna* (*Kapha dosha*). Other minor types of *Ajirna* are *Prativasara Ajirna* (nutrients not digested), *Dinapaki Ajirna* (next day digestion), and *Rasashesh Ajirna* (average delay/incompletion of digestion).<sup>6</sup> Previous clinical studies concluded that the use of herbo-mineral and polyherbal preparation can help to reduce the situation of *Ajirna*.<sup>8,9</sup> Moreover, another review article emphasized that the co-occurrences of *Manasikahetu* with *Ajirna* disorders which is due to the various causal effects such as erratic life style, abnormal dietic regimen adherence, stress and mental disturbance.<sup>10</sup> A study conducted in 2011 showed that dyspepsia patients had a high risk of major depressive episodes (threefold risk) and generalized anxiety disorder by twofold risk.<sup>11</sup> However, the aberrations in the brain regions in patients suffering from functional dyspepsia were linked to depression and anxiety.<sup>12</sup> Hence, it is of great concern to study the longitudinal correlation of psychological distress and dyspepsia in order to treat digestive disorders and prevent a very adverse mental health condition.

In our study, we prepared a questionnaire to understand the prevalence of psychological issues in patients suffering from *Ajirna*. Further, we would elucidate that the co-occurrence of various dyspeptic symptoms with mental illness. Therefore, the use of trance-therapies like *Sattvaavajaya Chikitsa*, meditation, and *yogasana* can be proposed for the beneficial outcome of symptomatic relief and preventive measure from mental distress, especially in young *Ajirna* patients.

## 2. Materials and Methods

A cross-sectional observational study was conducted on pre-diagnosed patients of *Ajirna*, having age group of 20-60 years of either sex. The study was approved by the Institutional Ethics Committee (No: AY/PG/046/2019-20 IEC), and every participant signed an informed consent form before starting the study. We included individuals having the following symptoms in our study: *Glani* (tiredness), *Gaurav* (clumsiness), *Vishtambha* (improper defecation/ bloating), *Bhrama* (giddiness), *Marutamoodhata* (abdominal distension), *Vidbandha* (dry/hard stools) or *Atipravrutti* of mala (increased quantity of stool). However, the individuals who had the following symptoms or disease were excluded from the current study like- Crohn's disease, Celiac disease, ulcerative colitis, pancreatitis, all types of rare syndromes of the gastrointestinal tract, intestinal obstruction, oesophageal cancer, pancreatic cancer, rectal cancer, colon cancer, tuberculosis, syphilis, and congenital disorders.

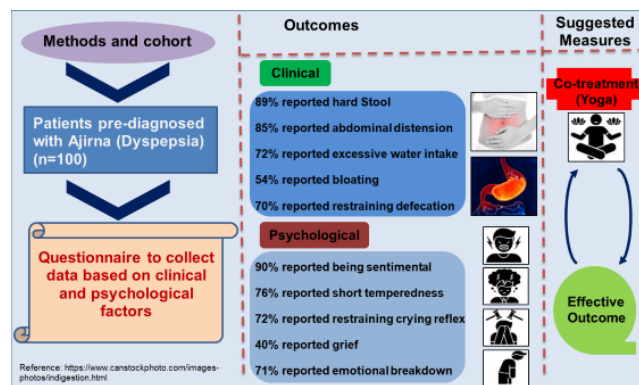
### 2.1. Study design and research methods

A structured questionnaire was used for the study and comprised 14 essential questions related to the patients' clinical features and psychological well-being. The questionnaire was based on compiled references of dietary and psychological factors of *Ajirna* from compendium *Yog Ratnakar*, *Purvardha*, and *Ajirna Nidan*. The prevalence of psychological disturbance was analysed in patients suffering from *Ajirna*. The statistical analysis of the descriptive data included numbers and frequency distribution according to age, sex, duration of the condition, clinical features, and gradation of the involved etiological factors. chi square test was also used to correlate the data.

## 3. Results

In order to understand the linkage between *Ajirna* and psychological disorders, the prepared questionnaire was given to the pre-diagnosed patients. It helped to obtain data related to demographic distribution, education, clinical symptoms, duration, lifestyle pattern, and psychological condition of the patients. Out of the 100 patients assessed, 51% were males, and 49% were females, with age ranging from 20-60 years. Regarding marital status, 79% of the

patients were married, and 21% were unmarried. A person’s personality can be dependent on three *doshas*, known as *vata*, *kapha*, and *pitta*. In *ayurveda*, the combinations of these *dosha* contributes to a person’s physiological and mental health, which is known as ‘Prakruti’.<sup>13</sup> In our study, there was a noticeable difference in the frequency distribution of the different combinations of *Prakruti*. The predominant *Prakruti* in the patients were *Pitta + Vaata* and *Vaata + Pitta*, with frequencies of 44% and 28%, respectively (Table 1).



**Figure 1:** Correlation between Ajirna and Manasilahetu (Psychological disorders)

**Table 1:** The frequency distribution of patients categorized as per *Prakruti*.

Prakruti type	Numbers, Frequency (%)
Kapha+ Pitta	12 (12)
Kapha+ Vaata	6 (6)
Pitta + Kapha	10 (10)
Pitta + Vaata	44 (44)
Vaata+ Pitta	28 (28)
Total	100

Among all the *Ajirna* patients (indigestion), the 47% of the population had *Ajirna* once per month and 44% once per week (Table 2).

**Table 2:** The frequency distribution of indigestion in patients

Indigestion occurrence	Numbers, Frequency (%)
Once/week	44 (44)
Once/month	47 (47)
2-4 months	9 (9)
Uncertain	0 (0)
Total	100

Furthermore, the 67% of the patients suffered from chronic indigestion, and the rest from acute indigestion (33%). *Ajirna* patients were majorly affected by dry or hard stools (89%), abdominal distension (85%), and incomplete defecation or bloating (54%) (Table 3).

**Table 3:** The frequency distribution of symptoms presented in patients

Symptoms observed	Numbers, Frequency (%)
Tiredness	7 (7)
Clumsiness	23 (23)
Incomplete defecation/bloating	54 (54)
Giddiness	7 (7)
Abdominal distension	85 (85)
Dry/hard stools	89 (89)
Increase in stool quantity	8 (8)

According to *Ayurveda*, the consumption of excess water during digestion often resulted in the indigestion of food and further dyspepsia due to lack/dilution of peptic juice.<sup>14</sup> Here, we were keen to understand the correlation of water intake with *Ajirna* symptoms in our study. Among all *Ajirna* patient, 72% of the patients consumed excess water daily, where 57% of the patient had a water intake of 2-4 litres/day and 15% had 4-6 litres/day. The rest of the patients drank an optimal quantity of water, 1-2 litres per day (28%). It was found that 70% of the patients had a habit of restraining the defecation reflex, and most of the patients were controlling the defecation reflex once a week (34%) or occasionally (30%) (Table 4).

**Table 4:** The frequency distribution of patients who were restraining the defecation reflex.

A habit of restraining defecation reflex	Numbers, Frequency (%)
Everyday	2 (2)
2-4 times/week	4 (4)
Once/week	34 (34)
Occasional	30 (30)
Total	70

Since, *Ajirna* and psychological well-being were shown to be correlated, we evaluated the emotional quotient of the *Ajirna* patients. Most of the patients had multiple emotional disturbances with the parameters overlapping among the *Ajirna* cases. Most of the patients agreed to be sentimental (90%), short-tempered (76%), a habit of restraining crying reflex (72%), episodes of emotional breakdown (71%), regular suffering from grief (40%), and loss of emotional productivity (24%) (Table 5). Fright issues in *Ajirna* patients were found to be due to different reasons like imagining scenarios (26%), attempting something new (15%), environment (8%), and mob (4%) (Table 5).

#### 4. Discussion

*Ayurveda* is an age-old traditional medical practice in India which conceptualizes the presence of five physical elements (ether, earth, fire, water and air)

**Table 5:** The table shows the analyses of the results obtained through the survey.

Question	Frequency	Proportion
<b>Symptoms of Ajeerna Observed</b>		
Tiredness	7	0.07
Clumsiness	23	0.23
Incomplete Defecation/bloating	54	0.54
Giddiness	7	0.07
Abdominal Distension	85	0.85
Dry/hard stools	89	0.89
Increased stool Quantity	8	0.08
<b>Seasonal Fluctuation In Water Intake</b>		
Yes	48	0.48
<b>Restrain Defecation Reflex</b>		
Yes	70	0.70
<b>Frequency of Restraining Defecation Reflex</b>		
Everyday	2	0.02
Once/week	34	0.34
2-4 times/week	4	0.04
Occasional	36	0.36
<b>Sentimental</b>		
Yes	90	0.90
<b>Emotional Breakdown</b>		
Yes	71	0.71
<b>Restrain Crying Reflex</b>		
Yes	72	0.72
<b>Fright Issues Due To</b>		
Specific Environment	8	0.08
Mob	4	0.04
Imaginary Scenarios	26	0.26
New activities	15	0.15
<b>Short Tempered</b>		
Yes	76	0.76
Sometimes	20	0.20
Suffering From Grief/Affliction		
Yes	40	0.40
Sometimes	53	0.53
<b>Loss Of Emotional Productivity</b>		
Yes	24	0.24
Sometimes	64	0.64

constituting the universe including human body and three *doshas* which distinguishes the individuality of humans termed as *Prakriti*. The *Prakriti* is a combination of a person's physical, physiological and mental traits which is independent of socio-demographic variabilities.<sup>15</sup> Hence, the massive similarities between western medicine's psychologic somato types and Indian medicine's *Prakriti*, together offer a proposal for definite genopsyocho-somato typing of humans. The three doshas namely-*Vata*, *Pitta* and *Kapha* which represents movement, digestion and cumulation, respectively. Each *doshas* are related to the expression of various nuclear transcription factors which profoundly regulate the embryonic development, adult homeostasis, and metabolism of the human.<sup>13</sup> A systematic review has emphasized on the *Prakriti* with metabolic disorders, chronic disease and genetic

abnormalities. Therefore, the early identification of *Prakriti* of newborn babies along with genetic screening would help to improve not only the personalized medicine but also personalized dietary and lifestyle changes from early age. This can be achieved personalized optimization of health management practices.<sup>16</sup> The manifestation of *Ajirna* includes Adhman (abdominal distension), *Vishtambha* (incomplete defecation), dry/hard stools, bloating, and clumsiness in patients which indicate the involvement of the gastrointestinal tract distress in disease pathogenesis.<sup>7</sup> Since *Prakriti* determines the constitutional blocks of the human being, therefore it is of great importance to identify the *Prakriti* of a patient before the commencement of treatment regime.<sup>17</sup> In our study, we found that chronic indigestion is prevalent in *Ajirna* patients, and it is episodic occurring every week or month. The prevention of *Ajirna*

is difficult due to the inability to identify the *Ajirna* pathology and lack of appropriate treatment. Thus, the frequent chronic indigestion takes a toll on the physical and further the mental health of *Ajirna* patients.

*Ayurveda* suggests that one should drink water only when you feel thirsty. However, modern medicine advises a high intake of water for proper hydration. The power (*Agni*) of the body helps in the digestion of food and high intake of water during digestion is like dousing fire with water. As per *Ayurveda* concepts, high intake of water can be harmful for health.<sup>14</sup> The undigested food (*Aama*), in addition to weakened digestive fire (*Mandagni*), leads to *Aama dosha*, which can, in turn, give rise to various disorders (*Roga*).<sup>8</sup> The patients in our study were found to drink 2-4 litres of water per day which might be the cause of *Ajirna*. Additionally, the restraining of the defecation reflex affects the functioning of *Aapaanavayu*, causing *vimargagaman* and *Vata dosha* in the body.<sup>10</sup> It is assumed that increased water intake may clear the bowels, but the current cross-sectional study points out the harmful effects of increased water intake.

Functional dyspepsia patients suffer from somatoform, depressive, and anxiety disorders.<sup>18</sup> A clinical study by Magni et al. (1987), where 86.8% of the patients with functional dyspepsia suffered from psychiatric disorders.<sup>19</sup> Psychotropic drugs including both the anti-depressive and anti-anxiety properties were more effective in managing functional dyspepsia symptoms than psychotropic drugs with only anti-depressive properties. The ability of psychotropic medications to manage dyspepsia indicates that emotional disturbances are associated with dyspepsia.<sup>20</sup> We found a high prevalence (71%) of psychological disturbances (*Manasika Hetu*) in the *Ajirna* patients as most of them restrained crying reflex. It is known that an increased incidence of restrained crying reflex leads to *Vata-vrudhhi*, and increased suppression of emotional stress leads to *Agnimandya*, further establishing the relationship between digestive and psychological problems. Moreover, we found that *Ajirna* patients suffered from grief; a state of mixed positive and negative emotions, which in later stages gets dominated by negative feelings, leading to psychological issues.<sup>21</sup> In a special case report, a 58-year-old woman was diagnosed of suffering from severe dyspepsia for 2 years, which did not subside with pharmacological treatment. On probing further, the development of dyspepsia coincided with the death of her son due to cancer and she blamed her ailment for that, further the hypnotic treatment cured the woman from her grief and led a normal life.<sup>22</sup> We also found that majority of the *Ajirna* patients were short-tempered. Short temper could be associated with intermittent explosive disorder or depression and includes emotional outbursts leading to physical aggression and anger, and negative consequences with patients feeling guilty later on.<sup>23</sup>

The *Ajirna*/dyspepsia and emotional stress are correlated because anxiety or emotional stress can increase the fight or flight response (adrenaline) in the brain.<sup>24</sup> As the brain uses high amounts of energy for its functional execution, the body diverts most of the energy from digestion to brain which further reduces the digestive efficiency. Also, the anxiety can increase serotonin levels in the body, which has an inhibitory effect on the gut, leading to indigestion or *Ajirna* (10). However, a randomized clinical study emphasized on the use of serotonin agonist for the treatment of functional dyspepsia anxiety.<sup>25</sup> Hence, it is advisable to treat the psychological issues in along with, instead of treating *Ajirna* alone.

In present study 38 patients of *Ajirna* were observed who were suffering from Fright issues and had a habit of Restraining Defecation Reflex. After applying chi square test p value noted was 0.861, which is > 0.05. Hence it can be said that there is no correlation amongst these two observations.

The early diagnosis and treatment of *Ajirna* are essential as in later stages; the disease can proceed to numerous *upadravas* like severe vomiting. A previous study on *Ajirna* patients showed that *Sattvavajaya Chikitsa* helped improve *Vataja*, *Pittaja*, and *Kaphaja* symptoms. A type of *Adravyabhoota Chikitsa*, *Sattvavajaya Chikitsa*, helps improve mental problems in *Ajirna* patients. Physicians can suggest relaxing muscles in addition to deep concentration (*Indriya-Nirapeksha Jnana* prevention) and detachment of *Mana* and *Indriyas* from *Vishayas* (*Indriya-Sapeksha Jnana* prevention). *Sattvavajaya Chikitsa*, helps to reduce the stress and enhance the strength of the *Sattva*.<sup>26</sup> Available evidences indicates that psychological therapies may benefit patients with functional dyspepsia, especially those with chronic symptoms.<sup>27</sup> Therefore, the psychological problems associated with the *Ajirna* patients could be treated with trance-therapy or *Sattvavajaya Chikitsa*. Finally, psychological treatment will help to lower the rate of *Ajirna* incidence in middle-aged patients, provide symptomatic relief, and can act as a preventive measure in young adults.

## 5. Conclusion

*Ajirna* is not only related to the physical illness such as- gastro-intestinal distress, abdominal pain and improper excretion habit, but also resulted in various mental disturbance, emotional outbreak and ultimately adverse life situations. In this scenario, we have shown the etiological evidences and dominance of *Manasika hetu* in *Ajirna* patients. Therefore, our study proposed that both bodily and psychological treatment of *Ajirna*, is crucial for an effective outcome. Mental stress is the growing problem in the society due to multiple causes like- profession, life style changes, irregular dietary pattern, which is hard to be eradicated. Therapies like *Sattvaavajaya Chikitsa*, meditation, and

yogasana could be regularly practiced in order to prevent not only dyspepsia or *Ajirna*, but also various life-style associated disease and for the improvement of mental health.

## 6. Source of Funding

None.

## 7. Conflict of Interest


None.


## References

- Ahmedani BK, Peterson EL. Major Physical Health Conditions and Risk of Suicide. *Am J Prev Med.* 2017;53(3):308–23.
- Available from: <https://www.who.int/news-room/feature-stories/mental-well-being-resources-for-the-public.2021>.
- Singhal A, Ross J. Risk of self-harm and suicide in people with specific psychiatric and physical disorders: comparisons between disorders using English national record linkage. *J R Soc Med.* 2014;107(5):194–204.
- Onyeka IN, Maguire A. Does physical ill-health increase the risk of suicide? A census-based follow-up study of over 1 million people. *Epidemiol Psychiatric Sci.* 2020;29:140. doi:10.1017/S2045796020000529.
- Moayyedi P, Lacy BE. ACG and CAG Clinical Guideline: Management of Dyspepsia. *Am J Gastroenterol.* 2017;112(7):988–1013.
- Kushwaha V, Charaksamhita. 2016.
- Shriwas R, Shukla S, Chandrakar RK, Shrivastava H. Etiopathological study of most common digestive disorder *Ajirna* (indigestion). *Int J Ayurveda Pharma Res.* 2018;6(5):84–8.
- Joshi N, Dash MK, Panda PK. Role Of Kana Kajjali In The Management Of *Ajeerna* (indigestion): An Open Clinical Study. *Int J Ayurveda Pharma Res.* 2019;7(5):1–9.
- Khuntia BK, Dash NC, Das BK. A Clinical Study on *Ajirna* vis-à-vis Dyspepsia and its Management with a Polyherbal Compound Formulation. *J Res Ayurvedic Sci.* 2011;32(1-2):47–58.
- Saini N, Pal PK, Byadgi PS. Critical Analysis of Etiological Factors of *Ajirna* (Indigestion). *Int J Complement Alt Med.* 2017;5(1):1–5.
- Mak AD, Wu JC. Dyspepsia is strongly associated with major depression and generalised anxiety disorder - a community study. *Aliment Pharmacol Ther.* 2012;36(8):800–10.
- Nan J, Liu J. Brain-based Correlations Between Psychological Factors and Functional Dyspepsia. *J Neurogastroenterol Motility.* 2015;21(1):103–13.
- Rizzo-Sierra CV. Ayurvedic genomics, constitutional psychology, and endocrinology: the missing connection. *J Alternative Complement Med.* 2011;17(5):465–73.
- Londhe D, Ch CA. Review Article Water for Health: An overview of principles & practices of Water consumption in Ayurveda. *Ann Ayurvedic Med.* 2020;9(3):189–97.
- Hankey A. Ayurvedic physiology and etiology: Ayurvedo Amritanaam. The doshas and their functioning in terms of contemporary biology and physical chemistry. *J Altern Complement Med.* 2001;7(5):567–74.
- Dey S, Pahwa P. Prakriti and its associations with metabolism, chronic diseases, and genotypes: Possibilities of new born screening and a lifetime of personalized prevention. *J Ayurveda Integrative Med.* 2014;5(1):15–24.
- Jayasundar R. Ayurveda: a distinctive approach to health and disease. *Curr Sci.* 2010;98(1):908–22.
- Barry S, Dinan TG. Functional dyspepsia: are psychosocial factors of relevance? *World J Gastroenterol.* 2006;12(17):2701–8.
- Magni G, Bernasconi G, Mario FD. Psychiatric disturbances in patients with dyspepsia of unknown cause. *Lancet.* 1987;2(8572):1395–1395.
- Hojo M, Nagahara A. A Systematic Review of the Effectiveness of Antianxiety and Antidepressive Agents for Functional Dyspepsia. *Intern Med.* 2017;56(23):3127–60.
- Zisook S, Shear K. Grief and bereavement: what psychiatrists need to know. *World psychiatry : official J World Psychiatr Assoc (WPA).* 2009;8(2):67–74.
- Zimmerman J. Dyspepsia as a somatic expression of guilt: a case report. *Am J Clin Hypn.* 2001;44(1):57–61.
- Kulper DA, Kleiman EM. The experience of aggressive outbursts in Intermittent Explosive Disorder. *Psychiatry Res.* 2015;225(3):710–5.
- Adibi P, Keshteli AH. Association of anxiety, depression, and psychological distress in people with and without functional dyspepsia. *Adv Biomed Res.* 2016;5:195. doi:10.4103/2277-9175.190936.
- Hiyama T, Yoshihara M. Treatment of functional dyspepsia with serotonin agonists: a meta-analysis of randomized controlled trials. *J Gastroenterol Hepatol.* 2007;22(10):1566–70.
- Vyas KM, Dwivedi RR. Role of Sattvavajaya Chikitsa (Trance therapy) in the management of *Manasa-Dosha Ajeerna*. *Ayu.* 2012;33(1):78–84.
- Faramarzi M, Azadfallah P. The effect of psychotherapy in improving physical and psychiatric symptoms in patients with functional dyspepsia. *Iranian J Psychiatry.* 2015;10(1):43–9.

## Author biography

**Manasi Gajanan Oak**, PG scholar

**Mrudula Vinayak Joshi**, Professor and HOD  <https://orcid.org/0000-0003-3905-9475>

**Vinayak Nilkanth Joshi**, Professor and HOD  <https://orcid.org/0000-0002-1203-5505>

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