

Gut Harmony: Assessing An Ayurvedic Herbal Formula For Ibs Management

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Abstract: Irritable Bowel Syndrome (IBS) is a chronic functional gastrointestinal disorder characterized by abdominal pain, bloating, and altered bowel habits. Current treatments often provide limited relief and may have side effects. This study evaluates the efficacy and safety of Digestive Health Capsules, an Ayurvedic herbal formulation, in managing IBS symptoms and improving quality of life. Methods- A randomized, open-label, clinical trial was conducted on patients diagnosed with IBS. Participants received Digestive Health Capsules twice daily for eight weeks. The primary outcome measures included changes in IBS Symptom Severity Scale (IBS-SSS) scores and IBS-Quality of Life (IBS-QOL-36) scores. Statistical analysis was performed using paired t-tests to assess the significance of symptom improvement. Results- A total of 40 patients completed the study. There was a statistically significant reduction in IBS-SSS scores ($P < 0.0001$), indicating improved symptom severity. Additionally, IBS-QOL-36 scores showed a significant enhancement in patients' quality of life ($P < 0.0001$). No serious adverse events were reported, and the formulation was well-tolerated. Discussion- The herbal ingredients in Digestive Health Capsules, including Kutāja, Bilva, Śunthī, and Vijayā, contributed to symptom relief through their gut-regulating, anti-inflammatory, and adaptogenic properties. The results suggest that this formulation effectively manages both gastrointestinal and psychosomatic symptoms of IBS. Conclusion- Digestive Health Capsules demonstrated high efficacy and good safety in IBS management, offering a promising natural alternative to conventional therapies. Further large-scale, controlled trials are recommended to confirm these findings and establish long-term benefits.

Keywords- Irritable Bowel Syndrome, Ayurveda, Digestive Health, IBS-QOL-36, Gut Health

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Introduction

Irritable Bowel Syndrome (IBS) is a complex and prevalent functional gastrointestinal disorder that significantly affects the quality of life of individuals worldwide.¹ It is a condition characterized by chronic abdominal discomfort, bloating, altered bowel habits, and digestive distress without any detectable structural abnormalities.² IBS is often described by multiple names, including spastic colon, mucous colitis, and nervous diarrhea, highlighting its varied presentation. The exact cause of IBS remains unclear, but it is widely acknowledged that a combination of disturbed gut motility, altered gut-brain interactions, and psychosocial factors contribute to its manifestation.³ The condition is classified into different subtypes based on bowel movement patterns—IBS-D (diarrhea-predominant), IBS-C (constipation-predominant), and

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IBS-A (alternating).⁴ It can be triggered by infections, psychological stress, or lifestyle changes, making it a multifaceted disorder requiring a holistic approach to management.⁵ In India, IBS affects approximately 15-20% of the population, with a higher prevalence in women and young adults. While not life-threatening, it is a significant cause of chronic pain, fatigue, and emotional distress, leading to increased healthcare costs and work absenteeism.⁶ In the Ayurvedic system of medicine, IBS closely aligns with disorders of Grahanī and Pakvāśaya, primarily caused by the vitiation of Vāta along with involvement of other Doṣas.⁷ The interplay between mental health and digestion is well documented in Ayurveda, where emotional disturbances like anxiety, stress, and grief are believed to aggravate Vāta, leading to symptoms akin to IBS. Various Ayurvedic texts describe conditions resembling IBS, such as

Vātaja Atisāra, Sangraha Grahaṇī, and Pravāhikā, all of which share overlapping symptoms with modern IBS classifications.

This study aims to explore IBS through the lens of Ayurveda, assess its conceptual similarities with traditional digestive disorders, and evaluate the efficacy of **Digestive Health Capsules**, an herbal formulation containing Bilva, Kuṭaja, Śuṅṭhī, and Bhangā, in managing IBS symptoms. By analyzing its impact on key clinical parameters and quality of life, this research seeks to provide a natural and holistic approach to IBS treatment, addressing both physiological and psychological aspects of the disorder.

2. Methodology

Study Design- This study is an open-label, single-arm, single-center clinical trial designed to evaluate the safety and efficacy of Digestive Health Capsules in the management of Irritable Bowel Syndrome (IBS). The study was conducted at the National Institute of Ayurveda (NIA), Jaipur, and was registered with the Clinical Trials Registry of India (CTRI/2022/03/041004). Ethical approval was obtained from the Institutional Ethical Committee of NIA, Jaipur (No. IEC/ACA/2021/02-83).

Subject Selection

- A total of 40 patients diagnosed with IBS (both men and women) were enrolled in the study based on the inclusion and exclusion criteria.
- Written informed consent was obtained from all participants before enrollment.

Inclusion Criteria

1. Male and female patients aged 18 to 65 years diagnosed with IBS using the IBS diagnostic scale.
2. Ability to consent to the study and capable of reading and writing in English or the local language.
3. Non-regular users of cannabis (less than three times per week) and willingness to abstain from cannabis one week before and during the study.
4. Normal liver function (AST: 10-40 U/L, ALT: 7-56 U/L) and normal renal function (serum creatinine < 133 μmol/L, eGFR ≥ 60).⁸
5. Agreement to avoid products with similar benefits throughout the study duration.
6. Willingness to abstain from alcohol, caffeine, and nicotine consumption during the study period.
7. Compliance with protocol procedures and willingness to sign the consent form.

Exclusion Criteria

1. Hypersensitivity or adverse events related to cannabis or cannabinoids.
2. Patients on opioids or other anxiety medications.
3. Presence of significant cardiac disease, uncontrolled hypertension, or history of arrhythmia/myocardial infarction.
4. Current substance use disorder or lifetime history of cannabis dependence.

5. Pregnant and lactating women or women planning pregnancy.
6. Regular use of cannabis (three or more times per week) or cannabinoid-based medications within seven days before study entry.
7. Positive urine screening for substance abuse (alcohol, cocaine, amphetamines, opioids, etc.).
8. Any systemic or cutaneous disease interfering with study procedures.
9. Participation in another clinical trial for the same indication within 90 days of screening.

Withdrawal Criteria

1. Participants failing to report for a follow-up visit within 15 days of the scheduled date.
2. Participants who withdraw consent at any stage.
3. Loss to follow-up.
4. Worsening of clinical condition despite prescribed treatment.

Study Protocol

Intervention

- **Product Used:** Digestive Health Capsules (Ayurvedic proprietary medicine)
- **Procurement of drug:** Bombay hemp company
- **Composition:** Each capsule contains:
 - Vijayā (Cannabis sativa) - 200 mg
 - Śuṅṭhī (Zingiber officinale) - 100 mg
 - Kuṭaja (Holarrhena antidysenterica) - 300 mg
 - Bilva (Aegle marmelos) - 200 mg
- **Dosage:** 1 capsule in the morning and 1 capsule at night for 8 weeks.

Study Duration & Follow-up

- **Total Study Duration:** 8 weeks
- **Number of Visits:** 5 (Baseline (Day 0), Day 15, Day 30, Day 45, and Day 60)
- **Assessments at Each Visit:**
 - IBS Severity Scoring Scale (IBSSS)
 - Self-evaluation for tolerance using an evaluation questionnaire

Assessment criteria- IBS Severity Scoring Scale⁹

Statistical Analysis- Data analysis was conducted using appropriate statistical methods to assess the significance of improvements in IBSSS. Paired t-tests or Wilcoxon signed-rank tests were used to compare pre- and post-intervention scores.

3. Results

In the present study, total 44 patients were registered. Out of these 40 patients completed the treatment whereas 4 were drop outs.

The majority of subjects (60%) were aged 18-32 years, followed by 25% in 33-46 years and 15% in 47-60 years. Males (75%) had a higher prevalence than females (25%). Most subjects (52.5%) weighed 61-70 kg, while 37.5% weighed 51-60 kg, and 10% weighed 71-80 kg. Sedentary work was common, with 37.5% engaged in desk jobs and 20% in the medical field. IBS was more prevalent in urban areas (90%).

Dietary habits showed 52.5% were vegetarian, and 47.5% followed a mixed diet. Tea addiction was

observed in 42.5%, and alcohol addiction in 22.5%. Irregular bowel habits were noted in 67.5%. Emotional stress was reported in 67.5%, with most experiencing moderate stress. Regarding IBS chronicity, 37.5% had symptoms for over three years, and 30% for 1-2 years. Among Rasavaha Srotas Duṣṭi Lakṣaṇa, Angamarda (85%) and Agnimāndhya (80%) were most common, while Tandrā, Hrillāsa, and Jvara were absent.

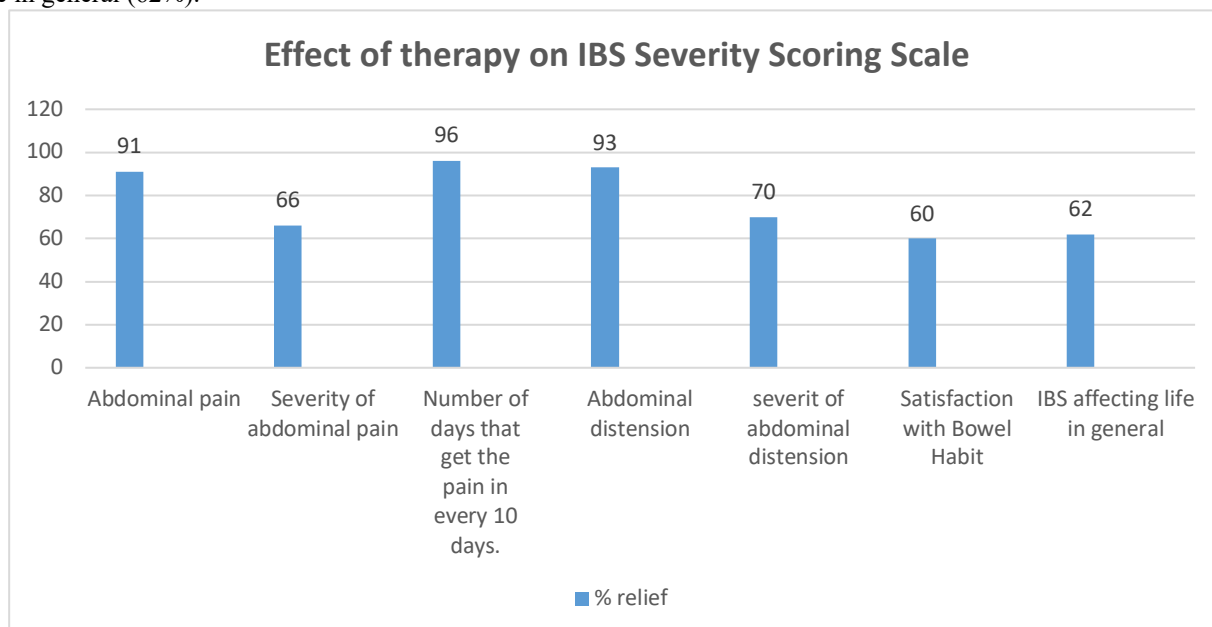
Annavaḥa Srotas Duṣṭi Lakṣaṇa included Āṭopa (82.5%), Anannābhilāsā (67.5%), Arocaka (57.5%), and Kaṅṭhadāha (47%). For Puriṣavaha Srotas Duṣṭi Lakṣaṇa, Ānāha, Drava, and Śleśmamalapravritti were seen in all patients, while Alpa Pravritti was found in 32.5%. IBS severity assessment showed 57.5% with a severe score (>300) and 42.5% with moderate severity, with no cases of mild severity.

Effect of Therapy:

Table No. 1 Showing the effect of trial medicine (Digestive Health Capsule) on IBS Severity Scoring Scale in study group

Symptoms	Mean		Diff.	% Relief	± SD	SE M	W	P	Sig
	B. T	A. T							
Abdominal pain	0.875	0.075	0.8	91	0.405	0.064	528.0	<0.0001	ES
Severity of Abdominal Pain	3.15	1.075	2.075	66	1.248	0.197	595.0	<0.0001	ES
Number of days that get the pain in every 10 days.	4.675	0.2	4.475	96	2.864	0.453	630.0	<0.0001	ES
Abdominal Distension	1.00	0.07	0.92	93	0.26	0.04	703.0	<0.0001	ES
Severity of Abdominal Distension	3.5	1.05	2.45	70	1.108	0.175	741.0	<0.0001	ES
Satisfaction with Bowel Habit	3.07	1.22	1.85	60	0.86	0.13	703.0	<0.0001	ES
IBS Affecting life in General	3.05	1.15	1.9	62	0.9	0.142	703.0	<0.0001	ES

Above table shows that trial medicine provided an extremely significant result (P<0.0001) in symptoms like abdominal pain with 91% of improvement, severity of abdominal pain (66%), number of days that get the pain in every 10 days (96%), abdominal distension (93%), severity of abdominal distension (70%), satisfaction with bowel habit (60%), IBS affecting life in general (62%).



Discussion

The present study evaluated the efficacy and safety of Digestive Health Capsules, an Ayurvedic herbal formulation, in the management of Irritable Bowel Syndrome (IBS). The study outcomes demonstrated a highly significant improvement ($P < 0.0001$) in IBS symptoms, including abdominal pain, bloating, altered bowel habits, and overall quality of life.

The results indicate that Digestive Health Capsules effectively reduced the severity of IBS symptoms, with notable improvements in abdominal pain (91%), abdominal distension (93%), and bowel movement satisfaction (60%). The reduction in symptom severity suggests the potential of this herbal intervention in regulating gut motility and reducing visceral hypersensitivity, key factors in IBS pathophysiology.

The role of individual ingredients in Digestive Health Capsules further supports these findings. Kutaja and Bilva are known for their anti-diarrheal and gut-stabilizing properties, while Śunṭhī aids in digestion and reduces bloating.¹⁰ Vijayā (Cannabis sativa), included in a controlled dose, may have contributed to pain relief and improved gut motility through its known analgesic and gut-modulating effects.¹¹

The study findings align with previous research indicating that herbal and Ayurvedic formulations can provide holistic management of IBS by addressing both physiological and psychological aspects. The significant symptom relief and improved quality of life scores reinforce the potential of Digestive Health Capsules as a natural and effective alternative for IBS management.

Conclusion

The findings of this study suggest that Digestive Health Capsules, an Ayurvedic herbal formulation, significantly improve the symptoms of Irritable Bowel Syndrome (IBS), including abdominal pain, bloating, altered bowel habits, and overall quality of life. The highly significant improvements ($P < 0.0001$) observed in IBS symptom severity indicate that the formulation effectively addresses both gastrointestinal and psychological aspects of the disorder.

The combination of herbal ingredients, including Kutaja, Bilva, Śunṭhī, and Vijayā, likely contributes to the observed benefits by regulating gut motility, reducing visceral hypersensitivity, and alleviating associated stress and anxiety. These results reinforce the Ayurvedic principle of a holistic approach to digestive health.

Given the high efficacy and good tolerability of the formulation, Digestive Health Capsules may serve as a promising natural alternative for IBS management. However, further randomized controlled trials with larger sample sizes and long-term follow-ups are recommended to establish its broader clinical applicability and safety profile.

Conflict of Interest: None declared.

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References

- ¹ Sperber AD, Bangdiwala SI, Drossman DA, Ghoshal UC, Simren M, Tack J, Whitehead WE, Dumitrascu DL, Fang X, Fukudo S, Kellow J. Worldwide prevalence and burden of functional gastrointestinal disorders, results of Rome Foundation Global Study. *Gastroenterology*. 2021 Jan 1;160(1):99-114.
- ² Chang L. Epidemiology and quality of life in functional gastrointestinal disorders. *Alimentary pharmacology & therapeutics*. 2004 Nov;20:31-9.
- ³ Lea R, Whorwell PJ. Quality of life in irritable bowel syndrome. *Pharmacoeconomics*. 2001 Jun;19:643-53.
- ⁴ Guilera M, Balboa A, Mearin F. Bowel habit subtypes and temporal patterns in irritable bowel syndrome: systematic review. *Official journal of the American College of Gastroenterology | ACG*. 2005 May 1;100(5):1174-84.
- ⁵ Abbo Bacia J. Holistic approaches to stress management: Understanding, prevention, and coping strategies. *Research Invention Journal of Current Research in Humanities and Social Sciences*. 2024;3:83-7.
- ⁶ Bruta K, Vanshika, Bhasin K, Bhawana. The role of serotonin and diet in the prevalence of irritable bowel syndrome: a systematic review. *Translational Medicine Communications*. 2021 Dec;6:1-9.
- ⁷ Majhi L. The Normal and Abnormal Condition of Doṣās in Āyurveda (Sāmya and Vaisāmya of Doṣās in Āyurveda). *Partners Universal International Innovation Journal*. 2023 Dec 25;1(6):169-76.
- ⁸ OPIYO W. Serum electrolyte changes associated with kidney and liver function markers in HIV-infected individuals attending Jaramogi Oginga Odinga teaching and referral hospital, Kisumu county, Kenya (Doctoral dissertation, Maseno University).
- ⁹ Lembo A, Ameen VZ, Drossman DA. Irritable bowel syndrome: toward an understanding of severity. *Clinical Gastroenterology and Hepatology*. 2005 Aug 1;3(8):717-25.
- ¹⁰ Wujastyk D. Acts of improvement: on the use of tonics and elixirs in Sanskrit medical and alchemical literature. *History of Science in South Asia*. 2017;5(2):1-36.
- ¹¹ Dwivedi DV. Scientific and Medicinal Evaluation of Harītakī (Terminalia Chebula) in Indian Perspective. *Journal of the ganganatha jha campus*. 2023 Mar;11:126.