

# Holistic Approaches in the Management of Alcohol Use Disorder: A Systematic Review of Ayurvedic Interventions

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## ABSTRACT

**Introduction:** Alcohol Use Disorder (AUD) is a chronic condition marked by a compulsive desire for alcohol, loss of control, and significant physical and psychological dependency. Conventional treatments for AUD often come with side effects, relapse, and incomplete recovery. Ayurveda, with its holistic approach, offers potential in addressing both the physiological and psychological dimensions of AUD. This review explores Ayurvedic interventions, including detoxification, herbal formulations, and psychological approaches, for managing AUD.

## Methods:

A systematic review was conducted following the PRISMA guidelines, including studies published between 2010 and 2024. The search was carried out on databases like PubMed, AYUSH Research Portal, and Google Scholar. Eligible studies included randomized controlled trials (RCTs), non-randomized clinical trials, case reports, and observational studies that evaluated Ayurvedic therapies for AUD. Key outcomes included reduction in alcohol consumption, withdrawal symptoms, oxidative stress markers, and improvements in psychological health.

**Results:** Fourteen studies fulfilling the inclusion criteria were included in the review. Most studies investigated the effects of Panchakarma therapies (e.g., Virechana, Basti, Nasya), herbal formulations (e.g., Arogyavardhini Vati, Ashtang Lavan Churna), and Satvavajay Chikitsa (psychological counseling). Results indicated significant improvements in withdrawal symptoms, reduced alcohol cravings, and improved liver function. Panchakarma therapies showed efficacy in detoxification and managing oxidative stress markers, while herbal treatments and psychological interventions demonstrated promising effects on reducing relapse rates and improving emotional stability.

**Discussion:** The findings suggest that Ayurvedic interventions offer a comprehensive treatment strategy for AUD, addressing both the physical and psychological aspects of addiction. The combination of detoxification, herbal support, and psychological counseling aligns with the holistic nature of Ayurvedic medicine and offers potential advantages over conventional treatments. However, further high-quality clinical trials are needed to standardize these interventions and establish robust evidence for their clinical application.

**Conclusion:** Ayurvedic therapies, particularly Panchakarma, herbal formulations, and psychological interventions, show promising potential in the management of AUD. The holistic nature of Ayurveda offers a complementary approach to conventional treatments, emphasizing detoxification, emotional well-being, and long-term recovery. Further research with standardized protocols is necessary to validate and optimize these interventions in clinical settings.

**Keywords:** Alcohol Use Disorder, Madatyaya, Ayurvedic treatments, Panchakarma, Satvavajaya Chikitsa, Herbal formulations, Addiction management, Oxidative stress, Systematic review.

## 1. INTRODUCTION

Alcohol Use Disorder (AUD), commonly referred to as alcoholism, is a chronic condition characterized by a strong craving for alcohol, loss of control over drinking, withdrawal symptoms, and physical dependence. It is a significant public health issue globally, contributing to a wide range of physical, psychological, and social challenges. Conventional management strategies for AUD often include pharmacological interventions, behavioral therapies, and counseling, but these approaches are associated with limitations such as side effects, relapse, and incomplete recovery.

Ayurveda, the ancient system of Indian medicine, offers a holistic approach to managing alcoholism, emphasizing detoxification, mental health, and sustainable recovery. In Ayurvedic texts, AUD is described under "Madatyaya," attributed to the vitiation of doshas (Pitta, Vata, and Kapha) and the accumulation of toxins (Ama). This review aims to explore Ayurvedic interventions for managing AUD, evaluate their clinical effectiveness, and discuss their safety profiles based on evidence from existing literature.

## 2. METHODS

### 2.1. Study Design

This systematic review was conducted following the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines and reported according to CONSORT (Consolidated Standards of Reporting Trials) standards.

### 2.2. Eligibility Criteria

#### Inclusion Criteria:

**Study Design:** Included randomized controlled trials (RCTs), non randomized clinical trials, controlled clinical trials (CCTs), case reports, observational studies, and reviews.

**Population:** Individuals diagnosed with Alcohol Use Disorder (AUD) or chronic alcohol dependence.

**Intervention:** Ayurvedic therapies, including Panchakarma treatments, herbal formulations, and Satvavajaya Chikitsa (counseling), Yoga procedures

**Comparator:** Conventional therapies, placebo, or other alternative interventions.

**Outcomes:** Primary outcomes included reduction in alcohol consumption, withdrawal symptoms, and relapse rates. Secondary outcomes included improvement in oxidative stress markers, quality of life, and psychological health.

#### Exclusion Criteria:

Studies focusing exclusively on non-Ayurvedic interventions or without measurable outcomes.

### 2.3 Information Sources

The systematic review analyzed published studies from 2010 to 2024 using databases such as PubMed, AYUSH Research Portal, Scopus, and Google Scholar. Unpublished dissertations and clinical data were also reviewed.

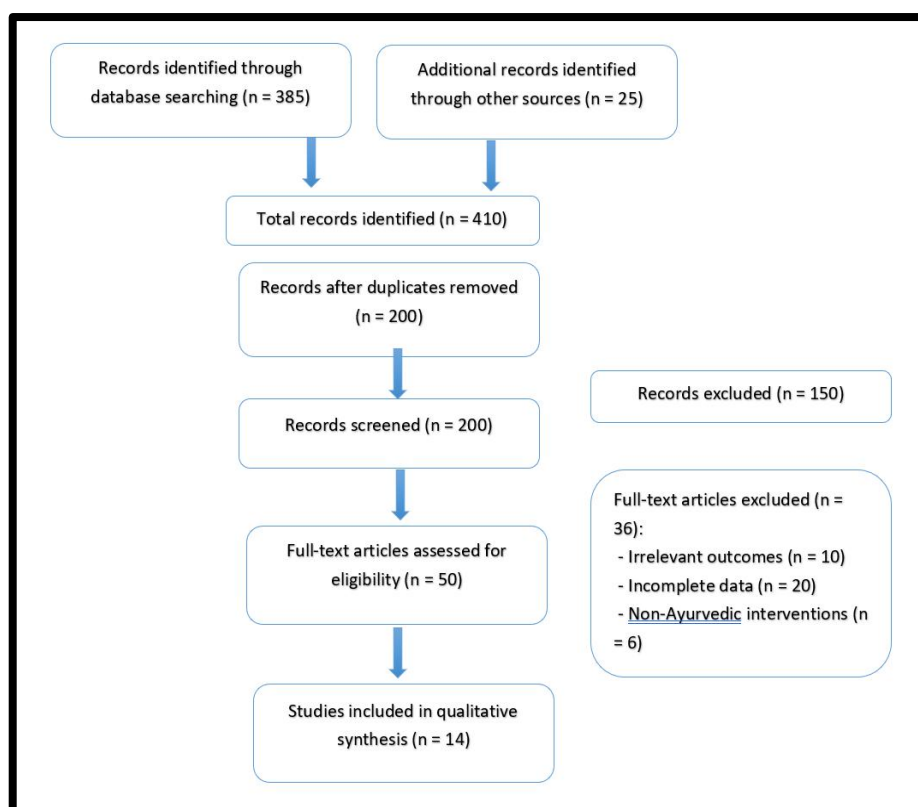
### 2.4. Search Strategy

Keywords used were "Ayurveda AND Alcoholism," "Madatyaya treatment," "Ayurvedic management of AUD," "Panchakarma for addiction," and "herbal formulations for alcohol dependence.", "YOGA practices for alcoholism", "Satvajay chikitsa". Filters included peer-reviewed studies with clearly defined interventions and outcomes.

### 2.5. Study Selection and Data Extraction

Studies were screened independently by two reviewers for inclusion, and data were extracted using the PICO framework (Population, Intervention, Comparator, Outcomes). The Cochrane Risk of Bias tool assessed study quality. Discrepancies were resolved through discussion.

### PRISMA Flow Diagram



## 2.6. Key aspects of studies included in study

Sr. no.	Title/Topic	Publication Details	Sample Size	Intervention	Key Outcomes	Conclusion
<b>CLINICAL TRIAL</b>						
1	Clinical Efficacy of Ashtang Lavan Churna in Alcohol Addiction	Sandeep Charak, Dharminder Kumar Sharma, Monika Sharma International Research Journal of Ayurveda & Yoga Vol. 5 (1),17-25, January, 2022	15	Ashtang lavan churan- 5 gm twice a day with lukewarm water after meals for 1 month	There was no significant difference in the clinical manifestations of alcohol withdrawal and addiction in the study group, but the majority of the clinical manifestations were controlled/cured before and after therapy. Statistically, there is no significant difference in	Throughout the clinical trial, 36.00 percent of patients in one group were found to be de-addicted.

					the number of de-addicted patients after one month of treatment.	
2	An open-label single-arm clinical study to evaluate effectiveness of polyherbal ayurveda formulation in alcoholic liver disease	M. J. Sushruth Kumar Jain, Shrilata, H. P. Savitha, Manjunatha Adiga, Suhas Kumar Shetty, T. Sanath Kumar Journal of Ayurveda, volume 17-1 Jan - Mar 2023	30	Patoladi Gana Kashaya 90 ml in three divided doses of 30 ml after food with equal warm water for 30 days.	The trial drug showed statistical significance in liver function test and lipid profile. In subjective parameters, statistical significance was obtained in Mandagni, Jwara, Chardi, Udarashoola, Baddhashakrith, and Peetanetrashakruthmootrata ( $P < 0.05$ ).	Patoladi Gana Kashaya is effective in the management of Madya Janya Yakrit Vikara (alcohol liver disease) and requires further investigations using a more vigorous method
3	Clinical efficacy of Narayan Churna in alcohol addiction: a single-blinded randomized clinical trial	Sandeep Charak, Monika Sharma, Sharad Porte. J Indian Sys Medicine 2021;9:126-34	TOTAL- 30, 15 in each group	Study drug: Narayan Churna 5 g twice a day with lukewarm water after meals for one month Control drug: Ashtang lavan churan 5g twice a day with lukewarm water after meals for one month Supportive drugs such as Tagaradi Kwath	Statistically significant results are observed in both groups. In both the study and control groups, 13.3% of the patients showed excellent relief. In both the control and	Overall, 36.66 % of patients were found to be de-addicted during the entire clinic

				Ghan vati and Bhumyamalaki Ghanvati have been given in both groups	study groups, 26.6 % and 13.3% of patients showed moderate relief, respectively.	al trial, which is a big achievement for Ayurveda science
4	Nasya and its efficacy in Alcohol withdrawal Syndrome	M Jithesh, Mohammed Shafeek, Uma Venugopal, Renuka R Gayal Scholars Journal of Applied Medical 2015; 3(3G):1516-1520	Total- 40, 20 in each group	Study group- Marsa nasya with Ksheerabala taila Control group- moern conservative management	It was observed that there was significant improvement in both the groups statistically and on comparison, the study group showed significant effect as compared to control on the final assessment.	Marsa nasya with Ksheerabala taila is effective as the Allopathic counterpart in the initial management of alcohol withdrawal syndrome.

**REVIEW ARTICLE**

S R. N O	Title	Publication Details	Conclusion
	UPROOT ADDICTION WITH EFFECTIVE AYURVEDIC MODALITIES	Dr. Tanvi M. Chotai, Dr. Sarita M. Kapgate World Journal of Pharmaceutical Research Volume 6, Issue 8, 2017.	In the contemporary medical health science, a detailed description of pathway of alcohol action is identified. Few drugs have been discovered to treat addiction but these therapeutic drugs are having some adverse effect as well. Extensive review of ayurvedic literature revealed that many Ayurvedic concepts of treatment and formulation can be adopted for effective management of de-addiction.
	Clinical aspects of madatyaya; management	Dr. Athulya c. M., dr. Nirmal mahendra savale World journal of pharmaceutical and medical research Vol 10, issue 6, 2024.	Madatyaya affects Hridaya, Rasavaha srotas, Manovaha srotas and Oja, etc. Mithya, Atiyoga and Heenayoga, etc. are behavioral issue related with Madatyaya. The treatment regimen includes Satvavajay Chikitsa, Yoga practices, Shaman Chikitsa (Rasayana medications), Snehan, Swedan, Nabhi puran, Nasya, Shirodhara and

	through pharmacological and non-pharmacological approaches of ayurveda		Basti, etc. Ayurvedic approaches not only address physical symptoms but also cure psychological and emotional aspects
	Ayurveda perspectives toward prevention and management of nicotine and alcohol dependence: a review	Renu B. Rathi, Bharat J. Rathi J Indian Sys Medicine 2020;8:14-20	Achar Rasayan, Sadvritta, and Satvavajay Chikitsa are the preventive as well as curative measures of de-addiction. Ayurveda also advocates medicated smoke/Dhumpan and alcohol, that is, Drakshasav, Shrikhandasav, and so on, as replacement therapy; use of daily and seasonal regimen and Doshashodhan (elimination of vitiated humors) in day-to-day life is essential to prevent or treat addiction problems.

**CASE REPORTS**

Sr. no.	Title/ Topic	Publication Details	Intervention	Key Outcomes	Conclusion
1	Ayurveda and Yoga Management of Chronic Alcoholism Sequelae- A case report	Aqsa Zarin Khan, Jibi Varghese, Shweta Kodre, Mohini Niware, Snehal Pansare, Shreya Bhatta, Samkit Shah, Manna Mathew. Journal of Ayurveda and Integrative Medicine Volume 15, Issue 1, January–February 2024, 100862	The patient underwent a two-month treatment regimen that combined Satvavajay Chikitsa, Yoga, and Shaman Chikitsa involving Rasayana medications and procedures including snehan (Oleation), swedan (fomentation), nabhi puran (filling oil with navel), nasya (nasal administration), shirodhara (continuous flow of liquid on head) and basti (medicated enema).	The intervention outcome showed relief from the aforementioned symptoms and improvement in both symptom scores and GCS (Glasgow coma scale) score	This treatment approach aimed to promote vitality, longevity, and an overall sense of balance and well-being.
2	Ayurvedic Management of Alcohol Use Disorder	Nisha C N1, Raviprasad Hegde Journal of Ayurveda and Integrative Medicine. Volume 8, Issue 11, November 2023	Arogyavardhini Rasa, Kumaryasava, Brahmi Vati, Shiropichu with Brahmi Taila, Amalaki Takradhara, Shodhan-Virechana with Trivrut Leha, Raja Yapan Basti (Kala Basti) Anuvasana Basti with Brahmi tail Deep relaxation and meditation • Anuloma-	The outcome of the Ayurvedic therapy which included detoxification, proper medication,	the focus of treatment in alcohol use disorder is to balance Shareerika

			Viloma Pranayama	meditation and counselling is much encouraging.	Dosha as well as Manasi ka Dosha. Hence treatment adapted in this case are Shodhana Chikitsa and Shamanaushadha which are Medhya and Yakrit Prasadana
3.	Role of Ayurveda in the Management of Alcohol withdrawal symptoms - A Case Report	Monika Sharma Ann Ayurvedic Med. 2021; 10(4) 440-446	The patient was treated with Drakashaasav, Vishatindukadi Vati, Ajmodadi Churna, Dasan Sanskar Churna, Ashwagandha Churna, Vidarikand Churna, Mukta shukti bhasm & Shirodhara with Brahmi tail mix with Chandana laxadi tail and til tail	The outcome of therapy is measured using modern parameters and scales, such as the CIWA-Ar scale, which indicates that with adequate treatment, meditation, and counselling, the patient's physical and psychological symptoms	Psychological counselling, Abhyanga, shiro-Abhyanga and dietary medication should be applied in case of addiction to rehabilitate the patient

				improve.	
4	A case study on ayurvedic management of alcohol withdrawal symptoms	Dr. Rahul Jaiswal, Dr. Sharad Rathi, Dr. Urmila Shukla, Dr. Anshu Malviya, Dr. Roshni Tiwari	Internal medicines- vidarikand churna, krocnhbeej churna, arogyavardhini rasa, shicakshar pachan churna Procedures- sarvanga abhyanga, basha sweda, shirodhara with jatamansi kwatha	Using the CIWA-Ar, it was found that every symptom had greatly decreased after 7 days of treatment. After 15 days overall fatigue subsided, sleep returned to normal, and hunger increased to sufficient food	The results of the Ayurvedic treatment, which included counseling, detoxification, appropriate medication, and meditation, are very positive.
5	A case study on the management of alcohol dependence through Ayurveda	Sangamesh M , Raviprasad Hegde , Vinitha Dsouza Journal of Ayurveda and Integrated Medical Sciences   May 2024   Vol. 9   Issue 5	<b>Shodhana chikita-</b> Nitya Virechana with Avipattikara Choorna 20g with warm milk in the morning empty stomach for 7 days Kalabasti: Yastimadhu Ksheera Basti Anuvasana Vasti with Mahathiktaka Ghrita <b>Shamana chikitsa-</b> Arogyavardini Vati, Manasmitravatak Sarpagandhavati, Saraswatharista <b>Extrenal procdures:</b> Talapotchil, Parisheka shiropichu	From the first follow-up to the second follow-up, there is an improvement in HB levels, SGOT, SGPT levels, and the platelet count, indicating improvement in the underlying condition	the holistic treatment of alcohol use disorder using Ayurveda, emphasizing the comprehensive approach to addressing this condition.
6	Ayurvedic management	Dr. Twinkle Gupta, MD, and Ayush Verma European Journal Of Pharmaceutical And Medical Research	Sarvanga Taila dhara, Shirodhar, Nasya Karma, Ashwagandha	On assessing the	a multidisciplin



	gement of alcohol withdrawal syndrome – a case report	Vol 10, Issue 5, 2023.	Churna, Bhahmi Vati, Ksheerbala 101, Arogyavardhini, Nadi Kashaya	condition of patient by using CIWA-Ar scale, it was observed that all the symptoms got significantly reduced after 30 days of treatment. After 45 days, the sleep was normal, food intake became adequate, generalized fatigue was reduced.	ary approach including detoxification, management of associative conditions and rehabilitation are too adopted here. The focus of treatment is to balance tridosha (vata, pitta & kapha) as well as triguna (satta, raja & tama) through which to provide symptomatic relief to the patient
7	Scope of Ayurvedic intervention in the management of alcohol withdrawal	Anju S Raj, Rama Kant Yadava, Rahul N, Arshathjyothi P International Journal of Ayurveda Research Volume 4. Issue 4 October=December 2023	Internal medicines- Avipattikara churna, Amalaki churna, Mukta pishti, Yashtimadhu churna, Draksharishta and Sankhapushpi syrup internally. Panchakarma procedures- Shirodhar, Talam, Nasya, counseling, Diet & Yoga advised	In the current case, CIWA-Ar scale shows a reduction of scores from 29 to 3, and Insomnia Severity Index shows a reduction	The combined effect of internal medications and external therapies, along with

	syndrome			of scores from 28 to 8. There is a change from severe-to-mild in CIWA-Ar scale and a change from severe clinical insomnia to subthreshold insomnia in the Insomnia Severity Index.	Yoga, and Pranayama helped to balance the deranged Tridosha and Trignuna in the condition of Madatyaya
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## 2.7. Risk of Bias Assessment

The risk of bias in the included studies was evaluated using the **Cochrane Risk of Bias Tool** for randomized controlled trials (RCTs) and the **ROBINS-I tool** for non-randomized studies. The following domains were assessed:

### 1. Random Sequence Generation (Selection Bias)

- **Low Risk:** Studies clearly described randomization processes (e.g., using a computer-generated random sequence or random number tables).
- **High Risk:** Studies with unclear or absent descriptions of randomization methods or using potentially biased methods (e.g., allocation based on the day of the week or participant identifiers).

### 2. Allocation Concealment (Selection Bias)

- **Low Risk:** Adequate concealment methods (e.g., sealed opaque envelopes or central randomization).
- **High Risk:** Inadequate concealment, allowing researchers or participants to predict the allocation sequence.

### 3. Blinding (Performance and Detection Bias)

- **Low Risk:** Double-blinded studies ensured that participants and outcome assessors were unaware of the intervention assignments.
- **Unclear Risk:** Studies did not specify blinding details.
- **High Risk:** Lack of blinding or partial blinding that could influence outcomes, particularly in subjective measurements.

### 4. Incomplete Outcome Data (Attrition Bias)

- **Low Risk:** Studies with minimal dropout rates and clear explanations for any missing data.
- **High Risk:** High dropout rates or lack of transparency in addressing missing data, leading to potential bias.

### 5. Selective Reporting (Reporting Bias)

- **Low Risk:** All pre-specified outcomes were reported.
- **High Risk:** Studies omitted significant outcomes or selectively reported positive results.

### 6. Other Bias

- **Low Risk:** Studies demonstrated rigorous methodologies and provided sufficient details to rule out additional biases (e.g., funding bias or conflicts of interest).
- **High Risk:** Presence of conflicts of interest or industry-sponsored studies without proper controls.

## Summary of Risk of Bias in Included Studies

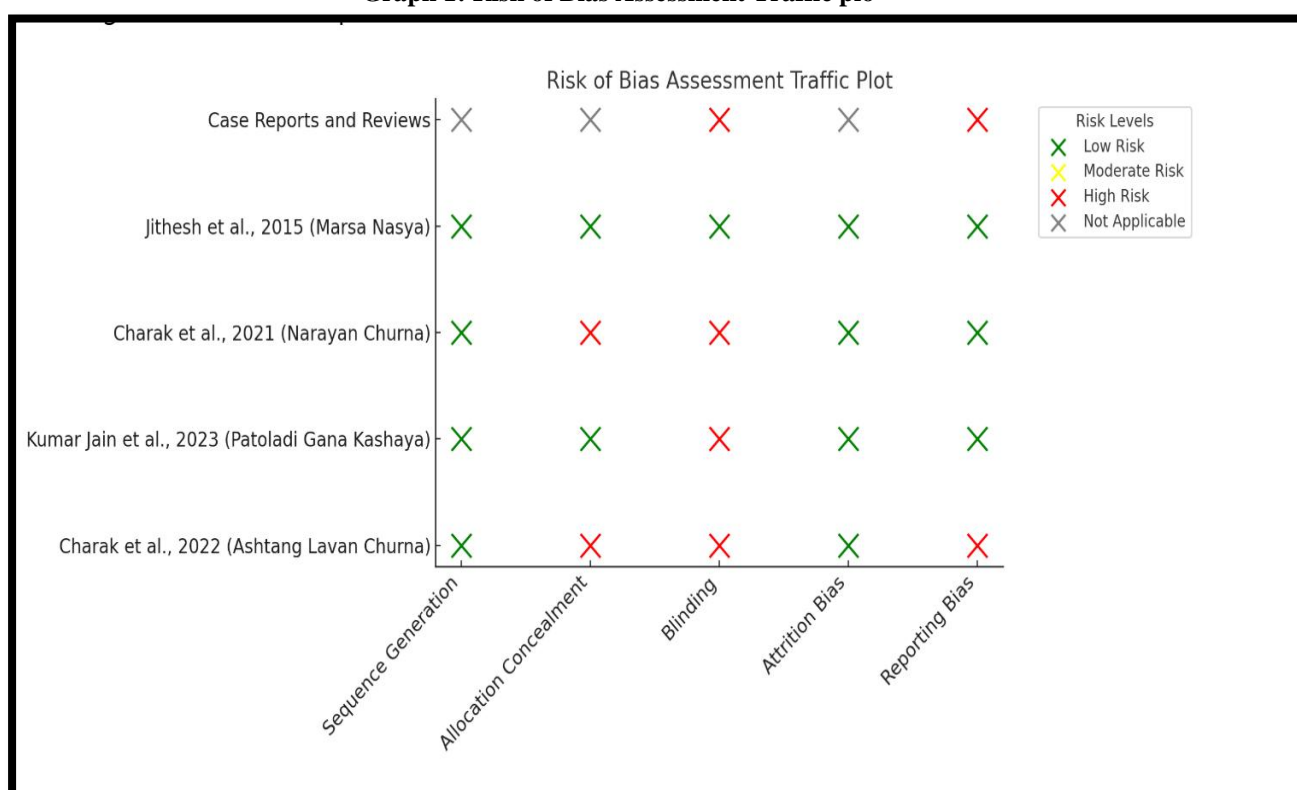
Study Name	Sequence Generation	Allocation Concealment	Blinding	Attrition Bias	Reporting Bias	Overall Risk of Bias
Charak et al., 2022 (Ashtang Lavan Churna)	Low Risk	High Risk	High Risk	Low Risk	High Risk	High
Kumar Jain et al., 2023 (Patoladi Gana Kashaya)	Low Risk	Low Risk	High Risk	Low Risk	Low Risk	Moderate
Charak et al., 2021 (Narayan Churna)	Low Risk	High Risk	High Risk	Low Risk	Low Risk	Moderate
Jithesh et al., 2015 (Marsa Nasya)	Low Risk	Low Risk	Low Risk	Low Risk	Low Risk	Low
Case Reports and Reviews	Not Applicable	Not Applicable	High Risk	Not Applicable	High Risk	High

### Risk of Bias Analysis

- The majority of the included studies showed a **moderate to high risk of bias**, primarily due to inadequate blinding, lack of allocation concealment, and selective reporting.
- Some case reports and observational studies lacked robust methodologies, which reduced the overall reliability of their findings.
- Randomized controlled trials (RCTs) with clear methodologies, such as Jithesh et al., 2015, provided stronger evidence compared to non-randomized and observational studies.

Efforts should be made in future research to improve methodological rigor, ensuring reduced bias and increased validity of findings.

**Graph 1: Risk of Bias Assessment Traffic plo**



### 3. RESULTS

This systemic review includes clinical trial, case reports, and review articles related to ayurvedic management of alcohol use disorder. In the systematic review, the included studies focused on a variety of Ayurvedic interventions targeting different aspects of Alcohol Use Disorder (AUD). Here's a categorization of how many studies/articles focused on specific treatments or approaches:

### 3.1. Focus of by Articles Type is as follows:

#### 1. Clinical Trials

- **Ashtang Lavan Churna:** Showed limited statistical significance in clinical manifestations of addiction and withdrawal but achieved a 36% de-addiction rate.
- **Patoladi Gana Kashaya:** Demonstrated significant improvement in liver function tests, lipid profiles, and subjective symptoms of alcohol-induced liver diseases (e.g., Madya Janya Yakrit Vikara).
- **Narayan Churna:** Statistically significant outcomes in both study and control groups, with an overall de-addiction success rate of 36.66%.
- **Marsa Nasya with Ksheerabala Taila:** Achieved significant symptom reduction in alcohol withdrawal syndrome, comparable to modern conservative management.

#### 2. Review Articles

- Ayurvedic approaches, including Satvavajay Chikitsa (counseling), Panchakarma, and Rasayana medications, address both physical and psychological dimensions of AUD, promoting sustainable recovery and reducing relapse rates.

#### 3. Case Reports

- **Integrated Interventions:** Combining detoxification (Shodhana), internal medications, external therapies (Abhyanga, Shirodhara), and Yoga showed marked improvements in withdrawal symptoms, liver function, sleep quality, and general well-being.
- **Outcome Measures:** Tools like CIWA-Ar and Insomnia Severity Index demonstrated significant reductions in symptom severity scores.

### 3.2. Focus of Articles by Treatment Type is as follows:

#### 1. Panchakarma (Detoxification Therapies)

- **Total 7 articles** focused on using Panchakarma therapies
- **Details:** Included therapies like Virechana, Basti, Nasya, Shirodhara, and Snehan-Swedana. These articles emphasized detoxification as a foundational approach to address systemic imbalances and improve liver function and withdrawal symptoms.

#### 2. Herbal Formulations (Shaman Chikitsa)

- **Total 9 articles** focused on using herbal formulation/ shaman chikitsa.
- **Details:** Used single or polyherbal formulations like Arogyavardhini Vati, Ashtang Lavan Churna, Narayan Churna, Draksharishta, and Rasayana medications. These formulations aimed to restore dosha balance, enhance liver function, and reduce oxidative stress.

#### 3. Integrated Approaches (Combination Therapies)

- **Total 6 articles** focused on interteated approach or combination therapies
- **Details:** Combined detoxification (Shodhana), internal medications, and external therapies like Abhyanga, Shirodhara, and Shiropichu. These approaches were designed to provide comprehensive management of both physical and psychological symptoms.

#### 4. Counseling and Psychological Interventions (Satvavajay Chikitsa)

- 5 article emphasized on counselling and satvavajay chikitsa.
- **Details:** Focused on mental health support through psychological counseling, lifestyle modifications (Achar Rasayana), and Yoga practices for enhancing willpower and emotional stability.

#### 5. Yoga and Lifestyle Interventions

- **Total 4 articles included yoga and lifestyle modifications.**
- **Details:** Explored Yoga practices like Pranayama, relaxation techniques, and daily regimens for improving psychological health and managing cravings.

It can be conclude that most focused interventions were herbal formulations (9 articles) and detoxification therapies (Panchakarma) (7 articles). Emerging Trends are Integrated approaches combining therapies, counseling (Satvavajay Chikitsa), and Yoga are gaining attention due to their holistic benefits. This analysis shows that Ayurvedic interventions for AUD span multiple modalities, with a balanced focus on physiological detoxification, mental health, and sustainable recovery.

## 4. DISCUSSION

The results underscore the potential of Ayurvedic interventions as a complementary or standalone approach for managing AUD. Key insights include:

1. **Holistic Management:** Ayurvedic protocols address not only physical symptoms but also mental health challenges, emphasizing the balance of Tridosha and Triguna. This comprehensive approach targets the root causes of addiction rather than merely alleviating symptoms.

2. **Detoxification and Restoration:** Procedures like Virechana and Basti facilitate detoxification, while formulations like Arogyavardhini Vati and Rasayana medications support liver regeneration and mental clarity.
3. **Supportive Therapies:** Practices such as Shirodhara, Nasya, and Yoga promote relaxation, enhance sleep quality, and reduce anxiety, which are critical during withdrawal and recovery.
4. **Comparative Effectiveness:** Clinical trials comparing Ayurvedic therapies to conventional treatments suggest comparable or superior outcomes, particularly in managing withdrawal symptoms and reducing relapse rates.

Despite these promising results, limitations include small sample sizes, variability in study designs, and the need for standardization in intervention protocols.

## 5. CONCLUSION

This systematic review highlights the potential of Ayurvedic interventions as a holistic and integrative approach for managing Alcohol Use Disorder (AUD). The reviewed studies underscore the efficacy of various Ayurvedic therapies, including detoxification procedures (Panchakarma), herbal formulations (Shaman Chikitsa), and psychological interventions (Satvavajay Chikitsa), in addressing the multifaceted challenges associated with AUD.

Panchakarma Therapies like Virechana, Basti, and Nasya are effective in managing withdrawal symptoms, detoxifying the body, and improving liver function and systemic oxidative stress. Herbal Formulations such as Arogyavardhini Vati, Ashtang Lavan Churna, and Draksharishta exhibit significant results in reducing alcohol cravings, mitigating withdrawal symptoms, and enhancing physiological and psychological health. Psychological Interventions and lifestyle modifications (Satvavajay Chikitsa and Achar Rasayana) play a critical role in addressing the emotional and behavioral dimensions of addiction, thereby promoting sustainable recovery. Yoga and Pranayama, when integrated with Ayurvedic therapies, provide additional benefits in stress management, improving emotional stability, and reducing relapse rates. The holistic framework of Ayurveda, which integrates detoxification, rejuvenation, mental health, and lifestyle adjustments, aligns well with the complex pathophysiology of AUD. This multidimensional approach not only alleviates physical symptoms but also addresses the psychological and social aspects of addiction.

In conclusion, Ayurvedic therapies offer a viable and complementary solution for AUD management. By addressing the root cause of the condition and promoting overall well-being, these interventions have the potential to redefine the paradigms of addiction treatment, fostering long-term recovery and improved quality of life.

Implications and Future Directions- While the findings are promising, they also underscore the need for:

- Standardization of Interventions: Developing evidence-based protocols for Ayurvedic treatments to ensure consistency and replicability in clinical practice.
- Larger Clinical Trials: Conducting multi-center, randomized controlled trials to validate the efficacy and safety of Ayurvedic interventions.
- Interdisciplinary Collaboration: Combining Ayurvedic therapies with modern medical approaches for comprehensive management of AUD.
- Focus on Preventive Strategies: Utilizing Ayurvedic principles of Sadvritta and daily regimens for early prevention of addiction.

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