

WORLD JOURNAL OF PHARMACEUTICAL RESEARCH

SJIF Impact Factor 8.453

Volume 14, Issue 5, 1685-1697.

Review Article

ISSN 2277-7105

ANALYTICAL AND OBSERVATIONAL CLINICAL EVALUATION OF ADDICTION KILLER ARK, IN DE-ADDICTION PROTOCOL OF ALCOHOL ADDICTED PATIENTS, ALCOHOLISM AND TAPERING UP IN ALCOHOL CONSUMPTION (ATEE-MADHYATA)

*Dr. Ravi Raj M. D AYURVEDA

Associate Professor, Department of Rasa Shastra evam Bhaishajya Kalpana, Shri Krishna Govt Ayurvedic College and Hospital, Kurukshetra, 136118 Haryana.

Article Received on 28 January 2024,

Revised on 17 Feb. 2025, Accepted on 09 March 2025

DOI: 10.20959/wjpr20255-35988



*Corresponding Author Dr. Ravi Raj

Associate Professor,
Department of Rasa Shastra
evam Bhaishajya Kalpana,
Shri Krishna Govt
Ayurvedic College and
Hospital, Kurukshetra,
136118 Haryana.

ABSTRATCT

Addiction is a chronic brain disorder characterized by compulsive dependence on a substance or behavior, exceeding voluntary control. It involves both psychological and physiological reliance, often leading to severe personal and social consequences. Despite its harmful effects, individuals continue their addictive behaviors, making recovery challenging. Sudden withdrawal from addictive substances can trigger psychosomatic disorders, further complicating the rehabilitation process.

Material And Method

This article is based on clinical applications of ADDICTION KILLER ARK, along with insights from various clinical studies on drug addiction, withdrawal, and its management, as documented in Ayurvedic texts. References have been drawn from Ayurvedic Samhitas with their commentaries, as well as textbooks on Ayurveda and modern medicine, to ensure a comprehensive understanding of the subject.

Addiction is a chronic brain disorder marked by compulsive dependence on substances or behaviors, surpassing voluntary control. It entails both psychological and physiological reliance, often resulting in serious personal and social consequences. Despite its detrimental effects, individuals struggle to break free from addictive patterns, making recovery a complex

<u>www.wjpr.net</u> Vol 14, Issue 5, 2025. ISO 9001: 2015 Certified Journal 1685

process. Abrupt withdrawal can lead to psychosomatic disorders, further hindering rehabilitation.

The study administered a daily dose of 5-10 ml of **ADDICTION KILLER ARK** (empty stomach in the morning and evening before meal.

Result: Ayurveda, the ancient science of healing, offers a vast repository of herbal, mineral, and herbo-mineral formulations for the prevention and treatment of diseases, including addiction and withdrawal from substance abuse. Ayurveda, the ancient healing science, provides a rich reservoir of herbal, mineral, and herbo-mineral remedies for preventing and treating diseases, including addiction and substance withdrawal.

Shrikhandasav should be gradually replaced and tapered off in alcohol dependence. For cocaine and tobacco addiction, coca herbal tea and a self-prepared ARK of ajwain and tobacco should be administered in a controlled, tapering manner. Additionally, symptomatic treatment with appropriate medications, psychological counseling, Abhyanga, Shiro-Abhyanga, Shirodhara, yoga, and meditation play a crucial role in addiction recovery and should be integrated into the rehabilitation process.

Additionally, ADDICTION KILLER ARK showed remarkable effectiveness in treating alcoholism and aiding in the gradual reduction of alcohol consumption. Over a period of 60 consecutive days, the results demonstrated a statistically significant improvement (P < 0.05) in the treatment of alcoholism among alcohol-dependent patients.

Conclusion: Gradual withdrawal of addictive substances through Padanshik Karma, combined with symptomatic withdrawal treatment, administration of ADDICTION KILLER ARK, psychological counseling, Abhyanga, Shiro-Abhyanga, Shirodhara, yoga, and meditation, plays a crucial role in effective drug de-addiction and rehabilitation.

KEYWORDS: Drug addiction, De- addiction, Ayurveda, drugs de-addiction, Ayurveda, Madya, Alcohol use disorder, Shodhana, Raja Yapana Basti, **ADDICTION KILLER ARK.**

INTRODUCTION

A drug, as defined by the World Health Organization (WHO), is any substance that, when introduced into a living organism, can alter one or more of its functions. The terms 'drug addiction' and 'drug addict' have been removed from scientific use due to their negative

connotations. Instead, terms like 'drug abuse,' 'drug dependence,' 'harmful use,' 'misuse,' and 'psychoactive substance use disorders' are now used in modern classifications.

A psychoactive drug is any substance that affects mental functioning, and alcohol is one such drug consumed globally. However, dependence on alcohol as a coping mechanism for emotions, trauma, or depression leads to addiction. Alcohol addiction affects not only physical health but also mental and social well-being. It can result in issues such as weight gain, liver dysfunction, aggressive behavior, financial instability, unemployment, and even harm to an unborn child.

Understanding alcohol addiction and exploring natural treatment options are crucial steps in minimizing its impact. In Ayurveda, alcohol addiction is referred to as *Manasikam Visargah*, *Madyapash*, or *Madyasakti* (*Madya* meaning alcohol, *Pash* meaning habit, and *Aasakti* meaning craving).^[2]

The preparation of ADDICTION KILLER ARK follows a standardized, repetitive process to ensure the final formulation's potency and effectiveness. This method aligns with ancient Ayurvedic principles and is an example of herbal potentization, as referenced in classical texts such as *Bhav Prakash Nighantu* and other *Materia Medica*.

The herbs used in this formulation function as *Medhya Rasayan* (intellect enhancers), which strengthen mental faculties, promote cognitive clarity, and help maintain emotional balance. Additionally, these herbs serve as *Balya* (strength enhancers) and *Rasayana* (rejuvenators), contributing to overall well-being, even in healthy individuals.

AIMS AND OBJECTIVES

- 1. The present work was undertaken with the following aims and objectives.

 Conceptual and hypothetical evaluation of Ati-Madhyata (Alcoholism)
- Clinical evaluation of an Ayurvedic compound "Addiction Killer ARK" in the management of Alcoholism and Tapering up in Alcohol Consumption (Ati Madhyata)
- 3. To evaluate, elaborate and discussed the drug addiction as per Ayurveda.
- 4. To evaluate, elaborate and discussed the solution of drug addiction and its withdrawal as per Ayurvada.

MATERIAL AND METHODS

Selection of Cases: Patients with Alcoholism and Tapering up in Alcohol Consumption (Ati Madhyata) selected randomly from OPD of P.G Department of Rasa Shastra at Shri. Krishna Govt Ayurvedic College Kurukshetra.

Age Group

60 Individual from the age group of 25 to 55 Years were taken for **Alcoholism and Tapering** up in Alcohol Consumption (Ati Madhyata).

The observational clinical trial took place from 2024 JANUARY to APRIL 2024 at OPD of P.G Department of Rasa Shastra at Shri Krishna Govt Ayurvedic College Kurukshetra. The trial design involved the enrolment of volunteers aged between 25 to 55 Years without consideration of their religious affiliation, income level, or occupation. Initially, a total of 80 volunteers were screened for primary eligibility, but 20 individuals were subsequently excluded for various reasons.

Ultimately, 60 volunteers were selected for the this trial and were randomly assigned to one group: that receiving **Addiction Killer ARK** for Alcoholism and Ati-Madhyata. Eligibility for participation in the study was determined by specific inclusion and exclusion criteria.

Inclusion criteria

Male married or unmarried patients suffering from Alcoholism and Ati-Madhyata. Inclusion criteria involved clinically assessed healthy Male married or unmarried patients aged between 25 to 55 Years, irrespective of their religious beliefs and income status.

These participants were required to be free from chronic, organic, or severe diseases and should not be taking any supplements or vitamins.

Exclusion criteria

- 1. Age below 25 years and above 55 years.
- 2. Patients suffering from chronic, organic, or severe diseases and should not be taking any supplements or vitamins, carcinoma, acquired immunodeficiency syndrome, tuberculosis, congenital abnormalities of genital organs, other disease like phimosis, ulceration, hydrocele, spinal cord lesions, etc.

www.wjpr.net Vol 14, Issue 5, 2025. ISO 9001: 2015 Certified Journal 1688

History of patient's present illness

Male patients who were an alcoholic since past 3 to 10 years complains of tremors in both the hands and disturbed sleep since past 3-4 months Started consuming alcohol due to peer pressure in college and life challenges. They tried to quit alcohol several times and were successfully able to do it for 2 years but relapsed. They also the habit of chewing tobacco since 20 years. The patient is seeking help to quit these habits so he came to our hospital for treatment.

History of past illness: Nothing significant.

Family history: All are said to be healthy, No history of alcoholism in the family.

Premorbid personality: Introverted, sedentary, despondent, self-centered, lack of acceptance

of responsibility.

Marital status: Married/Unmarried

DRUG DOSE DURATION

- 1. Tapering of Alcohol intake.
- 2. ADDICTION KILLER ARK (5-10 ml BD with luke warm Water).
- 3. ADDICTION KILLER ARK (5-10 ml BD with luke warm Water).
- 4. Psychological Counseling, Abhyang, shiro-Abhyang, Shirodhara, Yoga and Meditation.

1st Follow-Up: After 15 Days

- 1. Tapering of Alcohol intake.
- 2. ADDICTION KILLER ARK (5-10 ml BD with luke warm Water).
- 3. ADDICTION KILLER ARK (5-10 ml BD with luke warm Water).
- 4. Psychological Counseling, Abhyang, shiro-Abhyang, Shirodhara, Yoga and Meditation.

2nd Follow-Up: 2nd Follow-Up: After 30 Days

- 1. Tapering of Alcohol intake.
- 2. ADDICTION KILLER ARK (5-10 ml BD with luke warm Water).
- 3. ADDICTION KILLER ARK (5-10 ml BD with luke warm Water).
- 4. Psychological Counseling, Abhyang, shiro-Abhyang, Shirodhara, Yoga and Meditation.

3rd Follow-Up: After 45 Days

- 1. Tapering of Alcohol intake.
- 2. ADDICTION KILLER ARK (5-10 ml BD with luke warm Water).

- 3. ADDICTION KILLER ARK (5-10 ml BD with luke warm Water).
- 4. Psychological Counseling, Abhyang, shiro-Abhyang, Shirodhara, Yoga and Meditation.

4th Follow-Up: After 60 Days

- 1. Tapering of Alcohol intake.
- 2. ADDICTION KILLER ARK (5-10 ml BD with luke warm Water).
- 3. ADDICTION KILLER ARK (5-10 ml BD with luke warm Water).
- 4. Psychological Counseling, Abhyang, shiro-Abhyang, Shirodhara, Yoga and Meditation.

General contents of ADDICTION KILLER ARK are mentioned below

TABLE 1: ADDICTION KILLER ARK.

Hindi or Sanskrit Name	Latin or English Name	Morpho-logical	Each 10 ml of Arq
of Herb		Part Used	contains
VIDARI KAND	Pueraria tuberosa	Stem	550 mg
VACHA	Pueraria tuberosa	Root	25 mg
TULSI	Ocimum sanctum	Plant	125 mg
AJWAIN	Trachyspermum ammi	Seed	25 mg
AMLA	Phyllanthus emblical	Fruit	25 mg
GOKHRU	Tribulus terrestris	Fruit	50 mg
GILOY	Tinospora cordifolia	Stem	25 mg
BHUMI AMLA	Phyllanthus niruri	Plant	150 mg
ASHWAGANDHA	Withaniasomnifera	Root	100 mg
SHANKHPUSHPI	Convolvulus prostratus	Plant	125 mg
BRAHAMI	Bacopa monnieri	leaves	125 mg

Addiction Killer ARK is and Ayurvedic Patent Medicine Duly Approved by AYUSH department of Haryana and prepared in the R n' D Lab of Captain Biotech 27/12/2, M.I.E., Part-A, Bahadurgar Contact No.: 8570851605, Manufacturing License Number:- 631–ISM (HR) and Marketed by SAT KARTAR SHOPPING LTD, 603 Mercantile House, KG Marg New Delhi- 110001.

Investigations

Before treatment	After treatment	
SGOT - 47 IU/L	SGOT - 24 IU/L	
SGPT - 42 IU/L	SGPT - 25 IU/L	
Alkaline phosphatase - 252 IU/L	Alkaline phosphatase - 192 IU/L	
Total bilirubin - 2.0mg/dL	Total bilirubin - 0.9mg/dL	
Direct bilirubin - 0.5mg/dL	Direct bilirubin - 0.2mg/dL	
Indirect bilirubin - 1.5mg/dL	Indirect bilirubin - 0.7mg/dL	
USG Abdomen & Pelvis - Fatty changes in	USG Abdomen & Pelvis - No obvious	
liver, Cystitis.	sonological abnormalities.	

www.wjpr.net Vol 14, Issue 5, 2025. ISO 9001: 2015 Certified Journal 1690

Statistical analysis

The statistical analysis of data collected from the two treatment groups at different study intervals was performed using a paired Student's t-test.

RESULT

Initially, subjects underwent a thorough examination in the OPD, including biochemistry tests. A clinical assessment was conducted to evaluate the effectiveness of Addiction Killer ARK in treating alcoholism and reducing alcohol consumption (Ati Madhyata).

Furthermore, the study revealed a significant (P < 0.001) improvement in *Agitation and Anxiety* (+62.0 %), *Bones & Joints aches and Headache* (+61.4%), *Mood Swings and Depression*, 50.4% to 55.4% in excessive hunger, *Nausea & Vomiting Paroxysmal Sweats* and 50.4% to 55.4% in excessive mental stress, *Poor Concentration and Sleep Difficulties* 50.4% to 55.4% in *Tachycardia Resting Tremor*.

The study revealed a significant (P < 0.001) improvement in desire of Alcohol intake. The study revealed a significant (P < 0.001) improvement in associated sign and symptoms.

DISCUSSION

According to Ayurveda, alcohol possesses properties that are opposite to Ojas (vital energy) and is comparable to poison, though less potent, as it does not cause immediate fatality. It deeply infiltrates body tissues (Dhatus), leading to dryness, roughness, and excessive heat. Alcohol weakens bone joints, depletes Ojas, and contributes to mental disorders. Its effects include agitation, anxiety, bone and joint pain, headaches, mood swings, depression, excessive hunger, nausea, vomiting, paroxysmal sweating, heightened mental stress, poor concentration, sleep disturbances, tachycardia, restlessness, and tremors.

Mode of Action of Drugs

These Ayurvedic herbs possess properties that can aid in reducing alcohol dependence and supporting overall well-being

- **1. Vidari Kand** Acts as a natural rejuvenator, helping to reduce stress and anxiety, which are common triggers for alcohol consumption.
- **2.** Vacha Known for its calming effects on the nervous system, it helps in reducing cravings and withdrawal symptoms.

- **3.** Tulsi Has detoxifying properties that help cleanse the body and reduce the urge for alcohol.
- **4. Ajwain** Aids digestion and reduces the toxic effects of alcohol on the liver, promoting internal healing.
- **5. Amla** A powerful antioxidant that supports liver health, enhances immunity, and reduces the oxidative stress caused by alcohol consumption.
- **6. Gokhru** Helps in detoxification and supports kidney and liver function, promoting overall well-being.
- **7. Giloy** Known for its adaptogenic properties, it helps in managing stress and anxiety, reducing dependency on alcohol.
- **8. Bhumi** Amla Supports liver detoxification and regeneration, helping in reversing alcohol-induced liver damage.
- **9. Ashwagandha** A potent adaptogen that reduces stress and anxiety, which are often associated with alcohol dependence.
- **10. Shankhpushpi** Enhances cognitive function, reduces stress, and promotes emotional stability, aiding in the recovery process.
- **11. Brahmi** Improves mental clarity, reduces cravings, and supports emotional balance, making it beneficial for overcoming addiction.

These herbs work together to curb alcohol cravings, detoxify the body, repair alcohol-induced damage, and enhance mental well-being. Incorporating them into a daily routine under professional guidance can effectively support the journey toward overcoming alcohol dependence.

The goal of an effective treatment program is to identify and heal the root causes of drug dependency. Pharmacotherapeutic intervention plays a crucial role in substance abuse management, not only during withdrawal but also in long-term relapse prevention.

In Ayurvedic treatment, the abused drug is gradually replaced with herbal medicines that mimic its effects, and these medicines are systematically reduced using the 'Padanshik Krama' (gradual tapering method). Alternatively, the abused drug itself is reduced in a stepwise manner until it is completely stopped. Ayurveda recommends this approach to prevent adverse effects associated with sudden withdrawal. By gradually decreasing the dosage, the risk of severe withdrawal symptoms is minimized. If withdrawal symptoms do appear, they are managed symptomatically to ensure a smoother transition to recovery.

CONCLUSION

According to Ayurveda the focus of treatment in alcohol use disorder is to balance Shareerik Dosha as well as Manasika Dosha. Hence treatment adapted in this case are Shodhana Chikitsa and Shaman shodhana which are Medhya and Yakrit Prasadana. The outcome of the Ayurvedic therapy which included detoxification, proper medication with classical herbal preparation and **Addiction Killer ARK**, meditation and counselling is much encouraging.

Patient Perspective

All Patients sober now. They bear a good inter-personal relationship with family, has started new businesses and work . they have been visiting to OPD regularly.

REFERENCE

- 1. Control Over Drug And Substance Abuse, Government of India, Ministry of Health & Family Welfare, Department of Health & Family Welfare. Available from http://mohfw.nic.in/index1.php?lang=1&level=0&linkid=229&lid=1353.06/04/2015).
- World Drug Report 2010. Drug statistics and trends. Available http://www.unodc.org/documents/wdr/WDR_2010/2.0_Drug_statistics_and_Trends pdf downloaded on 06/04/2015.
- 3. 7.5 crore drug addicts in India: Survey, http://ibnlive.in.com/news/75-crore-drug-addicts-in-india-survey/9329-3.html. 06/04/15.
- 4. Charak smhita, charakchandrika hindi commentary by Bramhanand Tripathi, reprint ed. surbharati academy Varanasi chikitsasthan 2007; 24(206): 835.
- 5. Charak smhita, Vidyotni comentry by Kashinath Pandey and Dr. Gorakhnath chaturvedi, Reprint ed., Chaukhambha Bharti Academy Varanasi, Sutrasthan 2005; 7(37): 163.
- 6. Charak smhita charakchandrika hindi commentary by dr. Bramhanand Tripathi, surbharati academy reprint Chikitsa sthana 2007; 24(157): 827.
- 7. Charak smhita charakchandrika hindi commentary by dr. Bramhanand Tripathi, surbharati academy reprint Chikitsa sthana 2007; 24(194): 833
- 8. Philip Davis et.al. United Nations Office on Drugs and Crime, *World Drug Report 2014*United Nations publication, June 2014
- 9. Summary findings of the National Survey released in 2004, Available from http://www.unodc.org/pdf/india/publications/south_Asia_Regional_Profile_Sept_2005/10 _india.pdf. Downloaded 15/06/2015.

- 10. DRUGS Short- and Long-Term Effects And Withdrawal Symptom http://www.unodc.org/pdf/india/publications/DAIIM_Manual_TTK/3-17.pdf downloaded on 5/5/15.
- 11. Dennis L. Kasper, Eugene Braunwald, Anthony S. Fauci, Stephen L. Hauser, Dan L. Longo, J. Larry Jameson; *Harrison principals of internal medicine* 16th edition vol-2, pub. Mc Graw Hill Newyork, 2005; 2570-2571.
- 12. Indiana Prevention Resource Center, http://www.cesar.umd.edu/cesar/drugs/amphetamines.pdf downloded on 15/06/2015
- 13. National institute of drug abuse research report series; Methamphetamine abuse NIH Publication Number 13-4210 Revised September 2013 Feel free to reprint this publication.
- 14. DRUGS Short- and Long-Term Effects and Withdrawal Symptoms page 17.
- 15. http://www.unodc.org/pdf/india/publications/DAIIM_Manual_TTK/3-17.pdf downloaded on 5/5/15
- 16. Anabolic Steroids, http://www.cesar.umd.edu/cesar/drugs/steroids.pdf on date 16/2/15
- 17. Dr. Rakesh lal, Substance Use Disorder, National Drug Dependence Treatment Centre, AIIMS, 2005; 5: 1-7
- 18. Dennis L. Kasper, Eugene Braunwald, Anthony S. Fauci, Stephen L. Hauser, Dan L. Longo, J. Larry Jameson; *Harrison principals of internal medicine* 16th edition vol-2, pub. Mc Graw Hill Newyork, 2005; 2573-2575
- 19. Clinical Opiate Withdrawal Scale (COWS) downloaded from www.csam-asam.org/sites/default/files/pdf/misc/COWS.doc on date 15/06/15
- 20. Cannabis Withdrawal Assessment Scale downloaded from http://nceta.flinders.edu.au/index.php/download_file/- /view/177/ on date 21/06/85
- 21. World Health Organization's International Classification of Diseases 10th Edition Research Criteria for "Tobacc Withdrawal State" (ICD-10 Diagnostic Criteria for Research, p 61)
- 22. Amphetamine Withdrawal Assessment Scale Drug & Alcohol Services Council, SA, 2002.
- 23. Sullivan, J.T.; Sykora, K.; Schneiderman, J.; Naranjo, C.A.; and Sellers, E.M. Assessment of alcohol withdrawal: The revised Clinical Institute Withdrawal Assessment for Alcohol scale (CIWA-Ar). *British Journal of Addiction*, 1989; 84: 1353-1357.
- 24. Benzodiazepine Withdrawal Assessment Scale, Drug & Alcohol Services Council, SA, 2002.

- 25. Information of list of drugs abused in Hong Kong, Annex 3; downloaded from http://www.nd.gov.hk/pdf/annex03_eng.pdf on date 11/05/2015
- 26. India, Ministry of Health and Family Welfare. *The Ayurvedic pharmacopoeia of India*. Part I. Vol. I. New Delhi:
- 27. Department of Indian Systems of Medicine & Homeopathy, 2001; 101-102.
- 28. THE AYURVEDIC PHARMACOPOEIA OF INDIA PART II (FORMULATIONS) VOLUME I First Edition Page 51-53.
- 29. Charak smhita vidyotani hindi commentary by Pt. Kashinath Pandey *et.al*. Chaukhambha bharati academy reprint sutra sthana, 2005; 2(32): 58.
- 30. Govinda das sen. Bhaishajya ratnavali. With the commentaries of 'Vidyotini' hindi vyakhya by Shastri A. In: Shastri R....: Chaukhamba Sanskrit Sansthana Varanasi; 18th ed 2005; 513(24): 26-29.
- 31. Govinda das sen. Bhaishajya ratnavali. With the commentaries of 'Vidyotini' hindi vyakhya by Shastri A. In: Shastri R....: Chaukhamba Sanskrit Sansthana Varanasi; 18th ed, 2005; 21(9): 498.
- 32. Sharangdhar samhita jiwanprada hindi commentary by Dr.Shailaja Shrivastava, Chaukhambha Orientalia Varanasi edition 2011 4/6 page 31.
- 33. Mathew Anand, Dr. Jagatheesan and Alagesan Effect of yoga therapy in rehabilitation of drug addicts, GRA GLOBAL RESEARCH ANALYSIS X 154, volume 2, issue 7.
- 34. *Charak smhita*. ayurveddeepika commentary by chakrapanidatta, chaukhambha surbhartiprakashan Varanasi. Edition 2013, sutrasthan 6/49,48
- 35. *Shrimadbhagvat Geeta* Marshi Vedvyas. ed;Shrimad bhaktivedant narayan svami reprint, 1997; 2: 59-116.
- 36. Hugh Myrick and Raymond F. Anton. Treatment of Alcohol Withdrawal. Alcohol Health & Research World, 1998; 22(1); 38-43.
- 37. Facts About Drugs: Opiates. Available on https://www.lsuhsc.edu/orgs/campushealth/docs/opiates.pdf. Downloaded
- 38. Adam Winstock & Toby Lea. management of cannabis withdrawal. Available o https://ncpic.org.au/media/1602/management-of-cannabis-withdrawal.pdf.14/05/2015
- 39. *Leon Gussow and Andrea Carlson* . Sedative Hypnotics. Available on http://www.slremeducation.org/wp content/uploads/2015/02/Chapter-165.-Sedative-Hypnotics.pdf. 14/05/2015
- 40. Dr. Shiv Gautam et. al,. Clinical Practice Guide Lines for Management of Barbiturates and Benzodiazepine Dependence.

- 41. Available on http://www.indianjpsychiatry.org/cpg/cpg2006/CPG-mgmt_12.pdf. 14/05/2015
- 42. Karen Miotto and Brett Roth. *GHB Withdrawal Syndrome*. Texas Commission on Alcohol and Drug Abuse. Available on https://www.erowid.org/chemicals/ghb/ghb_addiction2.pdf. 14/05/2015
- 43. Catherine McGregor et. al, The nature, time course and severity of methamphetamine withdrawal. Research Report.
- 44. Addiction. Society for the Study of Addiction, 2005; 1-10.
- 45. Michael Weaver. Withdrawal from Alcohol, Cocaine and Heroin. Available on http://www.eric.vcu.edu/home/resources/consults/Withdrawal.pdf. 14/05/2015
- 46. John R. Hughes. Effects of abstinence from tobacco: Valid symptoms and time course. Nicotine & Tobacco Research, 2007; 9(3); 315–327.
- 47. Bhaisajya Ratnavali hindi commentary prof. Siddhi Nandan Mishra Chaukhambha surbharti Prakashana Varanasi edition, 2012; 497.
- 48. Rasatantrasar Evam sidahprayog samgra- Part-I, 16th ed., Krishan-Gopal Ayurveda bhavan Kaleda Publication, 2003; 463.
- 49. Rasatantrasar Evam sidahprayog samgra- Part-I, 16th ed., Krishan-Gopal Ayurveda bhavan Kaleda Publication, 2003; 75.
- 50. Govinda das sen. Bhaishajya ratnavali. With the commentaries of 'Vidyotini' hindi vyakhya by Shastri;18th ed. Varanasi: Chaukhamba Sanskrit Sansthana, 2005; 8(254): 162-170,
- 51. Prof. P.V. Sharma, Dravya guna-vijnana vol.2, chaukhambha bharti academy Varanasi 2003; Page 497.
- 52. Prof. P.V. Sharma, Dravya guna-vijnana vol.2, chaukhambha bharti academy Varanasi 2003; Page 387
- 53. Anonymous. Traditional Herbal Remedies for Primary Health Care. World Health Organization, 2010; 157-162.
- 54. Anonymous. Traditional Herbal Remedies for Primary Health Care. World Health Organization, 2010; 67-70.
- 55. Anonymous. Traditional Herbal Remedies for Primary Health Care. World Health Organization, 2010; 85-90.
- 56. Sangita D. More1, R. R. Dwivedi2. A clinical study of Panchakola Siddha Yavagu in the management of Agnimandya. AYU, 2011; 32(1); 70-75.

- 57. Ramanand Tiwari, Darshana H. Pandya, Madhav Singh Baghel2. Clinical evaluation of Bilvadileha in the management of irritable bowel syndrome. AYU, 2013; 34(4); 368-372
- 58. Jo ao Guilherme Bezerra Alves et al. Effectiveness of Mentha piperita in the Treatment of Infantile Colic: A Crossover Study. Evidence-Based Complementary and Alternative Medicine, 2012; 1-4.
- 59. Kshama Gupta1, Prasad Mamidi2, Anup B. Thakar. Randomised placebo controlled study on *Sarasvata choorna* in generalised anxiety disorder. International Journal of Green Pharmacy, 2014; 231-236.
- 60. Issac Paul, Narayana Prakash B, Shetty Suhas, Kumar Savitha H. P Efficiency Study of Fortified Mandookaparni Choorna in the Management of Chittodvega (Generalized Anxiety Disorder), IAMJ: 2013; 1(4); 1-4.
- 61. Kavita S. A conceptual study of Nodranasha with a comparative study of diet and Guda Pippalimoola Yoga in Primary insomnia, (MD thesis) Govt. Ayurveda Medical College, Mysore, 2010; 177
- 62. Anonymous. Ayurvedic Management of Select Geriatric Disease Conditions. A Ccras Who Collaborative Project, Central Council for Research in Ayurveda and Siddha, New Delhi, 2011; 111.
- 63. Lisa Simon Onken &Jack D. Blaine. Psychotherapy and Counseling in the Treatment of Drug Abuse. National Institute on Drug Abuse NIDA Research Monograph 104. 1990 U.S. Department of Health and Human Services.