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**CROSS SECTIONAL SURVEY TO GATHER OPINION ABOUT THE
EFFECTIVENESS OF TRIPHALADI CHOORNA AMONG THE
AYURVEDA MEDICAL PRACTITIONERS ACROSS INDIA**

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ABSTRACT

Background: Triphaladi Choornam, a polyherbal Ayurvedic formulation comprising Triphala and Yashtimadhu, is a classical formulation formulated by Arya Vaidya Sala, Kottakkal, Kerala. It is widely used in the management of various metabolic, ophthalmic, and dermatological disorders. This survey evaluates its therapeutic effects and underlying mechanisms, emphasizing its multifaceted role in health care.

Key Findings: The survey concludes that Triphaladi Choorna is effective in addressing the following conditions:

1. Metabolic Disorders:

- **Diabetes Mellitus:** Triphaladi Choornam significantly reduces fasting blood sugar (FBS) and HbA1c levels. Its hydrolyzable tannins enhance pancreatic function, inhibit glucose absorption, and mitigate oxidative stress, alleviating complications such as diabetic neuropathy and retinopathy.
- **Obesity and Dyslipidemia:** It demonstrates hypolipidemic and anti-obesity effects by reducing BMI, LDL-C, and triglycerides, attributed to its medohara (fat-reducing) and lipid-regulating properties.

2. Ophthalmic Health:

- Chakshushya (eye-protective) and antioxidant properties of ingredients of Triphaladi choorna support its efficacy in treating conditions like Timira(cataract) and Abhishyanda (inflammatory diseases). When used in *Kriya Kalpas* (local therapies), it improves ocular drug delivery, helping in preserving vision and preventing complications like cataracts.

3. Dermatological Benefits:

- Its anti-inflammatory, wound-healing, and collagen-boosting properties make Triphaladi Choornam effective in managing skin disorders, including diabetic wounds. It combats oxidative stress and infections, promoting faster healing and skin rejuvenation.

Thus Triphaladi Choornam is an effective formulation with significant therapeutic potential in managing chronic conditions like diabetes, obesity and eye and skin diseases. Its antioxidant, anti-inflammatory and rejuvenative actions highlight its importance in Ayurveda and modern integrative medicine.

Keywords: Triphaladi Choornam, Triphala, Yashtimadhu, Polyherbal Formulation, Metabolic Disorders, Ophthalmic Diseases, Chakshushya, Rasayana

INTRODUCTION

Triphaladi Choornam is a classical formulation formulated by Arya Vaidya Sala, Kottakkal, Kerala, combining the virtues of Triphala and Yashtimadhu (Licorice). As the name suggests, the main ingredient, Triphala constituting Haritaki, Vib

ithaki and Amalaki taken in specific proportion is paired with Yashtimadhu, which makes it different from the usual Triphala choornam. This choornam is available in the market since more than 30 years with license no 45/25D/87.

A regular bowel movement is regarded as a key indicator of healthy metabolism. However, modern lifestyle and dietary changes can often disrupt this natural process. To maintain optimal systemic function, periodic cleansing and rejuvenation are essential. Ayurvedic classics offers a holistic solution for this issue in the form of "Triphala," - a gentle bowel cleanser.

Triphala is acclaimed as Rasayana (rejuvenative) and Chakshushya (that which promotes eye health) in Ayurveda [1]. The addition of Licorice enhances the benefits of Triphala, bolstering natural immunity and overall well-being. Triphaladi Chooranam encourages regular bowel movements, providing relief from bloating and acidity caused by poor digestion. This formulation also aids in detoxification, contributing to healthy weight management. This formulation has also been reported to have potent antioxidant, immunomodulatory, anti-inflammatory and hypoglycemic activities [2].

After more than 30 years of marketing, AVS has decided to revisit the strategies regarding the clinical validation and added benefits of Triphaladi chooram. For assessing the effectiveness and added benefits, a cross sectional survey was done among 220 Ayurvedic practitioners who are using Triphaladi chooram in their clinical practice.

MATERIALS & METHODS

Materials:

Primary resources: Bruhatrayi &laghutrayi with available commentaries, Classical text like Baishjyaratnavali, Nighantus like Raja Nighantu and Bhavaprakasa.

Secondary resources:

Relevant modern literature, previous research works, MD and PhD theses, journals, articles, published research papers and subject related data available online.

Developed questionnaire- Done face validity- Initially a questionnaire was developed and took expert suggestions. More than 90% of the contents were agreed by the experts like clinicians with more than 25 years of experience.

Methods

Plan of the study

Primary and secondary resources were reviewed and necessary materials were compiled. Compiled materials were thoroughly studied, re-arranged and critically analysed to provide the logical base for survey study.

- **Study design:** Observational Descriptive Cross sectional study
- **Study population:** Physicians practicing Ayurveda in different parts of India.
- **Inclusion criteria:**

Age group: Physicians within 25 – 80 years

Gender: Both gender included.

- **Exclusion criteria:**

Physicians who are not willing to participate in the survey

- **Sample size:**

It was calculated by using the following formula:

$$n = \frac{Z_{1-\alpha/2}^2 \overset{\text{Expected Proportion}}{p(1-p)}}{\underset{\text{Absolute Error}}{d^2}}$$

$$Z_{1-\alpha/2} = 1.96$$

$$P = 60\%$$

$$d = 7\%$$

Expecting 60% prevalence of effectiveness of Triphaladi choornam and considering a 7% margin of

precision, the sample size is calculated as 196. Considering a drop out of 10%, the total sample size is considered as 215 but we got 220 responses from the physicians.

- **CONDUCT OF THE SURVEY**

A request form and brief introduction about the study were sent to the physicians along with the google form.

- **IEC APPROVAL** – The research proposal was submitted to IEC committee Vaidyaratnam P.S. Varier's Arya Vaidya Sala Kottakkal with IEC number IEC/M5/09/24.

- **DATA COLLECTION:** Primary collection of data with a structured questionnaire through Google form

- **STATISTICAL ANALYSIS**

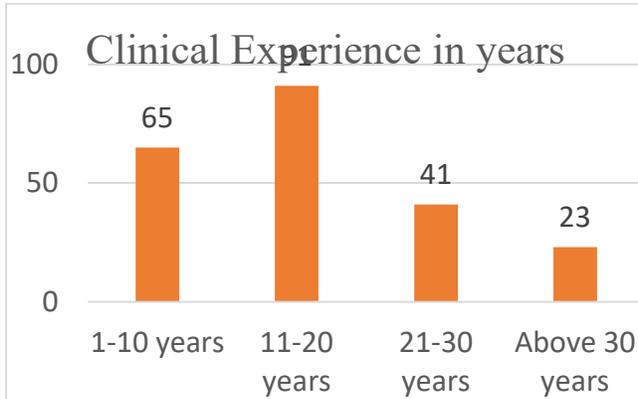
- **Cross sectional study-** Prevalence will be published in terms of frequency and percentage

- **Sub analysis-** Crosstabs and Chi-square tests were used.

OBSERVATION, ANALYSIS AND RESULT

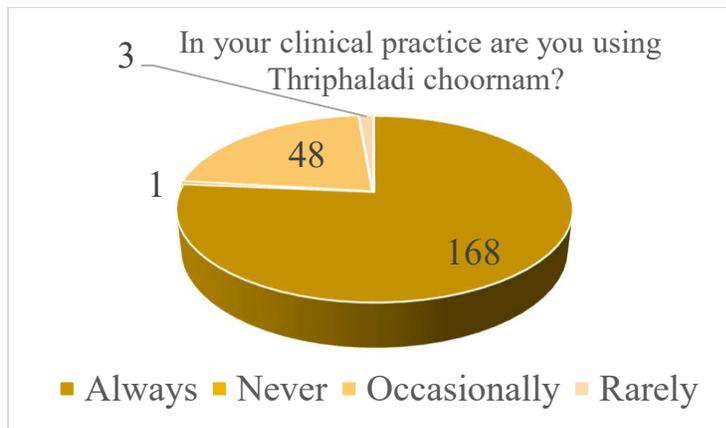
1.Clinical experience

Figure-1 - Clinical Experience in years



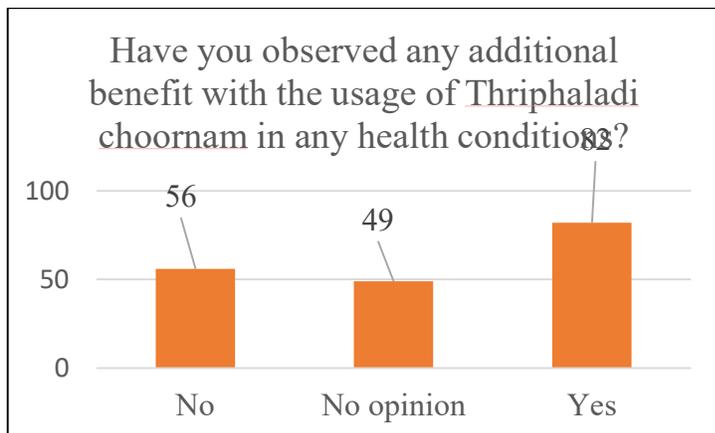
Out of 220 respondents, 91% have 11 to 20 years of clinical experience, 65% have 1 to 10 years, 41% have 21 to 30 years, and 23% have more than 30 years of experience.

2.Usage of Triphaladi choornam in clinical practice



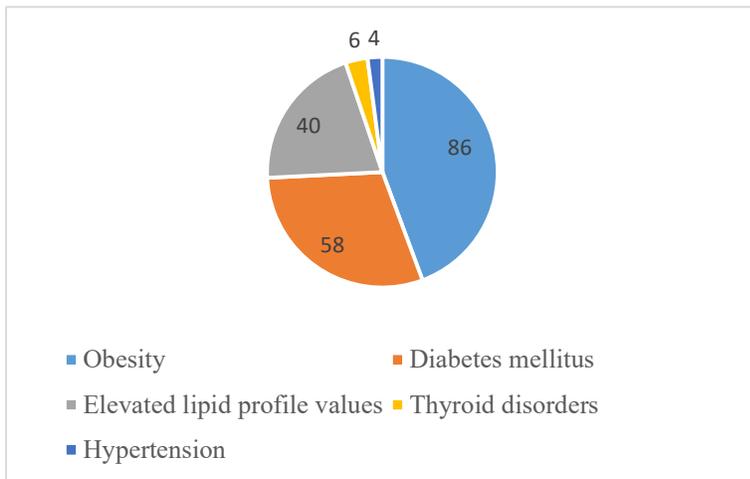
Among the 220 respondents, 168 reported that they always use Triphaladi choornam their clinical practice, while 48 use occasionally.

3.Additional benefits of Triphaladi choornam



Among the 220 respondents, 82% have reported additional benefits from using Thriphaladi choornam for various health conditions, such as improved eyesight, better digestion, management of diabetes, and relief from mouth ulcers.

4) In which of the following co-morbid conditions Triphaladi choornam has better results



Among 220 respondents, 86 experts opined that Thriphaladi Choornam is highly effective in treating obesity. Additionally, 58 respondents consider it beneficial for managing diabetes mellitus. Similarly, 40 respondents find it useful in addressing elevated lipid profile values, while for 6 experts it is effective for thyroid disorders and 4 respondents opine that it is helpful in managing hypertension.

5) In which of the conditions are you using Thriphaladi choornam internally?

In which of the conditions are you using Thriphaladi choornam internally?	Expert opinion
As a sukhavirechana dravya(Laxative)	177
Prevention and management of ophthalmic diseases	170
Metabolic disorders	155
In skin disorders	146
As a Rasayana	142

Out of 220 respondents, the majority (177) expressed that Thriphaladi Choornam is highly effective as a sukhavirechana dravya (laxative). Additionally, 170 respondents opines that it plays a significant role in the prevention and management of ophthalmic diseases. Of these, 155 respondents consider it

useful in addressing metabolic disorders, while 146 experts find it beneficial for treating skin conditions and 142 respondents view it as an effective rasayana (rejuvenate therapy).

6) In which of the conditions are you using Thriphaladi choornam externally?

In which of the conditions are you using Thriphaladi choornam externally	Expert opinion
In Vrana sodhana purposes (wound cleansing)	182
Prevention and management of ophthalmic diseases	161
In skin disorders	161
For treatment purposes like udvartanam (powder massage) etc.	108

182 experts stated that Thriphaladi Choornam is effective for external use in wound cleansing (Vrana Sodhana). Additionally, 161 experts believe it is highly effective in the prevention and management

of ophthalmic diseases and skin disorders when applied externally. Moreover, 108 experts opined that it is also beneficial for treatments such as Udvartanam.

7) Ideal time for administration of Triphaladi choornam

Ideal time for administration of Triphaladi choornam	Expert opinion
Bed time	176
Empty stomach	66
After Dinner	54
After Breakfast	25
Before Breakfast	23
Before lunch	15

Among 220 respondents, 176 experts indicated that they administer the medicine at bedtime, while 66 stated that they give it on an empty stomach. Of these, 54 experts said

that they administered it after dinner, 23 before breakfast, and 15 before lunch.

8) Would you use Triphaladi choornam as an adjuvant or standalone therapy, please specify?

Would you use Triphaladi choornam as an adjuvant or stand-alone therapy, please specify	Expert opinion
As an adjuvant	96
Standalone therapy	63
Both	6

Out of 220 respondents, 96 experts stated that they use Triphaladi Choornam as an adjuvant therapy. Among them, 63 experts noted that they use it as a standalone therapy, while 6

indicated that they use it both as an adjuvant and a standalone treatment.

Analysis

Clinical experience in years	Effectiveness in metabolic diseases			Obesity			Diabetes mellitus			Elevated Lipid profile		
	Effective	Not-effective	Total	Effective	Not-effective	Total	Effective	Not-Effective	Total	Effective	Not-Effective	Total
1-10	51	14	65	34	31	65	25	40	65	20	45	65
11-20	58	33	91	26	65	91	15	76	91	10	81	91
21-30	31	10	41	16	25	41	11	30	41	5	36	41
Above 30	15	8	23	10	13	23	7	16	23	5	18	23

Clinical experience in years	Effectiveness in Ophthalmic disease			Effectiveness as sugha virechaka			Effectiveness in external application (skin disorders)			Effective as Rasayana		
	Effective	Not-effective	Total	Effective	Not-effective	Total	Effective	Not-Effective	Total	Effective	Not-Effective	Total
1-10	55	10	65	57	8	65	50	15	65	50	15	65
11-20	64	27	91	67	24	91	52	39	91	49	42	91
21-30	33	8	41	33	8	41	29	12	41	28	13	41
Above 30	18	5	23	20	3	23	15	8	23	15	8	23

Clinical experience in years	Used as an Adjuant			Used as a standalone therapy			Overall effectiveness		
	As an Adjuant	Not as an Adjuant	Total	Yes	No	Total	Effective	Not-Effective	Total
1-10	37	28	65	27	38	65	61	4	65
11-20	27	64	91	17	74	91	82	9	91
21-30	19	22	41	11	30	41	36	5	41
Above 30	13	10	23	8	15	23	21	2	23

Table: Significant chi-square values

Sl. No	Test for Association Chi- square	P Value (Test for association)
1	Test for association between clinical experience and effective as a Rasayana	.027(<.05)
2	Test for association between Clinical experience in years and effective in obesity	0.027(<.05)
3	Test for association between Clinical experience in years and effective in DM	0.022(<.05)
4	Test for association between clinical experience in years and Indicated in Elevated lipid profile	0.01(<.05)
5	Test for association between Clinical experience in years and Triphaladi choornam As an adjuvant	0.004(<.05)
6	Test for association between Clinical experience in years Triphaladi choornam As standalone	0.017(<.05)

RESULTS

1. Out of 220 physicians involved in the survey, 155 (70.45%) physicians have **more than 10 years** of experience.
2. Among these, 168 physicians (76%) **almost always** recommend Triphaladi choornam in their clinical practice.
3. The survey highlights that 90% of the practitioners found Triphaladi Choornam to be **effective**.
4. Of this, 96 physicians (44%) use Triphaladi Choornam as an **adjunct**

therapy whereas 63 physicians (29%) indicated that they use Triphaladi choornam as a **standalone therapy**.

5. Approximately 80% of practitioners recommend Triphaladi Choornam as a mild purgative (**sukha virechaka**)
6. 64% (142) of practitioners recommend Triphaladi choornam as a **Rasayana**

Apart from this, other indications where Triphaladi choorna is found to be effective by physicians are tabulated below:

Sl. No	Effective Conditions	Recommended experts (%)
1	Effectiveness in Metabolic disorders	155(70%)
2	Effective in treating Ophthalmic diseases	170(77%)
3	Effective in Skin disorders	161(73%)
4	Effective in obesity	86(39%)

7. Regarding the time of administration of Triphaladi choornam, it has been observed that the ideal time to consume Triphaladi Choornam is **before bedtime and on an empty stomach.**

DISCUSSION

INGREDIENTS	SCIENTIFIC NAME	FAMILY NAME	PART USED	QUANTITY
Haritaki	Terminalia chebula Linn.	Combretaceae	Fruit	5.000 g
Vibithaki	Terminalia bellerica Roxb.	Combretaceae	Fruit	1.667 g
Amalaki	Emblica officinalis Gartn.	Euphorbiaceae	Fruit	1.667 g
Yastimadhu	Glycyrrhiza glabra	Fabaceae	Rhizome	1.667 g

The name "Triphala" is derived from Sanskrit, where "tri" means three and "phala" means fruits. This polyherbal medicine is made from dried fruits of three plant species - Emblica officinalis, Terminalia bellerica, and

Drug review

Contents of Triphaladi choornam include Haritaki, Vibithaki, Amalaki, commonly called as Triphala and is paired with Yashtimadhu, which makes it different from the usual Triphala choornam.

Terminalia chebula [3]. It is also known by names phalottama, phalashresta, phalatrika, phalatraya, varā, and sreshta [4].

Properties of individual drugs of Triphaladi choornam

	Drug	Rasa	Guna	Veerya	Vipaka	Doshahara	Karma
1	Haritaki	Kaṣaya Pradhana lavaṇa varjita pancharasa	Laghu rukṣa	Usṇa	Madhura	Kapha vata hara	Anulomana, rasayana, prajasthapana, chakṣuṣya, hṛdya, lekhaṇa, medhya, cures meha, kuṣṭa, vṛana, chardhi, śopha, vātasṛa, mutrakricchra
2	Vibhītaki	Kaṣaya pradhana	Rukṣa, laghu	Ushna	Katu	Pitta- vata hara	Keṣhyam, kriminasana, bhedhana, kasaghna
3	Amalaki	Amla pradhana	Guru, rukṣa	Sita	Madhura	Pitta kapha hara	Vṛiṣhya, chakṣuṣya
4	Yashti madhu	Madhura	Guru snigdha	Sita	Madhura	Tridosha hara	Rasayana Vrishya chakṣuṣya

Properties of Triphala (combination)

	Rasa	Guna	Veerya	Vipaka	Dosha karma	Dhatukarma
Triphala	Kaṣaya	Rukṣa, sara	Anuṣṇa	Madhura	Tridoṣahara	Chakṣuṣya, dipana, vṛanaropana, rucikara, medohara

Properties of Yashtimadhu

	Rasa	Guna	Veerya	Vipaka	Dosha karma	Dhatukarma
Yashti madhu	Madhura	Guru, Snigdha	Śīta	Madhura	Tridoṣahara	Rasāyana, Vṛṣṣya, Cakṣuṣya, Balavarnakrit, Śukrala, Swarya, Keshyam,

Important chemical constituents of Triphala

Triphala consists of tannins, gallic acid, ellagic acid, and chebulinic acid, which are potent antioxidants, and other bioactive compounds like flavonoids, saponins, anthraquinones, amino acids, fatty acids, and carbohydrates.

Important phytochemicals in the respective drugs of Triphala

Phytochemical evaluation of triphala and individual components of formulation revealed the presence of wide range of chemical constituents [5].

Drugs	Haritaki	Vibhitaki	Amalaki
Phytochemicals	Gallic acid	Gallic acid	Ascorbic acid
	Syringic acid	Tannic acid	Gallic acid
	Epicatechin	Ascorbic acid	Nicotinic acid
	Ascorbic acid	β-sitosterol	Ellagic acid
	Chebulinic acid	Ellagic acid	Linoleic acid
	Anthraquinone	Chebulic acid	Linolenic acid
	Phosphoric acid	Mannitol	Oleic acid
		Oxalic acid	
		Galloyl	
		Galactose	
		Fructose	

Important chemical constituents of Yashtimadhu

The plant contains Glycyrrhizin as the principal sweetening agent. Other important chemical constituents include Glycyrrhizic acid, Glycyrrhetic acid, Liquirtin, Isoliuirtin, Neoisoliuirtin, Liquiritogenin, Isoliuirtin, Glabrine, Glabranine, Licuraside, Licochalcones A & B,

Hispaglabridin A & B, Licoridin, Glabrene, Liquiritic Acid and Glabrolide [6].

In Ayurveda, medicines are used either as single herbs or in combinations. The purpose of combining multiple herbs is to enhance therapeutic efficacy compared to using a single herb, and such combinations are referred to as polyherbal formulations. Triphaladi Choorna is one such formulation,

which includes Yashtimadhu along with Triphala.

However, there is lack of documented evidence specifically on Triphaladi Choornam. Nevertheless, articles discussing the effects of Triphala Choornam and Yashti Choornam are available.

The current survey revealed that 70% of practitioners reported Triphaladi Choornam to be effective in managing Metabolic disorders. Metabolic disorders are a group of medical conditions that arise due to disruptions in the normal metabolic processes within the body. Metabolism refers to the biochemical processes that convert food into energy and support essential functions such as growth, repair, and maintaining cellular activity. When these processes are impaired, it can lead to metabolic disorders. Common examples include **diabetes mellitus, obesity, thyroid disorders, and lipid metabolism disorders**. Metabolic disorders are often managed through lifestyle modifications, including balanced nutrition, physical activity, weight management, and proper medication.

In Ayurveda, metabolic disorders are primarily linked to an imbalance in **Agni** (digestive fire) and **Doshas** (Vata, Pitta, and Kapha), particularly Kapha Dosha. Ayurveda emphasizes restoring balance through

personalized therapies, herbal formulations, lifestyle modifications, and dietary regulations.

I. Effect of Triphaladi choornam on Metabolic diseases

1. Diabetes mellitus

Diabetes mellitus is a metabolic disorder that is associated with three basic pathophysiological abnormalities: impaired insulin secretion, excessive hepatic glucose production and insulin resistance in skeletal muscle, liver and adipose tissue. In Ayurveda, Diabetes is correlated to Prameha -a syndrome which includes a group of clinical conditions and mainly characterized by increased quantity of turbid urine, described in classics as “Prabhuta Avila Mutrata” [7].

The current survey noticed that internal administration of Triphaladi choornam exhibits a significant difference in the FBS and HbA1c values in diabetic patients. Additionally, its external application provided relief from diabetes-related complications.

Triphala consists the potential to treat each and every type of Prameha or acting as an effective antidiabetic agent. Antidiabetic activity of the herbal drugs is mainly due to their ability to restore the functions of pancreatic tissues by causing an increase in insulin output or inhibit the intestinal absorption of glucose or to the facilitation of

metabolites in insulin-dependent processes [8].

The active principles of Triphala are predominantly hydrolysable tannins. T. bellirica fruit contains about 20 to 30% of tannins. Emblica officinalis is a rich source of vitamin C and also contains pectin, glucose, tannins and phyllembin. T. chebula (TC, myrobalans) fruits are also an important source of tannin. The tannins of myrobalans are of the pyrogallol type, which on hydrolysis yield chebulic acid and D-galloyl glucose [9]. Studies have shown that the individual components of Triphala inhibit lipid peroxide formation and could scavenge hydroxyl and superoxide radicals. Recently, studies have pointed out that their antioxidant activity correlates with their antidiabetic property and that they are also helpful in decreasing the complications of DM [10] [11].

Diabetic neuropathy (DN) is one of the common microvascular complications affecting the majority diabetic population worldwide. DN is characterized by degenerative neuronal loss due to alterations in nerve damage and repair process which result in progressive loss of sensation [12]. The prevalence of diabetic peripheral neuropathy (DPN) ranges from 16 to 87% with painful diabetes-related neuropathy about 26%. The lower limb amputation is 10–

20-fold more common in diabetic patients as compared to non-diabetic patients (IDF, 2019). Chronic hyperglycemia contributes to pathological changes like demyelination of nerves, narrowing of neuronal capillary, axonal thickening, neuronal damage, and loss of nerve fibers [13]. The neuronal damage can be attributed to elevated levels of oxidative stress and advanced glycation end products (AGEs) in nerves [14].

Vyshna Raveendran *et al.* in their study reported that udgharṣaṇa with Triphala cūrṇa is found to be effective in reducing signs and symptoms of Diabetic Distal Symmetric Polyneuropathy. Udgharṣaṇa (a type of udwartana mentioned by susruta acharya) is mentioned to help in widening the opening of blood vessels, stimulating bhrājaka pitta (~ type of pitta) and alleviating vāta [15] which might have also contributed to the samprāpti vighatana. Triphala cūrṇa because of its ability to reduce tvakgata kleda, meda, meha [16] might have augmented the effect of the procedure [17].

Sachin V Suryavanshi *et al* in their study evaluated Triphala cūrṇa for its effects on diabetic retinopathy in rats induced with streptozotocin. After four weeks of induction, rats were treated with Triphala cūrṇa at doses of 250, 500, and 1000 mg/kg for four weeks. Triphala cūrṇa significantly reduced plasma

glucose and lactate dehydrogenase levels, and decreased sorbitol dehydrogenase, aldose reductase, and oxidative stress in lens tissues. Electroretinography showed improved 'a' wave and 'b' wave amplitudes with reduced latencies, and reduced retinal thickness. These findings suggest that Triphala cūrṇa may delay the progression of diabetic retinopathy in rats [18].

2. Effect of Triphaladi choornam in Obesity and in Elevated lipid profile

From the opinions of the physicians, the present survey noticed a **significant difference in the BMI** of the participants after the intake of triphaladi choornam. This action might be attributed to medohara property of both triphala and yasthi madhu suggesting that this combination used as monotherapy could significantly reduce the BMI of individuals.

Hypercholesteremia is one of the risk factors for coronary artery disease. The effects of Triphaladi Choornam **on the lipid profile** indicate its effectiveness in reducing elevated lipid levels. Several studies have investigated the potential of Triphala, both as a standalone and combined treatment, in lowering LDL-C, total cholesterol (TC), and triglycerides (TG). The lipid-lowering properties of Triphala may work by reducing cholesterol absorption, inhibiting HMG-CoA reductase activity, and regulating lipid accumulation through the

downregulation of adipogenic genes. Hypolipidemic effect of triphala was demonstrated in experimentally induced hypercholesteremic rats and the results showed significant reduction in the total cholesterol, LDL, VLDL, and free fatty acids in Triphala treated hypercholesteremic rats [19].

The role of Medodushthi is well-recognized in the pathogenesis of Santarpanoththa Vikaras such as Sthaulya (obesity) and Prameha (diabetes). Many herbs categorized under Medohara Gana are known to exhibit both hypolipidemic and hypoglycemic properties. A review of the classical literature reveals that Haritaki, Amalaki, Vibhitaki, and Yashtimadhu are prominently included in the Medohara Gana for their efficacy in managing disorders related to lipid metabolism and blood glucose regulation.

Hyperlipidemia, hyperglycemia, and obesity are crucial risk factors for CVD. Reports suggest that improvement in lipid profile and blood glucose and anthropometric parameters is associated with reduced risk of coronary and vascular events [20, 21].

II. Effect in Ophthalmic diseases

The eyes are one of the most important sense organs, known for their tejomaya (luminous) nature, and are situated in kapha sthana. This makes them inherently susceptible to kapha

vitiation. To maintain optimal eye health, it is essential to follow regimens that balance kapha and pitta doshas. Any disruption in this balance can lead to Abhishyanda, regarded as the root cause of all eye diseases in Ayurveda. Triphala, due to its chakshushya (beneficial for the eyes) and rasayana (rejuvenating) properties, as well as its ability to address kapha-pitta vitiation, is one of the most widely used polyherbal formulations for managing Netraroga (eye diseases). Pharmacognostical studies on Triphala reveal the presence of bioactive chemical constituents that play a significant role in the prevention and treatment of ocular conditions [22].

Among Netrarogas, Timira is a particularly severe condition that affects Drishti (the functional aspect of vision) [23]. If not managed in its early stages, Timira can progress to complete vision loss. Ayurveda recommends using Triphala in different mediums based on the predominant dosha involved in Timira—sesame oil for vata, ghee for pitta, and honey for kapha. Ghrita prepared out of triphala will be more effective in serving the purpose due to the ability of lipid medium in crossing the blood ocular barrier and act at the decided site. The antioxidant potential of flavonoids present in triphala plays an important role in preventing cataract.

In addition to internal administration, Triphala is frequently used in various Kriya Kalpas, such as Seka, Aschyotana, and Bidalaka. These localized treatment procedures are specifically designed for eye care, allowing the medication to bypass ocular barriers and reach the intended site²². For instance, Pindi application with Triphala is particularly effective for managing kapha-pitta prakupita Abhishyanda [25].

Triphala is considered a wholesome remedy for preserving eye health and protecting normal visual functions. Regular use is beneficial even for healthy individuals to maintain eye vitality.

Yashtimadhu also exhibits chakshushya properties. When combined with Triphala, it enhances the formulation's benefits for eye health. Together with Lauha bhasma, honey, and ghee, these ingredients form the medicine Saptamrita Lauha, widely used for treating various eye disorders.

In today's era, prolonged screen time and exposure to air pollutants make the eyes vulnerable to irritation and diseases. Triphala, being rich in Vitamin A, helps in preventing and managing these issues. Water boiled with Triphala churna can also be used as an eyewash, but only under the guidance of an ophthalmologist to ensure safe and effective use [22].

Pramehagna and kaphapitta hara properties along with rasayana and chakshushya effect of triphala and yashtimadhu helped in preventing ophthalmologic complication of diabetic mellitus.

III. Triphaladi choorna -as Sughavirechaka

In the survey, 80% of physicians reported the mild purgative action of Triphaladi Choorna. This effect is attributed to the unique combination of phytochemicals present in Triphala and Yashtimadhu, which work synergistically to regulate bowel movements and promote digestive health.

When analyzed individually, Triphala has traditionally been used as a laxative for chronic constipation, colon cleansing, digestive issues, and poor food assimilation. It is also widely recognized for its beneficial effects on general gastrointestinal health.

Haritaki, Amalaki, and Vibhitaki work synergistically to support digestive health and detoxification. Haritaki acts as a mild laxative, stimulating intestinal peristalsis and aiding in the expulsion of waste material. Amalaki, rich in vitamin C and antioxidants, soothes the intestinal lining and enhances overall digestive function. Vibhitaki complements these benefits by promoting intestinal motility and effectively clearing accumulated toxins (Ama) from the colon. Together, these three

potent ingredients offer a comprehensive approach to maintaining a healthy and balanced digestive system [26].

As both Ayurveda and modern medicine agree that health and disease begin in the gut. Triphala represents an essential foundational formula as it promotes efficient digestion, absorption, elimination and rejuvenation.

Studies reported that phytochemicals in Triphala such as quercetin and gallic acid promote the growth of Bifidobacteria and Lactobacillus species while inhibiting the growth of undesirable gut residents such as E. coli. The enzymatic activity of lactic acid bacteria degrades tannins in Triphala such as gallic acid. Triphala-derived polyphenols such as chebulinic acid are also transformed by the human gut microbiota into metabolites such as urolithins, which have the potential to prevent oxidative damage and inflammation [27].

IV. Rasayana effect

This combination contains dried fruits of the three plants that are classified as a tridoshic rasayana in Ayurvedic medicine along with yashti choorna. By its rejuvenating properties, it strengthens the immune system. It is rich in antioxidants which help fight against oxidative stress. In this way, it also fights lethargy and fatigue in the body by generating energy and getting rid of the bodily toxins. It

promotes longevity and rejuvenation in patients of all constitutions and ages. Modern experiments have proved that triphala is antibacterial and anti-inflammatory as well as analgesic. (reference)

Yashtimadhu enhances immunity by boosting levels of interferon which is the key chemical of the immune system that fights off viruses. Triphala and yashtimadhu complement each other very well when they are used together, they fill the mutual void. Triphala is tridoshahara but more targeted on kapha and pitta. Yashtimadhu being sweet brings in the vatahara effect to the equation [28].

V.External application of Triphaladi choornam

The present survey reported significant positive effect of triphaladi choornam in managing skin disorders.

Potent antioxidant and anti-inflammatory properties of both triphala and yashtimadhu make the combination highly effective in healing and preventing various dermatological issues. It helps alleviate skin inflammation, redness, dryness, acne, oxidative damage, promoting healthier and more radiant skin. It rebuilds skin protein and keeps moisture, resulting in healthy skin. Triphala is highly effective in wound healing due to its ability to enhance collagen production and reduce the risk of infections

caused by harmful bacteria. Being rich in Vitamin C, it is suitable for all skin types, minimizing the likelihood of side effects.

In the context of wound healing, the anti-inflammatory properties of Triphala and Yashtimadhu play a vital role in reducing inflammation at the wound site, an essential component of the initial stages of the healing process. In diabetic patients, wound healing differs significantly from that in non-diabetics, as elevated glucose levels adversely affect the process by altering the function of glycosylated proteins. Triphala not only eliminates wound pathogens such as *Staphylococcus aureus*, *Streptococcus pyogenes*, and *Pseudomonas aeruginosa* but also promotes wound healing. This effect is attributed to the presence of active constituents like polyphenols, flavonoids, and ascorbic acid, which act as stimulants for the healing process.

Studies reported that the topical and oral administration of Triphala extract promotes diabetic wound healing in streptozotocin induced diabetic rats with increased rate of wound contraction and collagen turnover [29].

CONCLUSION

Triphaladi Choornam emerges as a multifaceted Ayurvedic formulation with extensive therapeutic potential in managing various metabolic, ophthalmic,

dermatological, and digestive disorders. Its efficacy in addressing conditions like diabetes mellitus, obesity, hyperlipidemia, and diabetic complications is backed by both classical Ayurvedic principles and modern scientific studies. The synergistic action of its primary components—Haritaki, Amalaki, Vibhitaki, and Yashtimadhu—ensures a holistic approach to health by promoting detoxification, enhancing digestion, and regulating metabolic processes.

The formulation's antioxidant, anti-inflammatory, and rejuvenating properties are instrumental in improving immunity, reducing oxidative stress, and promoting tissue repair and regeneration. Its external application demonstrates remarkable benefits in wound healing and skin care, particularly in diabetic patients, by accelerating collagen production and reducing infection risks. Furthermore, Triphaladi Choornam proves highly effective in eye care, preventing and managing conditions like Timira and diabetic retinopathy while maintaining optimal visual function.

By addressing tridoshic imbalances, this combination supports overall health, promotes longevity, and ensures well-being across all age groups. Thus, **Triphaladi Choornam** stands as a testament to the profound wisdom of Ayurveda, offering a

comprehensive solution for both preventive and therapeutic healthcare.

RECOMMENDATIONS

Further clinical studies are warranted to validate its benefits and expand its application.

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