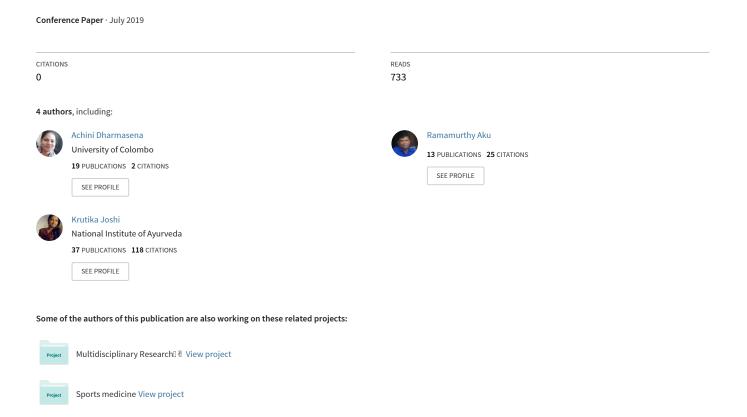
# `Role of shramahara mahakashaya (an anti-fatigue formula) in vyadhikshamtva(immunity)



# Role of shramahara mahakashaya (an anti-fatigue formula) in vyadhikshamtva(immunity)

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Abstract - The world health organization warned about the high rate of emergence of infectious diseases in 2007 and further notified around 40 infectious diseases emerged from 1970. 'Devoid of diseases' or vyadhikshamatva synonymously named as swasthya (wellbeing), bala(strength) and ojas in Ayurveda. Shrama (fatigue) is the main feature of balakshaya (Strength depletion), ojahkshaya as well as rasa, asthi and shukra dhatu kshaya (tissue depletion). Shrama occurs with the existent of balakshaya, ojahkshaya or depleting vyadhikshamatva. Thereby, shrama and vyadhikshamatva have a coexisting relation. Acharya caraka has collectively mentioned 10 drugs as shramahara kashaya which effectively works on shrama. It includes dry fruits and grains which are in regular consumption. Hence, ingredients of shramahara kashaya are easily available, non-controversial comparing to jeeavaniya (life promoting) and brumhaniya(bulk promoting) drugs that are commonly used to enhance vyadhikshamatva. They are rich in nutrients, antioxidants and also have proven effects on anxiety, and in immunomodulation. These shreds of medical evidence beyond the nutrition values of shramahara kashaya create a new paradigm in immunomodulation. With this aim, this review has been planned to find the efficacy of shramahara kashaya in vyadhikshamatva. The study was carried out using a detailed analysis of various Ayurveda classical texts as well as available modern literature.

## Key words - Shramahara mahakashaya, immunomodulation, Vyadhikshamatva

#### Introduction

Time tested eternal science; Ayurveda is enriched with its' own concepts and principles for the overall wellbeing of mankind. Incorporating with main goals of Ayurveda it heightens wholesome health by establishing host defense mechanisms against diseases. This aspect of Ayurveda expounds as *vyadhikshamatva* [1] or *ojas* [2] or *bala* [3].

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The word vyadhikshamatva consists of 2 words; 'vyadhi' and 'kshamatva'. Vyadhi is defined as the combination of unfavourable stimuli to mind and body [4]. Kshamatva means 'to bear', 'to resist against disease' or 'composed to suppress excitation'. Vyadhikshamatva is the protection power against diseases (Vyadhi-balavirodhitva) and resistance power against disease occurrence (Vyadhi- utpadapratibandhakatva) [1]

This explanation can be co-related with the modern concept of immunology. As per allopathic view, the therapeutic modification of immune responses is known as Immunomodulation [5]. *Ojas*; the causative factor (*karana bhava* ) of *bala* [6] is considered as the key role in *Vyadhikshamatva*. *Kalaja bala* and *yuktikruta bala*, the two types of *bala* (out of three) can be improved by diet and behaviors [7]. Thereby, *ojas* can be enhanced and also the *vyadhikshamtva* of the host [8].

Hence, food is an essential element of wellbeing [9]. Copious pieces of evidence of therapeutic usage of food are found in *Ayurveda* classical books. *Shramahara mahakashaya*(SMK) mentioned in *shadvirechanashatashriteeya adhyaya* of *Caraka samhita* [10] is an amazing illustration amongst it. It comprises 10 ingredients of fruits, and grains which are used as food in a day to day life. This study aims to elucidate the utility of SMK in *vyadhikshamtva* based on its logical analysis (*anumana* and *yukti*) upon the properties of ingredients (*dravya swalakshana*)[11].

#### Material and methods

Comprehensive review of the ingredients of SMK has been done using *vruhattraya* and *Nighantus in e- nighantus*. Published scientific works allied with ingredients have been reviewed. Further, compiled data was tabulated upon the properties (*dravya swalakshana*), and analyzed the inference action (*anumana*) and logical therapeutic (*yukti*) outcomes pertinent to the concept of *vyadhikshamatva*.

#### Results

The word 'shrama' denotes fatigue, exhaustion, or exertion either physically or mentally [12]. Presently, the infinite dimensions of this concept had spread towards sports medicines with intentions for increasing shareera bala and exercise capacities [13]. It revealed significant results in enhancing shareera bala (strength); the karyabhava(effect) of ojas. Similarly, the relative improvement of bala and vyadhikshamatva upon ojas has been described by acarya Cakrapani [14].

Table 1 - Shrama and its' relation with diseases

	As an etiological factor	Reference		As a symptom or sign of a disease	Reference
1	Fever	Su.U.39/80 C.Ni.1/220	1	Suppression of thirst	Ca.Su7/21
2	Pittaja prameha (metabolic disorder due to vitiated pitta dosha)	Ca.Ni.4/ 24	2	excessive exercise	Ca.Su.7/33
3	Skin disorders	Ca.Ni.5l6	3	shrama is an indicative factor for purification therapy	Ca.Su.15/14
4	cause of discharge of pseudo pregnancy	Ca.Vi.3/24	4	Asthidhatu kshaya(disorders of musculoskeletal system)	Ca.Su17/67
5	male infertility	Ca.Ci.30/161	5	shukradhatu kshaya(disorders of testosterone synthesis)	Ca.Su.17l69
6	bhagandara (ano-rectal fistula)	Su.Ni 4/9	6	fever due to vitiation of vata dosha	Ca.Ni.1/21
7	palitya roga (alopecia)	A.Hr.U.23/29	7	prodromal and general symptom of fever	Ca.Ni.1/33
8	Shrama causes thirst	Su.U.48/4	8	symptom of skin disorders, pandu(malnutrition disorder), madatya(alcoholism)	Ca.Ci.7/12 Ca.Ci.16/13 Ca.Ci.24/102
			9	stage of loss of body strength sthaulya(obesity)	A.Hr. Su.11/10
			10	Rasa dhatu kshaya(Depletion of rasa dhatu)	A.Hr. Su. 11/17
			11	mamsa medhogata vata	A.Hr.Ni.15/11
			12	Ojo visransa	Su.Su.15/25

Table 2 - Shramahara kashaya with botanical sources and properties

	Drugs	Rasa	Guna	Virya	Vipak a	Dosha karma	Allied pharmacological properties with vyadhikshamatva action
1	Draksha Vitis vinifera L.	М	Gu, sni	Sita	M	VP samaka	hrdya, vrishya, cakshushya, kshatakshya hara, santarpani param
2	Kharjura Phoenix dactalifera L.	M Ks	Gu, sni	Sita	M	VP samaka	bala sukrakari, hrdya, kshatakshya hara, tushtipushtida sukralam,

3	Priyala	М	Gu,	Sita	M	VP	vrishya, balya,hrdya
	Buchanania lanzan Spreng.		sni			samaka	
4	Badara	A, M, Ks	Gu, sni	Sita	М	VP samaka	vataghna, brimhana,
	Ziziphus zizyphus (L)H. Karst.	KS	SIII			Samaka	
5	Dadima	М	La, Sni	Anushna	М	VPK	hrdya, medhya, kanthasya
	Punica granatum L.	Ks, A				samaka	rogaghna
6	Phalgu	М	Gu,	Sita	М	VP	Tarpani, brimhana,vajikarana
	Ficus carica L.		sni			samaka	
7	Parushaka	М, А,	La	Sita	М	VP	Brimhana
	Grewia asiatica L.	Ks				samaka	
8	Ikshu	М	Gu,	Sita	М	VP	Vrishya, kapha prada, hridya,
	Saccharum		sni			samaka	brimhana
	officinarum L.						
9	Yava	M, Ks	Ru,	Sita	М	KP	Sthairya, agnivarnakari
	Hordeum vulgare L.		Gu			samaka	
10	Shashtika shali	M, Ks	Gu,Sn	Sita	М	P	Balya, sthanya, pushti medha,
	Oryza sativa L.		i			samaka	kapha prada

M- Madhura , A- Amla, Ks- Kashaya, La – Laghu, Sni – Snigdha, Ru – Ruksha, Gu – Guru, VP- Vata Pitta, KP – Kapha Pitta, P- Pitta, VPK – Vata, Pitta, Kapha

#### Discussion

#### Based on the logical analysis (Yukti)

'Shrama' is a condition which occurs in dhatu kshaya stages (tissue depleting conditions) (table 1). It is a clinical feature in bala vibhramsha (loss of strength) and ojo visransa (table 1). Ojas is known by upachaya of all dhatus[15]. Hence, execute shramahara cikitsa found to be truthful in ojah kshaya thereby in vyadhikshamatva.

#### Based on properties of the ingredients (swalakshana)

Potentials of SMK are wholesome effects of individual drugs. Predominance properties of SMK are madhura rasa, guru, snigdha guna, madhhura viapaka, sheeta veerya, and vata pitta shamaka guna (table 2). Due to guna samanya (similarity of properties) between SMK and Ojas and kapha dosha, the decrease entity can be enhanced by similar entities [16].

## • Based on Inference (Anumana)

Individual ingredients of SMK possess *rasayana properties* (rejuvenation therapy) like *hrdya* (cardioprotective), *vrishya* (aphrodisiac), *balya* (promote strength),and *medhya* (promote intellect) mostly (table 2)[17]. Hence, the study can infer the synergetic effect as same[16].

#### Conclusion

The vast scope of this unique collection of SMK drugs is beneficial for attaining *vyadhikshamatva*. Antioxidant assay and nutritional assessment of SMK have also suggested its' high pharmacological potentials in sustenance [13]. Hence, *acarya Caraka* mentioned one should build the capacity to tolerate *shrama* for getting *mokshah* (Eventual destination)[[18].This indirect implication on the concept of *shrama* shows the mask facet of SMK in *vyadhikshamatva*.

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