

# Journal of Pharmaceutical Research International

33(64A): 381-393, 2021; Article no.JPRI.71164

ISSN: 2456-9119

(Past name: British Journal of Pharmaceutical Research, Past ISSN: 2231-2919,

NLM ID: 101631759)

# Correlation of Diet Regimen in Manifestation of Skin Diseases: A Survey

# Shivani Kapurkar a≡\*, Pooja Ghumde a≡ and Sonali Chalakh bo

<sup>a</sup> Mahatma Gandhi Ayurved College, Hospital & Research Centre, Salod (H), Datta Meghe Institute of Medical Science, Wardha, India.

<sup>b</sup> Department of Agadtantra, Mahatma Gandhi Ayurved College, Hospital & Research Centre, Salod (H), Datta Meghe Institute of Medical Science, Wardha, India.

#### **Authors' contributions**

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

#### Article Information

DOI: 10.9734/JPRI/2021/v33i64A35752

**Open Peer Review History:** 

This journal follows the Advanced Open Peer Review policy. Identity of the Reviewers, Editor(s) and additional Reviewers, peer review comments, different versions of the manuscript, comments of the editors, etc are available here:

https://www.sdiarticle5.com/review-history/71164

Original Research Article

Received 22 October 2021 Accepted 28 December 2021 Published 30 December 2021

# **ABSTRACT**

**Background:** Ahara plays main role in the life of every individual. Dietary regimen as always been placed first while discussing the causes for skin diseases. The normal integrity and the immunological role of skin is maintained by nutritional, biochemical and metabolic aspects of diet. Maintaining dietary lifestyle strictly prevents not only skin diseases but also various systemic diseases. So to assess the type of diet and dietary regime in the patient of skin diseases this study has been evaluated.

**Aim:** Assessing rule of diet-daily regimen in skin diseases of modern era with Ayurveda perspective.

Methods: 100 Patients visiting Kayachikitsa OPD within the duration of 6 months.

**Results:** It is observed that Aharja hetu and skin diseases are interlinked with each other which disturb psychological health, which ultimately gets affected to sleep pattern. The same subjective we came through while drawing the resultants of the present survey study, in certain aspect that, Mixed diet (70%), Oily and Spicy food (43%), Curd (42%), Tila taila (41%), Madhur (20%), Tea (28%), Snehadravya and Ushnadravya sevan (17%), Ksudha- Bad (38%).

Conclusion: Aharaj hetu are responsible for skin disease due, to habituation with various food

\*Corresponding author: E-mail: kapurkarshivani@gmail.com;

<sup>&</sup>lt;sup>■</sup>Intern (BAMS);

<sup>&</sup>quot;HOD.

entities, leading to rasa raktadi dhatu dushti & its precursor dhatu as well, also it should be taken in consideration that, dhatu are been vitiated by dushit avastha of dosha, which ultimately causes of skin disease.

Keywords: Ahara; ayurveda; dietary regimen; skin diseases.

#### 1. INTRODUCTION

Ahara, Nidra and Brahmacaraya are been mentioned as Trayaupastambh which supports the body itself. Ahara has been enumerated first. which shows its importance [1]. Ayurveda focuses on logical and judicious use of ahara for the prevention and cure of diseases. Ayurveda follows the 4 fold therapeutic management steps includes samshaman(palliation), which samshodhana (biopurification), parivarajan(avoiding causative factors) and pathya (food/diet suitable for pacification of disease) Acharva Charaka defines [2]. viruddhahara as certain diet and combinations, which breaks the metabolism and inhibits the process of formation of tissue and which have opposite property to that of the are called as viruddha Anna or tissue incompatible diet [3]. Virrudha can be considered as diet which are having mutually contradictory properties, contradictory to tissues, diet capable of producing untoward effect on the body when processed in a particular form or proportion or those food which may produce unwanted effects when consumed at an inappropriate time. Ayurvedic literature has compiled almost 18 types of virudha ahara and has also mentioned complications ranging from skin diseases (kushta), visarpa (erysipelas), unmada (insanity) and marana (death) [4]. Urbanization, change in lifestyle and fascination of western culture are the reasons for change in food habits and lifestyle of people these days. There is also a change in preparatory methods and food habits of people in present era campared to the ancient times. With this modification of the dietary habits and regimen, people are facing skin ailments [5]. Ayurveda states Viruddh Ahara (incompatible diet) is the main etiological reason for kustha (skin disease) [6]. The benefits of food can be achieved only when the food is taken judiciously and as per the methods of food will also leads to ill health. A wholesome diet is necessary for good health, combating diseases and co-morbid conditions and enhancing the potency of the medications. Intake of sufficient quantity of food leads longevity and healthy state of body is maintained [7]. All skin diseases has been

concluded under kushta vyadhis as per Acharya's and respectively divided into Mahakushta and Ksudrakushta. The primary stage of Kushta goes with the Nidana Virodhi Anna Paanani as Viruddha Ahara are meant to be significant causative factor of Skin diseases (Twakvikaras) [8].

With above point in mind and to search out cause and effect relationship between Viruddha Āhāra (incompatible diet) in Kuṣṭha (skin disease), the present study has been selected.

# 2. MATERIALS AND METHODS

The 100 patients of diagnosed skin diseases were taken from the OPD of kayachikitsa, MGACH&RC. After giving the preliminary information about the project to the patient, consent is taken. Dietary regime of the patient is assessed on the basis of pre-designed questionnaires.

# 2.1 Inclusion Criteria

Patients suffering from skin diseases between age group 20-50 years of irrespective gender and who are willing to participate.

# 2.2 Methods

Survey studies, Observational cross-sectional.

# 2.3 Statistical Analysis

The statistical analysis is done by using descriptive statistics.

# 3. OBSERVATION AND RESULTS

To understand the exact Aharaj cause of skin disease in the patients visiting at kayachikitsa OPD of Mahatma Gandhi Ayurved College Hospital & Research Centre, salod, wardha on the basis on framed questionnaire made in Google form and the data been drawn through excel sheet and respectively graphs & tables prepared.

Table 1. Causative factors leading to skin diseases

Ahara	No. of patients consumed
Vegetarian	31%
Mixed	70%
Different entities of Ahar	400/
Oily+Spicy	43% 21%
Bakery products Soft drinks	19%
Packet stuff	17%
Milk/Dairy products	17 70
Milk	22%
Curd	42%
Shikiran (shrikand, fruit salad., etc)	33%
Others	4%
Routine usage of oil	
Soyabean oil	24%
Sunflower oil	14%
Groundnut oil	15%
Sesame oil (Tila taila)	41%
Linseed oil (Javas taila)	6%
Oka satmya ( Habituated ) Alcohol	6%
	28%
Tea	
Coffee	12%
Tobacco	6%
Smoking	6%
Tea+Tobacco	10%
Tea+Alcohol	5%
No addiction	13%
Tea+Smoking	3%
Tea+Coffee	8%
Tea+Alcohol+Smoking Satmya (Frequent usage)	3%
Madhur	20%
Katu	7%
Madhur+Lavan	7%
Amla+Lavan	16%
Madhur+Katu	18%
Madhur+Amla+Lavan	16%
Madhur+Amla+Lavan+Katu	19%
Incompatible diet	470/
Snehadravya+Ushnadravya	17%
Navana+Milk Potato+Tila+Lasuna	15% 13%
Dadhi+Udad dal	12%
Guruannapan +Guda	12%
Harita saka and vidahi anna	12%
Dugdha+Fish	8%
Atidravadravyapana	7%
Pishtanna	4%
Kshudha	
Good	31%
Bad	38%
Normal	31%

Table 2. Skin diseases caused above mentioned Ahara respectively

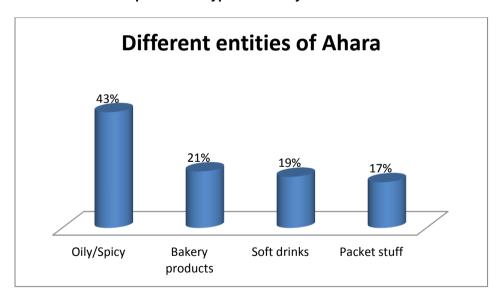
Twak vikar	Correlation according to Modern	No. of subjects found
Yuvanapidika	Acne Vulgaris	19%
Ekakushta	Psoriasis	18%
Shitapitta	Urticaria	17%
Vicharchika	Eczema	17%
Shwitra	Vitiligo/ Leucoderma	14%
Vyanga	Melasma	6%
Vatarakta	Lupus erythematosus	4%
Visphota	Blister	4%

Ahara

70%

Vegetarian Mixed

Graph 1. What type of Ahara you consume?



Graph 2. What kind of different Ahara you prefer frequently?

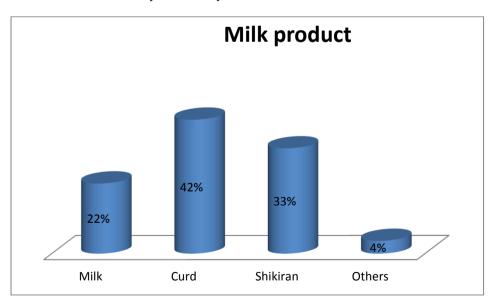
# 4. DISCUSSION

Among 100 participants maximum numbers of subjects were found to be consuming, mixed diet at about 70% (Graph 1) and the causative

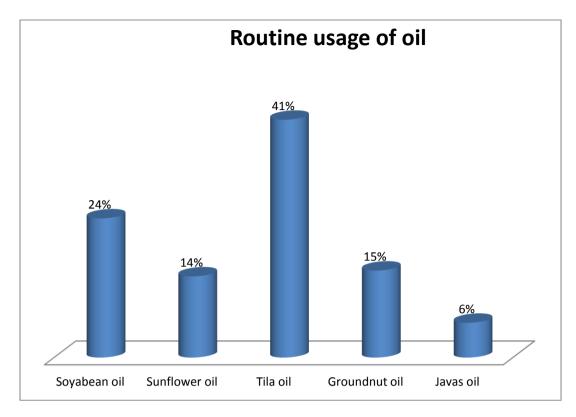
factors specifically the consumption of Aharaj hetu is 17% i.e., Oily and Spicy food items (Graph 8), and consumption of viharaj hetu is 36% i.e., Diwaswapa (Graph 9). Subjectives suffering with manas hetu yukta avasta were

35% (Graph 13), and suffering with nidra janva hetu were 47% (Graph 14). Subject consuming oily/spicy food were 43% however packet stuff consumer were found to be 17% (Graph 2), on the other hand 22% were consuming milk and 42% were consuming curd (Graph 3). Most preferred oil in daily routine was found to be tila taila 41% and linseed oil (javas taila) was found to be 6% (Graph 4). 28% of subjects were found to have tea consumption frequently (Graph 5), 20% were consuming madhur rasamtmak ahara and amla, lavan rasatmak ahara consumer were 16% (Graph 6). The most causative factor among ahara was snehadravya, ushnadravya of about 17% and least 4% found was pishtanna consumption subjects (Graph 7). 36% subjects (patients) were prone to divaswapa (Graph 8). Reflecting 38% were having avara (bad) kshuda (hunger sensation) (Graph 9), ultimately jaran shakti was found to be pravara at 14% (Graph 10) likewise ahara shakti was found to be pravara at 3%(Graph 11), affecting manas avasta at 35% being krodita and chintita and 15% were drowned in shoka (Graph 12), likewise affecting nidra(Sleep pattern) 42% were suffering with disturbed sleep and on the other hand 11% were suffering with disturbed sleep due to skin diseases(Graph 13). 46% subjects were having past illness of diabetes mellitus and least 3% subjects found to be having no significant history (Graph 14). As Ahara plays the major in life of individual, proper intake of Ahara by following all the rules of conducts mentioned by the acharyas

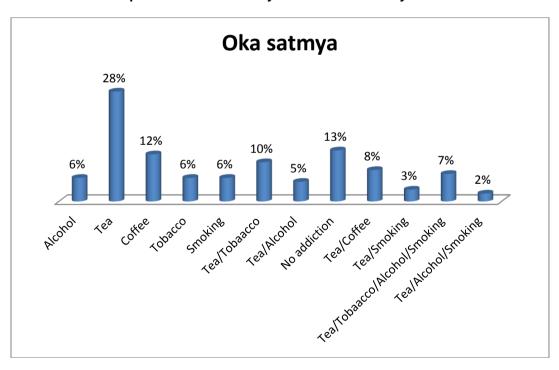
leads to healthy life and improper intake of Ahara i.e., intake of anything in excess or in way leads to disease state. contradictory Acharaya Charaka explains that anything taken in excess and at improper time disturbs the Annavaha strotas which can be taken as Amapradosha hetu. Atimadhura, Atiamala ras and sevan leads to pitta also agnimandya, raktadushti, raktaprakopa, mamsa sthaithilya and pittavruddhi. Lavan has the properties of provoking pitta which in turn aggravates rakta and leading to the eruption of dermatic lesion, deleption of the muscle tissue. Tila when consumed in excess is kushtakara and which is already possesess ushna guna, ultimately leads to pitta prakopa avastha. Guda is kaphakara, (jaggery) krumikara. agnimandyakara, medokara. Anupa audak mamsa, guru snigdha, pichhila is agnimanday kara which hampers the functioning of prakrut dosha and dhatu. Curd (dadhi) is mahaabhishvandhi (stickness property) which vitiates the rasa raktadi dhatu , kushtakara, kaphakara and which causes stroto roda (blockage) of rasavaha( channels of lump), raktavaha channels of blood), mamsavaha (channel of muscles) strotas which leads to hampering of nutritive entities from being circulated throughout the body [9]. Fish (matsya) leadsa bahudoshavikara. Pishtanna is guru in guna. Soka, kroda (anger or anxiety) leads to prakruta vata pitta dosha prakopa.



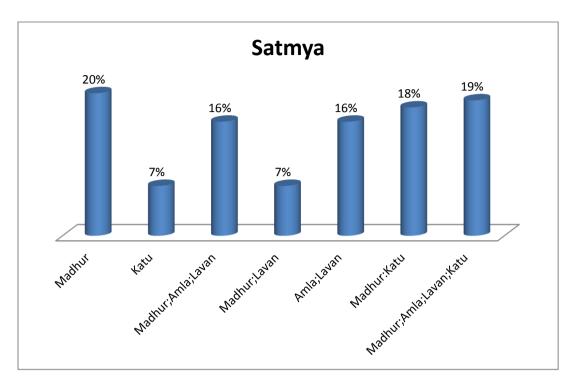
Graph 3. What different type of Milk/Dairy products you prefer frequently?



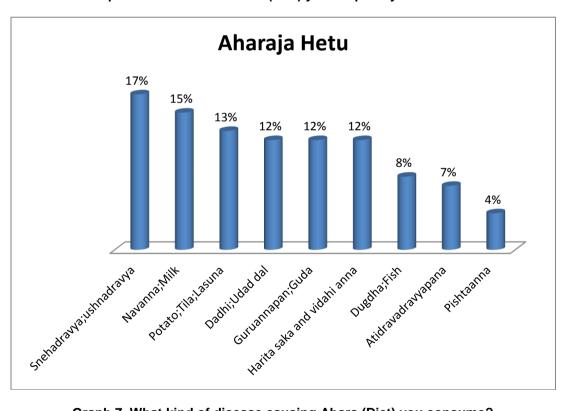
Graph 4. What kind of oil you consume on daily basis?



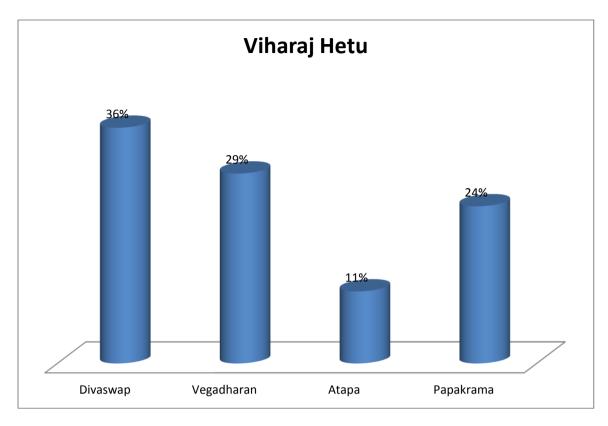
Graph 5. What are you habituated of?



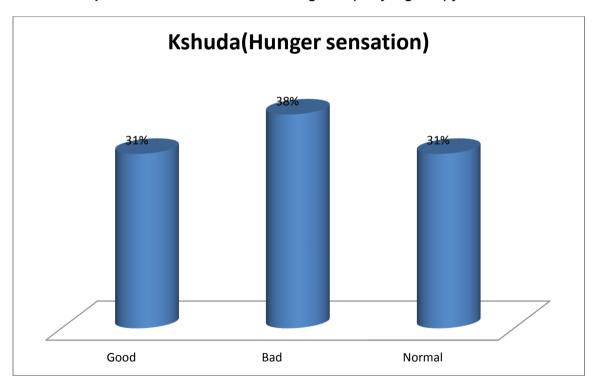
Graph 6. What kind of Ahara (Diet) you frequently are used to?



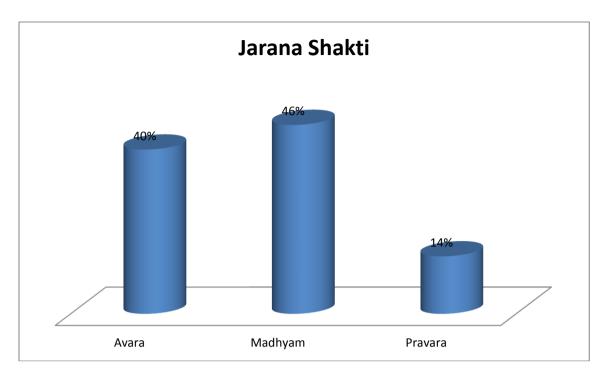
Graph 7. What kind of disease causing Ahara (Diet) you consume?



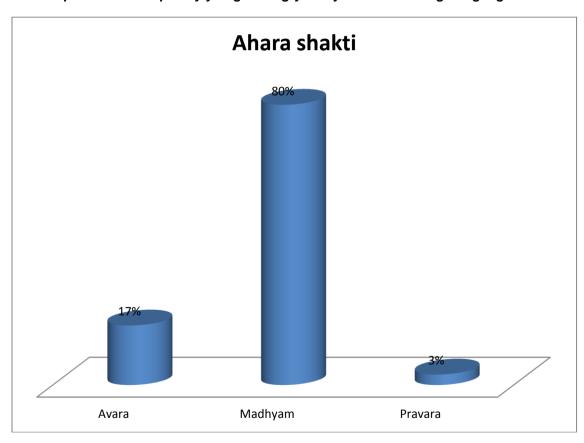
Graph 8. What kind of disease causing vihar(Daily regimen) you follow?



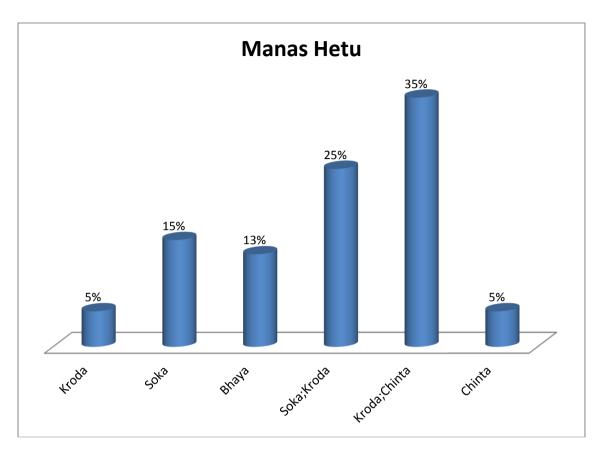
Graph 9. How frequently you get hunger sensation?



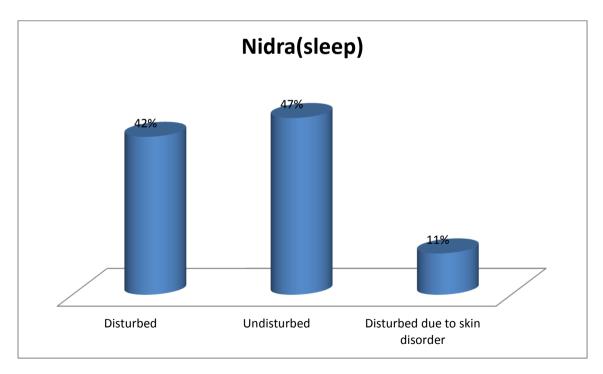
Graph 10. How frequently you get hungry and you feel of food getting digested?



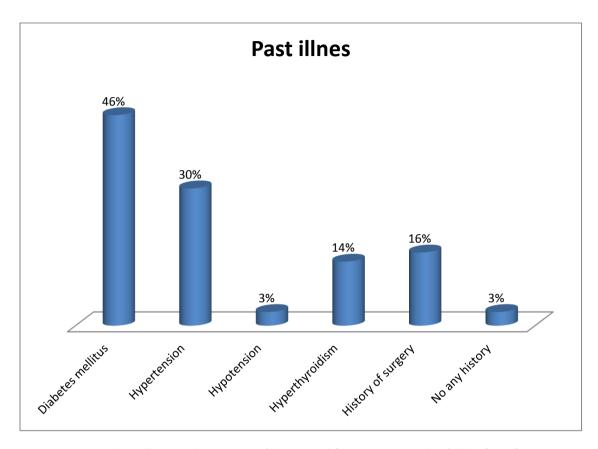
Graph 11. How much quantity of Ahara (food) you can consume at a time?



Graph 12. Do you practice any of the causative factors among following?



Graph 13. What kind of sleep pattern you follow?



Graph 14. Do you have any of the past history among the followings?

In samhita it is mentioned that Dooshivisha causing kitibha and kotha (skin lesions) due to vitiation of Rakta Dhatu. The Doshas one by one get vitiated and results in death due to Dooshivisha.(latent posion) [10] Dooshivisha is compared with allergic reaction as per Ayurveda, allergic disorder are caused due to antigen and antibody reaction which leads to formation of inflammation, due to unhealthy environmentseason-food, Diwaswapna (day sleep), these leads to vitiation of tissues, as mentioned in Critical review of Dooshivishari Agad with special reference to anti-allergic action by Chalakh S et al. [11] An epidemiology and physiopathology review on skin diseases and diabetes mellitus explained by de Macedo et al. Diabetol Metab Syndr (2016) explains the high prevalence of skin disease in Diabetes mellitus patients [12]. Role of viruddha ahara in kustha (skin disease): an epidemiological study by talekar manisha et al. concludes that viruddha ahara plays main role in manifestation of skin disease [13,14]. Few studies on skin diseases from modern medicine were reviewed [15-17]. Some interesting key studies on effects of treatment with modern medicines were reviewed [18-20]. Benefits of

Ghrelin in improving appetite were outlined by Khatib et al. [21-26].

# 5. CONCLUSION

From the overall study it could be concluded that Aharaj hetu plays a significant role in the manifestation of skin diseases. Due to frequent consumption of Aharaj hetu i.e., various food entities, it results into vitiation of Rasa Raktadi dhatu & its precursor dhatu as well, also it should be taken in consideration that, dhatu are been vitiated by Dushit Avastha of dosha, which ultimately causes of Skin Disease.

# **CONSENT**

As per international standard or university standard, patients' written consent has been collected and preserved by the author(s).

# **ETHICAL APPROVAL**

The project is started after ethical clearance of IEC, MGACH&RC, DMIMS (DU).

# **NOTE**

The study highlights the efficacy of "ayurveda" which is an ancient tradition, used in some parts of India. This ancient concept should be carefully evaluated in the light of modern medical science and can be utilized partially if found suitable.

# **COMPETING INTERESTS**

Authors have declared that no competing interests exist.

# **REFERENCES**

- 1. International Ayurvedic Medical Journal, Concept of ahara in ayurveda Assistant Professor, Dept. of Kriva Sharir, Patanjali Ayurvigyan Evam Anusandhan Sansthan, Haridwar, Uttarakhand, India.
- 2. Central Council for Research in Ayurvedic Sciences, Ministry of AYUSH, Government of India, New Delhi, J. L. N. B. C. A. H. Anusandhan Bhavan, 61-65, Institutional Area, Opp. D-Block, Janakpuri, New Delhi - 110 058. Available:http://www.ccras.nic.in/sites/defa
  - ult/files/ebooks/24052018 CCRAS HQ A yurvedabaseddiet&lifeStyleGuidelinesSkin Diseases.
- Mukund Sabnis, Viruddha Ahara: A critical 3. view, Ayu. 2012;33(3):332-3336. DOI: 10.4103/0974-8520.108817.
- Jr, B.F.P., Federico R. Tewes. What 4. attorneys should understand about Medicare set-aside allocations: Medicare set-aside allocation is going to be used to accelerate settlement claims in catastrophic personal injury cases. Clinical Medicine and Medical Research. 2021; 2(1):61-64.
  - Available:https://doi.org/10.52845/CMMR /2021v1i1a1
- 5. Agnivesha, In: Charaka Samhita, Sutra Sthana, 26/81. Reprint Vaidya Jadavaji Trikamaii Acharya, editor. Varanasi: Krishnadas Academy. 2000;149.
- 6. Agnivesha, Charaka, Charaka Samhita revised by Dridhabala, Sutra Sthana Atreyabhadrakapyiyadhyaya 26/85, edited Kashinath Sastri and pt. Gorakhanath Chaturvedi, reprint 2005, Chaukhambha Sanskrit Sansthana, Varanasi. 2005;521.
- 7. Agnivesha, Charaka, Charaka Samhita revised by Dridhabala, Chikitsa Sthana

- Kusthachikitsadhvava 7/4-8, edited by Acharva Vidvadhara Shukla and Prof. Ravi Dutt Tripathi, reprint 2007, Chaukhambha Sanskrit Sansthana, Varanasi. 2007;181.
- 8. Daniel V, Daniel K. Diabetic neuropathy: new perspectives on early diagnosis and treatments. Journal of Current Diabetes Reports. 2020;1(1):12-14. Available:https://doi.org/10.52845/JCDR/2 020v1i1a3
- Singh B, Dutta J, Sharma V. Assessment 9. of Knowledge about Aahar and Vihar among university students. Int. J. Res. Ayurveda Pharm. 2012;3(2):189-191.
- Shivani Kapurkar, Sonali Chalakh, Pooja 10. Ghumde. Manoj Patil, Chitriv Correlation of diet regimen in manifestation of skin diseases - a survey based on ayurved perspective, International Journal of Current Research and Review. 2020;12(22). DOI:http://dx.doi.org/10.31782/IJCRR.202
  - 0.SP86
- 11. Manjiri Walinjkar, Anil Avhad, Panditrao Londhe, Sharad Makhare, Clinical study to evaluate the causative factors of Shvitra (Vitiligo). Res. Tradit. Meed. 2016: 2(5):130-134 Available:http:dx.doi.org/10.21276/jrtm.201 6/304
- Daniel V, Daniel K. Perception of Nurses' 12. Work in **Psychiatric** Clinic. Clinical Medicine Insights. 2020;1(1):27-33. Available:https://doi.org/10.52845/CMI/20 20v1i1a5
- Pradeep Patil, Patil KS, Hande Sudarshan, 13. Pawar Vinay, Mujumdar Amit, Mhatre Ashish. Conceptual Study of Dooshivisha (Cumulative toxicity) w.r.t. Ancient classics and Modern science. J Ayurveda Integr Med Sci. 2016;3:144-150. Available:http://dx.doi.org/10.21760/jaims.v 1i3.4431
- Chalakh S, Wadnerwar N, Deogade M, Kadu A, Critical review of Dooshivishari Agad with special reference to anti-allergic action, Joinsysmed. 2017;5(3):221-226.
- Geisa Maria Campos de Macedo, Samanta 15. Nunes and Tania Barreto. Skin disorders in diabetes mellitus: an epidemiology and physiopatholgy review. Diabetology Metabolic Syndrome; 30 August 2016.
- Daniel V, Daniel K. Exercises training program: It's Effect on Muscle strength and Activity of daily living among elderly people. Nursing and Midwifery. 2020; 1(01):19-23.

- Available:https://doi.org/10.52845/NM/202 0v1i1a5
- Talekar Manisha, Mandal Sisir Kumar, Sharma Reetu. Role of viruddha ahara in kustha (skin disease): An epidemiological study. Int. J. Res. Ayurveda Pharm. 2015; 6(3):335-341 Available:http://dx.doi.org/10.7897/2277-4343.0636
- Bhende S, Parwe S. Role of Nitya Virechana and Shaman Chikitsa in the management of Ekakushta with special respect to plaque psoriasis: A case study. Journal of Indian System of Medicine. 2020;8(1):57.
- 19. Henry D, Singh A. A study of pattern of cutaneous manifestations in patients with diabetes mellitus. Journal of Pakistan Association of Dermatologists. 2020;30(1): 161–66.
- 20. Henry D, Singh A, Madke B, Kedia P. A case of altered clinical picture of extensive Tinea Corporis (Tinea as a Great Mimicker). Iranian Journal of Dermatology. 2019;22(3):107–9.
- Sahu PJ, Singh AL, Kulkarni S, Madke B, Saoji V, Jawade S. Study of oral tranexamic acid, topical tranexamic acid, and modified Kligman's regimen in treatment of Melasma. Journal of Cosmetic Dermatology. 2020;19(6):1456–62.
   Available:https://doi.org/10.1111/jocd.1343 0.

- Shashank B, Bhushan M. Injectable Platelet-Rich Fibrin (PRF): The Newest Biomaterial and Its Use in Various Dermatological Conditions in Our Practice: A Case Series. Journal of Cosmetic Dermatology; 2020. Available:https://doi.org/10.1111/jocd.1374 2.
- Verma SB, Madke B. Topical Corticosteroid Induced Ulcerated Striae. Anais Brasileiros de Dermatologia; 2020. Available:https://doi.org/10.1016/j.abd.202 0.07.003.
- Verma SB, Madke B, Joshi RS, Wollina U. Pseudoedematous Striae: An Undescribed Entity. Dermatologic Therapy. 2020;33:4. Available:https://doi.org/10.1111/dth.13754
- Khatib MN, Gaidhane S, Gaidhane AM, Simkhada P, Zahiruddin QS. Ghrelin O Acyl Transferase (GOAT) as a Novel Metabolic Regulatory Enzyme. Journal of Clinical and Diagnostic Research. 2015;9(2):LE01–5.
   Available:https://doi.org/10.7860/JCDR/2015/9787.5514.
- Khatib MN, Khatib M, Gaidhane S, Gaidhane A, Zahiruddin QS. Ghrelin for regulating appetite and energy balance: A systematic review. National Journal of Physiology, Pharmacy and Pharmacology. 2014;4(2):101–5.
   Available:https://doi.org/10.5455/njppp.2014.4.230420141.

© 2021 Kapurkar et al.; This is an Open Access article distributed under the terms of the Creative Commons Attribution License (http://creativecommons.org/licenses/by/4.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Peer-review history:
The peer review history for this paper can be accessed here:
https://www.sdiarticle5.com/review-history/71164