OBSERVATIONAL STUDY

A Study to Evaluate the Association of Varna in Healthy Individuals of Different Deha prakriti—An Observational Study

Vandana Yadav1, Meera K. Bhojani2

1 MD Scholar, Department of Kriya Shariir, All India Institute of Ayurveda, New Delhi, Delhi, India.
2 Associate Professor, Department of Kriya Shariir, All India Institute of Ayurveda, New Delhi, India.

ABSTRACT

Introduction: Humans are given beauty as a heavenly gift. Throughout the beginning of time, its significance has been understood and valued, and attempts have been made to conserve and advance beauty in all of its forms. Some of the factors outlined in Ayurveda that play an important part in determining a person’s attractiveness include: (a) Prakriti, (b) Sara, (c) Samhanana, (d) Varna, (e) Prabha, and (f) Chhaya. These factors provide the aesthetic sense and essential basis of personality and beauty. Ayurvedic literature classifies seven types of Prakriti and characterized the skin color (Varna) on basis of Prakriti. There are many characters mentioned in Samhita for determination of Prakriti. Skin (Twacha) is one of criteria among them. This study has been undertaken to determine the association of prakriti and Varna.

Methods: The validated instrument CCRAS Prakriti assessment scale has been applied to assess the Prakriti and Fitzpatrick Scale to assess the varna of the individuals.

Results: Data of 125 patients aged 21–60 years have been analyzed. Most patients belonged to Pitta-Kapha Prakriti (36%). Individuals with their Prakriti found in order of frequency were Vata-Kapha (27.2%), Vata-Pitta (25.6%), Pitta (5.6%), Vata (4%), and Kaphaja (1.6%). According to Varna Data, 61 individuals (48.8%) were Type 4 skin complexion, 44 (35.2%) were Type 3 skin complexion, 13 (10.4%) were Type 5, and 07 (5.6%) were Type 2 Skin complexion.

Conclusion: Patients with Pitta-Kapha dominant Prakriti have been found less value of skin color index as compare to other Prakriti. This study concluded that varna is associated with Dosha Prakriti.

1. INTRODUCTION

Ayurveda holds that a person’s general health has an impact on their skin, and it recommends a variety of skin care procedures that should be followed at every stage of life. Some of the factors outlined in Ayurveda that play an important part in determining a person’s attractiveness include: (a) Prakriti, (b) Sara, (c) Samhanana, (d) Varna, (e) Prabha, and (f) Chhaya. These factors provide the aesthetic sense and essential basis of personality and beauty. Prakriti is pre-determined combination of Dosha decided at the time of conception. Ayurvedic literature classify seven types of Prakriti and characterized the skin color (Varna) on the basis of Prakriti. There are many characters mentioned in Samhita for the determination of Prakriti. Skin (Twacha) is one of the criteria among them.

Acharya Charaka described Prakriti and Vaikrita skin color (Varna) and complexion. Krishna, Shyama, Shyamvadata, and Avadaata are Prakrita Varna and Neela, Shyavaa, Taamra, Harita, and Shukla are Vaikrita Varna. A genetic factor is important to determine the individuals’ basic skin color. Skin color (Varna) of an individual depends upon genes as per modern science. In Samhita, Varna (skin color) is developed from Anna (food) and Agni (digestion) and genetically from Aatmaja and Satvaja Bhava of Garbha.

Presently, due to changing lifestyle and increased stressful life, the majority of the population is suffering from skin disorders. Prakriti-specific advices may also be helpful in maintaining the physiological health of the skin. Skin (Twacha) is the mirror, which reflects the
harmony of internal functions of the body. Any change in skin color (Varṇa) disturbs the patient both mentally and physically. Personalized beauty care or cosmetology is the future of skin care. Hence, this current study has been planned to evaluate the association of varṇa in healthy individuals of different deha prakriti.

1.1. Objective
The objective of this study was to identify association of Prakriti and Vaikritvarna in healthy individuals of different deha prakriti.

2. METHODS
2.1. Study Design
In this observational study of prakriti and varna, 125 individuals were recruited, regardless of gender or religion, to investigate the association of prakriti with varna. The study’s inclusion criteria were (1) anyone of the age 21–60 years irrespective of sex, caste, religion, or socioeconomic status. The only four factors for exclusion from the study were (1) Any systemic disorders such as diabetes mellitus, hypertension, muscular dystrophy, or any chronic illness, (2) Individuals who were diseased in the past 1 month, (3) Non-cooperative during the study, and (4) Individuals having any addictions such as chewing tobacco, smoking, and alcohol consumption.

2.2. Setting
The current study was conducted at the All India Institute of Ayurveda, An Autonomous body under the ministry of AYUSH. The participants were assessed using a CCRAS Prakriti assessment tool and the Fitzpatrick Scale.

2.3. Variables
The criteria for this observational study include the CCRAS Prakriti assessment tool, which contains demographic details along with anatomical, physiological, psychological, and behavioral determinant of Prakriti. Other variable was for assessment of skin color index (varna) with the help of Fitzpatrick Scale.

2.4. Data Sources
The study’s primary data came from (1) CCRAS Prakriti assessment tool; and (2) the Fitzpatrick Scale, which was used to examine the association of both variables.

2.5. Statistical Methods
Microsoft Excel was used to tabulate the demographic, clinical, and quantitative data for the research participants’ evaluation. The categorical variables were measured using frequency and percentage. The parameters were statistically determined using the analysis of variance test and the mean and standard deviation were computed using appropriate software, with a $P < 0.05$ deemed significant.

3. RESULTS
A total of 125 study participants for the observational study were included in the study.

3.1. Subjects Characteristics
Table 1 shows the demographic data of the individuals. Table 1 shows gender, age, eating pattern, and body mass index (BMI).

3.2. Prakriti Based Differentiation
The results of this study revealed that Pitta-Kapha Prakriti and Vata-Pitta Prakriti were the most common Prakritis [Figure 1].

3.3. Varna Based Differentiation
The results of this study revealed that Type 4 and Type 3 were the most common skin complexion [Figure 2].

3.4. Association of Prakriti and Varna
According to the data [Table 2], Prakriti affects the Varna. The Prakriti of the person affected the skin color index.

4. DISCUSSION
In this study, we looked at the demographic profile along with an assessment of balavridhilar Prakriti and the skin color index of 125 patients from Delhi. We discovered that the majority of patients from Pitta-Kapha and Vata Kaphaja Prakriti. In terms of BMI, it was observed that maximum patients, that is, 66.4% were falling under the category of overweight, 32.8% were in the healthy weight category, 0.1% were falling in Class-I obesity. An energy imbalance between calories consumed and calories burned is the underlying cause of obesity. Obesity is caused by an increase in the consumption of foods that are high in calories but low in nutrients, as well as an increase in physical inactivity brought on by the sedentary nature of many occupations, shifting modes of transportation, and growing urbanization. The data corroborated the current study findings, which showed the participants’ disturbed dietary and lifestyle viewpoints.

The study showed that the pitta-kapha prakriti individuals have more fair skin complexion as compared to other prakriti. Pitta and Kapha prakriti individuals are described as sukumar avdatagatra.[7,8] means having fair and clear complexion. Acharya Vagbhata described pitta as gaur varna.[9] According to the complexion, skin types may be categorized, and this is done depending on the amount of melanin in the skin. The higher the no. in scale more is the melanin content and the darker the skin. The lower the no. in scale, the more fair the skin.

Individual differences in skin tone are common and are mostly attributed to the existence of melanocytes, carotene, oxygenated hemoglobin, and local blood flow.[10] Brown granules known as melanin are present in melanocytes, which are located in the deep basal layer of the epidermis.[11] Melanin not only affects skin tone but also offers defense against sun exposure.[12] The yellowish tone of the skin is partly due to beta-carotene, which is present in subcutaneous fat tissue. The palms of the hands and the soles of the feet contain the highest concentration of this chemical.[13] Finally, the presence of oxygenated blood being carried by the arteries and capillaries is responsible for the skin’s typical reddish color.

The data of the study also validated the same about pitta and kapha prakriti as described in ancient texts. This study may provide baseline values for the assessment of various skin disorders which hamper the skin complexion and beauty and the role of Prakriti in determining the best treatment plan to prevent and fight against various skin diseases.

5. CONCLUSION
The present observational study showed that the Prakriti and varna are correlated. This study explores the future of personalized cosmetology.
6. ACKNOWLEDGMENTS
Nil.

7. AUTHORS’ CONTRIBUTIONS
All the authors contributed equally to the design and execution of the article.

8. FUNDING
Nil.

9. ETHICAL APPROVALS
The study not required ethical permission as it is an observational study.

10. CONFLICTS OF INTEREST
Nil.

11. DATA AVAILABILITY
This is an original manuscript, and all data are available for only review purposes from the principal investigators.

12. PUBLISHERS NOTE
This journal remains neutral with regard to jurisdictional claims in published institutional affiliations.

REFERENCES

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Table 1: Demographics of participants (n=125)

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<th>Characteristics</th>
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<tr>
<td>Female</td>
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<tr>
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<tr>
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<tr>
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<td>51–60 years</td>
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<tr>
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Table 2: Effect of Prakriti on skin color index

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Figure 1: Prakriti based differentiation

Figure 2: Varna based differentiation