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AN OBSERVATIONAL STUDY TO EVALUATE TWAK SNIGDHATA IN YAUVANA PIDIKA AMONG DIFFERENT SHAREERA PRAKRUTI

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Abstract

Yauvana Pidika, an *Ayurvedic* concept, correlates with *Acne vulgaris*, a common skin condition. *Acne* affects a significant portion of the global population. It can have a psychological impact, particularly on young individuals conscious of their facial appearance. *Ayurveda* categorizes *Yauvana Pidika* as a *Kshudra Roga*, involving imbalances of *Kapha*, *Vata*, and *Rakta* in the body. A person's *Prakruti*, their inherent constitution, is believed to influence disease susceptibility and response to treatment. *Pitta Prakruti* individuals are considered more prone to *Pidika*, while oily skin is associated with a higher risk of *acne*. Understanding *Prakruti* and skin type is crucial for tailored prevention and treatment of these skin conditions. So an attempt was made to assess the relationship between *Twaksnigdhata* and *Yauvana Pidika* among different *Shareera Prakruti*. Survey was conducted of 200 volunteers and data was collected.

Results: In the present study, based on the data analysis, it can be concluded that in people between the age group of 16-25 years, there exist statistically highly significant relation between *Twak snigdhata* and *Yauvana Pidika* among different *Shareera Prakruti* with P value < 0.001.

Key words : *Twak snigdhata* , *Yauvana Pidika* , *Shareera Prakruti*.

INTRODUCTION

Face is most important and beautiful part of the body when it comes to cosmetology as far as beauty and look is concerned. Generally, youngsters are conscious about beauty of their face.¹ *Yauvana Pidika* can be correlated to *Acne vulgaris*. This is one of the most commonly observed ailments in day-to-day life having latent impact on one's psychological behaviour. It is a chronic skin disorder of the pilosebaceous unit that primarily affects the face, chest, and back. The inflamed glands may form small papules, or they may form pustules or cysts². 85% of young people between the ages of 12 to 24 years have *acne*, commonly affected age groups being 8% of adults of 25 to 34 years and 3% of adults from 35 to 44 years. *Acne* is more common in boys than girls during adolescence, But the incidence rate is higher in woman during adulthood³. *Acne* starts in the age of 10-17 years in females and 14-19 years in males. Even though *acne* is not a life-threatening situation, but it can lead to permanent scarring. Scarring can occur at any age including as early as 9-10 years⁴. One third of adults who have *acne* admit to feeling embarrassed because of their skin⁵.

According to classics, *Yauvana Pidika*, has been categorized under the *Kshudra Rogas* and mainly involves *Kapha*, *Vata* and *Rakta* producing *Shalmali Kantaka Sadrusha* and *Ghana Medogarbhayuktha Pidikas* all over the face⁶. A group of unexpressed characters inherited right at the time of *Shukra Shonita Samyoga*, prior to

birth defined as *Prakruti* as like presence of *Visha* in *Vishakrimi*⁷. As the *Prakruti* of a person remains stable throughout the life of an individual, it will affect the routine physical and mental activities. It is also useful in predicting and individual susceptibility to a particular disease, prognosis of that illness and selection of therapy. According to classics, *Pitta Prakruti* person are generally prone to *Pidika*⁸(*Yauvana*). According to modern science they state that oily skin has a highly significant association with development of acne⁹. Whereas *Twak Snigdhatta* is seen in *Kapha Prakruti* person¹⁰. We mostly encounter people visiting OPD with acne issues. Acne Vulgaris is one of the most commonly observed ailments in day-to-day life having latent impact on one's psychological behaviour.

Generally, youngsters are conscious about beauty of their face. Hence, there is a need to counter this condition effectively, primary step is to prevent further progression of the disease. It is necessary to know which skin type people and which *Prakruti* people are affected more with *Yauvana Pidika* and along with its severity of *Lakshana*.

By considering above facts an attempt is made to observe the relation between *Twak Snigdhatta* and *Yauvana Pidika* in different *Shareera Prakruti*.

Aim

To evaluate the relationship between *Twak Snigdhatta* and *Yauvana Pidika* in different *Shareera Prakruti*.

Objectives

- To assess *Twak Snigdhatta* in patients with *Yauvana Pidika*.
- To assess the *Yauvana Pidika* severity.
- To assess the *Shareera Prakruti* in patients with *Yauvana Pidika*.

HYPOTHESIS:

H₀ -There is no relation between *Twak Snigdhatta* and *Yauvana Pidika* among different *Shareera Prakruti*.

H₁ -There is a relation between *Twak Snigdhatta* and *Yauvana Pidika* among different *Shareera Prakruti*.

RESEARCH METHODOLOGY

METHODOLOGY

STUDY DESIGN

This was a cross-sectional survey study. The study consisted of a conceptual and an observational part. In the conceptual part relevant literature about the concept of *Shareera Prakruti*, *Yauvana Pididka*, and *Twaksnidghata* was collected, conceptualized and analysed from *Ayurvedic* perspective. In the observational part, a cross-sectional survey was conducted to assess the *Shareera Prakruti YauvanaPididka*, and *Twaksnidghata* of participant with the help of questionnaire. The data collected were classified, interpreted and statistically analysed to draw the final conclusion.

PROCEDURE OF COLLECTION OF DATA

In according with the study protocol approved by the institutional ethical committee, written informed consent was obtained from all the study participants. It was made sure that subjects were responding the question with closed interview method and others not influencing the subject to answer the questionnaire.

SAMPLE SIZE ESTIMATION

Sample size is calculated by using.

$$n = \frac{z^2 * P(1-p)}{d^2}$$

Z = Standard deviation (Z=1.96)

P= prevalence (75%)

1-p = (100-75)

d = degree of freedom

$$n = \frac{3.8416 * 75(100-75)}{36}$$

$$= 200.0833$$

Therefore, sample size is 200.

SAMPLE SOURCE

In the study 200 subjects of age group of 16-25 years, irrespective of gender, religion, occupation, marital status, socio-economic status and educational status were randomly selected from in and around Moodbidri taluk of Dakshina Kannada District.

INCLUSION CRITERIA:

1. Subjects of either gender of age between 16-25 years of age.
2. Subjects who are fulfilling any 2 or more diagnostic criteria.
3. Subjects willing to give consent to participate in this study.

EXCLUSION CRITERIA:

1. Diagnosed cases of PCOS and thyroid.
2. Diagnosed cases of ovarian tumour.
3. Pregnant and lactating women.
4. Patients under medications.

ASSESSMENT CRITERIA

- Assessing the *Prakruti* with questioners. *Prakruti* is assessed by total percentage of individual *Dosha* and above 50% of any *Dosha* is considered as that *Dosha* predominant *Prakruti*.
- *Yauvana Pidika* severity is assessed by using GAGS (Global acne grading system). The score for each area (local score) is calculated using the formula local score = factor x grade (0-4). The GAGS score is the sum of local scores, and acne severity was graded using the global score. A score of 1-18 is considered mild; 19-30 moderate; 31-38 severe; and > 39 very severe.
- *Twak Snigdhatata* was assessed by using Baumann skin type questionnaire.
 - If scoring is between 9-15 its very dry skin.
 - If scoring is between 16-22 is slightly dry skin.
 - If scoring is between 23-29 is slightly oily skin.
 - If scoring is between 30-36 is very oily skin.

OBSERVATIONS AND RESULTS**Table No.1: Showing the Demographic Data**

Age (in years)	N (200)
No. of subjects	200
Mean \pm SD	20.90 \pm 1.681
Median	21.00
Q ₁ : Q ₃	19 : 22
Min: Max	18 : 25

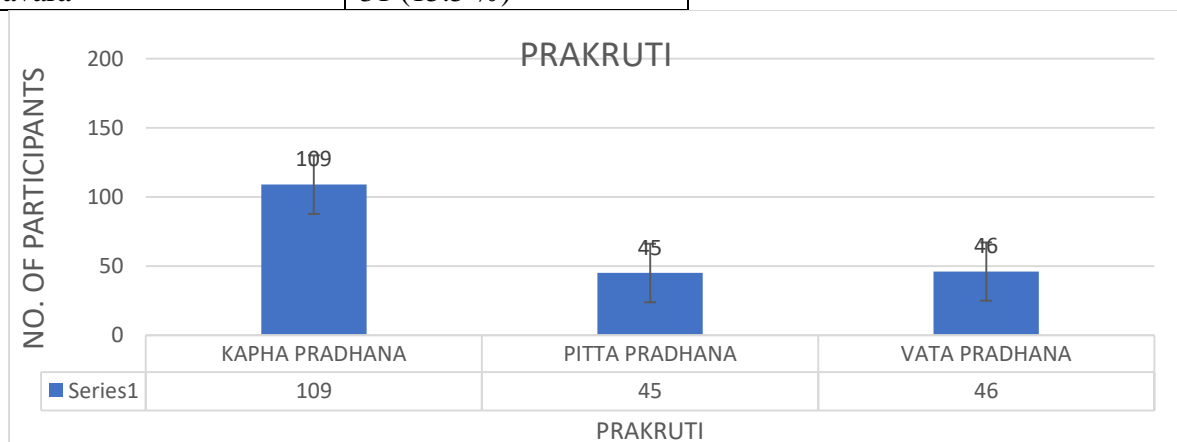
Sex, n (%)	
Male	49 (24.5 %)
Female	151 (75.5 %)

Religion, n (%)	
Hindu	185 (92.5 %)
Christian	04 (2.0 %)
Jain	02 (1.0 %)
Muslim	09 (4.5 %)

Diagnostic, n (%)	
RG	02 (1.0 %)
SG	07 (3.5 %)
SGM	04 (2.0 %)
SM	03 (1.5 %)
SR	71 (35.5 %)
SRG	74 (37.0 %)
SRGM	34 (17.0 %)
SRM	05 (2.5 %)

Ahara, n (%)	
Non-veg	132 (66.0 %)
Veg	68 (34.0 %)

Agni, n (%)	
Avara	04 (2.0 %)
Madhyama	164 (82.0 %)
Mmandha	01 (0.5 %)
Pravara	31 (15.5 %)

**Chart no 1: Distribution of volunteers according to Prakruti.**

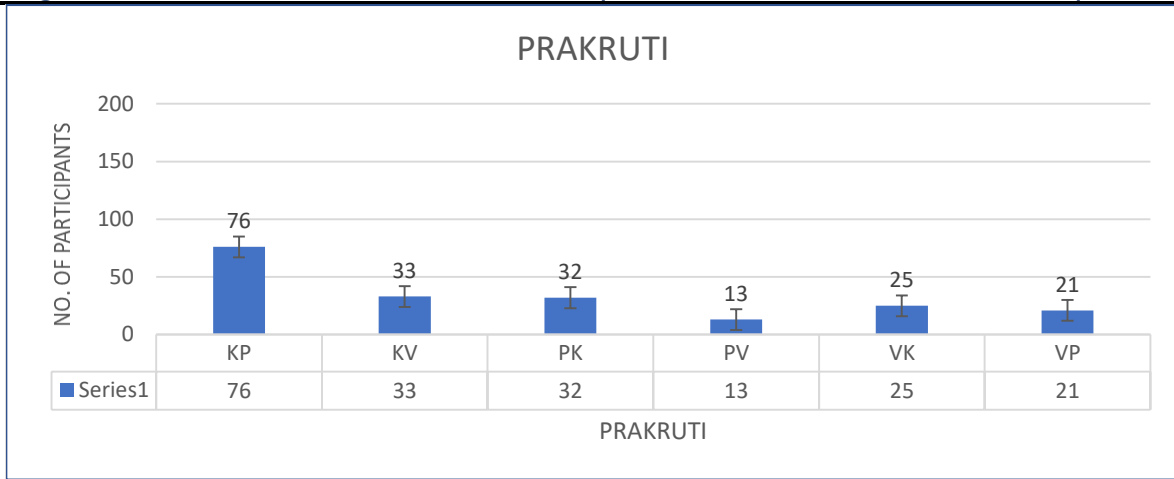


Chart no 2: Distribution of volunteers according to Dwandvaja Prakruti.

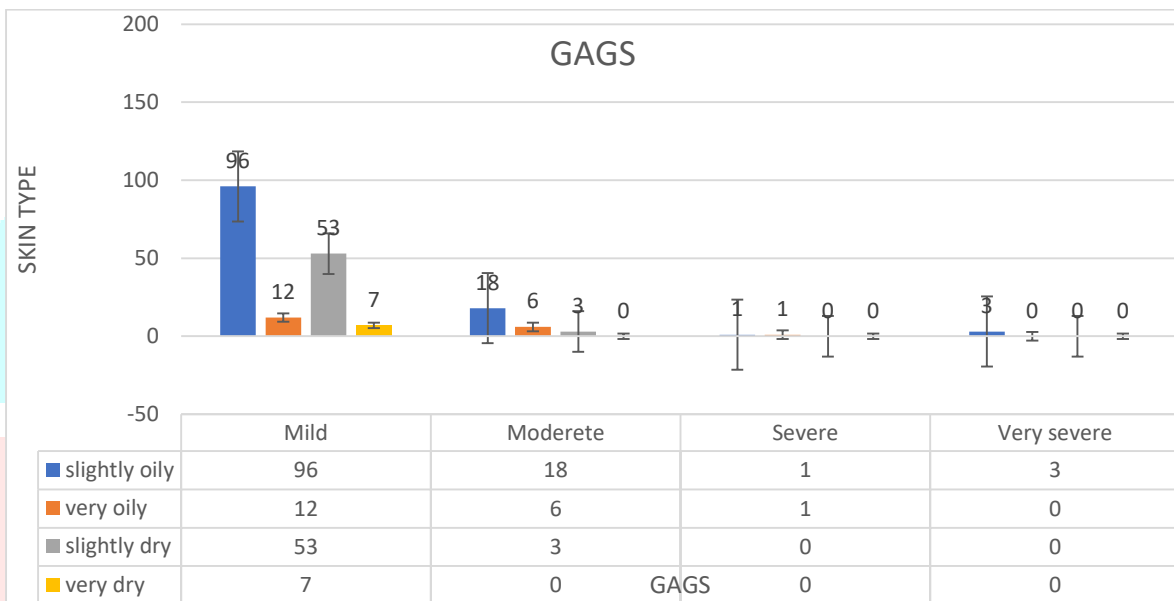


Chart no 3: Distribution of volunteers according to Skin type and GAGS.

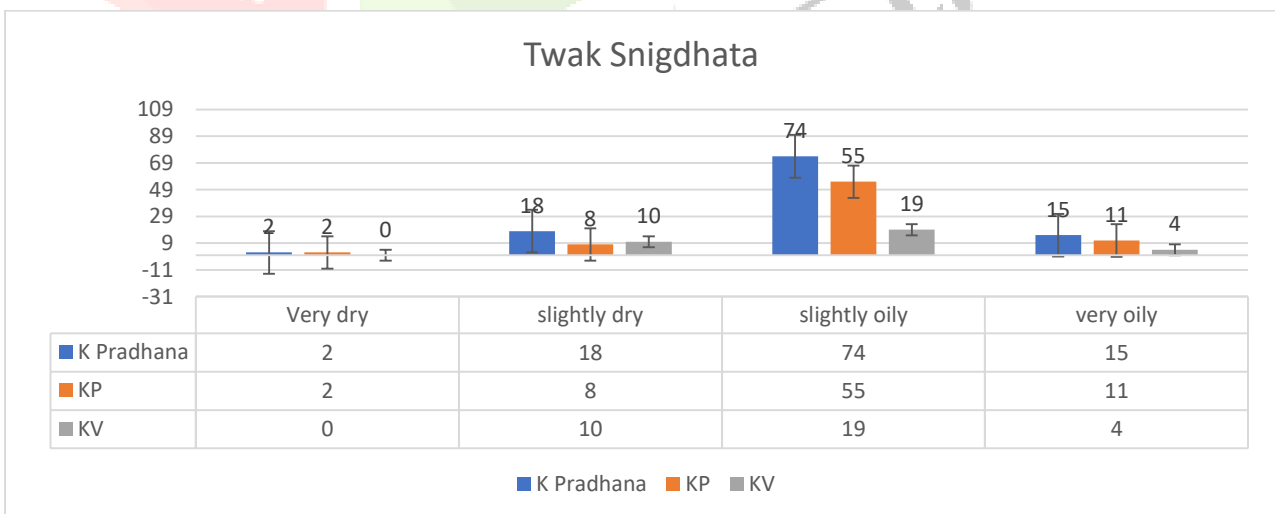


Chart no 4: Distribution of volunteers according to Kapha Pradhana Prakruti in comparison on Twak Snigdhatta.

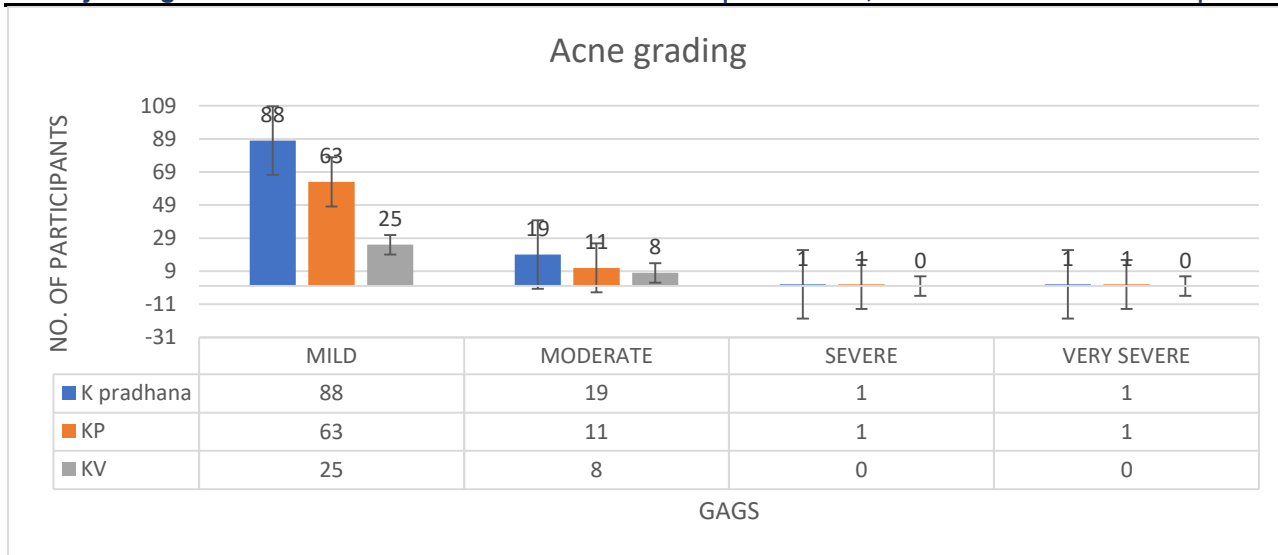


Chart no 5: Distribution of volunteers according to *Kapha Pradhana Prakruti* in comparison on GAGS.

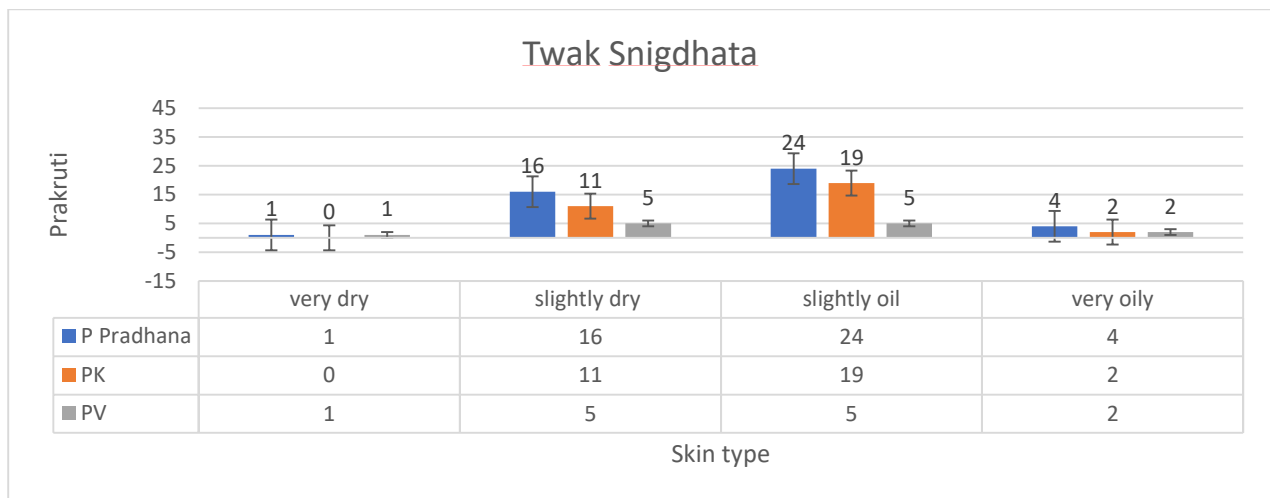


Chart no 6 Distribution of volunteers according to *Pitta Pradhana Prakruti* in comparison on *Twak Snigdghata*

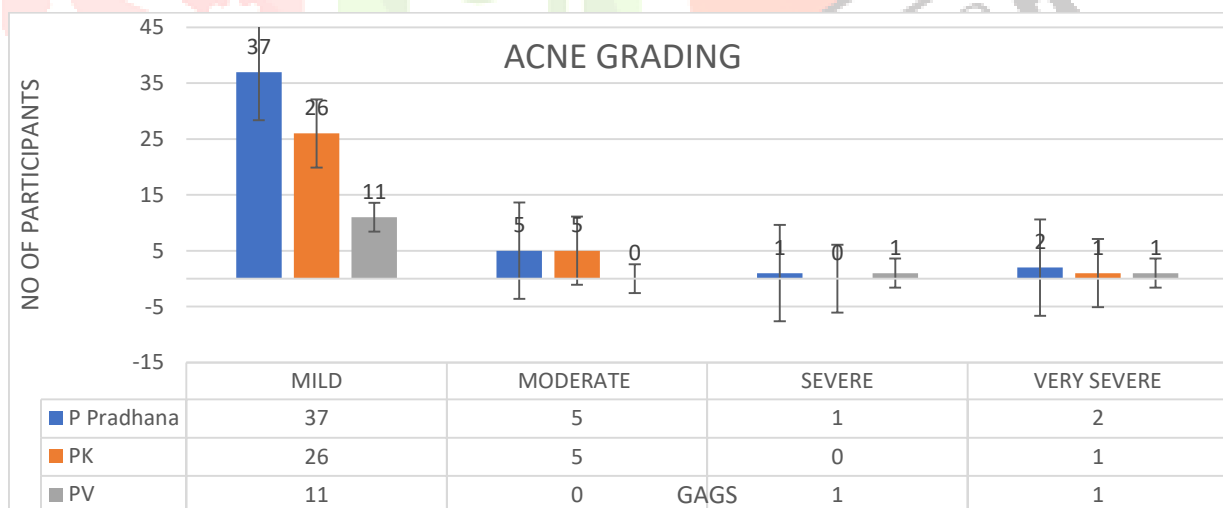


Chart no 7 : Distribution of volunteers according to *Pitta Pradhana Prakruti* in comparison on GAGS.

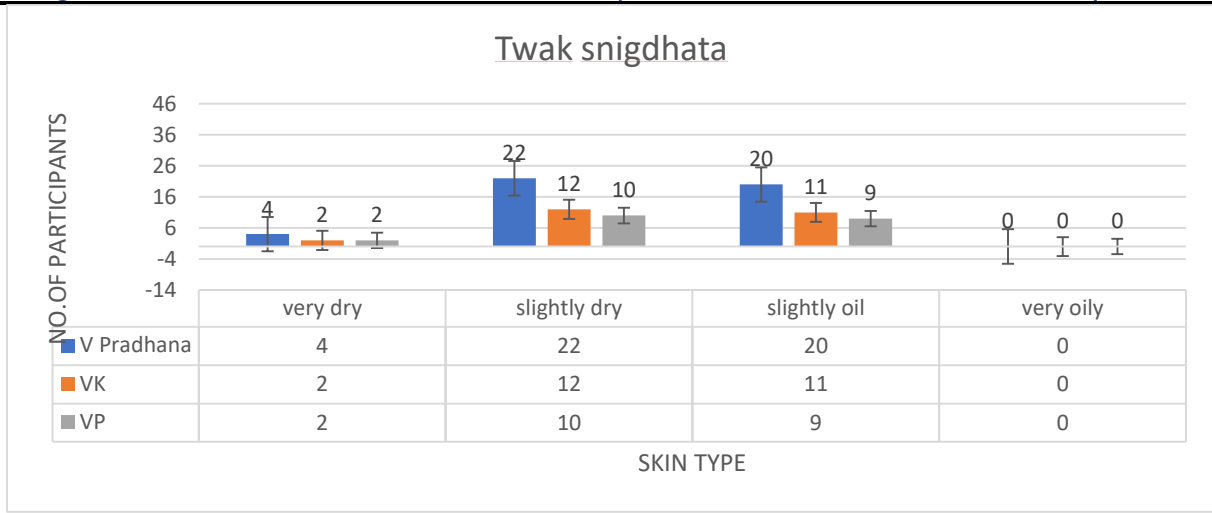


Chart no 8 : Distribution of volunteers according to Vata Pradhana Prakruti in comparison on Twak Snigdhatta.

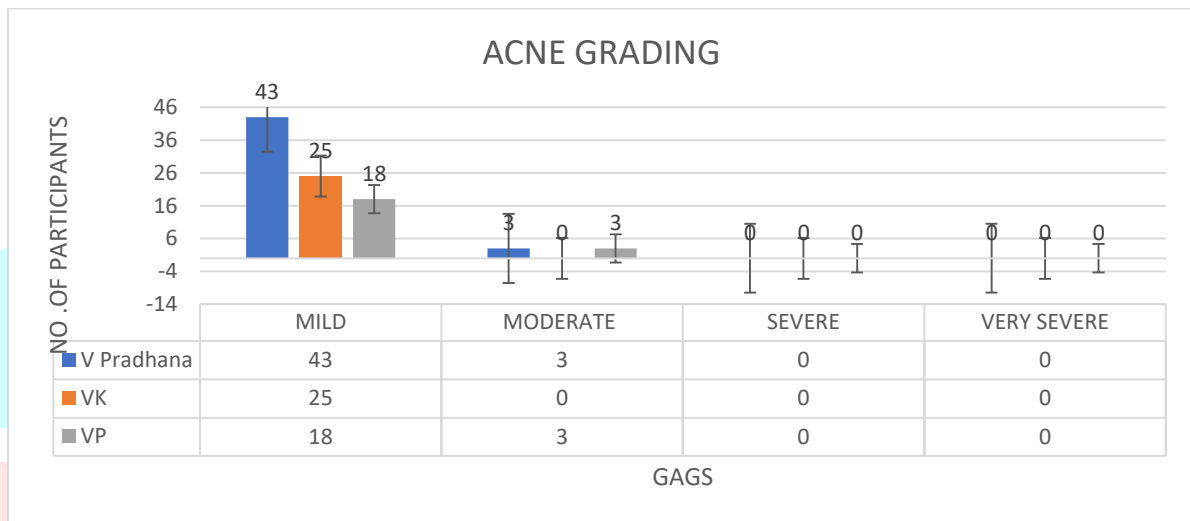


Chart no 9 : Distribution of volunteers according to Vata Pradhana Prakruti in comparison on GAGS.

Correlation for all subjects (n=200)

Table No.2 : Showing the correlation value.

Variables		Skin type assessment	GAGS
Vata	ρ	-0.387	-0.306
	P value	<0.001	<0.001
Pitta	ρ	-0.098	0.026
	P value	0.169	0.717
Kapha	ρ	0.511	0.358
	P value	<0.001	<0.001
Skin type assessment	ρ	1	0.537
	P value	NA	<0.001

Among 200 sample size there is Moderate correlation between Twak Snigdhatta and acne grading.

Interpretation based on Correlation coefficient(ρ):

-0.3 to 0.3 No correlation

+/- 0.3 to 0.5 Mild correlation

+/- 0.5 to 0.75 Moderate correlation

Above +/- 0.75 Good correlation.

Out of 200 volunteers, *Vata Pradhana Prakruti* volunteers are showing highly significant co-relation with *Twak Snigdghata* and GAGS with having p value less than 0.001. *Pitta Pradhana Prakruti* volunteers are not showing significant co-relation with *Twak Snigdghata* and GAGS with having p value 0.169, 0.717 respectively. *Kapha Pradhana Prakruti* volunteers are showing highly significant co-relation with *Twak Snigdghata* and GAGS with having p value less than 0.001.

Table No.3: Showing the Chi-Square result between *Twak Snigdghata* and *Prakruti*.

	OILY	DRY	Row Totals
<i>KAPHA</i>	89 (74.67) [2.75]	20 (34.34) [5.98]	109
<i>PITTA</i>	28 (30.82) [0.26]	17 (14.18) [0.56]	45
<i>VATA</i>	20 (31.51) [4.20]	26 (14.49) [9.14]	46
Column Totals	137	63	200 (Grand Total)

Significant value	0.05
DF	2
X ²	22.90626424
P- Value	<0.001
critical value	5.991464547

The chi-square statistic is 22.90. The p-value < 0.001. The result is significant at $p < .05$.

Table No.4: Showing the Chi-Square result between between GAGS and *Twak Snigdghata*.

	MILD	MODERATE	ROW TOTALS
OILY	108 (115.08) [0.44]	29 (21.92) [2.29]	137
DRY	60 (52.92) [0.95]	3 (10.08) [4.97]	63
COLUMN TOTALS	168	32	200 (GRAND TOTAL)

The chi-square statistic is 8.6424. The p-value is .003284. The result is significant at $p < .05$.

DISCUSSION

❖ Relation between *Prakruti* and *Twak Snigdghata*.

Acc to *Acharya Charaka* he as mentioned about the *Snigdghata* in various explanation one among them is *Prakruti*. *Prakruti* or physical constitution of foetus is determined by the following factors.

- *Shukra* and *Shonitha*
- *Kala* and *Garbhashaya*
- *Matruja Ahara Vihara*
- *Mahabhutaja Vikara*.

Kaphaja Prakruti individuals presents with physical characteristics one among them is *Twak Snigdhatata*, as *Kapha Dosha* dominance is seen in them. Reason behind this is *Guna* of *Kapha Dosha* those are as follows, *Snigdhatata* – oily, unctuous, *Sheeta* – cold, *Guru* – heavy, *Manda* – mild, viscous, *Shlakshna* – smooth, clear, *Mrutsna* – slimy, *Sthira* – stability, immobility.

Vata Prakruti individual presents with *Ruksha Twak* because of *Ruksha Laghu Sheetata Dharuna*, *Khara*, *Vishadata* as its *Guna*.

Pitta Prakruti individual presents with *Sasneha* – slightly oily, unctuous, *Teekshna* – piercing, entering deep tissues, *Ushna* – hotness, *Laghu* – lightness, *Visram* – bad smell, *Sara* – having fluidity, movement, *Drava* – liquidity as its *Guna*.

❖ *Mahabhuta* and *Twak Snigdhatata*.

In *Ayurveda*, the concept of *Panchamahabhutas* is fundamental to understanding the composition of everything, including the human body. The concept states that all matter is composed of five elements: *Prithvi* (earth), *Apya* (water), *Teja* (fire), *Vayu* (air), and *Aakash* (ether or space). These elements combine in different proportions to form the various substances and tissues in the body, including the skin (*Twacha*).

According to *Ayurveda*, the properties, and characteristics of the skin (*Twacha*) are influenced by the predominance of certain *Mahabhutas*:

1. *Prithvi Mahabhuta* (Earth Element): This element is responsible for the gross and stable nature of the skin (*Stula*), its firmness (*Stira*), and its tangible form (*Murtimanta*).
2. *Apya Mahabhuta* (Water Element): The unctuous (*Snigdhatata*), soft (*Mrudu*), and smooth (*Shlakshna*) properties of the skin are attributed to the *Apya Mahabhuta*.
3. *Teja Mahabhuta* (Fire Element): *Teja Mahabhuta* is responsible for the colour or complexion (*Varna*) of the skin.
4. *Vayu Mahabhuta* (Air Element): The sensation of pain, temperature, and pressure experienced through the skin is associated with the *Vayu Mahabhuta*.
5. *Aakash Mahabhuta* (Ether or Space Element): The pores of *Loma* (hair follicles) and *Swedavaha Srotas* (sweat ducts) on the skin are attributed to the *Aakash Mahabhuta*.

Although *Twacha* (skin) is mainly considered to be of *Parthiva* (earth) origin, because of the *panchikarana Siddhanta Prithvi* contribute more for *Snigdhatata* of *Twacha* because of its dominance.

❖ *Twak Snigdhatata* and *Yauvana Pidika*.

The aetiological factors that simulate *Kapha*, *Vata* and *Rakta Dushti*, and vitiation of *Vata* and *Kapha Dosha* which gradually vitiates *Rasaraktaadi Dhaatus*. It may cause abnormality in *Dhaatvaagni* (mainly *Medoagni*) resulting into excessive *Sweda* production (as *Swedamala* of *Medodhatu*), which obstructs the hair follicle (as *Meda* and *Lomakupa* are the root of *Swedavaha Srotas*) because of the *Snigdhatata* gets increases. Though the *Tarunya Avastha* that is adolescent period is the age for *Shukra Pradurbhava* that is manifestation of *Shukra Dhatu* and *Sharangadhara* has mentioned *Vaktre Snigdhatata* that is unctuousness on face and *Pidika* (boil) formation on face as *Mala* of *Shukra Dhatu*. Thus, here *Sanga* type of *Srotodushti* takes place and its manifestation is *Yauvana Pidika*.

Acne is a multifactorial skin condition, and several concurrent events play a crucial role in its development:

1. Increased Sebum Excretion: Acne is often associated with increased sebum production by the sebaceous glands. Sebum, an oily substance, plays a role in providing lubrication to the skin. However, excessive sebum production can contribute to clogged pores and acne lesions.
2. Alteration of Lipid Composition: Changes in the lipid composition of the skin surface can impact the skin's barrier function. An altered lipid composition can lead to increased vulnerability to environmental factors and bacterial colonization, potentially exacerbating acne.
3. Oxidant/Antioxidant Imbalance: An imbalance between oxidants (reactive oxygen species) and antioxidants in the skin can lead to oxidative stress. Oxidative stress can cause damage to skin cells and tissues and is linked to inflammation, which can worsen acne.

When sebum production is increased, it can mix with dead skin cells and other debris, leading to the formation of comedones (clogged pores). In some cases, this sebum can interfere with the normal process of follicular keratinization in the pilosebaceous unit, resulting in the formation of microcomedones. If these microcomedones progress and become blocked, it can create an environment conducive to the growth of *Propionibacterium acnes* (*P. acnes*), a bacterium that resides in the hair follicles. *P. acnes* can further contribute to inflammation and the development of inflammatory acne lesions, such as papules, pustules, and nodules.

CONCLUSION

- ❖ In the present study, based on the data analysis, it can be concluded that in people between the age group of 16-25 years, there exist statistically highly significant relation between *Twak snigdhatta* and *Yauvana Pidika* with P value < 0.001.
As per observations, *Kapha Pradhana Prakruti* and *Pitta Pradhana Prakruti* individuals presented with Oily skin type, Majority exhibited with mild grade of acne and all the four gradings of acne are also observed. where as in *Vata Pradhana Prakruti* individuals, Dry skin type is exhibited, Only mild and moderate grade of acne is observed. There is no observation found in severe and very severe type of acne grading.
- ❖ Finally, this study has contributed to the knowledge that *Twak Snigdhatta* of an individual is having relationship with *Yauvana Pidika*.

REFERENCE

1. Acharya Kasyapa, Kasyapa Samhitha, Edited by Prof. P. V. Tewari, Chaukhamba viswabharathi, Varanasi, Reprint edition - 2008, Suthra Sthana 28/7; Pp: 77.
2. Dorland, Dorland's illustrated Medical Dictionary, Saunders Elsevier publication, Philadelphia, 31st edition, Pp: 2175, Pg.No: 19
3. Bmj.com/best practice/monograph/101/basics/epidemiology.html.
4. Kilkenny, Mmerlin K Plunkett, A Marks R, The prevalence of common skin conditions in Australian school studies, 3 acne vulgaris, BRJ Dermatol 1998, 139840-845 Pubmed/Article.
5. Yogaratnakara, edited and English translation by Dr. Madham Shetty, Suresh Babu, Chaukhamba Sanskrit series office, Varanasi, 1st edition, 2008.
6. Acharya Vagbhatta, Ashtanga Hrdhayam, with Sarvanga Sundara Arunadatha Commentary and Ayurvedarasayana Hemadri Commentary, Edited by Bhishagacharya Harishastri Paradakara Vaidya, Chaukhamba orientalia, Varanasi, 9th edition, 2005, Uttara Sthana 31/5 Pp: 888.
7. Acharya Vagbhatta, Asthanga Hrudaya with Sarvanga Sundara Arundatta Commentary and Ayurveda Rasayana Hemadri, edited by Harisadashiva Shastri Paradakara Chaukhamba Surabhatri Prakashan, Varanasi Reprint -2009, Suthra sthana 1/9, PP.8.
8. Agnivesha, charaka samhita translated by Dr. Ram karan sharma and vaidhya bhagwan dash, vol 2, Chowkhamba Krishnadas Acadamy, Varanasi, 2003, vimana sthana 8/97, PP:264.
9. Alshammari. F.F, alshammari. Rasha, and alshammari.K.S, epidemiology of acne vulgaris & among adolescents & young adults in hail, kingdom of saudi arabia: a community based study: published on 2020 jul 19 PMID: 32821620.
10. Agnivesha, charaka samhita translated by Dr. Ram karan sharma and vaidhya bhagwan dash, vol 2, Chowkhamba Krishnadas Acadamy, Varanasi, 2003, vimana sthana 8/97, PP:264.