



Cross-Sectional Study to Understand the Association of *Anguli Pramana* and *Prakruti* with Special Reference to *BAHU*

Shyny Thankachan^{1*}, Kulkarni BG², Dayana H³, Pradeep Dhavale⁴

1. PhD Scholar, Dept of Rachana Shareera, Parul Institute of Ayurved, Parul University, Vadodara, Gujarat, India
2. Professor & H.O.D., Dept. of Rachana Shareera, Parul Institute of Ayurved & Research, Vadodara, Gujarat, India.
3. PhD Scholar, Dept of Rachana Shareera, Parul Institute of Ayurved, Parul University, Vadodara, Gujarat, India
4. Professor & H.O.D., Dept of Kaya Chikitsa, Dr. N. A. Magdum Ayurvedic Medical College, Hospital & Research center, Ankali, Karnataka, India.

Correspondence Email: drshynyayur@gmail.com

ABSTRACT

Ayurvedic acharyas described gloriously about human constitutions. As early as 1000 B.C Charaka and Susruta made detailed study on Anguli pramana shareera; later Vagbhata rearranged their perception. Anguli pramana: is a relative unit to denote length, breadth & circumference. Swaanguli (One's own finger measurement is being used for the measurement of various angapratyangas (body parts and sub parts) of an individual. Pramana Shareera is considered in modern science as Anthropometry or physical Anthropology. This is being used to assess height, age, etc physical measurement. In Ayurveda, the strength, life spans etc of an individual can also being assessed by Pramana Shareera. Prakruti is a group of characters inherited by an individual depending on predominance of dosha prevailing at the time of conception. Charaka has included both prakruti and pramana among ten folds of examinations which guides us not only about physical built but also the mental built. Both Pramana and Prakruti give an idea of the physic of a person and help to become aware of Vyadhi and predicting prognosis of a disease. There by helps in the plan of line of treatment. Thus contribute to the personalized approach. In this study the parameter taken as the width of Madhyamaparva of Madhyamanguli was conforming in all 100 subjects. This study has found that the Pramana of 100 subjects corresponds to textual description in Kapha Prakruti. The findings of the study vary from the textual description in case of Vata & Pitta Prakruti. The study also confer the length of the Bahu was more in Kapha Prakruti. And satisfies the criteria of Pralamba Bahu in Kapha Prakruti.

Keywords: *Anguli pramana, Swaanguli, Pramana Shareera, Prakruti, Bahu, Pralamba Bahu, Anthropometry*

Received 12.11.2022

Revised 22.01.2023

Accepted 27.01.2023

INTRODUCTION

Ayurvedic acharyas described gloriously about human constitutions. As early as 1000 B.C Charaka and Susruta made detailed study on Anguli pramana shareera; later Vagbhata rearranged their perception. Anguli pramana is a relative unit to denote length, breadth & circumference. Swaanguli(One's own finger measurement is being used for the measurement of various angapratyangas(body parts and sub parts) of an individual.Pramana Shareera is considered in modern science as Anthropometry or physical Anthropology. This is being used to assess height, age, etc physical measurement [1]. In Ayurveda, the strength, life span etc of an individual also can be assessed by Pramana Shareera [2]. The unit measurement of the body parts and structures is Anguli(finger breadth)[3]. Susrutacharya suggests that, for an Atura, the physician has to examine many things including Ritu, Agni, Vaya, Deha, Bala, Satva, Satmya, Prakruti, Bheshaja & Desha[4] before starting a treatment. For the examination of Ayu, Anguli Pramana is one of the criteria[5].

Prakruti is the physical and mental peculiarities acquired by birth depending on predominance of dosha prevailing at the time of conception which remains with him or her throughout the life. According to the nature of prakruti the built of the person also varies. Both Prakruti and Pramana is included among ten folds of examinations by Charakacharya, which steer us to the physical built and the mental built of an individual[6]. This knowledge helps to become aware of Vyadhi and predicting prognosis of a disease.

Anguli pramana: is a relative unit to denote length, breadth & circumference. Angula can be taken as Width of Madhyama Parva of Madhyamanguli [7]. Distance between proximal & distal inter phalangeal joints [7] of Madhyamanguli Nakhatalabhaga of Angushta[8].

TERMS USED IN UPPER LIMB;

Bahu term is used to denote two different meaning in different contexts.

1. As upper arm- In the context of Anga-pratyangai, it is considered as upper arm region[9].

2. As upper extremity- where as in the context of Shadangas[10], & also in context of certain diseases like Visvachi[11], Ardhita[12], Avabahuka[13], Bahu is refers to upper extremity, which is below Kaksha (arm pit) up to the tip of the middle finger[10] Prabahu is the region between Amsa & Kaphoni (elbow)[14]. Prapani is the part below the Kaphoni[15]

OBJECTIVES

A) Determination of stature with Anguli Pramana of Bahu.

B) Assessment of Prakruti.

C) To find out the relation of Anguli Pramana of Bahu with Prakruti.

D) To evaluate the relevance of Pramana Shareera from ancient literature in context with modern Anthropometry.

MATERIAL AND METHODS

For the present study it is decided to take minimum of 100 apparently healthy individuals. The Prakruti is assessed & then the Pramana have been analyzed

ASSESSMENT CRITERIA

FINGER BREADTH

Width of Madhyama Parva of Madhyamanguli or Width of proximal Inter-phalangeal joint of middle finger. Distance between proximal & distal Inter phalangeal joint of middle finger or length of middle phalanges of middle finger. Nakhatalabhaga of Angushta- breadth of nail surface of thumb

INCLUSION CRITERIA

Healthy individuals of different Prakruti's ranging from 25-45 years are considered in this study.

EXCLUSION CRITERIA

Individuals with congenital deformities, Fractures, pathological changes pertaining to upper extremity were excluded.

MEASUREMENTS-

UPPER LIMB

a) Total arm length -

The distance from acromiale to the tip of the longest finger

Acromiale: The most lateral point on the superior surface of the acromion

b) Brachium -

It is the straight distance between acromion & radiale

Radiale : The centre of the notch between the head of the radius & the lateral epicondyle of the Humerus

c) Forearm -

It is the straight distance between radiale & stylium. In order to locate the landmark of the arm should be aligned in the supine position as far as possible and measurements are taken.

Stylium : The most distal point on the radius

d) Hand -

It measured from stylium to the tip of the middle finger parallel to the axis of the finger. While taking the measurement the palm should be extended and arm should be in hanging position.

e) Fingers -

From Metacarpophalangeal joint to the tip of the each finger is measured

STATURE:-

a) It is measured from heel to the vertex.

Subject stands erect, heels together, eyes straight ahead. Measurement is taken at vertex with hair compressed.

b) It is measured from the tip of the toe to the tip of the middle finger, when the person stands on his toes & hands are raised.

ARM SPAN-

It is measured between tips of the two middle fingers when arms are stretched.

The study was conducted on about 100 volunteers in the age group of 25-45yrs. Prakruti was of first parameter which was assessed. The characteristic features of that each Prakruti manifest were individually appraised. If a person satisfies about 60% of the criteria of a Prakruti is considered as Ekadoshaja Prakruti. Only Ekadoshaja Prakruti was considered in this study. From whom the

measurements were collected. Total length of Bahu was considered initially, and then the individual measurements of each parts of Bahu were taken. Measurements were taken from the left side of the body. The measurements were taken in centimeters for standardization as per metric system & then converted into Anguli Pramana based on Swa-Anguli Pramana according to three references mentioned in the classics such as, Anguli Pramana as width of Madhyamaparva of middle finger, distances between proximal & distal Interphalangeal joints & length of thumb nail of an individual. Prakruti of the individual is assessed on the basis of the individual Prakruti characters told in the Charaka Samhita.

ASSESSMENT CRITERIA FOR DETERMINATION OF SCORES:

The Prakruti assessment proforma contained questions related to the characters which are to be responded by the individual patients as well as observed by the questioner. If the response is positive, it received a score (rate) of +1, if the response was negative, it was given 0. Wavering and uncertain responses were not entertained.

RESULT

KAPHA PRAKRUTI

Anguli

A) Width of proximal Inter phalangeal joint of middle finger (width of middle phalanges of middle finger) varies from 2.200-1.850cm with the mean 1.993cm & SD 0.0884cm.

B) Distance between the proximal & distal Inter phalangeal joints of the middle finger (Length of middle phalanges of middle finger) varies from 2.500-2.000cm with the mean 2.177cm & SD 0.119cm.

C) Length of Angushta Nakhatalabhaga varies from 2.000-1.700cm with the mean 1.853cm & SD 0.0876 cm.

Height

A) It varies from 85.480-82.880 angula with the mean 84.070 & SD 0.872 angula.

B) It varies from 81.060-74.000 angula with the mean 67.189 & SD 1.785 angula.

C) It varies from 94.028-85.005 angula with the mean 87.438 & SD 2.317 angula.

Height with arm rise

A) It varies from 122.600-116.010 angula with the mean 119.368 & SD 2.144 angula.

B) It varies from 116.720- 99.000 angula with the mean 107.013 & SD 4.151 angula.

C) It varies from 135.350-118.980 angula with the mean 125.618 & SD 4.169 angula.

Arm span

A) It varies from 85.010-82.090 angula with the mean 83.821 & SD 0.926 angula.

B) It varies from 82.250-72.940 angula with the mean 77.823 & SD 2.486 angula.

A) It varies from 98.820-85.640 angula with the mean 88.550 & SD 3.287 angula.

Bahu

A) It varies from 39.495-33.070 angula with the mean 38.065 & SD 1.623 angula.

B) It varies from 33.010-30.530 angula with the mean 34.103 & SD 0.694 angula.

C) It varies from 40.730-33.720 angula with the mean 38.455 & SD 1.928 angula.

Prabahu

A) It varies from 18.050-15.500 angula with the mean 18.534 & SD 0.740 angula.

B) It varies from 15.880-14.520 angula with the mean 15.131 & SD 0.407 angula.

C) It varies from 19.850-15.890 angula with the mean 19.786 & SD 0.905 angula

Hasta

A) It varies from 23.100-18.250 angula with the mean 23.751 & SD 1.480angula.

B) It varies from 20.320-17.380 angula with the mean 19.933 & SD 0.962angula.

C) It varies from 25.410-18.710 angula with the mean 24.364 & SD 1.656angula.

Prapani

A) It varies from 16.010-13.200 angula with the mean 15.088 & SD 0.811angula.

B) It varies from 14.410-12.570 angula with the mean 13.802 & SD 0.479angula.

C) It varies from 17.600-13.530 angula with the mean 16.203 & SD 0.976angula

PITTA PRAKRUTI

Anguli

A) Width of proximal Inter phalangeal jointof middle finger (width of middle phalanges of middle finger) varies from 2.000-1.700cm with the mean 1.857cm & SD0.0799cm.

B) Distance between the proximal & distal Inter phalangeal joints of the middle finger (length of middle phalanges of middle finger) varies from 2.150-1.850cm with the mean 1.967cm & SD 0.0748cm.

C) Length of Angushta Nakhatalabhaga varies from 1.950-1.700cm with the mean 1.823cm & SD 0.0623 cm.

Height

- A) It varies from 85.010-80.600 angula with the mean 83.107 & SD 1.350 angula.
B) It varies from 84.400-72.560 angula with the mean 76.468 & SD 2.989 angula.
C) It varies from 88.960-80.600 angula with the mean 84.618 & SD 2.415 angula.
- Height with arm rise
A) It varies from 119.890-115.050 angula with the mean 117.407 & SD 1.690 angula.
B) It varies from 119.600-112.520 angula with the mean 104.202 & SD 2.975 angula.
C) It varies from 126.060-115.050 angula with the mean 119.542 & SD 3.316 angula.
- Arm span
A) It varies from 84.940-81.000 angula with the mean 81.955 & SD 1.086 angula.
B) It varies from 83.760-72.750 angula with the mean 76.039 & SD 2.821 angula.
C) It varies from 88.280-81.000 angula with the mean 84.149 & SD 2.279 angula.
- Bahu
A) It varies from 38.050-32.044 angula with the mean 34.992 & SD 1.438 angula.
B) It varies from 35.390-29.230 angula with the mean 32.100 & SD 1.774 angula.
C) It varies from 39.020-32.044 angula with the mean 34.612 & SD 1.733 angula.
- Prabahu
A) It varies from 16.050 - 13.600 angula with the mean 14.947 & SD 0.82 angula.
B) It varies from 16.000 - 12.520 angula with the mean 14.123 & SD 1.02 angula.
C) It varies from 16.860 - 13.600 angula with the mean 15.217 & SD 0.94 angula.
- Hasta
A) It varies from 22.100-17.320 angula with the mean 21.356 & SD 1.571 angula.
B) It varies from 21.480-16.010 angula with the mean 19.336 & SD 1.783 angula.
C) It varies from 22.660-17.320 angula with the mean 21.702 & SD 1.697 angula.
- Prapani
A) It varies from 16.980-12.130 angula with the mean 13.987 & SD 1.411 angula.
B) It varies from 15.790-11.222 angula with the mean 13.210 & SD 1.458 angula.
C) It varies from 17.410-12.130 angula with the mean 14.243 & SD 1.519 angula.

VATA PRAKRUTI

Anguli

- A) Width of proximal Inter phalangeal joint of middle finger (width of middle phalanges of middle finger) varies from 2.200 - 1.850cm with the mean 2.037 cm & SD 0.108cm.
B) Distance between the proximal & distal Inter phalangeal joints of the middle finger varies (length of middle phalanges of middle finger from 2.700 - 2.000cm with the mean 2.253cm & SD 0.175cm.
C) Length of Angushta Nakhatalabhaga varies from 2.100 - 1.800cm with the mean 1.967cm & SD 0.113cm.

Height

- A) It varies from 87.250-83.090 angula with the mean 85.889 & SD 1.291 angula.
B) It varies from 82.540-67.250 angula with the mean 77.784 & SD 4.211 angula.
C) It varies from 97.480-80.950 angula with the mean 89.092 & SD 4.368 angula.

Height with arm rose

- A) It varies from 123.550-116.450 angula with the mean 121.339 & SD 2.275 angula.
B) It varies from 116.690-96.090 angula with the mean 109.931 & SD 5.963 angula.
C) It varies from 138.050-113.460 angula with the mean 128.817 & SD 6.374 angula.

Arm span

- A) It varies from 86.990-83.400 angula with the mean 84.947 & SD 1.097 angula.
B) It varies from 86.990-72.560 angula with the mean 78.247 & SD 3.709 angula.
C) It varies from 95.920-67.650 angula with the mean 90.629 & SD 6.610 angula.

Bahu

- A) It varies from 38.050-34.580 angula with the mean 37.400 & SD 1.104 angula.
B) It varies from 36.310-28.030 angula with the mean 33.809 & SD 2.380 angula.
C) It varies from 40.610-34.750 angula with the mean 38.407 & SD 1.887 angula.

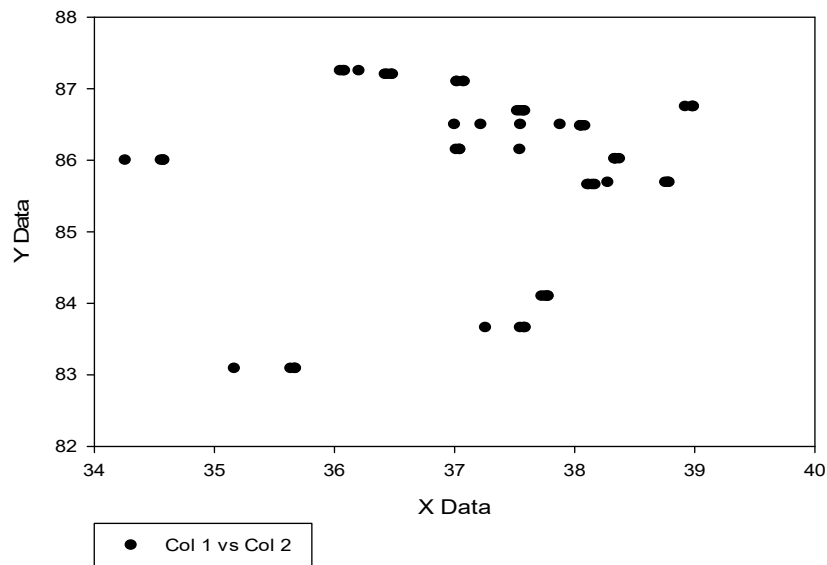
Prabahu

- A) It varies from 18.830-16.000 angula with the mean 17.360 & SD 0.638 angula.
B) It varies from 17.620-13.900 angula with the mean 15.807 & SD 0.869 angula.
C) It varies from 21.300-16.600 angula with the mean 19.948 & SD 1.086 angula.

Hasta

- A) It varies from 23.660-19.310 angula with the mean 22.239 & SD 1.331 angula.
B) It varies from 21.890-17.550 angula with the mean 20.189 & SD 1.501 angula.
C) It varies from 25.450-19.310 angula with the mean 22.961 & SD 1.887 angula.

Fig No 3 : Vata Prakruti
2D Graph 1



COMPARISON WITH ANCIENT LITERATURE

a) PRALAMBA BAHU

A. In Kapha Prakruti Bahu measurement varies from 39.495-33.070 Angula with the mean 38.065 & SD 1.623 Angula.

B. In Pitta Prakruti Bahu measurements varies from 38.050 -32.044 Angula with the mean 34.992 & SD 1.438 Angula.

C. In Vata Prakruti Bahu measurements varies from 38.050 - 34.580 Angula with the mean 37.400 & SD 1.104 Angula.

b) SAMA-AYAMA VISTARA

KAPHA PRAKRUTI

A) Ayama varies from 85.480-82.880 Angula with the mean 84.070 & SD 0.872 Angula.

B) Vistara varies from 85.010-82.090 Angula with the mean 83.821 & SD 0.926 Angula.

t-TEST

t = 0.759 with 28 degrees of freedom. (P = 0.454)

95 percent confidence interval for difference of means: -0.423 to 0.922

The difference in the mean values of the two groups is not great enough to reject the possibility that the difference is due to random sampling variability. There is not a statistically significant difference between the input groups (P = 0.454).

Pitta Prakruti

A.) Ayama varies from 85.010 - 80.600 Angula with the mean 83.107 & SD 1.350 Angula.

B.) Vistara varies from 84.940-81.000 Angula with the mean 81.955 & SD 1.086 Angula.

t-test

t = 2.460 with 28 degrees of freedom. (P = 0.020)

95 percent confidence interval for difference of means: 0.193 to 2.111

The difference in the mean values of the two groups is greater than would be expected by chance; there is a statistically significant difference between the input groups (P = 0.020).

VATA PRAKRUTI

A) Ayama varies from 87.250-83.090 Angula with the mean 85.889 & SD 1.291 Angula.

B) Vistara varies from 86.990-83.400 Angula with the mean 84.947 & SD 1.097 Angula.

t-TEST

t = 2.153 with 28 degrees of freedom. (P = 0.040)

95 percent confidence interval for difference of means: 0.0460 to 1.838

The difference in the mean values of the two groups is greater than would be expected by chance; there is a statistically significant difference between the input groups (P = 0.040).

C) TOTAL HT, HT IN TOES & ARM OUT STRETCHED, VISTARA

KAPHA PRAKRUTI

A . Ayama varies from 85.480-82.880 Angula with the mean 84.070 & SD 0.872 Angula

B. Ht when standing in toes & arm raised varies from 122.600-116.010 Angula with the mean 119.368 & SD 2.144 Angula

C . Vistara varies from 85.010-82.090 Angula with the mean 83.821 & SD 0.926 Angula

PITTA PRAKRUTI

A) Ayama varies from 85.010 - 80.600 Angula with the mean 83.107 & SD 1.350 Angula

B) Ht when standing in toes & arm rose varies from 119.890-115.050 Angula with the mean 117.407 & SD 1.690 Angula

C) Vistara varies from 84.940-81.000 Angula with the mean 81.955 & SD 1.086 Angula.

VATA PRAKRUTI

A) Ayama varies from 87.250-83.090 Angula with the mean 85.889 & SD 1.291 Angula.

B) Ht when standing in toes & arm rose varies from 123.550 - 116.450 Angula with the mean 121.339 & SD 2.275 Angula.

C) Vistara varies from 86.990-83.400 Angula with the mean 84.947 & SD 1.097 Angula.

DISCUSSION

On a closer scrutiny it has been observed that the stature is more in Vata Prakruti & less in Pitta Prakruti, where as medium in Kapha Prakruti as per the literature. More over it is observed that among three Parameters of Anguli Pramana, the width of Madhyamanguli seems to be more relevant. Here in this study Vata Prakruti having more height as well as more length of individual measurements of Bahu, where as while taking the circumference of Bahu, the Kapha Prakruti having more measurement. In Pramana Shareera, the Pramana comprises of the height, width, circumference etc. So in Vata Prakruti the height is more but the circumference & other features are not conferring [1-2].

COMPARISON WITH ANCIENT LITERATURE

In the study conducted the parameter height was assessed first. The height is assessed in two ways,

-From heels to vertex.

-Height measured from the tip of toes to the middle finger in a posture in which the person stands on his toes with his arm raised upwards.

In both cases also the height was maximum in persons with Vata Prakruti, less in Pitta Prakruti individual & closer in Kapha Prakruti in comparison with measurements explained in classics. The length of the Bahu was more in Kapha Prakruti, and then come Vata followed by individuals of Pitta. Among the individual measurements of Bahu, the length from the olecranon to the tip of the middle finger is higher in Kapha Prakruti, tracked by Vata Prakruti & Pitta Prakruti. Other individual measurements of Bahu seemed to be greater in Vata Prakruti, then Kapha pursued by Pitta Prakruti individuals. Here it satisfies the criteria of Pralamba Bahu in Kapha Prakruti [3-4]. While adding the individual measurement to get the total measurement of Bahu it was observed greater than the total measurement of Bahu which is taken from the corocoid process to the tip of the middle finger. The reason may be the individual measurement being added for overtraining the total length of the extremity will differ because the structures will be submerging in the extremity. Both observations & classical points coincide here [5-6].

The total height as well as individual measurements of Bahu of persons included in this study was distinguished more in Vata Prakruti. The measure of total height is nearest to classical measurements in case of Kapha Prakruti, where it is increased in Vata Prakruti & decreased in Pitta Prakruti. This satisfies the classical reference that the Vata Prakruti is Deergha Kaya [7-8]. Sama Ayamavistara cannot be explainable. But interpretation given by Chakrapani, which is the length between the tips of extended upper extremity, is being noticed in the Kapha Prakruti people [9-10]. Though there is no significant difference between the measurements of Kapha, Pitta & Vata Prakruti, Kapha Prakruti people have measurements closer to those explained in the classics. With the help of statistical study we can prove that Kapha Prakruti peoples have measurements nearer to what is told in classics. Thus whether these confer to the concept of Suvi bhakta Gatra [11-15].

CONCLUSION

Prakruti & Pramana formed two relevant aspects in the study of the structural & functional make up of human body. Prakruti helps to determine the general built & character of an individual where as Pramana gives an idea of the stature. Both are important in detecting Vyadhi & predicting prognosis of a disease in addition to planning treatment accordingly. The characteristic features of each Prakruti assessed during the study conducted are found to have been in concurrence with those mentioned in the classics.

The Anguli is subjected to different versions of the authors. However the parameter taken as the width of Madhyamaparva of Madhyamanguli was conforming in all 100 subjects.

This study has found that the Pramana of 100 subjects corresponds to textual description in Kapha Prakruti. The findings of the study vary from the textual description in case of Vata & Pitta Prakruti. Standardization of Anguli Pramana in all three Prakruti's may oppose the fundamentals of Ayurveda which considers each human being as a distinct entity. Though standardization is not possible, the population can be organized into seven homogenous groups of Prakruti's. Further studies with large sample size may be required for a better understanding of Ayurvedic Anguli Pramana in relation to Prakruti.

REFERENCES

1. Pheasant, S. (1998). Bodyspace anthropometry, ergonomics, and the design of work Taylor & Francis Ltd..
2. Agnivesha, C. S. (2001). Revised by Charaka and Dridhabala with Sri Chakrapanidatta Ayurvedadipika Commentary in Sanskrit edited by Vaidya Jadhavji Trikamji Acharya. *Choukambha Sanskrit Sansthan, Varanasi, Vth Edition, 279.*
3. Acharya Sushruta, S. S. with Nibandhasangraha Commentary of Sri Dalhana Acharya, edited by Vaidya Jadavji Trikamji Acharya, Chaukhambha Orientalia, Varanasi, Pp-824, 150.
4. Acharya Sushruta, S. S. with Nibandhasangraha Commentary of Sri Dalhana Acharya, edited by Vaidya Jadavji Trikamji Acharya, Chaukhambha Orientalia, Varanasi, Pp-824, 148.
5. Acharya Sushruta, S. S. with Nibandhasangraha Commentary of Sri Dalhana Acharya, edited by Vaidya Jadavji Trikamji Acharya, Chaukhambha Orientalia, Varanasi, Pp-824, 150.
6. Agnivesha, C. S. (2001). revised by Charaka and Dridhabala with Sri Chakrapanidatta Ayurvedadipika Commentary in Sanskrit edited by Vaidya Jadhavji Trikamji Acharya. *Choukambha Sanskrit Sansthan, Varanasi, Vth Edition, 262.*
7. Thankachan, S., & Dayana, H. Paryeshana International Journal of Ayurvedic Reserach. Ayurvedacharya Venimadhava Shastri JoShi & Ayurvedavisarada Narayanahari JoShi, Ayurvediya Mahakosha or Ayurvediya Sabdakosha, Samskruta-Samskruta Pradhamakhanda, 1968, Maharashtra rajya sahitya ani samskruti Mandala, Pp-975, P No- 10
8. Thankachan, S., & Dayana, H. Paryeshana International Journal of Ayurvedic Reserach. Ayurvedacharya Venimadhava Shastri JoShi & Ayurvedavisarada Narayanahari JoShi, Ayurvediya Mahakosha or Ayurvediya Sabdakosha, Samskruta-Samskruta Pradhamakhanda, 1968, Maharashtra rajya sahitya ani samskruti Mandala, Pp-975, P No- 10
9. Acharya Sushruta, S. S. with Nibandhasangraha Commentary of Sri Dalhana Acharya, edited by Vaidya Jadavji Trikamji Acharya, Chaukhambha Orientalia, Varanasi, Pp-824, 363.
10. Agnivesha, C. S. (2001). revised by Charaka and Dridhabala with Sri Chakrapanidatta Ayurvedadipika Commentary in Sanskrit edited by Vaidya Jadhavji Trikamji Acharya. *Choukambha Sanskrit Sansthan, Varanasi, Vth Edition, 279.*
11. Acharya Sushruta, S. S. with Nibandhasangraha Commentary of Sri Dalhana Acharya, edited by Vaidya Jadavji Trikamji Acharya, Chaukhambha Orientalia, Varanasi, Pp-824, 268.
12. Agnivesha, C. S. (2001). revised by Charaka and Dridhabala with Sri Chakrapanidatta Ayurvedadipika Commentary in Sanskrit edited by Vaidya Jadhavji Trikamji Acharya. *Choukambha Sanskrit Sansthan, Varanasi, Vth Edition, 618.*
13. Paradakara, H. (2002). Vagbhata. Ashtanga Hridaya (Commentaries of Ayurveda Rasayana by Hemadri and Sarvanga Sundari by Arunadatta.). Varanasi. *Chaukhamba Publications, Nidana Sthanam, 534.*
14. Agnivesha, C. S. (2001). revised by Charaka and Dridhabala with Sri Chakrapanidatta Ayurvedadipika Commentary in Sanskrit edited by Vaidya Jadhavji Trikamji Acharya. *Choukambha Sanskrit Sansthan, Varanasi, Vth Edition, 279.*
15. Agnivesha, C. S. (2001). revised by Charaka and Dridhabala with Sri Chakrapanidatta Ayurvedadipika Commentary in Sanskrit edited by Vaidya Jadhavji Trikamji Acharya. *Choukambha Sanskrit Sansthan, Varanasi, Vth Edition, 279.*

CITATION OF THIS ARTICLE

Shyny Thankachan, Kulkarni BG, Dayana H, Pradeep Dhavale. Cross-Sectional Study to Understand the Association of *Anguli Pramana* and *Prakruti* with Special Reference to *BAHU*. Bull. Env. Pharmacol. Life Sci., Vol 12[3] February 2023 : 13-20.