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# MENTAL DEFORMITY INDIVIDUALS WITH LOW IQ AND ITS RELATION WITH SAMA AYAM VISTARA

Bhoir Uday B<sup>1</sup>, Kamble Pushpalata<sup>2</sup>, Umesh Ghate<sup>3</sup>

<sup>1</sup>Associate Professor, <sup>2</sup>Ex Professor & HOD,

Department of Rachana Sharir, College of Ayurved, Bharati Vidyapeeth Deemed to be University,

Pune-43., Maharashtra, India

<sup>3</sup>Assistance Professor, Department of Kriya Sharir (Physiology), College of Ayurved,

Bharati Vidyapeeth Deemed to be University, Pune, Maharashtra, India

Email: <u>ubb786@rediffmail.com</u>

#### **ABSTRACT**

Anguli pramana is one of the type of measurement used in Ayurveda for measuring the dimensions like Ayama (height), Vistara (Length from the tip of middle finger of right hand to the same of left hand in expanded position i.e. arm span), etc. of different parts and sub-parts of human body According to hypothesis about 'Sama Ayam-Vistara given in Charak-samhita Viman-sthana 8/118, in healthy person, Ayu (longevity of life), Bala (Physical & Mental - Strength) etc. are best at its maximum if difference in Ayam & Vistara is less, whereas the difference in Ayam & Vistara increases or decreases, Ayu & Bala will be more or less respectively. In this research project scholar has elaborated the relation of Sama Ayam-Vistara with mental deformity as an unhealthy status of a person, whereas congenital / developmental mental deformity with low IQ were considered. The statistical analysis illustrates that the average difference between Ayam & Vistara in Mental deformity individuals lies approximate 2 to 4 angula (2.93 angula). The outcome of the research project shows the considerable association between mental deformity individuals and difference between Ayam and Vistara. So the concept of 'Sama Ayam-Vistara' helps us to give an idea about the Healthy or Unhealthy status of an individual at its best.

Keywords: Sama Ayam-Vistara, Mental deformity relation.

# INTRODUCTION

In Sushrut samhita, Sushrutacharya has elaborated the concept of *pramanvat sharir* and its relation with good health as well as longevity of life. On the basis of same concept Charakacharya has explained the concept of Sama Ayam-Vistara. It was observed, whereas difference between Ayama & Vistara lies between 0 to 2 angula then Bala of an individual lies

at its maximum. Whereas the difference between Ayama & Vistara lies between 2 to 4 angula then Bala of an individual lies at its medium and as difference between Ayama & Vistara lies above 4 angula then the Bala of an individual lies at its minimum.

In the present study, the relation of Sama Ayam-vistara with unhealthy persons related with mental deformity was considered. In this also the scholar has taken only congenital/developmental mental deformity individuals to evaluate the hypothesis. The main aim of this research study was an evaluation of Sama Ayam Vistara in mental deformity individuals in relation with low IQ. i.e. how Ayam Vistara varies in mental deformity individuals.

#### **AIMS & OBJECTIVES:**

**Aim:** Evaluate the Sama Ayam Vistara in mental deformity individuals.

**Objectives:** Find out the relation of difference in *Ayam-Vistara* & IQ in the individuals with mental deformity.

# **MATERIALS & METHOD:**

- Individuals of either sex of 25 years to 70 years were considered for the research project.
- Individuals of either sex were taken for the present study.
- Screw gauge micrometer to measure the Swanguli praman of individuals.
- Measuring Tape, Scale to measure the Ayam & Vistara of individuals.
- Case paper proforma for the detail information about Congenital / Developmental mental deformity & the all measurements.

#### **Inclusion criteria:**

- Concern Individuals of Congenital / Developmental mental deformities with low IQ
- Individuals of either sex of 25 years to 70 years.

#### **Exclusion Criteria:**

- Healthy individuals & individuals below 25 years.
- Accidental or traumatic mental deformity.

#### Methodology:

- The detail information of the individuals was taken by information sheets with details of the concern deformity.
- The different measurements as below were recorded:
- 1) Swanguli praman was measured by Screw gauge.

- 2) Ayam was measured by measuring tape.
- 3) Vistara was also measured by measuring tape. The details of all foresaid measurements are furnished as below.

#### 1) Measurement of Swanguli-Praman:

For this measurement length of proximal interphalangeal joint of the middle finger of the hand was considered. As shown in the image below. For this measurement of Swanguli praman right hand was considered in right handed person and left hand in left handed person. The measurement was taken by using Screw gauge micrometer. The reading comes in mm, which is converted into cm and recorded in information sheet.

Fig 1.



 The Ayama & Vistara of the individuals were taken by measuring tape and then readings were recorded with dividing it by Swanguli-praman to convert it in Anguli praman.

# 2) Measurement of Ayam:

For this measurement the Height of a person was considered as shown in following image. The height of a person is measured in cm and converted into Angula.

If the measurement of height is considered as 'H' cm.

Swanguli Praman is considered as 'S', and Ayam is considered as 'A'

Then **Ayam** (A) is equal to:

$$A = \frac{H}{S}$$
 angula

Fig 2. Measurement of Ayam



# 3) Measurement of Vistara:

For this measurement the length from the tip of middle finger of right hand to the same of left hand in expanded position was taken as shown in following image. This measurement (Arm span) was measured in cm and the converted into Angula.

If this measurement is considered as 'B' cm, Swanguli Praman is considered as 'S', and Vistara is considered as 'V'

The Vistara is equal to:

$$V = \frac{B}{S}$$
 angula.

Fig:3 Measurement of Vistara



- After the record of all these measurements the difference between Ayam and Vistara is calculated and recorded on case paper.
- Information about Concern Congenital / Developmental mental deformities with IQ of an individual was recorded in case paper.
- Then all the observations were recorded collectively in different tabulating form.

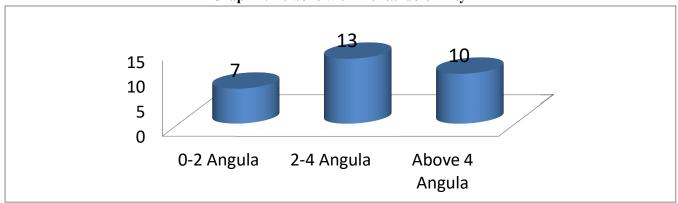
Then all this data is furnished for statistical analysis.

# **OBSERVATIONS & RESULTS:**

**Table 1: Persons with Mental deformity** 

Difference in Ayam & Vistara	Frequency	Percentage
0-2 Angula	7	23.3
2-4 Angula	13	43.3
Above 4 Angula	10	33.3
TOTAL	30	100

**Graph 1: Persons with Mental deformity** 



Difference Total 0-2 Angula 2-4 Angula Above 4 Angula Count 0 2 25-30 6.7% 10.0% 6.7% % .0% Count 30-35 % 20.0% 13.3% 40.0% 23.3% IQ Count 1 3 12 35-40 % 20.0% 53.3% 30.0% 40.0% Count 4 9 3 2 40-45 26.7% 20.0% 23.3% % 60.0% Total 15 10 30 Count 5

Table 2: Association of Difference between Ayam and Visatara with IQ level in Mental Deformity

Graph 2: Association of Difference between Ayam and Visatara with IQ level in Mental Deformity

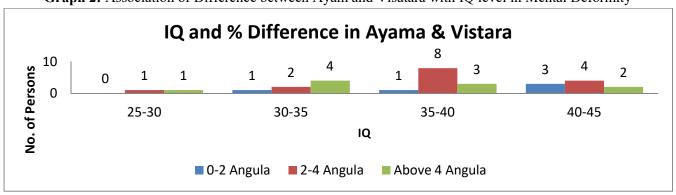


Table no. 3

	Value	Degrees of freedom	P-Value
Pearson Chi-Square	13.917 <sup>a</sup>	8	.084
Likelihood Ratio	11.377	8	.181
Linear-by-Linear Association	4.367	1	.037
N of Valid Cases	30		

Since P-Value is greater than 0.05 hence we conclude that there is no significant association between IQ and Ayam vistara difference.

#### DISCUSSION

The relation of *Sama Ayam-Vistara* in healthy individuals observed whereas the difference between *Ayama & Vistara* lies between 0 to 2 angula then *bala* of an individual lies at its maximum. Whereas the difference between *Ayama & Vistara* lies between 2 to 4 angula, then *bala* of an individual lies at its medium. And as difference between Ayama & Vistara lies Below 4 angula then the *bala* of an individual lies at its minimum. Here bala was considered

as a Sharirik and Mansik Bala (Physical and Mental strenght). In the concern research project the relation of Sama Ayam Vistara & Mansik Bala (Mental strength) has to be considered for the reference. As these results are important and helps to evaluate the concept of Sama Ayam Vistara by comparison and also by all directions.

# The concern research study:

The results of concern research project are seems to be directly proportional to the hypothesis. According to the concept of Sama Ayam-Vistara the difference between the Ayam & Vistara is smaller or negligible in the healthy individuals. Whereas we can say that the individual with approximate equal of Ayam & Vistara is a healthy individual and the individual with greater difference in Ayam & Vistara leads with unhealthy category. Arbitrarily this was considered for the evaluation of the study only. Because the individual with greater difference in Ayam & Vistara may not leads to be unhealthy all times.

The outcome of the concern research project proves the same as it shows the positive association between the type of deformity & difference in *Ayam & Vistara*.

In mental deformity individuals it was observed that

- 1. 23.33% individuals have 0 to 2 *angula* difference between *ayam & vistara*.
- 2. 43.33% individuals have 2 to 4 *angula* difference between *ayam & vistara* and
- 3. 33.33% individuals have difference between *ayam & vistara* as 4 *angula &* above.

The highlighted cases shows the outcome as below

- a. In mental deformity cases the maximum difference between *ayam & vistara* is observed as 6.52 *angula* in case no 75 only.
- b. Overall maximum no of cases has the difference between *ayam & vistara* is 2 to 4 *angula*.
- c. It is also observed that there is no significance association between the difference between *ayam & vistara* and the IQ of individuals.

The analysis of the observations shows the considerable association between type of deformity and difference in *Ayam* and *Vistara*. The outcome of the research projects shows the considerable associations between the Difference in *Ayam-vistara* & mental deformity.

#### CONCLUSION

The statistical evaluation of the results shows that in unhealthy individual, the difference between the *Ayam & vistara* increases as compared to the relation of Ayam & Vistara in healthy individuals.

In unhealthy individuals with congenital / developmental deformities the statistical evaluation shows that the difference between the Ayam & Vistara lies approximate 2 to 4 and above 4 angula. Though there is again variation among the difference between Ayam and Vistara but the difference between Ayam and Vistara lies approximately 2 to 4 angula and above 4 angula.

Whereas from above outcome it proves that, in unhealthy individual with mental deformity the difference between Ayam & Vistara in majority lies approximate 2 to 4 angula and sometime above 4 angula. So we can say that in unhealthy individual with mental deformity the difference between Ayama & Vistara increases and it lies approximately between 2 to 4 angula.

- 1. From chi-square test for association, P-Value is greater than 0.05 hence we conclude that, there is no significant association between *Ayam-Vistara* difference and type of deformity
- 2. It is also observed that, difference between *Ayam and Vistara* is considerable in individuals with mental deformities (in the range 2 to 4 angula)
- 3. There is also a considerable association between *Ayam-Vistara* difference and IQ of individuals with IQ: 30-40 in mental deformity.

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