

**OBSERVATIONAL STUDY OF RESPIRATORY RATE IN DIFFERENT
DEHAPRAKRUTI W.S.R. TO SHWASGATI****Amit Sudhakar Pethkar¹, Rajahamad Ghudulal Jamadar^{2*} and Ashwini Rahul Patil³**¹Professor, Kriya Sharir, ADAMC, Ashta.²Assistant Professor, Kriya Sharir, ADAMC, Ashta.³Associate Professor, Kriya Sharir, ADAMC, AshtaArticle Received on
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Sharir, Adamc, Ashta.**ABSTRACT**

In Ayurveda science Prakruti is described according to predominance of Dosha at the time of conception. Accordingly Charakacharya Explained about the strength of different dosha pradhan Prakruti Kaphapradhan Prakruti persons having Uttambala (good strength), Pittapradhan Prakruti person having Madhyambala and Vata Pradhan Prakruti person having Alpabala. By the virtue of this concept Respiratory rate is to be measured and the difference between the values of respiratory rate is to be compared with the different dehaprakruti i.e. Vatapradhan Prakruti, Pittapradhan Prakruti and Kaphapradhan Prakruti. Shwasgati has explained in Ayurvedic

Literatures as the total count in a whole day i.e. in 24 hours. For that we have selected 55 healthy volunteers irrespective of sex in each dosha pradhan prakruti having the age between 20 years to 50 years. Total 165 volunteers are examined. The readings of respiratory rate are taken and conclusion is drawn.

KEYWORDS: Dehaprakruti, Shwasgati, Respiratory Rate.**INTRODUCTION**

Prakruti is formed at the time of conception according to predominance of Dosha i.e. Vata, Pitta, Kapha and it remains unchanged till death. Every human being on this earth born with some or other physical and mental peculiarities which remains with him or her throughout life i.e. from birth to death. Such features acquired by birth itself are called as Prakruti. Prakruti is a nature or habit or constitutional or existence of a person. It includes many factors like basic physical body builder, daily activities, diet, way of thinking, feelings, etc. Which

are outcome of Swabhav. In the opinion of physician seven kinds of Prakruti are produced by the Vata, Pitta and Kapha separately, by combination of any two and of all the three together whichever the Dosha that becomes predominant at the time of union of Shukra and Shonit, Prakruti gets from that Dosha. Nature has bestowed many favors which are scientific miracles working for a smooth running of human body. One of the Tripods, Utterly essential for the sustenance of the human and plant life is the Pranvayu. Oxygen and other gases present in the atmosphere are very much necessary for the various biological processes like metabolism etc. continuously going on in the body. The Strotas related with the transportation and transfusion of Pranavayu in the human body has been named as Pranavaha Strotas, which is of prime importance for animates. Respiratory system itself is very important system in the body which functions for the transportation of oxygen and carbon dioxide. Similarly cardiovascular system is also very important for life system which transports nutrients and nourishes to whole body and also glucose as material of first order for the life process. Under Ayurvedic concept on Strotoshareera these two systems have been somehow explained under heading of Pranavaha Strotas, under the consideration of the Mulasthan of Pranavaha Strotas. Acharya Charaka has said that Pranavaha Strotasmoolsthana is Hrudaya (heart) and Mahastrota. Acharya Sushrut has presented the moolsthan of Pranavaha Strotas are Hrudaya (heart) and Rasavahi Dhamanies (Blood Vessels). Sharangadharasamhita explains that Prana which is situated in the Nabhi comes to Hrudaya from Hrudaya it goes out to environment through throat to drink the Vishnu Padaamruta or AmbaraPeeyusha, Ambar means sky and Peeyusha means nectar. After taking atmospheric nectar i.e. oxygen, it enters the body again through PranavahaStrotas to nourish the whole body and to stimulate the digestive fire for the proper digestion of food. The Shwasankriya is performed by the help of Pranavayu and Udanavayu in the form of Uchhwas and Nishwas simultaneously. The Udanagati (expiration) and the Pranagati (inspiration) both together form the Shwasagati i.e. complete respiration. In Shatapatha Brahmana told that Prana and Apanavayu are responsible for the respiration and also told the respiration rate which is 21,600 in 24 hours i.e. in a whole day, if we divide it in hours and minutes then 900 / hour and 15 / minute. Individuals having vataj type of constitution are mostly possess of less strength, less span of life, less children, less accessories of life and less wealth. Pittaja type of constitution is endowed with moderate strength, moderate span of life, moderate spiritual and materialistic knowledge, wealth and accessories of life. Person having sleshma type of constitution is endowed with the excellence of strength, wealth, knowledge, energy, peace and longevity.

AIM AND OBJECTIVES

Aim

To study Respiratory Rates in different dehaprakruti.

Objectives

1. To review concepts of dehaprakruti according to Ayurvedic point of view.
2. To assess the Respiratory Rates in different dehaprakruti.

Hypothesis

H1 = There is significant differentiation in Respiratory Rates in Vatapradhana, Pittapradhana and Kaphapradhana Prakruti.

H0 = There is no significant differentiation in Respiratory Rates in Vatapradhana, Pittapradhana and Kaphapradhana Prakruti.

MATERIALS AND METHODS

Materials

1. Screening of Prakruti of 500 populations will be done with the help of standard Prakrutiparikshnapatrika.
2. To select appropriate 55 volunteers each Vatapradhan, Pittapradhan, Kaphapradhanvyakti from the population.
3. Respiratory Rate is to be count.
4. Stethoscope is used to examine the systemic findings

Inclusion criteria

1. Age limit between 20 years to 50 years.
2. Both male and female candidates were selected.
3. Only healthy individuals were selected.

Exclusion criteria

1. Below 20 years volunteers and above 50 years.
2. Suffering from any pulmonary diseases like Asthma, COPD, T.B. Bronchitis, etc.
3. Any other systemic disease.

Methods

1. Prakruti Parikshana is done on percentage base.

2. Respiratory Rates of Vatapradhana, Pittapradhana, and Kaphapradhana Prakrutivyakti is done in proper manner. Callibration of Spirometer is done before each test.
3. Recorded Respiratory Rate values of Vatapradhana, Pittapradhana and Kaphapradhana Prakrutivyakti are analysed and compared with each other.

Study design- Observational study design.

Sample size- 165 volunteers. Accordingly volunteers were divided in 3 groups.

A Group- Vatapradhanaprakruti 55 volunteers.

B Group- Pittapradhanaprakruti 55 volunteers.

C Group- Kaphapradhanaprakruti 55 volunteers.

Sample method- Stratified random sampling method.

Collection of data

Primary data

- a) Data collected from Prakrutiparikshan chart.
- b) Data collected by systemic examination
- c) Data collected from survey.

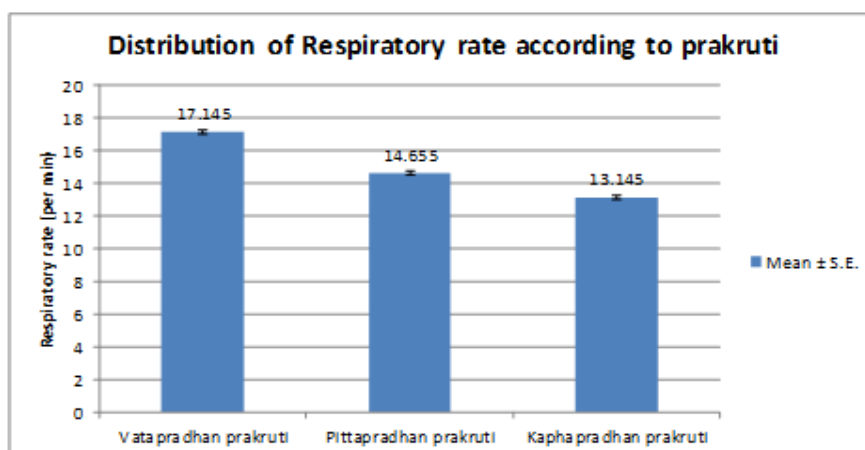
Secondary data- Data collected from Ayurvedicsamhitas, literatures, various books, websites, journals, research papers and articles.

Statistical methods: One way ANOVA TEST has used for comparing mean values of Vatapradhana, Pittapradhana and Kaphapradhanaprakruti group. Results are presented along with summary, statistic mean, standard deviation and graphical methods like bar chart; level of significance was kept at 5 percent.

OBSERVATIONS

Comparisons of measures of different variables

Prakruti Parameters	Vatapradhan		Pittapradhan		Kaphapradhan		F Value	P Value
	Mean	SD	Mean	SD	Mean	SD		
RR	17.145	1.113	14.655	0.865	13.145	1.145	204.1	<0.001



Testing of hypothesis using statistical test

No.	Hypothesis	Test used	F Value	P Value	Level of Significance	Decision
1	H1- Mean Respiratory Rate for at least one group is significantly different	ANOVA	204.1	<0.001	5%	Accepted

RESULTS

1. Respiratory Rate for Vatapradhana Prakruti, Pittapradhana Prakruti group and Kaphapradhan Prakruti group is significantly different. Mean Respiratory rate in Vatapradhana Prakruti group is significantly higher than in Pittapradhana Prakruti group and Kaphapradhana Prakruti group, as well as mean Respiratory rate is significantly higher in Pittapradhana Prakruti group than KaphapradhnaPrakruti group.

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