



RESEARCH ARTICLE

Received on: 05-04-2014  
Accepted on: 11-04-2014  
Published on: 20-04-2014

**Pandit. Prasad Suresh Joshi**  
966/102 Gokhalenagar ,  
opp. Mafo, Pune 411016.  
prasadjoshi038@gmail.com ,  
prasadjoshi@vedvidnyan.com



QR Code for Mobile users

Conflict of Interest: None Declared

**Effect of chanting 'Vitthal' on Heart: A Clinical Study.**  
Prasad Joshi\*, Avinash Inamdar<sup>1</sup>, Sanjivani Inamdar<sup>2</sup>, Ravi Prayag<sup>3</sup>, Jyuthica K Laghate<sup>4</sup>,  
Bhagyashree Nilkanth<sup>5</sup>

\*Director, Ved-Vidyan Research Centre, Pune.

<sup>1,2</sup>Director, The Inamdar Heart Clinic, Pune.

<sup>3</sup>HOD, Community Medicine; MIMER Medical College, Talegaon, Pune.

<sup>4</sup>HOD, Research and Development, Vishwanand Kendra.

<sup>5</sup>Researcher, Institute of Biofield Sciences, Pune.

**ABSTRACT**

The present study aims to explore the effect of chanting Vitthal on various heart parameters and energy of Heart Chakra. According to ancient Sanskrit language science, Yogic chakra concept and Ayurveda, Vitthal has connection with Heart Chakra. The study was conducted on 30 healthy volunteers and baseline screening was done using parameters like Blood Pressure, Pulse Rate, Pulse Pressure Product, Heart Rate, and Left Ventricular Ejection Fraction. Energy profiling of Heart chakra was done using Biofield viewer and Electroscanning method. The results showed statistically significant differences at 5% significance in Heart rate, Blood Pressure, Pulse rate, Pulse Pressure Product, Ejection Fraction as well as energy values before and after chanting Vitthal for 9 minutes once as a part of study intervention. There were statistically significant increase in Green Pixel Parameter which is the colour energy of Heart Chakra. As far as the cardiac parameters, the study revealed that the chanting helped in improving the pumping action of the heart as suggestive of Ejection Fraction as well as regulating the Blood Pressure, Pulse, Heart rate and Pulse Pressure Product. It can be concluded that chanting "Vitthal" has beneficial action on physiologic activity and energy of Heart and Heart Chakra.

**Keywords:** Effect of chanting, Heart, Heart Chakra, Electroscanning method.

**Cite this article as:**

Prasad Joshi, Avinash Inamdar, Sanjivani Inamdar, Ravi Prayag, Jyuthica K Laghate, Bhagyashree Nilkanth. Effect of chanting 'Vitthal' on Heart: A Clinical Study. Asian Journal of Complementary and Alternative Medicine 02 (02); 2014; 11-15.

## Introduction

The thousand treasures of the poetic literature of the various Saints of Maharashtra like Saint Tukaram, Saint Dynaneshwar speaks volumes about the God Realization of these devotees towards Lord Vitthal. Lord Vitthal known by various names like Vithoba, Pandurang is an incarnation of Lord Vishnu and is predominantly worshipped in the states of Maharashtra and Karnataka. Vitthal is regarded as the 'Yoga Murti' (Deity of Yoga) according to ancient Indian Idol Science (Murti Shastra). The idol structure symbolizes balance of energies within and outside the body. Innumerable devotees of Lord Vitthal known as Varkari (people who walk in procession) undertake an annual pilgrimage to Pandharpur, gathering there on Ekadashi of the Hindu lunar calendar month of Aashaadha. These masses travel by foot, and cover a very long distance of 250 km in a short span of 18 days. The members of this procession include, small children, young adults, Old members, and people from different age, caste, religion and physically challenged too. Everyone chants 'Vitthal' word throughout the procession and do so till the destination arrives almost day and night. Since walking is connected with pumping action of the heart, it is interesting to explore the source of this massive energy and whether chanting 'Vitthal' has a scientific action and influences the physiologic activity of heart (<http://pandharpurtemple.com/article/id/104/legend-of-vitthal-temple>).

The main impetus, therefore, behind conducting this study was to understand the source of this massive energy of these devotees, especially the relationship of the 'Vitthal' word with the human heart and its physiologic activity. Since walking and Heart functions are connected and the procession is all about walking throughout the distance and chanting the name of Vitthal, there has to be something which might promote the functions of the human heart to a better level and perform in an enhanced manner. There is an absolute dearth of evidence in this area, and therefore, such a study can potentially add to evidence and throw light on role of mantra chanting on physiologic body mechanisms.

## Scientific Relevance of 'Vitthal' Word

'Vitthal' Word and its scientific relation with the Indian language (Sanskrit) science: One of the most ancient and prolific languages of the world, Sanskrit language script known as 'Devnagri' is the base of many Indian languages like Marathi, Hindi, Tamil and also bears close relevance to world languages like German, Arabic, Parsi, Urdu, English and French. In many ways, Sanskrit defines the philosophy of life in a poetic, concise and spiritual manner and therefore its extensive use can be observed in all the religious texts of Hinduism as well the other forms of art like poetry, drama, fiction in our nation. Sanskrit Language is also known as

Girvan Vaani (गीर्वाण वाणी); Girvan means God and Vaani is language.

## Alphabets in Sanskrit (Varnamala)

There are two main parts of the Sanskrit languages. Swara (notes) and Vyanjana (Voices and expressions). Swara (Notes) are independent and not dependant on other varna (alphabets) for their utterance. They can be classified as homogeneous and heterogeneous and also according to their location in the mouth. Likewise, from the point of pronunciation in speech Vyanjana (Expressions) are dependent on Swara. There are 33 types of Vyanjana and classified as Sparshavarna (Based on touch); Antastha (Inner) and Ushma (Warm).

Vyanjana (Expressions) are also categorized as Alpapran (thrown with little air)-Mahapran (thrown with more air) – When little air is thrown out of the mouth while speaking the vyanjana's, these are known as Alpaprana. In every category, first, third and fifth vyanjan and half swara are the Alpapran vyanjan. The remaining ones are Mahapran because extra air is thrown out of the mouth. With respect to the above theory, va and la are soft vyanjana. Tha (ठ) is hard vyanjan (Kathor Vyanjan).

Therefore, the word Vitthal (विठ्ठल) has two mahapran words among two alpapran words. Interestingly such combination can never exist. However the fact is Vitthal is the only divine word which has such combination. (Joshi, 2011)

## Heart Chakra and 'Vitthal' word:

The Seven Yogic Chakra as elaborated in Yoga Sutras of Patanjali comprise of the fourth chakra or Anahat (अनाहत) chakra (situated near heart and therefore known as the Heart Chakra). Every chakra has a root word (beej mantra) surrounded by root expression (beej akshar). Anahat (अनाहत) chakra has "tha" "ठ" as assigned integral beej akshar (बीजाक्षर). This beejakshar is not associated with any other chakra and is directly related to the heart chakra (<http://www.yogamag.net/archives/2009/june09/stages.html>)

## Concept of Prana (Vayu) in Ayurveda and 'Vitthal' word

Ayurveda, the oldest system of medicine, existing till date elaborates about vayu (vata, air element) as one of the three bioenergies and classifies it in 5 main types:

As described above, Pran and Heart are directly related. Th ("ठ") is a mahapran (महाप्राण) shabda and since there are two mahapran words in Vitthal, Vitthal chanting has direct effect on the heart.

Number	Name	Location	Action
1	Prana(प्राण)	Heart(हृदय)	Sustains life through respiration
2	Apana(अपान)	Pelvic area and buttocks (गुद)	Excretion of urine and faeces
3	Udana(उदान)	Throat(कंठ)	Digestion
4	Samana(समान)	Navel(नाभी)	Assimilation and Absorption
5	Vyana(व्यान)	Throughout body(सर्व शरीरभर)	Movements

Table 1: Types of Prana (Adapted from Tilak,2012)

### Aims and Objectives

The aims of this study are:

1. To assess the effects of chanting 'Vitthal' on heart using pre and post assessment of Blood Pressure, Pulse Rate, Heart Rate, Electrocardiogram(ECG) and Left Ventricular Ejection Fraction in 2DEcho.
2. To evaluate the changes in the energy levels of Heart Chakra using pre and post assessment of Heart chakra and Biofield using Biofield Viewer (BV) and Electro Scanning Method (ESM).

### Methods

#### Study design, Target population and Intervention:

The present study is a single arm clinical study to assess the effects of chanting Vitthal on heart of healthy volunteers. Ethics approval was sought from the Local Independent Ethics Committee and after ethical approval, the participants were randomly chosen from the local population using Inclusion and Exclusion criteria. All the participants were provided with detailed information about the study and those who willingly signed the Informed Consent were recruited.

Healthy volunteers between 18 and 50 years of age and willing to give consent were chosen for the study. Pregnant and nursing mothers, individuals with debilitating diseases and implant devices such as pacemaker, defibrillator, metal/rod or plate were excluded.

The study was conducted with strict adherence to GCP Norms for Clinical Research and Guidelines prescribed under the ICH Code of Harmonisation, Declaration of Helsinki. Data protection and confidentiality norms were strictly adhered as prescribed guidelines with complete anonymisation of participant personal information.

#### Study Devices

Two-Dimensional Echocardiogram (2D Echo) with Colour Doppler was used in the following study to estimate the size of the heart chambers, its dimensions, volume and thickness of the walls. In this study 2D Echo was particularly used to measure patient's Ejection fraction.

#### E-S Complex

In this study, the ES Complex was used to measure participants' Heart Rate and Left Ventricle Stroke Work.

Bioelectric impedance measurements represent a wide range of old and new non-Successive measurements are made with weak current low frequency(700 Hz) between six tactile electrodes placed symmetrically on the forehead, hands, and feet of the subject. Each electrode is alternatively cathode and anode (bipolar mode from anode to cathode), which permits the recording of the resistance (Law of Ohm) of 22 segments of the human body and specifically passes through the interstitial fluid compartment. (Anderson et al.,1995)

#### Biofield Viewer

*Biofield Viewer* shows the biofield, aura, chakra, and meridian systems in clear colours and patterns. It reveals the interference and transference of light patterns, at and above, the visible spectrum and shows energy dynamics at work. It is easy to determine where stress exists and where potential issues could develop. It can also indicate healthy and pain free areas. A trained practitioner can make an accurate biofield assessment that can lead to much clearer understanding of a client's health on all levels -*physical, emotional and psychological*. Areas of well-being are indicated by a mixture of lighter, brighter, balanced and more harmonious patterns, symmetry and colours. While dis-eased and stressed areas show as distorted, darker and congested pools of low energy colours. When used correctly, it can reveal both the symptoms and root disharmonies of a disease([www.biofieldsciences.com](http://www.biofieldsciences.com)) For this study two images of the participants were taken above the waist in sitting position, both in Biofield Viewer mode and Chakra Viewer mode, to observe energy level changes of Heart chakra, respectively.

#### Electro Scanning method (ESM)

ESM or Electro-Scanning Method is a safe, non-invasive, quantitative numerical method of diagnosing imbalances in your energy field developed by British scientist Dr Harry Oldfield. In ESM, sound signals are induced via a crystal and saline electrode and recorded by a sensitive sound level meter. The readings of an ESM scan detect imbalances in energy field. For this study, ESM was used to measure participants energy level of Heart chakra.(<http://www.energymedicineexchange.com/uncategorized/145-electro-scanning-method-harry-oldfield>).

#### Baseline(Before Intervention) Screening and Intervention

Participants who gave their informed consent were screened before intervention as follows:

1. Category ES Complex+ Manual: Heart rate measured specifically for ES Scanning, Blood Pressure, Pulse Rate and Pulse Pressure Product
2. Category 2D Echo+Color Doppler: Left Ventricular Ejection Fraction
3. Category Biofield Viewer (BV): Green, red and Blue Pixel Parameter Analysis
4. Category ECG: Heart rate

5. Category Electro Scanning Method: Heart Chakra Energy Estimation After the baseline screening, the participants were asked to chant 'Vitthal' word for 9 minutes once and were screened post chanting using the same investigations as stated above.

There were no adverse events observed during the course of the study.

**Statistical Measures**

The primary outcome measures were difference in pre and post levels of Heart rate, Blood Pressure, Pulse Rate, ECG and Left Ventricular Ejection Fraction and Pulse Pressure Product. Pulse Pressure product was a new variable formulated as Systolic BP\*Pulse Rate which provided an assessment of the myocardial load of the heart.

The secondary outcome measures were change in energy levels of Heart Chakra using Electroscanning method and changes in Green, Red and Blue Pixel Parameters using Biofield Viewer.

Quantitative analysis was done using parametric testing such as paired t tests. Probability Estimation was done at 5% significance level and confidence intervals were reported. The null and alternative hypotheses for each variable were presented as no difference in the parameters before and after chanting 'Vitthal' in the population.

**Results**

Under the category ES-Complex +Manual, assessed Heart Rate and Vitthal Chanting

t-Test: Paired Two Sample for Means		
	<i>Heart Rate Before</i>	<i>Heart Rate After</i>
Mean	82.93333333	80.93333333
Variance	105.4436782	122.5471264
Pearson Correlation	0.862679332	
t Stat	1.940678687	
P(T<=t) two-tail	0.062074113	
t Critical two-tail	2.045229611	

**Table 2: Heart rate(Before and After) Vitthal Chanting**

There is a statistically significant difference between heart rate before and after chanting(p=0.03<0.05).The mean Heart Rate was 82.93 before and 80.93 after chanting Vitthal by the participants.

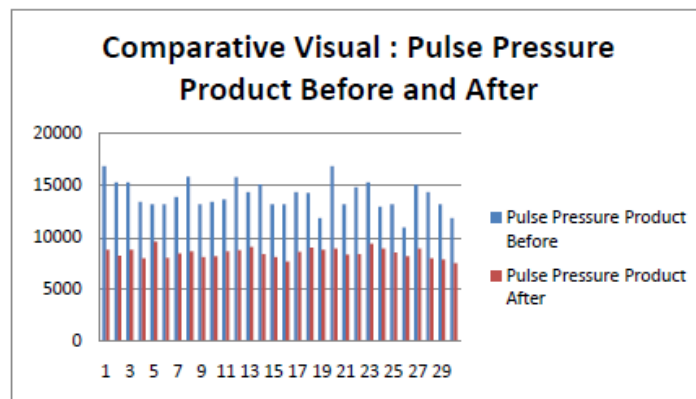
**Pulse Rate and Vitthal Chanting**

t-Test: Paired Two Sample for Means		
	<i>Pulse Rate Before</i>	<i>Pulse Rate After</i>
Mean	77.13333333	73.73333333
Variance	13.42988506	19.02988506
Pearson Correlation	0.468210241	
t Stat	4.452961302	
P(T<=t) two-tail	0.000115622	
t Critical two-tail	2.045229611	

**Table 3**

There is a highly statistically significant difference in pulse rate before and after chanting Vitthal(p=0.00<0.01).The mean pulse rate is 77.13 before and 73.73 after chanting Vitthal by the population.

**Pulse Pressure Product and Vitthal Chanting**



**Figure 1**

There is a statistically significant difference in pulse pressure product before and after Vitthal chanting(p=0.00<0.05<0.01).We therefore reject the null hypothesis at 1% significance level and as seen in the output, there is a considerable difference in pulse pressure product ;before is 14067.2 and after is 8529.2 respectively.

Therefore, it can be assumed that the chanting has effect on all the factors under ES-Complex category (Heart Rate, Pulse Rate, and Pulse Pressure Product) since all these factors are showing the significant decrease in after chanting than in before chanting.

**Category : 2D Echo**

2D Echo with Color Doppler was used to estimate the Ejection Fraction of the Left Ventricle which provides an objective assessment of the pumping action of the heart.

t-Test: Paired Two Sample for Means		
	<i>EF Before</i>	<i>EF After</i>
Mean	64.41935	68.03225806
Variance	54.91828	50.63225806
Pearson Correlation	0.475097	
t Stat	-2.7015	
P(T<=t) two-tail	0.011244	
t Critical two-tail	2.042272	

**Table 4: Ejection Fraction and Vitthal**

The p value is 0.01< 0.05. Therefore, we can reject the null hypothesis of no difference in ejection fraction before and after chanting. As shown above, there is a statistically significant difference in Ejection Fraction, before 64.41 and after 68.03 respectively.

**Category: ESM**

Electro scanning method was used to assess the difference in the energy of Heart Chakra before and after chanting.

t-Test: Paired Two Sample for Means		
	Energy Before	Energy After
Mean	-0.505	-0.225
Variance	0.33437069	0.072715517
Pearson Correlation	0.61284417	
t Stat	-3.300095074	
P(T<=t) two-tail	0.002566284	
t Critical two-tail	2.045229611	

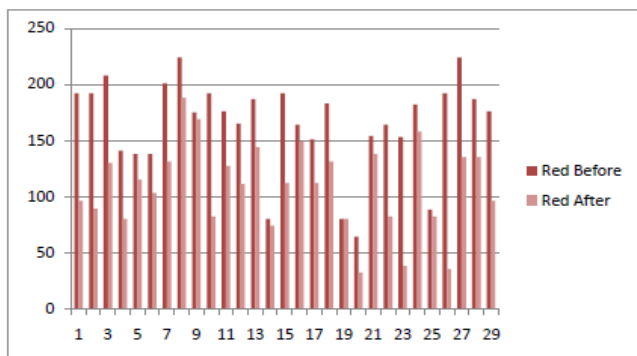
**Table 5**

There is a highly statistically significant difference in Energy of Heart Chakra before and after chanting( $p=0.00<0.01$ ).The null hypothesis can therefore be rejected at 1% significance level. As seen from the output, Mean Energy before chanting is -0.505 Hz and after chanting is -0.225 Hz.

**Category Biofield Viewer (BV)**

Biofield Viewer was used to assess in changes in pixel parameters of higher frequency (healing) colour as well as colour of the Heart Chakra,i.e; Green as well as changes in lower frequency colours such as Red ,colour associated with energy deficits or diseased state.

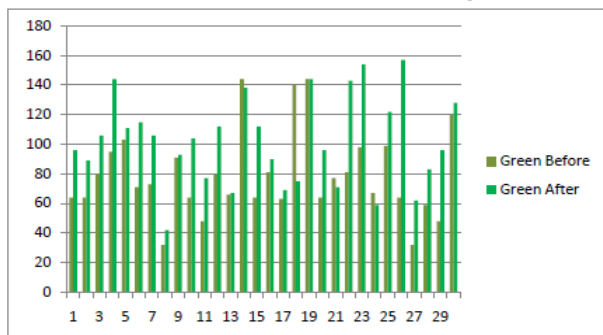
**Red Colour Pixel and Vitthal Chanting**



**Figure 2 Red Colour Pixel and Vitthal Chanting**

The p value is  $0.00<0.05<0.01$ .Therefore, the difference in red pixel parameter is highly statistically significant at 1% level. Therefore, the null hypothesis of no difference can be rejected .The before red pixel mean is 161.70 and the after pixel mean is 107.27 respectively.

**Green Pixel Parameter and Vitthal Chanting**



**Figure 3 Green Pixel Parameter and Vitthal Chanting**

The p value is  $0.00<0.05<0.01$ . Therefore, the difference in red pixel parameter is highly statistically significant at 1% level. Therefore, the null hypothesis of no difference can be rejected .The before green pixel mean is 79.2 and the after pixel mean is 102.03 respectively.

**Discussion**

As seen in the present study, there have been significant changes in the Heart Rate, Pulse Rate, Pulse Pressure Product and Blood Pressure after chanting Vitthal for 9 minutes. There have been significant changes in the left ventricular ejection fraction in the present study. All these parameters are indicative that Vitthal chanting has effect on physiologic activity of heart including its pumping as assessed by the Ejection Fraction.The analysis of BV recordings of the Experimental group revealed that there was extremely significant changes in Red and Green Pixel parameter.The analysis of ESM recordings of the Experimental group revealed that there was significant change in energy level of Heart Chakra.

**Conclusion**

The present exploratory study throws light on the relationship between chanting Vitthal and physiologic and energy profile of Heart.A large scale clinical trial can be conducted in the future to explore the role of chanting Vitthal not only in Healthy Volunteers as well as cardiac patients.

**Acknowledgements**

Investigators take this opportunity to thank Mr. Sudhir Neurgaonkar (Research Administrator) for arranging the participants. We are also thankful to Ms. Adishree Halgekar for data compilation and Mrs.Shrutee Kulkarni for statistical analysis and Mr.Kedar Khatmode for recording and data collection, Mr. Suyash Patankar (IT Manager) for technical instrumental support.

**References:**

1. <http://pandharpurtemple.com/article/id/104/legend-of-vitthal-temple>),Accessed on 01/01/2014.
2. Joshi P.Sugam.Sanskrit Vyakran,Pune:Nitin Publications,2004.
3. <http://www.yogamag.net/archives/2009/fjune09/stages.html>,Accessed on 03/01/2014.
4. Tilak S.Chakra Janmajanmantariche.Pune:Prasad Publications;2012.
5. Fogh-Andersen N, Altura BM, Altura BT, Siggaard-Andersen O. Composition of interstitial fluid. Clin.Chem. 1995 Oct; 41 (10): 1522-5.
6. <http://www.energymedicineexchange.com/uncategorized/145-electro-scanning-method-harry-oldfield>,Accessed 06/01/2014.