#### **UGC Granted Minor Research Project**

# "Effect of the Indian Classical Raga in the Treatment of Blood Pressure and Diabetes - A study"

### **Summary**

Proposal of Minor Research Project was sanctioned by UGC vide File No. 23-896/13 (WRO) Date: 20/02/2015

-----Principal Investigator-----

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### 1 METHODOLOGY

The Research was carried from Date: 01/03/2015 to 01/03/2017 in the PPT Hall of Dattaji Bhale Blood Bank, Dr. Hedgewar Hospital, Aurangabad.

After discussing with Dr.Ranjana Deshmukh (M.D.,Medicine), Dr. Mayura Kale (Diabetalogist) (Dr.Hedgewar Hospital,Aurangabad) and Dr.Mayura Kale (Associate Professor, Govt. Pharmacy College,Aurangabad) the criteria of selection of people was finalized. The criteria was

- 01. Patient must be of age 40 to 70.
- 02. Patient should have BP or Diabetes or both from last five to ten years.
- 03. Patient must be under treatment for BP and diabetes.
- 04. Patients were strictly informed to have a normal usual life while experimental period.
- 05. After selection they were requested to attend the music therapy session at PPT hall, Dattaji bhale blood bank at 7:30 to 8:30 a.m. Daily 10 days during treatment period.
- 06. One day before starting the treatment all were requested to check diabetes level in the fast and post meal period at Dr. Hedgewar Hospital, Aurangabad
- 07. CD of Raga Ahir Bhairav and Miya ki Todi was recorded in a professional studio in the voice of Dr Parag Choudhari.
- 08. Before listening the Raga Patient's BP RR and PR was checked and noted by professional Doctors of Dr,Hedgewar Hospital.
- 09. The CD contained two raagas Ahir Bhairav and Miyan ki Todi each one was of half an hour.
- 10. After listening the Raga again BP RR and PR was noted
- 11. There were 9 sessions of 10 days from 01/03/2015 to 01/03/2017 after two months interval.
- 12. Estimated Control 10 persons without treating them with Raga therapy.
- 13. After completion of 10 days period the level of blood sugar was estimated. The results of 9 sessions were presented by graph and the data was related with before and after reading of BP RR and PR and BMI and diabetes. This relationship was

calculated by the guidance of Dr. Rajesh Nawle (Associate Professor) Government College of Pharmacy Aurangabad.

### 2 RESULTS

Sr N O.	SESSION	SYSTOLI C BP	DISTLO LIC BP	RR	PR	FASTING SUGAR	POSTMEAL SUGAR	ВМІ
1	RAGA THERAPY FIRST SESSION	SIG	SIG	SIG	SIG	NOT SIG	NOT SIG	SIG
2	RAGA THERAPY SECOND	SIG	SIG	SIG	SIG	NOT SIG	NOT SIG	SIG
3	RAGA THERAPY THIRD SESSION	SIG	SIG	NOT SIG	SIG	NOT SIG	NOT SIG	SIG
4	RAGA THERAPY FOURTH	SIG	SIG	SIG	SIG	NOT SIG	NOT SIG	SIG
5	RAGA THERAPY FIFTH SESSION	SIG	SIG	SIG	SIG	NOT SIG	NOT SIG	NOT SIG
6	RAGA THERAPY SIXTH SESSION	SIG	SIG	SIG	SIG	NOT SIG	NOT SIG	NOT SIG
7	RAGA THERAPY SEVENTH	SIG	SIG	SIG	SIG	NOT SIG	NOT SIG	NOT SIG
8	RAGA THERAPY EIGHTH	SIG	SIG	SIG	SIG	NOT SIG	NOT SIG	NOT SIG
9	RAGA THERAPY NINTH SESSION	SIG	SIG	SIG	SIG	NOT SIG	NOT SIG	NOT SIG
10	CONTROL (WITHOUT LISTENING RAGA)	NOT SIG	NOT SIG	NOT SIG	NOT SIG	-	-	-

#### 3 AUTHORS CONCLUSION

The Research was carried from Date: 01/03/2015 to 01/03/2017 in the PPT Hall of Dattaji Bhale Blood Bank, with collaboration of Dr. Hedgewar Hospital, Aurangabad. Patient selected on the basis of age ,sex. One day before starting the treatment all were requested to check diabetes level in the fast and post meal period at Dr. Hedgewar Hospital, Aurangabad. CD of Raga Ahir Bhairav and Miya ki Todi was recorded in a professional studio in the voice of Dr Parag Choudhari. Before listening the Raga Patient's BP RR and PR was checked by professional Doctors of Dr, Hedgewar Hospital. After listening the Raga again BP RR and PR was noted There were 9 sessions of 10 days from 01/03/2015 to 01/03/2017 after two months interval. Estimated Control 10 persons without treating them with Raga therapy. After completion of 10 days period the level of blood sugar was estimated. The results of 9 sessions were presented by graph and the data was related with before and after reading of BP RR and PR and BMI and diabetes. This relationship was calculated. Findings from Experimental results suggest that, Raga Therapy exclusively shown positive result with BP. We found improvements in BP, PR, RR and Data shows slight improvement in Blood Sugar. Basically raga known for entertainment has medical intervenes also. Apart from this, study shows that there is a significant change in BMI also.

Experiment can come up with much accurate and valid data. Diabetic level of the individuals is dependent upon many factors like habit of eating, age, habit of exercise etc. However individually there were two persons whose diabetic levels were reduced and later the medicines were reduced by the concerned doctor. The reports of diabetes of those persons before and after treatment are presented in the report. Hence, effect of Raga on diabetes seems to be different with different persons. There may possible improvise significant blood sugar by further more continuous session. It hence it may require long-term treatment to get the desired results.

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