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RESEARCH ARTICLE

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## A STUDY TO EVALUATE THE EFFECTIVENESS OF BUERGER -ALLEN EXERCISE IN IMPROVING PERIPHERAL CIRCULATION AMONG DIABETES MELLITUS PATIENTS IN SELECTED HOSPITAL OF GANDHI NAGAR

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### ABSTRACT

An Experimental Study Was conducted to assess the Effectiveness of 'Buerger- Allen Exercise among Diabetes Mellitus Patient In selected Hospital of Gandhinagar the 'General system Model was used as a conceptual framework. A research approval With Experimental Study design was used to advise the Objective of the Study. The sample Size consisted of 30 diabetes mellitus Patients from selected Hospital of Gandhinagar the non-probability purposive sampling technique was used to collect the sample. In Experimental Study the mean of the per test was 5.27 and post test was 2.63 with standard Deviation 1.35 at 0.05 level of significance majority of the score was under the good improvement in peripheral circulation. The study therefore, offer a new weaving improvement in peripheral circulation through "Buerger- Allen Exercise".

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## INTRODUCTION

An Experimental Study Was conducted to assess the Effectiveness of 'Buerger- Allen Exercise among Diabetes Mellitus Patients in selected Hospital of Gandhinagar. The study was conducted in Partial fulfillment of the main of the study were to Assess the Effectiveness of 'Buerger - Allen Exercise among Diabetes patients to identify the Effectiveness between Buerger - Allen Exercise improvement of peripheral circulation in diabetes mellitus patients with variable like age, gender, marital status, educational status type of work religions, weight, dietary pattern.

**Need for the Study:** Diabetes is the commonest metabolic disorder that affect population in the entire world diabetes increases the risk of lower extremities circulation this leads to severe complication like foot ulcer and gangrene in the lower limbs. Buerger- Allen exercise is a non - invasive cost-effective method to improve the foot perfusion in term of ABI score and reduce the capillary refill time.

### Objectives of the Study

- To assess the level of peripheral circulation among Diabetes Mellitus Patient

- To assess the Effectiveness of 'Buerger- Allen Exercise among Diabetes Mellitus Patients.

## DATA ANALYSIS

Frequency and percentage distribution of demographic variable N=30. The above table depicts the distribution in number and percentage of study subject according to their demographic variables out of 30 sample were 20% in age group of 40-50 year, 33.3% were in age group 46-50 year, 20 % were in age group 51-55year 26.7% were in age group 56-60 year .In the gender of the patient out of 30 sample 56.7% were male and 43.3% were females. In marital status of patient out of 30 sample 86.7%were married,13.3%were unmarried in educational status of patient out of 30 sample 33.4% were illiterate,33.3% had attained primary education ,13.3% had attained secondary education, 20 % were postgraduate . In the type of work of patient out of 30 sample 40% were having secondary work 16.7 % were Hindu,30 % were Muslim , 10% were Christian. In the weight of patient out of 30 sample 13.3% were having weight 60-80 kg, 63.4% were having weight 81-100 kg, 23.3 were having weight 81-100 kg, 23.3% were having weight 101-120 kg. In dietary pattern of patient out of 30 sample 63.3% were vegetarian and 36.7 % were Non- vegetarian.

Sr.No	Demographic Variables	Categories	Frequency (f)	Percentage (%)
1	Age	40-45years	06	20%
		46-50years	10	33.3%
		51-55years	06	20%
		56-60years	08	26.7%
2	Gender	Male	17	56.3%
		Female	13	46.7%
3	Marital status	Married	26	86.3%
		Unmarried	04	14.7%
		Widow	00	00%
4	Educational status	Illiterate	10	33.3%
		Primary	10	33.4%
		Secondary	04	13.3%
		Graduate	06	20%
5	Type of work	Sedentarywork	12	40.3%
		Moderatework	13	43.3%
		Heavywork	05	17.4%
6	Religion	Hindu	18	60%
		Muslim	09	30%
		Christian	03	10%
		Other	00	00%
7	Weight	60-80 kg	04	63.3%
		81-100 kg	19	23.4%
		101-120 kg	07	23.3%
		121-140 kg	00	00%
8	Diet plan	Vegetarian	19	63.3%
		Non-vegetarian	11	36.7%
		Mixed	00	00%

Frequency and percentage distribution of effectiveness score of Buerger-Allen exercise in diabetes patients: N =30

Evaluate Level of Effectiveness	Pre-test score	Post-test score
Poor(7-9)	11(36.7%)	01(3.3%)
Average(4-6)	19 (63.3%)	7(23.3%)
Good (0-3)	00(00%)	22(73.4)
Total	30(100%)	30(100%)

Mean and Standard deviation and 't' test value of effectiveness of Buerger-Allen exercise among diabetes patients

GROUP	TEST	MEAN	MEDIAN	SD
Patient (N=30)	Pre-test	5.27	5	0.94
	Post-test	2.63	2	1.35

## METHODOLOGY

Conceptual framework used in this was based on modified Daniel stuffle Beam's CIPP evaluation model. A quantitative approach was adopted to evaluate the Effectiveness of 'Buerger- Allen Exercise on patients with diabetes in selected Hospital of Gandhinagar. The sample consisted of 30 samples at selected Hospital of Gandhinagar. One group pre test -post test sampling technique was used to collect the data.

## CONCLUSION

The study intends to assess the Effectiveness of 'Buerger-Allen Exercise on peripheral circulation among Diabetes patients in selected Hospital of Gandhinagar. The study reveals that practice of 'Buerger-Allen Exercise helps to improve the peripheral circulation in diabetes patient.

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