

## ASSESS THE EFFECTIVENESS OF SELF-INSTRUCTIONAL MODULE ON KNOWLEDGE REGARDING PREVENTION OF STROKE AMONG SEDENTARY WORKERS AT SELECTED ORGANIZATIONS IN URBAN AREAS OF BENGALURU

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### ABSTRACT

A study was conducted to assess the effectiveness of self-instructional module on knowledge regarding prevention of stroke among sedentary workers at selected organizations in urban areas of Bengaluru structured questionnaire was prepared on prevention of stroke and self – instructional module was developed. Pre-experimental one group pre-test post-test research design was adopted for this study with the sample size of 60 sedentary workers, who were selected using non-probability purposive sampling technique. Pretest was conducted among sedentary workers, in Rapid Global Business Solutions India Pvt Ltd. Bengaluru, to assess the knowledge on prevention of stroke by using structured questionnaires before implementing self-instructional module. Post-test was conducted 1 week after the administration of self-instructional module. The effectiveness of self-instructional module on prevention of stroke was assessed and analyzed by descriptive and inferential statistics. The result showed that the mean score of knowledge regarding prevention of stroke in pre-test is 13.48 and standard deviation is 1.48. Mean score of knowledge regarding prevention of stroke in post-test is 15.88 and standard deviation of 1.80. The result showed that there was significant knowledge gain in post-test, after administration of self-instructional module. Hence, the self-instructional module was effective. Also found that there was significant association between pre-test knowledge score and selected demographic variables. The study concluded that majority of the sedentary workers had poor knowledge regarding prevention of stroke during pre-test and found improvement in knowledge after post-test.

**Key words:** sedentary workers, stroke, self-instructional module

### Introduction

Cardiovascular diseases, including coronary artery disease and myocardial infarction are the main causes of morbidity and mortality worldwide. To reduce the burden on the population and individuals by these illnesses, effective preventive measures are essential. Moderate and intense physical activity (PA) showed a clear inverse with cardiovascular mortality. Further, physical activity is

recommended for the primary prevention of ischemic stroke. **Less time spent being sedentary and more time being physically active even at light or moderate intensities is associated with a reduced risk of stroke.** Stroke is a common disabling disease; it places a heavy burden on society.

The best way to help prevent stroke is to eat a healthy diet, get exercise regularly, and avoid smoking and drinking. Exercise and physical activity have a growing body of evidence based on primary and secondary prevention of stroke and in stroke recurrence. Hence it is necessary to make people conscious and aware of the prevention of stroke.

### Objectives:

1. To assess the level of knowledge on the prevention of stroke among sedentary workers.
2. To evaluate the effectiveness of self-instructional module on prevention of stroke among sedentary workers.
3. To find the association between the pre-test knowledge score regarding prevention of stroke and the selected demographic variables.

### Hypothesis:

H<sub>1</sub>: There will be a significant difference between pre-test and post-test levels of knowledge on the prevention of stroke among sedentary workers.

H<sub>2</sub>: There is significant association between pre-test knowledge score and selected demographic variables.

### Material and methods

#### Setting of the study

Setting is the physical location and condition in which data collection takes place. The study was conducted

in Rapid Global Business Solutions India Pvt Ltd Bangalore.

#### Population

It refers to the target population that represents the entire group or all the elements like individuals or objects that meet certain inclusion criteria of the study. In this study the population are the sedentary workers.

### Sample and sample size

Sample refers to the part of population that is selected to participate in the particular study.

In this study the sample size was 60 sedentary workers working at Rapid Global Business Solutions India Pvt Ltd.

### Sampling technique

Sampling technique refers to the process of selecting a portion of the population to represent the entire population. In this study, samples were 60 sedentary workers working at Rapid Global Business Solutions India Pvt Ltd. Convenience sampling technique was used for the selecting the sample.

### Sampling criteria

### Description of the tool

The tool consists of 2 sections:

**Section A:** It consists of 12 items to collect information regarding socio-demographic aspects of the respondents.

**Section B:** It consists of 30 structured knowledge questionnaires regarding prevention of stroke.

**Section C:** Self Instructional module

### Analysis of data

Data was analyzed by the means of descriptive statistics and inferential statistics

#### Descriptive statistics

Mean, median, mode, standard deviation, percentage distribution describes the sample characters.

#### Inferential statistics

Chi-square test was used to know the association of pre-test level of knowledge and their selected demographic variables.

<b>Table: 1 Distribution of Sedentary Workers By Diet</b>		
<b>Diet</b>	<b>Frequency</b>	<b>Percent</b>
Vegetarian	13	21.7
Non-vegetarian	39	65.0
Mixed	8	13.3
Total	60	100.0

The above table and graph depicts that among the study participants most of them i.e 65% are non-vegetarian, 21.7% are vegetarian, and 13.3% of participants are under mixed category.

<b>Table 2: Association of pre-test level of knowledge and their selected demographic variables.</b>					
Demographic variables	Responses	Pre-test score		Chi-square value	P - value
		Below median	Above median		
Age	20 – 25	18	11	1.133 (NS)	0.287
	> 25	15	16		
Gender	Male	19	17	0.181 (NS)	0.672
	Female	14	10		
Education	Graduate	25	18	0.604 (NS)	0.437
	Post-graduate	8	9		
Religion	Hindu	18	17	0.433 (NS)	0.511
	Muslim/ Christian	15	10		
Marital status	Married	18	19	1.573 (NS)	0.210
	Single	15	8		
Monthly income (Rs)	15000 – 20000	6	9	2.525 (NS)	0.283
	20000 – 25000	14	7		
	>25000	13	11		

Time spent on system (hrs)	8 – 10	3	3	Fisher's exact probability = 0.563 (NS)	
	> 10	30	24		
Diet	Vegetarian	4	9	3.937 (S)	0.047
	Non-vegetarian/ Mixed	29	18		
Hypertensive status	Yes	1	2	0.599 (NS)	0.439
	No	32	25		
Regular health check up	Yes	5	3	Fisher's exact probability = 0.474 (NS)	
	No	28	24		
Performing household chores	Yes	10	12	1.279 (NS)	0.258
	No	23	15		
Source of information on stroke	Yes	18	8	3.754 (NS)	0.053
	No	15	19		

Significant (S) at 5% level

Non-significant (NS)

The above table depicts that there is significant association between demographic variable such as diet (chi square=3.937) and knowledge of sedentary workers. There is no significant association between demographic variable such as Age(Chi-square=1.133), Gender(chi-square=0.181), Education (chi-square=0.604), Marital status (chi-square=1.573), Religion (chi-square=0.433), Monthly Income(chi-square=2.525), Time (hrs) spent on system(fisher's exact probability test=0.563), Hypertensive status (chi-square (0.599), Regular health check-up(fisher's exact probability test=0.474), Performing household chores (chi-square =1.279) ,Source of information (chi-square=3.754) and knowledge of sedentary workers.

### Result and Interpretation

Among 60 sedentary workers, majority 57(95%) of sedentary workers in the pre-test had inadequate knowledge level and 3(5%) had adequate level of knowledge. In post-test, most of 32(53.3%) sedentary workers had adequate level of knowledge and 28(46.7%) had inadequate level of knowledge. The findings summarized that self-instructional module has significantly beneficial effect in the level of knowledge among sedentary workers. The study also depicted that there was significantly association between the demographic variables of sedentary workers with their knowledge.

## Conclusion

The present study assessed the effectiveness of self-instructional module on prevention of stroke among sedentary workers at selected organization in urban areas in Bengaluru. Among 60 samples 57 samples had inadequate knowledge during pre-test and 3 samples had adequate knowledge and during post-test 32 samples had adequate knowledge and 28 sample had inadequate knowledge. Findings of the study included that self-instructional module as an intervention has brought significant improvement in knowledge level of sedentary workers.

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