



# **“PRE-EXPERIMENTAL STUDY TO ASSESS THE EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME ON KNOWLEDGE REGARDING CERVICAL SPONDYLOSIS AMONG IT PROFESSIONALS WORKING IN COMPANIES OF SELECTED METROPOLITAN CITY.”**

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## **Abstract:**

*Background:* Cervical spondylosis is a leading cause of musculoskeletal disability and one of the commonest cause of neck pain. The worldwide trend is for people to use computer for longer periods daily due to increased computer based tasks at work as well as during leisure activities. Neck pain is especially common among the working population and students. *Aim and objective:* Evaluate the effectiveness of structured teaching program on knowledge regarding cervical spondylosis among IT professionals working in companies. Also compare post –test and pre-test knowledge regarding cervical spondylosis among IT professionals working in companies before and after giving structure teaching program. To find the significant association between pre-test knowledge score regarding cervical spondylosis among IT professionals working in companies with selected socio demographic variable. *Materials and method:* Quantitative research approach was used in this study. 60 IT Workers who fulfilled inclusion criteria selected by using non probability convenient sampling technique. Pre experimental one group pre-test post-test research design was adapted. Validity of tool was done by 13 personnel from nursing faculty. The researcher used semi structured questionnaire to assess knowledge of IT workers. The data was analyzed in terms of the objective and hypothesis. *Result:* The analysis and interpretation revealed that the structured teaching programme was an effective tool for assessing knowledge on cervical spondylosis among IT professional working in companies. It is observed that statistically there is a significant difference between pretest and posttest mean of both knowledge. *Conclusion:* Our result indicates that the planned teaching programme was an effective tool for assessing knowledge regarding IT professionals working in selected companies.

*Index Terms* – Effectiveness, Structured teaching programme, Knowledge, Cervical Spondylitis, IT professionals.

## I. INTRODUCTION

Several problems in the body start showing up, and one has to then suffer from a lot of pain. This pain and adverse effects of unhealthiness cannot be cured by money; therefore, it is proven that a person's true wealth is having a healthy body and mind, which is to be earned by following a healthy lifestyle. Neck and shoulder pain has become an increasingly common health complaint among adolescents, where the prevalence is found to be higher in girls than in boys. It is one of the frequent causes for sickness. Cervical spondylosis is a disorder of neck bone. This disorder is caused by abnormal wear of the neck bone cartilage. Cervical spondylosis is also known as cervical ostia arthritis. Cervical spondylosis until few decades ago was a form of age related diseases and a few young people suffered from cervical spondylosis, but now due to life style changes people suffering from cervical spondylosis can be seen in all age groups the ages, even in adolescent and college student. Cervical spondylosis is a leading cause of musculoskeletal disability and one of the commonest cause of neck pain. The worldwide trend is for people to use computer for longer periods daily due to increased computer based tasks at work as well as during leisure activities. Neck pain is especially common among the working population and students.

## II. BACKGROUND OF THE STUDY

Cervical spondylosis is also known as cervical ostia arthritis. Cervical spondylosis until few decades ago was a form of age related diseases and a few young people suffered from cervical spondylosis, but now due to life style changes people suffering from cervical spondylosis can be seen in all age groups the ages, even in adolescent and college student. Cervical spondylosis is a leading cause of musculoskeletal disability and one of the commonest cause of neck pain. The worldwide trend is for people to use computer for longer periods daily due to increased computer based tasks at work as well as during leisure activities. Neck pain is especially common among the working population and students. Group of Computer users to analyze the relation between symptoms and signs originating from the cervical spine due to cervical spondylosis and the duration of computerize. Computer user were included in the study, 99 subjects who work on computer were evaluated for computer work station and posture during the use of computer. Results shows that cervical spondylosis was statistically significant among those who use computer ( $P < 0.05$ ) and study concluded that long term use of computer with bad posture and without break time increase liability for developing cervical spondylosis.

### STATEMENT OF PROBLEM:

“Pre-experimental study to assess the effectiveness of structured teaching programme on knowledge regarding cervical spondylosis among IT professionals working in companies of selected metropolitan city”

### OBJECTIVES:

1. To assess pre-test knowledge regarding cervical spondylosis among IT professionals working in companies before giving Structure teaching programme.
2. To evaluate post-test knowledge regarding cervical spondylosis among IT professionals working in companies after giving structure teaching programme.
3. To compare post –test and pre-test knowledge regarding cervical spondylosis among IT professionals working in companies before and after giving structure teaching program.
4. To find the significant association between pre-test knowledge score regarding cervical spondylosis among IT professionals working in companies with selected socio demographic variable.

### HYPOTHESIS:

**H<sub>1</sub>**:- There will be statistically significant difference between the pre-test and post-test knowledge regarding cervical spondylosis among IT professionals working in companies before and after structure teaching program.

**H<sub>2</sub>**: There will be statistically significant association between the pre-test knowledge regarding cervical spondylosis among IT professionals working in companies with selected demographic variables.

### III. RESEARCH METHODOLOGY

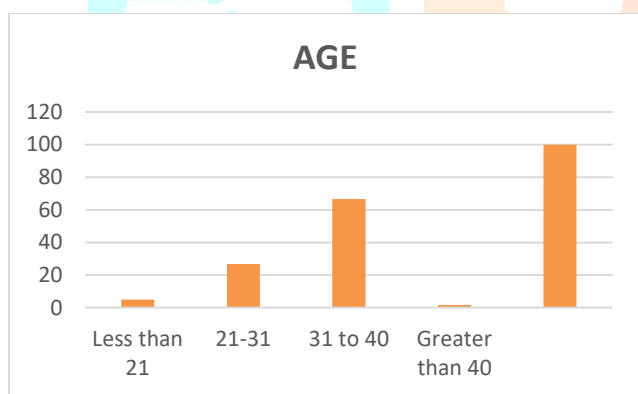
Quantitative research approach was used in this study. 60 IT Workers who fulfilled inclusion criteria selected by using non probability convenient sampling technique. Pre experimental one group pre-test post-test research design was adapted. Validity of tool was done by 13 personnel from nursing faculty. The researcher used semi structured questionnaire to assess knowledge of IT workers. The data was analyzed in terms of the objective and hypothesis.

#### THEORETICAL FRAMEWORK:

The system has a specific purpose or goal and uses a process to achieve the goal and system activity can be resolved in to an aggregation of feedback circuits. Input Refers to any form of information, energy that enters in to the system through its boundary. In this 68 study, input refers to Age, Gender, Previous source of information, type of residence, duration of computer use usage, family history of arthritis, and history of spine injury. Throughput Refers to the process whereby the system transforms create and organizes output. It denotes the different operational procedures in overall programme. The intervention has been taken place are pre-test, for assessing the knowledge of IT workers on cervical spondylosis, administration of structured teaching programme, and posttest for assessing the knowledge of IT Professionals after administration of structured teaching programme. Output Refers to energy, information or matter that is transferred to the environment. After processing the input, the system return output to the environment in an altered form, effecting the environment. It shows the evaluation of exposure to structured teaching programme, as adequate knowledge, moderate knowledge, and inadequate knowledge. Feedback refers to the environmental response of the system. Feedback may be negative or positive.

#### IV. RESULTS AND DISCUSSION

**TABLE 1 AND FIG. 1. : DISTRIBUTION OF SAMPLE ACCORDING TO AGE IN YEARS**



DEMOGRAPHIC CHARACTERST IC:AGE	FR EQ UE NC Y	PERCE NTAGE
Less than 21	3	5.00
21-31	16	26.67
31 to 40	40	66.67
Greater than 40	1	1.67
<b>TOTAL</b>	<b>60</b>	<b>100.0</b>

Above **table 1.1** and **figure 1.1** shows distribution of sample according to age in years, where 5% sample (3) where from age group of less than 21 years, 26.67% sample (16) where from age group of 21 to 31 years, 66.67 % sample (40) where from age group of 31 to 40 years, 1.67% sample (1) where age group of greater than 40 years.

**Table. 2 To assess pre-test knowledge regarding cervical spondylosis among ITprofessionals working in companies before giving Structure teaching programme.**

Pre Test Knowledge	Frequenc y	Percentag e
Poor knowledge	27	45
Average Knowledge	33	55
Good knowledge	0	0
<b>Mean</b>	<b>9.0</b>	<b>3</b>
<b>SD</b>	<b>2.0</b>	<b>9</b>

Post Test Knowledge	Frequenc y	Percentag e
Poor knowledge	0	0
Average Knowledge	0	0
Good knowledge	100	166.7
<b>Mean</b>		<b>20.67</b>
<b>SD</b>		<b>2.99</b>

**Table 2** shows overall frequency and percentage of pre-test based on semi structured questionnaire on knowledge regarding Cervical Spondylosis with application of Wilcoxon Signed rank Test.

**Table 3** To compare post –test and pre-test knowledge regarding cervicalspondylosis among IT professionals working in companies After giving STP.

Level of Knowledge	Pre Test Knowledge		Post Test Knowledge	
	Frequency	Percentage	Frequency	Percentage
Poor knowledge	27	45	0	0
Average Knowledge	33	55	0	0
Good knowledge	0	0	100	166.7
<b>Mean</b>	<b>9.03</b>		<b>20.67</b>	
<b>SD</b>	<b>2.09</b>		<b>2.99</b>	

**Table 3** shows overall frequency and percentage of pre-test based on semi structured questionnaire on knowledge regarding Cervical Spondylosis with application of Wilcoxon Signed rank Test. Over all frequency of pre-test poor knowledge is 27, average knowledge is 33 and goodknowledge is 0. Overall pretest percentage of poor knowledge is 45, average knowledge is 55, good knowledge 0. Over all mean score of pre-test is 9.03 with standard deviation of 2.09.

**Table 4** Association between pre-test knowledge cervical spondylosis among IT Professionals working in the companies of selected metropolitan city score with demographic variables.

	Average Knowledge	Poor knowledge	DF	Chi Square table value	Chi Square calculated value	P value	Remark
<b>1. Age in years</b>							
a) Less than 21	2	1	6	12.59*	14.81	0.01	S
b) 21-31	15	1					
c) 31 to 40	16	24					
d) Greater than 40	0	1					
<b>2. Gender</b>							
a) Female	9	9	1	3.84	2.26	0.61	NS
b) Male	24	18					
<b>3. How many year of experience do you have in this field?</b>							
a) 1-3 years	8	1	6	12.59	7.28	0.06	NS
b) 4-6 years	9	9					
c) 7-9 years	12	16					
d)More than 10 years	4	1					
<b>4. Dietary pattern</b>							
a) Veg	6	1	2	5.99	4.96	0.08	NS

\*Statistically Significant at

5 % level i.e.  $P < 0.05$ .

**Table 4** Dealt with the association of knowledge with selected demographic variables. The calculation of chi square results shows association of knowledge with age. The calculation of chi square results shows there is no association of knowledge score with gender, experience, dietary pattern, type of residence, and hours of computer usage per day, family history of cervical spondylosis, and family history of accident or fall, exercise, source of information of cervical spondylosis. **H<sub>0</sub> is accepted. H<sub>2</sub> of statistical hypotheses is rejected.**

**CONCLUSION:**

The IT workers face more amounts of exposure and risk on their health regarding cervical spondylosis. Determine the knowledge of IT workers. The knowledge level of the IT workers in the post test was significantly higher than the pre-test score. Structured teaching programme was found to be effective for improving the knowledge. This study emphasized on cervical spondylosis. Structured teaching program on cervical spondylosis found effective to increase the level of knowledge. This study helps to improve their health status

**V. ACKNOWLEDGMENT**

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