



**A STUDY TO ASSESS THE EFFECTIVENESS OF STRUCTURED TEACHING
PROGRAM ON KNOWLEDGE REGARDING PREVENTION OF COMPUTER VISION
SYNDROME AMONG HIGHER SECONDARY STUDENTS IN SELECTED SCHOOLS AT
INDORE M.P.**

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Background of the study

Computers become a permanent part of our lives. Today in virtually every corporate cubicle on the desk of every secretary or executives sits a computer that allows us to write design, compute, research, and communicate faster than we ever could before. Yet this communication has not come without a price to our health and general comfort level. Young generations are opting software jobs and due to stress lead in psychological distress.

The prevalence of eye symptoms among computer users ranges from 25-93% as reported by various investigations. Computers have become indispensable in the workplace. The combination of fixed and constrained body postures, work overload and unsuitable work stations can lead to health problems. The most common complaints among computer users are aches and pains in the shoulder, forearm, and wrist, hand, back, neck and eye strain.

Computer vision syndrome is an umbrella term for many eye and environment-related disorders that arise when job-related viewing demands surpass the user's visual capabilities and is characterized by visual symptoms arising from collaboration with a computer monitor and its settings. Ninety percent of the individuals who use the computer for three to four hours daily can develop CVS, and it can be dominant with the symptoms of itching, burning, eye dryness, blurred vision, double vision, and headache that occur during or instantly after the workday.

Universally, computer vision syndrome is the leading occupational hazard of the 21st century and one of the main public health problems. Global data show that 60 million people are suffering from CVS and one million new cases occur each year. Also, its symptoms affect almost 70% of all computer customers. It is a growing public health concern and contributes significantly to reducing the quality of life and efficiency at the workplace. The economic effect of the visual and musculoskeletal symptoms related to computer usage is great. Underestimating the symptoms that reduce occupational productivity will result in generous financial profit. Visual difficulties are the most frequently occurring health problem related to extreme computer use. Because of barrier inaccessibility and consumption of personal protective equipment, workload, and poor knowledge of ergonomics during computer use, the burden of CVS is high in developing countries such as Ethiopia.

Objectives of the study

- To assess the pretest knowledge of higher secondary students regarding computer visionsyndrome.
- To evaluate the effectiveness of structure teaching program (post-test) on knowledge of higher secondary students regarding prevention of computer vision syndrome.
- To compare the pre-test and post-test knowledge regarding prevention of computer visionsyndrome among higher secondary students.
- To find out the association between post-test knowledge scores among higher secondarystudents and selected demographic variables.

Hypothesis

All Hypothesis in 0.05 level of significance

H₁: There will be a significant difference between pre-test and post-test level of knowledgeregarding prevention of computer vision syndrome among higher secondary students.

H₂: There will be a significant association between post-test level of knowledge and theirselected demographic variables.

Methods & Material

The purpose of the study is determined the effectiveness of planned teaching programme on knowledge regarding prevention of computer vision syndrome among higher secondary students at selected school, Indore. The objectives of the study are to assess the pretest knowledge level among higher secondary students, to assess the effectiveness of structure teaching program on knowledge of higher secondary students, to compare the pre-test and post-test knowledge regarding prevention of computer vision syndrome among higher secondary students and find out the association between posttest knowledge score among higher secondary students with them selected demographic variables.

The conceptual framework of the study was based on modified Stuffle Beam CIPP mode. Pre experimental one group post-test and post-test design was used. The independent variable was structured teaching programme, dependent variable was knowledge of Higher Secondary School students regarding computer vision syndrome.

The study period was 4 weeks. Totally 120 Higher Secondary School, , were selected as a samples by using purposive sampling technique method. The data was collected using structured questionnaire constructed by the investigator. Structured teaching programme on prevention of computer vision syndrome was implemented by using booklet and power point presentation. After the structured teaching programme one week later post-test level of knowledge regarding prevention of computer vision syndrome by using same questionnaire. The reliability of the tool was test retest method, the data analysis and interpretation were done by using descriptive and inferential statistics.

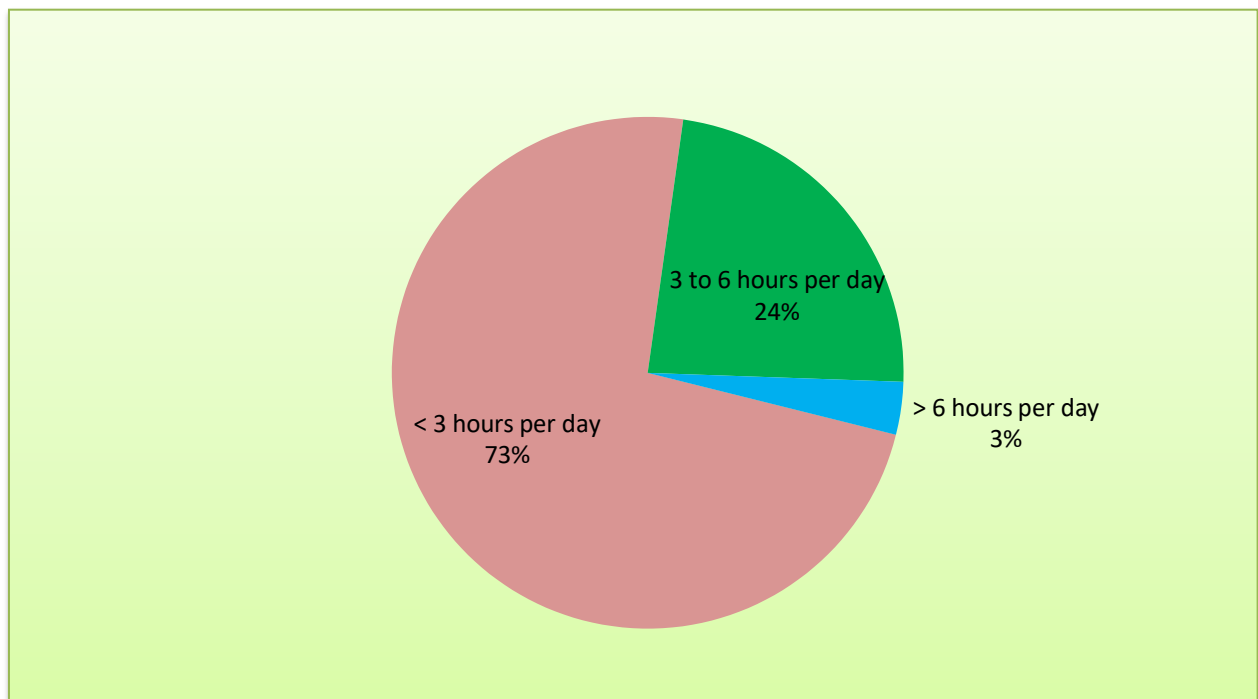
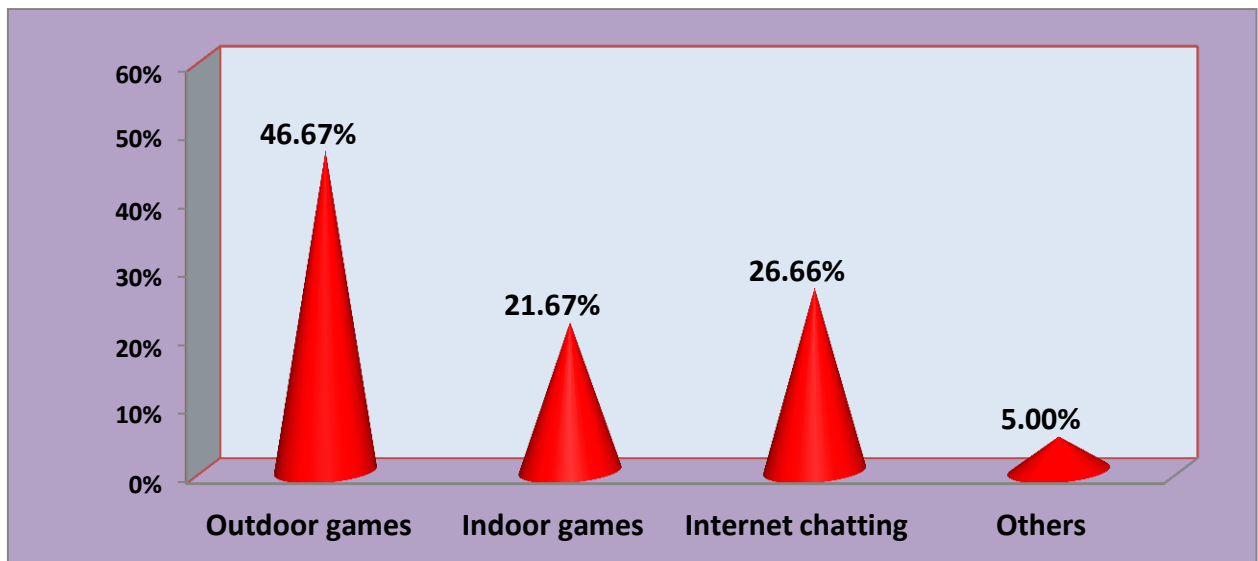
Result

Findings related to demographic variables:

- Majority of samples (58.33%) belongs to 15 - 16 years of age.
- Maximum of them (56.67%) were male.
- The major part of samples (81.67%) belongs to nuclear family.
- Majority of fathers education of samples (35%) were secondary education.
- The greater part of fathers occupation of samples (63.34%) were unskilled

worker.

- Majority of mothers education of the samples (35%) were primary education.
- Majority of mothers occupation of the samples (41.67%) were unskilled worker.
- Most of the participants about (30%) were earning Rs2,092 to Rs6,213 per month asfamily income.
- The greater part of samples (46.67%) have the hobbies of outdoor games.
- Majority of samples (58.34%) were using the computer <3hours per day
- Most of the participants (58.34%) were using the computer for education



In assessing pretest, 86.67% of Students are having inadequate knowledge and 13.33% of them having moderate level of knowledge and none of them are having adequate knowledge.

Findings regarding post test level of knowledge

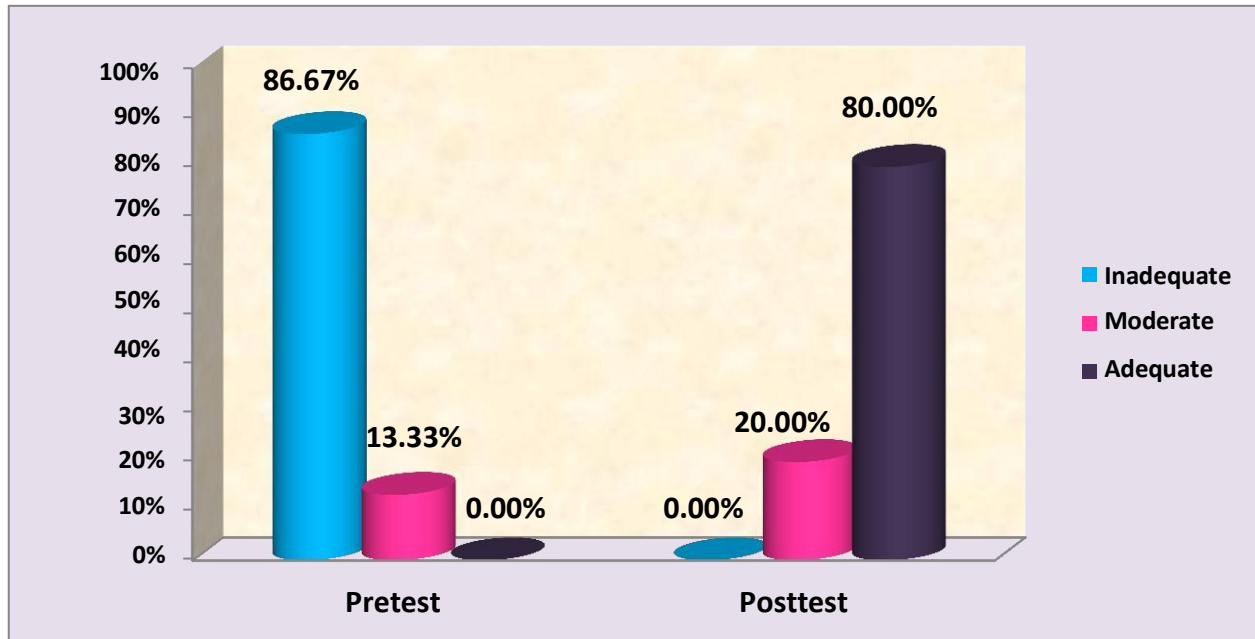
In Posttest, 20.00% of Students are having moderate knowledge and 80.00% of them having adequate level of knowledge and none of them are having inadequate knowledge.

Findings related to effectiveness of structured teaching programme

Area wise knowledge regarding prevention of computer vision syndrome showed that out of 120 samples regarding general knowledge score related to computer vision syndrome is 78.33%. The causes and symptoms of computer vision syndrome knowledge score is 77.00%. Prevention knowledge score is 81.13%. Eye exercise knowledge score is 78.33%.

Findings related to association with demographic variables:

- There was significant association with the effectiveness of structured teaching programme regarding prevention of computer vision syndrome and their age group between 15-16 years of students [χ^2 value = 3.86, $p = 0.05^*$]
- There was significant association with the effectiveness of structured teaching programme regarding prevention of computer vision syndrome and the male students [χ^2 value = 6.12, $p = 0.01^*$]
- There was significant association with the effectiveness of structured teaching programme regarding prevention of computer vision syndrome and the nuclear type of family [$\chi^2 = 5.45$, $p = 0.02^*$]
- There was significant association with the effectiveness of structured teaching programme regarding prevention of computer vision syndrome and their duration of computer use <3 hours per day [$\chi^2 = 5.99$, $p = 0.05^*$].



SUMMARY

The findings revealed that the structured teaching programme was more effective with the adequate knowledge gain score when compared to pre-test knowledge. Further studies focusing on the practice of higher secondary students regarding the prevention of computer vision syndrome can be more useful. Enhanced knowledge regarding prevention of computer vision syndrome should be used in developing highly effective educational programme in school areas.

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