A Study to Assess the Effectiveness of Self-Instructional Module on Knowledge Regarding Home Care Management of Cluster Headache among UG Student In Selected Engineering College

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Abstract: Headache / cephalagia are one of the most common of all human physical complaints based on National Headache Society "A Headache is a pain in the head or neck is an extremely common symptoms" Headache can either be primary/secondary headaches. Primary headache which are not caused by an underlined condition they can be a symptom of stress or poor posture Example of Primary headache or Tension- Type Headache, Cluster headache & Migraines. Secondary headaches are caused by an underlying condition such as Meningitis or Brain tumors¹. This study was based on quantitative evaluative research approach. A probability simple random sampling. Quasi experimental one group pre-test and post-test research design. In this study included 60 samples. Based on the objectives and the hypothesis the data were analyzed by using various statistical tests. Analysis of data showed that there is significant difference between the pre test and post test. The calculated 't'test values are much higher than the tabulated values. Hence it is statistically interpreted that the self instructional module on home care management of cluster headache at selected engineering college. In this study SIM on home care management of cluster headache was very effective to reduce cluster headache.

Keywords: Effectiveness of self instructional module on knowledge regarding home care management on cluster headache. UG engineering student.

1. Introduction

"What the neurology tells us is that self consist of many components, and the notion of one unitary self may well be an illusion."

Headaches are one of the most common medical complaints; most people experience them at some point in their life. They can affect anyone regardless of age, race, and gender. the world health organization (who) reports that almost half of all adults worldwide will experience a headache in any given year. a headache can be a sign of stress or emotional distress, or it can result from a medical disorder, such as migraine or high blood pressure, anxiety, or depression. it can lead to other problems. People with chronic migraine headaches, for example, may find it hard to attend work or school regularly.²

Cluster headache causes severe unilateral temporal or periorbital pain, lasting 15 to 180 minutes and accompanied by autonomic symptoms in the nose, eyes, and face. headaches often recur at the same time each day during the cluster period, which can last for weeks to months. some patients have chronic cluster headache without remission periods. the pathophysiology of cluster headache is not fully understood, but may include a genetic component. cluster headache is more prevalent in men and typically begins between 20 and 40 years of age.³

Common signs and symptoms are excruciating pain generally situated in or around one eye but may radiate to other areas of your face, head, neck and shoulders. one-sided pain, restlessness, excessive tearing, redness in eye on the affected side, stuffy or runny nose on the affected side, forehead or facial sweating, pale skin (pallor) or flushing on your face, swelling around eye on the affected side, drooping eyelid.⁴

Treatment focuses on avoiding triggers and includes abortive therapies, prophylaxis during the cluster period, and long-term treatment in patients with chronic cluster headache. evidence supports the use of supplemental oxygen, sumatriptan, and zolmitriptan for acute treatment of episodic cluster headache. verapamil is first-line prophylactic therapy and can also be used to treat chronic cluster headache. more invasive treatments, including nerve stimulation and surgery, may be helpful in refractory cases.⁵

Anne luise h et.al; (2018) a study was conducted to determine whether CGRP (calcitonin gene-related peptide) induces cluster headache attacks in episodic cluster headache in active phase, episodic cluster headache in remission phase, and chronic cluster headache. a randomized. double-blind, placebo-controlled, 2-way crossover study set at the danish headache center, rigshospitalet glostrup, in denmark. 91 patients assessed for eligibility, 32 patients (35.2%) were included in the analysis. the mean (sd) age was 36 (10.7) years (range, 19-60 years), and the mean weight was 78 kg (range, 53-100 kg). twentyseven men (84.4%) completed the study. the study concluded that calcitonin gene-related peptide provokes cluster headache attacks in active-phase episodic cluster headache and chronic cluster headache but not in remissionphase episodic cluster headache. these results suggest anticgrp drugs may be effective in cluster headache management.6

Volume 8 Issue 5, May 2019 www.ijsr.net Licensed Under Creative Commons Attribution CC BY **Todd rozen et.al; (august 22, 2011)** a study was conducted to present a cluster headache phenotype (never smoker and no parental secondary smoke exposure as a child): results from the united states .cluster headache survey consisted of 187 multiple choice questions (patient demographics, headache characteristics, triggers and personal burden) related to ch. at the end study concluded 1134 individuals completed the survey. 133 responders or 12% of the population were non-tobacco exposed. There were 87 males (65%) and 46 females (28%) with a gender ratio of 1.9:1⁷

Problem definition

"A study to assess the effectiveness of self-instructional module on knowledge regarding home care management of cluster headache among ug student in selected engineering college"

2. Methodology

Research approach: Quantitative evaluative research approach was used for this study.

Research design:

Variables under study

- 1) Independent variable: **self instructional module** on home care management of cluster headache.
- 2) Dependent variable: **knowledge of UG student** on home care management of cluster headache. The study was conducted in selected engineering college.

Population: In this study, the population included engineering student in selected engineering college. **Target population** consists ug engineering student in engineering. Accessible ug engineering student in selected engineering college. Who fulfill the inclusive and exclusive criteria.

Sample and sampling technique

Sample: In the study UG student in selected engineering college.

Sample size: The sample size for the present study is **60** UG students who fulfill the set inclusion criteria.

Sampling technique: Probability simple random sampling.

Inclusion criteria- Students who are

- Student who are able to read, write and speak english.
- students who are willing to participate in the study

Exclusion criteria- Students who are

- Who are sick at time of dada collection
- Scoring mode: Mild- 0 to 10 Moderate 11 to 20, severe-21-30

Preparation of the tool Section I:- Demographic data, Section II Structured knowledge questionnaires.

3. Results

Organization of the data: The collected data is tabulated, analyzed, organized and presented under the following sections:

Knowledge	Frequency	Mean	S.D.	t value	P value
Pre Test	60	8.73	2.48	20.70	0.000
Post Test	60	15.00	3.43		

The comparisons of the pre test and post test means of the knowledge were done by the paired t test. The pre test average score was 8.73 with standard deviation of 2.48. The post test average score was 15.00 with standard deviation of 3.43. The test statistics value of the paired t test was 20.79 with p value 0.00. Shows that self-instructional module on knowledge regarding home care management of cluster headache among UG student in selected engineering college to improve the knowledge was effective

4. Discussion

The findings of the study have been discussed with reference to the objectives of the study.

SECTION-I: It shows demographic characteristics of subjects as follows:

- Majority are age group 27 (45%) were in group 22-24 years of age, 14 (23.33%) were in the 20-22 years, 11(18.33%) were in the age group above 24 years and 8(13.33%) in the group below 20.
- Majority are genders 35 (58.33%) were female students and 25(41.67%) were male students.
- Majority are types of family 34(56.67%) were from the nuclear families and 26(43.33%) were from the joint families.
- Majority are residences/ habitats 34 (56.67%) were from the group day hosteller and 26 (43.33%) were the day scholar group.
- Majority are previous history of headache 34(56.67%) students answered yes and (43.33%) answered no.
- Majority are duration of cluster students 25(41.67%)in the group15-180 min,
- 19 (31.67%) in the 30 to 90 min, 15(25%) had since 3-5 min and 1(1.67%) had none.
- Majority are previous knowledge regarding the cluster headache 36 (60%) answered No they had knowledge and 24(40%) answered yes.
- Majority are source of Source of previous knowledge11 (18.33%) got the knowledge from the mass media and 10(16.67%) from the family and friends, 3(5%) from the workshop/ seminar /conference, none from Books and journals

Section-II:

Findings related to pre-test knowledge level of UG engineering student regarding home care management on cluster headache at selected engineering college.

No one of subjects were having good knowledge, 31.67% were having average knowledge and 68.33% in the poor knowledge category.

Findings related to post-test knowledge level of UG engineering student regarding home care management on cluster headache at selected engineering college.

Most of the subject 5% of subjects were having good knowledge, 83.33% were having average knowledge and 11.67% in the poor knowledge category.

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Section –III: Determine the effectiveness of selfinstructional module by using pre-test and post-test score.

- The calculated' value is 20.79 for knowledge of UG engineering student regarding home care management on cluster headache. The calculated value is more than the tabulated value at 5% level of significance which is statistically significant. In addition the 'p' value is 0.000 (less than 0.05) conclude that self-instructional module on knowledge regarding home care management on cluster headache among UG student at selected engineering college. was effective. Hence H₁ is accepted.
- In pre-test poor score 41 (68.33%) average knowledge 19 (31.67%) and good knowledge 0(0.00%)
- In post -test the poor knowledge score is 7 (11.67) average knowledge 50 (83.33%) and good knowledge 3 (5.00%)

SECTION-IV: Association between the levels of pre-test knowledge with the demographic variables.

The calculated value is greater than (at 0.05) tabulated value (in addition P value is less than 0.05) for pre-test of knowledge about home care management on cluster headache among UG student with demographics variables such, age, gender, type of family, previous history of headache, source of knowledge, So it is concluded that there is a significant association between pre-test levels of knowledge about home care management on cluster headache among engineering with demographic variables.

Section-V: Testing of hypothesis

The calculated't' value is 20.79 for knowledge of home care management on cluster headache among UG student at selected engineering college. The calculated value is more than the tabulated value at 5% level of significance which is statistically significant. In addition the 'p' value is 0.000 (less than 0.05) conclude that self-instructional module on knowledge regarding home care management on cluster headache at selected engineering college was effective. **Hence H₁ is accepted**

In that variables, age, gender, type of family, previous history of headache, source of knowledge, were not significantly associated with pre-test score. Hence H_2 is rejected.

5. Conclusion

In that study, the contributing that affect the knowledge level of the ug student are age ,gender, type of family , residence, previous history, duration of headache, previous knowledge , source of knowledge.

The findings of present study shows that the of ug student 50(83.33%) having average knowledge .the post-test knowledge mean score 15.00 was higher than pre-test mean score of knowledge 8.73.

The comparison of pre-test and post-test knowledge score showed that there was a significant gain in knowledge scores of the home care management on cluster headache after giving self-instructional module at 0.05 level (t- 20.79, p<

0.00). this results shows that the self-instructional module was effective.

The study findings concluded that the ug students were had poor knowledge regarding home care management on cluster headache. the self-instructional module had great potential for accelerating the awareness regarding knowledge of home care management on cluster headache.

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