A Study to Assess the Effectiveness of Structured Teaching Programme on Knowledge regarding Caffiene Withdrawal Symptoms among Professionals in Selected Automotives, at Bharatpur

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Abstract: *Caffeine can increase mental alertness at work or while studying and can enhance performance on certain mental tasks. In addition to alertness and mental performance, caffeine may also improve memory and reasoning in sleep-deprived people. Physical dependence on caffeine is evidenced by the occurrence of the caffeine withdrawal syndrome upon abstinence following chronic caffeine use. Physical caffeine dependence is distinct from the clinical caffeine dependence syndrome, although they are sometimes mistakenly equated. Clinical dependence is not required for physical dependence. And, while physical dependence is one potential criterion for a diagnosis of clinical dependence, the former is neither a necessary nor a sufficient condition of the latter. The study is based on evaluative approach; one group pretest post test pre-experimental design was used for the study. The sample of 60 subjects was selected by simple random sampling technique. The independent variable was STP on knowledge regarding caffeine withdrawal and the dependent variable was knowledge of the professional drivers on caffeine withdrawal. The Comparison of the knowledge level and the effectiveness of structured teaching programme were obtained by calculating the mean of pre test and post test with 't' test. The mean pre test knowledge on caffeine withdrawal symptoms was 12.33 with SD ±2.81 while mean post test knowledge on caffeine withdrawal symptoms was 25.52 with SD ±1.57. The paired t test value shows significance at level of Significance Level of p < 0.05.*

Keywords: Caffeine, effectiveness, STP

1. Introduction

Caffeine is a widely used neurostimulant that exerts its effects by antagonizing adenosine receptors in a competitive fashion. Caffeine has been considered to have net benefits on mood, reaction time, and cognitive performance. However, chronic caffeine use can result in tolerance to some of its stimulant effects and symptoms of withdrawal, such as headache and fatigue, which can appear after 12 hours of abstinence. The reversal of the negative withdrawal effects in chronic caffeine users has been proposed to outweigh any net benefits of caffeine. The acute effects of caffeine were investigated among moderate habitual caffeine consumers in an abstained state following 30 hours of caffeine abstinence, and in a normal caffeinated state following normal caffeine use. It was hypothesized that the effects of caffeine on measures of mood, cognition, and functional imaging would be greater in an abstained state than in a normal caffeinated state.

1.1 Need and Significant of the Study

Caffeine is the most commonly used psychoactive drug in the world. Its common usage is related in part to its hedonic acute effects and The caffeine withdrawal syndrome is characterized by symptoms that begin between 1to 43 hours after reducing usual caffeine intake or ceasing to consume caffeine following regular use. Symptoms reach peak intensity between 20 to 51 hours following abstinence and last for 2 to 9 days or even several months. There are 14 well-described caffeine withdrawal symptoms, including headache, tiredness/ fatigue, decreased energy/activeness, drowsiness/sleepiness, decreased contentedness/well-being, anxiety, depressed mood, difficulty concentrating, irritability, muzzy/foggy/not clearheaded, flu-like symptoms, nausea/vomiting and muscle pain/stiffness. These symptoms can impair daily functioning and cause clinically significant distress.

1.2 Problem Statement

A study to assess the effectiveness of structured teaching programme on knowledge regarding caffiene withdrawal symptoms among professionals in selected automotives, at bharatpur.

1.3 Objectives of the Study

- To develop and validate the structure teaching programme on caffeine withdrawal symptoms.
- To assess the pre-existing knowledge level to professionals regarding caffeine withdrawal.
- To determine the effectiveness of STP on caffeine withdrawal.
- To find out the association between mean post-test knowledge with the selected demographic variables.

1.4 Research Hypothesis

H1: The post-test knowledge score after structured teaching programme is significantly higher than the pre-test knowledge score.

H2: There is a will be significant association of pre-test knowledge score with selected demographic variables.

1.5 Conceptual Framework

The conceptual framework for this study was derived from Lubwing Von Bertanlanffy's "General system theory'' Which is a" science of wholeness and its purpose to unite scientific thinking across disciplines and which provide frame work for analyzing the whole of any open system.

2. Review of Literature

1) Meaning Caffeine.
2) Impact of caffeine withdrawal
3) Nurse Characteristics.
4) Development of knowledge about caffeine withdrawal in professionals.
5) Scales to observe of withdrawal symptoms.

Research Approach
Quantitative approach was used to assess the effectiveness on knowledge regarding caffeine withdrawal symptoms among professionals in selected automotives at Bharatpur.

Research Design
For the present study one group pre-test post-test design was selected.

Description of the Tool
The structured questionnaire consisted of two parts:-

Part I: This part deals with the demographic characteristics of participants such as age, marital status, type of family, monthly family income, domicile, educational status, and source of awareness.

Part II: Structured knowledge questionnaire on caffeine & withdrawal symptoms to assess the knowledge among professionals in selective automotives. It consist of the 25 multiple choice questions on the aspect of caffeine, introduction, definition, concept, impact and withdrawal.

Validity
It is the assessment of an instrument ability to measure what is a purpose to measure, the degree to which the data collection tools reflect the body knowledge pertaining to the concept being studied. The content was validated by experts those are Mental Health Nursing & Psychologist etc. The modification of the structured questionnaire was incorporated as per validates.

Reliability
The reliability of the instrument was established by administering the tool to 6 subjects, admitted in a selected transport agency in Bharatpur. Split-half method was used to measure the internal consistency of the tool. Karl Pearson's correlation formula and Spearman Brown prophecy formula were used to find out the reliability of the tool. The reliability found to be 0.92, hence the tool was found to be reliable.

Statistical Analysis of Data

- Organization of data in master sheet Frequency and percentage to be used for analysis of demographic data.
- Calculation of mean, standard deviation, means percentage score of knowledge.
- The effectiveness of the Structured teaching programme was find out by Paired t test
- Application of Chi-Square test to find the association of demographic variables with knowledge.

3. Major Findings of the Study

1) The result indicates that as high as 77% of the respondents belong to the age group of 25-30 years.
2) With regards to the marital status of samples, most of them (90%) were married and very few (10%) were unmarried.
3) Considering the type of family, 33% of subjects was belongs to Joint family and 67% of samples were in nuclear family.
4) It also presents that most of the samples (90%) were getting Rs 20, 000 or more monthly income.
5) It showed that, about 72% hailed from urban domicile.
6) It also indicated that majority (98%) of respondents has been completed up to 10education.
7) Further, it depicted that majority (62%) of the respondents were got information on Caffeine withdrawal symptoms from friends, family and health personnel.
8) In pretest, out of 60 samples 47 (100%) subjects with poor knowledge, none of the subjects had adequate knowledge regarding Caffeine withdrawal symptoms whereas in post test about 60 (100%) samples had adequate knowledge regarding Caffeine withdrawal symptoms.
9) The Comparison of the knowledge level and the effectiveness of information pamphlets were obtained by calculating the mean of pretest and posttest with 't' test. The mean pretest knowledge on Caffeine withdrawal symptoms was 12.33 with SD ±2.81 while it was 25.52 with SD±1.57. The paired t test value shows significance at level of $p<0.05$.
10) There was a significant association between the pretest knowledge score of professional drivers and type of family, domicile and source of awareness on Caffeine withdrawal symptoms at $p <0.05$ level while there was no significant association observed between pretest knowledge score and age, marital status, monthly income and educational status.

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