TRENDS OF ENERGY DRINKS CONSUMPTION AMONG MEDICAL AND DENTAL STUDENTS

AUTHORS:
1. DR SAMAN RAUF, CMH MEDICAL COLLEGE LAHORE
2. DR AHSAN IRSHAD, DHQ HOSPITAL NANKANA SAHIB
3. MUHAMMAD ESSA, BASIC HEALTH UNIT TALPUR, DERA GHAZI KHAN

ABSTRACT:
An energy drink is a type of drink containing stimulant compounds, usually caffeine, which is marketed as providing mental and physical stimulation. This survey study was conducted among the medical and dental students of different medical and dental colleges. A total of 120 medical and dental students participated in the study. The mean age of the students was 21.34±1.33 years. There were 90 males and 30 females in the study. Out of 90 male students, only 12 males were used to consume energy drinks on regular basis, 45 used it occasionally and rest had never used it. Out of 30 females, only 6 females were using it on regular basis, 9 used in occasionally and rest had never used it.

Keywords: Medical, Dental, Students, Energy Drinks

INTRODUCTION:
An energy drink is a type of drink containing stimulant compounds, usually caffeine, which is marketed as providing mental and physical stimulation (marketed as "energy", but distinct from food energy). They may or may not be carbonated and may also contain sugar, other sweeteners, herbal extracts, taurine, and amino acids. They are a subset of the larger group of energy products, which includes bars and gels, and distinct from sports drinks, which are advertised to enhance sports performance. There are many brands and varieties in this drink category.

Coffee, tea and other naturally caffeinated drinks are usually not considered energy drinks. Other soft drinks such as cola may contain caffeine but are not considered energy drinks either. The belief in energy drinks is held by most athletes, particularly because the term “energy drink” conveys a message that the product has a connection with physical activity. Consequently, an uninformed consumer may assume that some benefits would be derived after consuming these beverages.

It has been reported that the consumption of energy drinks, especially among young adults aged between 18 and 25, is currently of great concern. This is because these energy drinks typically contain three times the amount of caffeine present in soft drinks, and in some cases, up to ten times as much. Another issue of great concern is that, for most brands, information regarding the potential negative health effects of an excessive intake is not presented on the labels. Some energy drinks contain ingredients with potential interactions such as between taurine and other amino acids and between caffeine and some herbal extracts. Some herbs combine with caffeine to create a “synergistic effect” which varies from drink to drink.

There are several ingredients found in most energy drinks, including caffeine, guarana, taurine, sugar, ginseng, and bitter orange. The amounts of guarana, taurine, and ginseng found in most energy drinks occur at low levels; therefore,
they are neither therapeutic nor lead to adverse effects. However, there is a greater occurrence of adverse effects as a result of the amounts of caffeine and sugar present in most energy drinks. Use of energy drinks, coffee, and other caffeinated beverages as a replacement for sleep has become a common practice among adolescents and young adults related to school, sports, or everyday life obligations. This practice may lead to sleep deprivation. Impaired dental health and dental erosion is common in energy drink consumers as a result of the high sugar content of these beverages. Obesity is also a concern with energy drink consumption. These drinks contain excess calories, as much as 200 calories or more, and are considered a high-calorie drink. If consumed in amounts exceeding daily caloric needs, childhood obesity can result. Childhood obesity, already a great health concern around the world, may become a larger concern with increased popularity of energy drinks (1-5).

**MATERIAL AND METHODS:**
This survey study was conducted among the medical and dental students of different medical and dental colleges. Different questions were asked regarding energy drinks consumption i.e. whether they use energy drink or not, why they use it, why they do not use it, what is the frequency of using it etc. All the data was collected on a predefined proforma and later analyzed with SPSS Ver. 23.0. Relevant statistical analysis was performed. The qualitative variables were presented as frequency and percentages. The quantitative variables were presented as mean and standard deviation.

**RESULTS:**
A total of 120 medical and dental students participated in the study. There were 90 males and 30 females in the study. The mean age of the students was 21.34±1.33 years.

Out of 90 male students, only 12 males were used to consume energy drinks on regular basis, 45 used it occasionally and rest had never used it. Out of 30 females, only 6 females were using it on regular basis, 9 used in occasionally and rest had never used it.

The main reason for using the energy drinks was to gain the mental energy, and the motive behind this was the stress in studies. Those who never consumed it quoted that, they know it contains caffeine, that is why they do not use it.

**DISCUSSION:**

Excessive consumption of energy drinks can have serious health effects resulting from high caffeine and sugar intakes, particularly in children, teens, and young adults. Excessive energy drink consumption may disrupt teens' sleep patterns and may be associated with increased risk-taking behavior. Excessive or repeated consumption of energy drinks can lead to cardiac problems, such as arrhythmias and heart attacks, and psychiatric conditions such as anxiety and phobias. In Europe, energy drinks containing taurine and caffeine have been
associated with the deaths of athletes. Reviews have noted that caffeine content was not the only factor, and that the cocktail of other ingredients in energy drinks made them more dangerous than drinks whose only stimulant was caffeine; the studies noted that more research and government regulation were needed.

Research suggests that emergency department (ED) visits are on the increase. In 2005, there were 1,494 emergency department visits related to energy drink consumption in the United States; whereas, in 2011, energy drinks were linked to 20,783 emergency department visits. During this period of increase, male consumers consistently had a higher likelihood of visiting the emergency department over their female counterparts. Research trends also show that emergency department visits are caused mainly by adverse reactions to the drinks. In 2011, there were 14,042 energy drink-related hospital visits. Misuse and abuse of these caffeinated drinks also cause a significant amount of emergency department visits. By 2011, there were 6,090 visits to the ED due to misuse/abuse of the drinks. In many cases 42% of patients had mixed energy drinks with another stimulant, and in the other 58% of cases the energy drink was the only thing that had been consumed. Several studies suggest that energy drinks may be a gateway drug. The American Academy of Pediatrics recommends that children not consume caffeinated energy drinks (6-9).

REFERENCES:


