Effect of Energy Drink consumption on health of Medical students: First study reported from Nepal

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Abstract

Introduction and Rationale

Energy drinks that contain caffeine, taurine, vitamins, herbal supplements, and sugar or sweeteners and are marketed to improve energy, weight loss, stamina, athletic performance, and concentration. Medical students undergo a lot of stress during their course due to the massive course and curriculum. Recently some of energy drink has been banned in different countries like Denmark, Norway and France but in Nepal none of the studies has been done to report the effect of energy drink on health.

Objective:

The objective of the study will be to find out the effect of energy drink on health of medical students.

Materials and Methods

It is a cross sectional questionnaire based study done at Manipal College of Medical Sciences, Pokhara, Nepal on November 2013.

Results:

Out of 206 students 202 completed the questionnaire completely and their responses were evaluated which gives an overall response rate of 98.05%. Out of 202 students, 88 (43.56%) students were found consuming energy drinks. It was found Nepalese were consuming 35.2% followed by Srilankan 31.8%, Indian 19.3% and Maldivian 13.6%.
Number of cans consumed varied from 1-2 cans per day 64.8% to > 20 cans/week 5.7%. The clinical manifestations the student suffered from were felling lack of sleep 43.2%, increase frequency of maturation 29.5%, dry mouth 19.3%, palpitation 17%, felling discomfort 17%, euphoria 17%, anxiety 15.9%, burning sensation of the throat 13.6%, dizziness 11.4%, nausea 11.4%, headache 10.2%, sweating 10.2%, constipation 10.2%, allergic reaction 8%, weight loss 8%, prolonged sleep 8%, hallucination 6.8%, abdominal cramp 5.7%, vomiting 4.5%, diarrhoea 4.5%, chest pain 3.4%, shortness of breath 3.4%, seizure 2.3%, good taste 15.9%. Students take the energy drink to feel energetic 61.4%, increases stamina 44.3%, its good taste 15.9%. Male student has a [OR 2.693, 95% (CI 0.053, 138.132)] more tendency of having discomfort as compared to female. It was also found that male student has [OR 6.282, 95% (CI 0.385, 102.42)] and [OR 5.722, 95% (CI 0.798, 41.02)] more tendency of having euphoria and increased stamina as compared to females.

Conclusion

It's concluded that energy drink gives energy and increases the stamina but it produces a lot of ill effects on health. Further studies are required on the same field to find out its effect on health in Nepalese population.

Keywords: Energy drink, First study, Nepal
P Drug Selection- Medical students perceptive: A cross sectional study from a private medical school of Nepal

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Abstract

Introduction and Rationale

Personal (P) drug selection is an important part of the pharmacology teaching and learning session. Most of the textbooks that are commonly followed by the medical schools of Nepal merely tell about the concepts of P drug selection. Most of the time it is found that student cannot follow the concepts of P drug.

Objective:

The main objective of the study was to find the Medical students perceptive of P- Drug selection from a medical school of Nepal.

Materials and Methods

This cross sectional questionnaires based study was carried out at Manipal College of Medical Sciences, Pokhara, Nepal from July 2008- July 2013. Z test, Chi square test were used
for analytical purpose. P-value < 0.05 was considered to be statistically significant. Questionnaire validation tests showed that the Alpha Cronbach was 0.72.

Results:
Out of 712 students, 605 students filled the questionnaires properly and completely which indicates overall response rate of 84.97%. The questionnaire was rejected based on the incomplete filling of the form and absence of the students from the class. 453 students reported P drug selection is an important lesson for the MBBS curriculum 74.87%. P drug is for disease and not for a patient (496/605) 81.93%. The time for selection of P drug is to be increased was opted by (514/605) 84.95% of the students. There was a difficult of selecting the costs of the drugs from different brands was faced by (544/605) 89.91% of the students.

Conclusion
The teaching and learning activity of P Drug Selection needs improvement. With proper teaching and learning methodology the activity of P drug selection can reduce the chances of irrational prescribing that is common problem in developing country like Nepal.

Keywords: P Drug, Rational Medicines, Nepal
Nutrition education Programme in a medical school – A Scenario form Nepal

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Abstract

Introduction and Rationale
Numerous steps have been adopted to improve the nutrition knowledge and skills of medical students and physicians. Dissimilar researches in different parts of the world shows that most graduating medical students opinion about nutrition preparation, is inadequate.

Objective:
The objective of the study was to determine the amount and type of nutrition instruction at a medical school in Nepal.

Materials and Methods
A 14-item questionnaire survey was done among medical students to characterize nutrition instruction at their medical school and they were also asked to quantify nutrition contact hours outside designated nutrition syllabus.

Results:
A total of 286 students were submitted correctly filled Questionnaire with a response rate of 84%. 125 students responded with some form of nutrition education; however, only 95 students required a separate nutrition course. On average, students received 30 contact hours of nutrition instruction during medical school. Most students (90%) expressed the need for supplementary nutrition programme.

Conclusion
The integrated medical curriculum and introduction of problem-based learning at many medical colleges, a considerable portion of the total nutrition instruction is occurring outside courses specifically dedicated to nutrition. Therefore, there should be more improvement of Nutrition teaching learning activity in medical schools.

Keywords: Nutrition, medical education, medical school curriculum, education, nutrition curriculum
Dental caries and Oral facial clefts: A systematic review

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Abstract

Introduction and Rationale

Although facial clefts was ranked among the most common congenital malformations, little information is available concerning the oral and dental health of children with cleft lip and/or palate. Children with cleft lip and cleft palate have both the usual childhood dental needs and special problems arising from the clefts. Good dental care is essential. These children have an increased need for preventive and restorative dental care due to underlying dental anomalies and the use of braces and other orthodontic appliances. Unhealthy teeth and gums compromise later orthodontic and surgical interventions, and may contribute to low self esteem.

A number of literature reviews have been conducted on describing the dental health status of individual with cleft lip and cleft palate. Lauterstein & Mendelsohn (1964) did not find any difference in caries experience between cleft children and non cleft children, while Johnson & Dixon (1982) found that 32% of children with cleft lip and palate had one or more caries teeth than did higher percentage of caries teeth than did those with unilateral clefts.

It is apparent that findings on the overall oral and dental health status in children with cleft lip and cleft palate have been inconsistent. On the other hand did not find significantly different caries experiences among different cleft types, although caries experience was significantly higher in cleft children as a group than in control subjects.

Objective:

The overall aim was to evaluate the scientific evidence linking cleft Lip and Cleft Palate with an increased risk of poor dental health status. The review addressed a number of specific questions, Are children and adolescent with cleft lip palate at increased risk of poor dental health status? Is there relationship between cleft type and the prevalence of dental caries? Review the factors that could account for compromised oral hygiene and high caries prevalence in patients with cleft lip and cleft palate.

Materials and Methods

A systematic literature was conducted using the electronic database PUBMED, MEDLINE & CINAHL to identify the relevant studies. A number of relevant journals were searched including cleft palate craniofacial journal, European journal of orthodontics, Journal of Indian society of Periodontology, European arch Pediatric Dentistry, Journal of Dental Research, Indian Journal of Contemporary Dentistry and British dental journal.

Results:

Are children and adolescent with CLP at increased risk of poor dental health?

All the selected 11 literature suggest that an adolescent and children with CLP are at increased risk of poor dental health. Off the total sample of 114 ; 17.5% had calculus on their teeth. It was present in 9.8% of the 3-5 years old; 18.4% of 6-12 years and 29.2% of 13-18years old. In spite of the findings of low mean caries experience in the present cleft
sample. 20% nevertheless had active decay. (Paul & Brandt, 1998).

Subjects with CLP are at an increased risk for dental caries and periodontal disease when compared with a non cleft population. A high DMFT score in the sample examined suggests that persons with CLP need both preventive and restorative oral health care. Congenitally missing teeth are common in cleft palate population. (Wahadni, et al., 2004). Children with CLP had higher prevalence of remain out caries compared to those with cleft lip. (Bian et al., 2001).

Most of the literature was proved that children and adolescent with cleft lip and palate are at increased risk of poor dental health. But Lucas et al., (2000) found no significant difference in the caries, plaque and gingivitis scores between children with cleft palate and children in a control group. Compared to a 6 year old child dental caries was more prevalent in pre-school child that too also in 4.5 years, when matched with their non-cleft peers. (Britton &Welburry, 2010).

Many studies have been reported the dental caries in children with 3 – 5 year olds. Children whose clefts have been surgically repaired had a lower DMFT and DMFS than those whose clefts had not been surgically repaired. (Zhu et al., 2010). Children with CLP rarely escape dental and occlusal complication. Since these children and their parents give more importance to the surgical correction of their clefts and neglect their dental health they tend to have more decayed and missing teeth, and poor gingival health as compared to that of normal children. (Srinivas Murthy, 2010).

Is there relationship between cleft type and the prevalence of dental caries?

The type of the cleft and its severity appears to have little influence on the prevalence of dental caries. Patients with cleft lip, cleft palate and alveolus had poor oral hygiene and periodontal status than with cleft palate patients. The periodontal destruction was seen to be higher in UCLPA (Unilateral cleft lip, palate and alveolus) patients compared with CP.

Ahed&Wahadni., (2004) reported that there is no significant difference in caries was prevalent among cleft types. Similarly there was no significant difference in oral hygiene and periodontal disease prevalence among different cleft types. Although there was no significant difference in the DMFS, the children with CLP had greater number of unrestored cavities compared with the control children. (Lucas et al., 2000). The authors also found that dental health of children with isolated cleft of the lip or palate was found to be better than those with cleft lip and palate.

Combining CL & CP groups on the basis of their morphological similarities a statistically significant difference was found between the DMFS of the children and those of the CP group. (P<0.5). No statistically significant difference was found between DMFS of different cleft types and caries experiences of children with left side and right sided clefts. (Tahir et al., 1997).

Furthermore child with CP had cleaner teeth than did children with CLP; which was interesting in view of the fact that more children in CLP group brushed their teeth twice a day than did those in the CP group. (Tahir, 1997). However in the 3 to 5 year old group children with CL & or CP had significantly more caries than children of the same age with only a cleft lip with or without alveolus. The type of the cleft and the surgical repair are the two important factors for dental caries. (Zhu et al., 2010).

Review the factors that could account for compromised oral hygiene and high caries prevalence in patients with cleft lip and cleft palate.

Non-cleft parents can carry some of the CL genes which produces chemically subtle manifestation on their facial skeleton system. However there was no evidence to suggest that the parent is cleft lip and palate children have higher incidence of dental abnormalities than general population. (Anderson & Moss.,1994).

It is apparent that findings on the overall oral and dental health status in children with CLP have been in consistent. Poor gingival health was found in cleft children and there was more marked when only the anterior region were compared. In those with unilateral left and right CL there was no difference in DMFT index. However the findings of more tooth surface covered by plaque in the anterior segment of the arch than in the posterior segment again suggest the possible restrictive role of a surgically repaired lip because of its reduced elasticity. (Tahir, 1997)

Relationship between bottle feeding and caries prevalence showed that bottle feeding CLP child had showed baby bottle tooth decay. Parents of non-bottled children had significantly better dental care than parents of bottle feed children in brushing frequency. (Lin & Tsai, 1999). Children with CP tend to have greater prevalence tooth decay than normal children. The longer oral clearance time of food and consequent generation of fermentable sugar from starch may contribute to the higher caries prevalence observed in children with CP than in non- cleft controls. (Wahadni et al., 2004). Caries was more prevalent in the anterior teeth of the youngest age group, but in the posterior teeth of the oldest age group. (Britton &Wellburry, 2010).

Conclusion

Despite of the positive findings the studies lack uniformity and consistency to adequately evaluate the dental caries in each developmental stage of a CLP child. Therefore the need to identify high risk group and to facilitate the integration of oral hygiene and dental preventive regime into the treatment protocol is important. Dental specialist should reinforce a daily oral health maintenance programme.

Keywords: Dental Caries
A study to assess the knowledge and attitude of adolescents regarding dietary precautions for the prevention of obesity in selected school at Thrissur.

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Abstract

Introduction and Rationale

Obesity is a complex and growing global problem and is common in western countries & emerging in developing countries. Adolescence is particularly a unique dynamic period in life of human beings. Obesity is associated with a wide range of medical consequences like heart disease, dyslipidemia, risk for diabetes, arthritis, sleepapnea, gallstone formation, certain cancers including cancer of breast, colon , uterus, pancreas, kidney and psychological problems including social isolation, decreased self esteem and social discrimination are common

Objective:

To assess the knowledge and attitude of adolescents regarding dietary precautions for preventing obesity and to find the association between diet and the occurrence of obesity.

Materials and Methods

A non experimental descriptive design using random sampling technique. Knowledge and attitude were assessed using self administered questionnaire to a total of 60 adolescence between 15-18 years from two different schools in Thrissur, from September 2008 to October 2008

Results:

results revealed that 8.3% of samples have adequate knowledge, 53.3% have moderate and 38.3% of them have poor knowledge regarding the dietary precautions for the prevention of obesity was also found that 1.66% of the samples have adequate attitude, 23.3% have moderate and 75% have poor attitude towards dietary precautions for prevention of obesity. The diet preference and the occurrence of obesity revealed that 68.3% likes fried foods and 31.7% likes the non fried, but no association was found between family income and occurrence of obesity.

Conclusion

The investigator found that a direct relationship exists between knowledge and the occurrence of obesity. 38.3% have poor knowledge regarding the dietary precautions for the prevention of obesity. It was also found that obesity was more in males than in females. The figure suggests the urgent need for interventions to improve the knowledge and attitude level of adolescents. Education regarding the healthy diet and various diseases related to faulty diet is the need of the hour.

Keywords: Knowledge, Attitude, Prevention, Obesity, Diet, Adolescent