Oral Hygiene Practices Among Cricketers in Chennai

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Abstract: Oral hygiene refers to the practice of keeping the mouth, teeth and gums clean and healthy to prevent oral disease. Oral hygiene is often taken for granted but it is essential part of our daily life. Oral hygiene is the practice of maintaining a clean oral cavity to prevent dental diseases such as dental cavities, gingivitis, periodontitis and bad breath. A total of 150 cricketers were involved in the study. Self administered questionnaire related to the oral hygiene practices along with sociodemographic details was prepared and it was distributed through an online survey link. Based on hypotonic and isotonic content of the sports drink, the majority of the participants (58.7%) prefer isotonic sports drinks and the remaining participants (41.3%) prefer Hypotonic. About 58% of participants eat chocolate regularly. 54.6% of participants agreed that dental erosion affects oral health. 56% of participants think oral health has an impact on sports performance. In the present study, the knowledge, attitude and practice of oral hygiene is moderate. For further improvement, awareness about maintaining good oral health should be created among the public. Erosion can be prevented by educating the subjects about the risks associated with carbonated drinks which is more common among sportsmen and young adults.

Keywords: Oral hygiene, erosion, chocolate, sports performance.

INTRODUCTION

Oral hygiene refers to the practice of keeping the mouth, teeth and gums clean and healthy to prevent oral disease. Oral hygiene is often taken for granted but it is an essential part of our daily life. Oral hygiene is the practice of maintaining a clean oral cavity to prevent dental diseases such as dental cavities, gingivitis, periodontitis and bad breath. Plaque and calculus are the main causes of gum disease and tooth decay. Oral health is an essential component of general health (Hosing et al., 2016). Good oral hygiene is the foundation for a healthy mouth and prevents 80% of all dental problems (Pereira and Others, 2017). Majority of the Indians are unaware of the fact that good oral health not only ensures freedom from pain and suffering associated with oral health problems, but it is also essential for the overall health improvement and elevation of self esteem, quality of life, performance at work (Nagarajappa et al., 2015). Dental diseases such as dental caries, periodontal diseases and oral cancer have increased in prevalence globally by an average of 45.6% since 1990, in parallel with major non communicable disease (25%). Poor oral health impacts substantially on daily activities due to the associated pain and suffering, and in the long term is a substantial health and financial burden (Batra, Gupta and Erbas, 2019). Bacterial plaque is the cause of most of the oral diseases such as dental caries, gingivitis and periodontitis (Devishree and Saveetha Dental College and Hospital, 2016). Oral hygiene practices such as brushing teeth regularly, using fluoride toothpaste, using aids such as floss to clean interdental spaces, changing toothbrush at regular intervals of time, visiting dentists regularly will assist in maintaining proper oral health (Bandyopadhyay et al., 2017). Sports drinks may contribute to risks of dental erosion, dental caries, and periodontitis in athletes especially when he or she exhibits poor oral hygiene habits (Broad and Rye, 2015). Sports drinks contain relatively high amounts of carbohydrates (sugars), salt, and citric acid. High intake of sports drinks during exercise, coupled with xerostomia from dehydration, may lead to the possibility of erosive damage to teeth (Mathew, Casamassimo and Hayes, 2000). These drinks have negative effects on teeth and can eventually lead to dental erosion [9]. A person engaged in strenuous sports may be at risk for dental erosion due to the frequent ingestion of acidic sports drinks (Roy, 2008). Sports drinks were made for three main reasons: to prevent dehydration during sport or exercise; to supply enough carbohydrates to increase...
energy; and to provide electrolytes to replenish those lost during perspiration, with the view that these would be full of flavour. These can then be split into two main types of solution: hypotonic and isotonic (Hinds, 2019). By maintaining a proper oral health and practicing good oral hygiene habits can prevent many of the dental disease. Previously our department has published extensive research on various aspects of prosthetic dentistry (‘Evaluation of Corrosive Behavior of Four Nickel–chromium Alloys in Artificial Saliva by Cyclic Polarization Test: An in vitro Study’, 2017; Ganapathy, Kannan and Venugopalan, 2017; Jain, 2017a, 2017b; Ranganathan, Ganapathy and Jain, 2017; Ariga et al., 2018; Gupta, Ariga and Deogade, 2018; Anbu et al., 2019; Ashok and Ganapathy, 2019; Duraisamy et al., 2019; Varghese, Ramesh and Veeraiyan, 2019), this vast research experience has inspired us to research about the oral hygiene practices among cricketers in Chennai. Therefore the aim of the study is to assess the oral hygiene practices among cricketers in Chennai. Our team has rich experience in research and we have collaborated with numerous authors over various topics in the past decade (Ezhilarasan, 2018; Ezhilarasan, Sokal and Najmi, 2018; Gupta, Ariga and Deogade, 2018; Jeevanandan and Govindaraju, 2018; J et al., 2018; Menon et al., 2018; Prabakar et al., 2018; Rajeshkumar et al., 2018, 2019; Vishnu Prasad et al., 2018; Wahab et al., 2018; Dua et al., 2019; Duraisamy et al., 2019; Ezhilarasan, Aporova and Ashok Vardhan, 2019; Gheena and Ezhilarasan, 2019; Malli Sureshbabu et al., 2019; Mehta et al., 2019; Panchal, Jeevanandan and Subramanian, 2019; Rajendran et al., 2019; Ramakrishnan, Dhanalakshmi and Subramanian, 2019; Sharma et al., 2019; Varghese, Ramesh and Veeraiyan, 2019; Gomathi et al., 2020; Samuel, Acharya and Rao, 2020)

MATERIALS AND METHODS
A descriptive cross sectional study was conducted among cricketers aged 18-25 years to assess their impact of social media. Approval was obtained from the institutional review board. Simple convenient random sampling was done. A total of 150 participants were involved in the study. Self administered questionnaire of close ended questions was prepared related to oral hygiene practices along with sociodemographic details and distributed among cricketers through an online survey link. The responses were collected back and finally, the result was presented by using pie charts.

RESULTS AND DISCUSSION
The present study was conducted to know the knowledge, attitude and practice of oral hygiene among cricketers in Chennai. Regarding the knowledge of oral hygiene, 49.3% of participants brush to brighten their teeth. Surprisingly, 30.6% of participants brush their teeth to prevent bleeding and the rest of the participants (20.1%) brush to prevent the bad breath. Majority of the participants 48% approach the dentist only when they suffer from pain and 28% of participants approach dentist for specific treatment such as RCT, restoration and 24% of participants have never gone to dentist. Regarding the attitude, about 45.3% of participants think oral health is as important as general health and 38% of participants think oral health is not as important as general health. Only 32% of participants visit a dentist every 6-12 months and 68% of participants visit occasionally. Regarding the practice, the majority of the participants 94.6% brush their teeth regularly. Only 13.3% of participants brush twice a day and 86.6% of participants brush only once in a day. About 40% of participants use dental floss and the remaining 60% don’t use dental floss [Figure 1]. About 29.4% of participants clean their tongue regularly and 70.6% of participants don’t clean their tongue regularly [Figure 2]. Majority of the participants prefer red bull (53.3%) and Gatorade (34.6%) as their sports drinks and 6.6% of participants prefer one 8 and 5.3% prefer 7up as their sports drinks and regarding the frequency of consumption of these drinks, 42% of participants drink once in a day, 39.3% of participants drink twice in a day and 18.7% of participants intake more than twice a day. Based on hypotonic and isotonic content of the sports drink, majority of the participants (58.7%) prefer isotonic sports drinks and the remaining participants (41.3%) prefer Hypotonic [Figure 3]. About 58% of participants eat chocolate regularly [Figure 4]. 54.6% of participants agreed that dental erosion affects oral health. 56% of participants think oral health has an impact on sports performance and 44% of participants think that oral health doesn’t have any impact on sports performance [Figure 5].

CONCLUSION
Within the limitations of this study following conclusion can be drawn, Oral hygiene is important for overall health. For maintaining a good health, we should maintain a good oral health because many of the systemic diseases are associated with oral diseases. In the present study, the knowledge, attitude and practice of oral hygiene is moderate. For further improvement, awareness about maintaining good oral health should be created among the public. Erosion can be prevented by educating the subjects about the risks associated with carbonated...
drinks which is more common among sportsmen and young adults. Preventive programs and dietary counselling for young adults should be conducted to control and reduce the use of acidic beverages.

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CONFLICTS OF INTEREST
The authors declare that there were no conflicts of interest in the present study.

REFERENCES


Fig.1: Pie chart representing percentage distribution of participants who use dental floss where blue colour denotes ‘yes’ and pink colour denotes ‘pink’. About 40 %(blue) of the participants use dental floss.
Fig. 2: Pie chart representing percentage distribution of participants who clean their tongue regularly where blue colour denotes yes and pink colour denotes pink. 29.4% of the participants clean their tongue regularly.

Fig. 3: Pie chart representing percentage distribution of type of sports drinks preferred by the participants where red colour denotes isotonic and violet colour denotes hypotonic. 58.7% of the participants prefer isotonic sports drinks.

Fig. 4: Pie chart representing percentage distribution of participants who eat chocolate regularly where blue colour denotes yes and pink colour denotes pink. 58% of the participants eat chocolate regularly.
Fig. 5: Pie chart representing percentage distribution of knowledge on oral health has an impact on sports performance where blue colour denotes yes and pink colour denotes no. About 56% of the participants agreed oral health has an impact on sports performance.