

Self perception regarding dental aesthetics, knowledge and attitude of traumatic dental injury and halitosis among people of Aurabani, Sunsari district of Eastern Nepal

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ABSTRACT

Background and Objectives: Increased concern over dental appearance has been observed during childhood and adolescence to early adulthood. The study was conducted with objectives to assess the self-perception of dental aesthetics, knowledge, attitude and management of dental trauma and halitosis. **Materials and Methods:** Self-administered questionnaire translated in Nepali language consisting of 32 questions was used. The completed questionnaires were analyzed using descriptive statistics. **Results:** Out of the total study population, 63% were satisfied with their overall tooth appearance and 71.7% with their tooth color. Twenty-nine percent had experienced dental trauma. More than half of the study population thought that immediate treatment was required after dental trauma. Fifty seven percent of the villagers had halitosis. **Conclusion:** The research clearly shows that the people of Aurabani VDC were satisfied with their tooth color and overall tooth appearance; however the knowledge regarding emergency management of dental trauma, the cause and management of halitosis was insufficient.

Key words: Dental Aesthetics, Dental Trauma, Halitosis

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INTRODUCTION

According to the concept of Oral Health Related Quality Of Life (OHRQoL), good oral health is no longer seen as a mere absence of oral diseases and dysfunction. The definition of OHRQoL includes the absence of negative impacts of oral conditions on social life, and a positive sense of dento-facial self-confidence.¹ Increased concern over dental appearance has been observed during childhood and adolescence to early adulthood.² The decision to start orthodontic treatment is primarily influenced by such concerns and psychosocial well-being. Social interactions that have a negative effect on self-image, career advancement, and peer-group acceptance have been associated with an unacceptable dental appearance.³

Dental trauma involves injuries to the tooth and periodontium. Traumatic dental injuries can have a significant impact on the life, affecting both

emotionally and physically.⁴ Dental injuries may cause intrusion, extrusion, avulsion, luxation and subluxation of the tooth. Every year a large number of dental injuries are reported especially among children belonging to 7-15 year age group. Studies show that males are injured twice as often as females. The most commonly traumatized tooth is the maxillary central incisor.^{5,6}

Halitosis is a general term used to describe unpleasant or offensive odor emanating from the oral cavity. Halitosis may be an important factor during communication; therefore, it may be the origin of concern not only for a possible health condition, but also for frequent psychological alteration leading to social, and personal isolation.⁷ Halitosis is a very common problem in dental patients; in fact most of adult subjects have socially unacceptable breath when they wake up in the morning.⁸ A study performed in Japan involving

2672 individuals indicated that about 6-23% of the subjects had oral malodor as measured by Volatile Sulphur Compounds (VSC); higher than 75 parts per billion (ppb) in the expired air, at some period during the day. If these Japanese results reflect the oral malodor in other populations, then the oral malodor would represent a major oral health concern of the public.⁹ Some authors estimate that about 50% or more of the middle aged individuals had bad breath, due to physiological causes when they wake up in the morning.¹⁰ Hence, the aim of the study was to assess the knowledge, attitude and practice of dental aesthetics, dental trauma and halitosis among population of Aurabani VDC, Sunsari District of Eastern Nepal.

MATERIALS AND METHODS

A cross sectional study was done among the people of four wards of Aurabani VDC, Sunsari using convenience sampling technique. Informed consent was taken from villagers before the survey. One hundred and fifty-two villagers who were able to read and write were chosen using a convenience sampling technique. Villagers who were unwilling to take part in study were excluded. A standardized, semi-structured questionnaire was designed on three topics: Dental aesthetics, Dental trauma and Halitosis.⁵ The questionnaire was then translated to Nepali for self-administration. Reliability and validity test was done. The questionnaire consisted of: Personal data, questions regarding dental aesthetics (n=8) dental trauma (n=11) and halitosis (n=13). Questionnaires were collected from the villagers and data obtained from the responses was entered in Microsoft Excel Sheet and converted into Statistical Package for Social Sciences version 11.5 software for descriptive statistical analysis.

RESULT

The total sample included was 152 out of which 78 were male and 74 were female. Results showed that 63% were satisfied with their overall tooth appearance. It was observed that 71.7% were satisfied with their tooth color. On assessment of self-perception, nearly 35% of the study population noticed spacing in between teeth and 30.92% complained of mal-aligned teeth. Only few of them (17.10%) responded to have protruding anterior teeth. About 82% believed to have caries free anterior teeth but 9.86% of them complained of fractured anterior teeth. Nearly 13% responded to hide their teeth while smiling.

Nearly 30% had experienced dental trauma. Out of 44 people who had experienced trauma, 47.72% went to dentist but 11.36% took self-medication.

Majority of the participants (90.14%) thought that treatment was needed for dental trauma. When asked about the management, 58.55% thought that the most appropriate action after avulsion was to stop the bleeding. Nearly half of them (50.66%) did not know what should be done. Most of them (74.34%), would contact dentist to seek treatment. More than half (56.57%) felt that immediate professional help was needed for avulsion but 50% did not know that the avulsed tooth could be replanted. Also, 62.5% did not know about any transportation media. When asked about the avulsion of primary tooth, 67.11% said that they would not care if any primary tooth got knocked out.

Out of 152 villagers, 57.24% of them had experienced oral bad breath. Among them, 41.38% experienced bad breath after awakening and 22.98% when they were hungry or thirsty. About 42.5% felt bad breath once a month and 26.43% every day. When asked, 41.31% described their bad breath as stinky while 26.47% described it as bitter. Most of them (70%) felt that halitosis had affected their social life. Out of 87 people complaining of halitosis, 25.28% had tongue coating and 50.57% had problem of xerostomia, 28.7% were using antibiotics and 18.39% took antacids. Among those having halitosis, 59.78% did nothing and 29.88% had used mouth wash while 24.13% avoided talking with other people.

DISCUSSION

This study was conducted to assess the knowledge regarding dental aesthetics, dental trauma and halitosis among the villagers of Aurabani VDC, Sunsari district of Eastern Nepal. Esthetics has become an important aspect of dentistry. Patients have become more aware of dental aesthetics and are seeking treatment to achieve their idea of dental aesthetics. In general, people of Aurabani were satisfied with overall appearance of their teeth (77.63%). This finding is consistent with study conducted in Simla¹⁰, India where 60% of the patients were satisfied with their dental appearance. Many people in Aurabani were happy with the appearance of their tooth colour (71.7%) and tooth alignment (69.08%) whereas in a study done by Geiger SB et al.¹¹, 89.3% were not satisfied with their tooth colour, 37.3% were dissatisfied with their dental appearance followed by poor tooth alignment (23.7%). In this study, 12.5% hid their teeth while smiling which was comparable to a study done by Poonam¹⁰ where 13.6% reported in doing so, traumatic dental injuries affect approximately one of five school aged children and

most injuries occur either at home or at school. Parents, teachers and other non-dental professionals can play an important role in management of dental trauma and improving the prognosis. In this study, 28.94% subjects had experienced dental trauma and 17.10% unaware of management of avulsed tooth whereas in a study done in Vikarbad town by Anjum M,¹² in India, 41.4% experienced dental trauma and 24% of them were unaware of the management of avulsed tooth. Most of the villagers (74.34%) consulted the dentist at first which was much higher in comparison to a survey done in Saudi Arabia by Zakirula M et al.,⁵ where it was 47%. Almost 3% of the subjects considered saliva as the best transportation media which was lesser compared to the study done by Zakirulla M. et al.⁵ (11%). Most adults suffer from genuine halitosis occasionally, while an estimated 10-30% of population suffers from this problem regularly.¹³ In this study, 57.24% had experienced oral bad breath out of which 29.83% of them used mouth wash for subsiding it whereas in a study done in Portugal by Jonas,¹³ 84% responded for bad breath and 55% used mouthwash. In this study, 41.38% perceived bad breath after waking up which is lesser than the study done by Almas K et al.¹⁴ in King Saud University where it was nearly 63%. Self-management for bad breath was sought by 40.22% which is comparable to the study done by Almas Ket al.¹⁴ in King Saud University (38%). In the present study, 25.29% had tongue coating which was higher than that of the study done by Almas Ket al.¹⁴ in King Saud University 20%.

CONCLUSION

The study clearly implicates that the villagers of Aurabani VDC were satisfied with their tooth colour and overall tooth appearance but the knowledge regarding emergency management of dental trauma was insufficient. Also, the villagers demonstrated lack of knowledge regarding the cause and management of halitosis. Therefore, the development of public awareness programs about dental trauma and halitosis should carry a clear, objective and motivating message in order to make nonprofessionals not only aware of their role in saving teeth in case of accidents but also to make them feel responsible for their overall oral health.

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