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The Crucial Role of General Dental Practitioners in Oral Health Promotion and Prevention in Sri Lanka

Introduction

Findings from the National Oral Health Survey highlight a concerning burden of oral diseases in Sri Lanka, with significant percentages of various age groups suffering from dental caries, periodontal diseases, and other oral health issues.

Around 63.1% of 5-year-olds suffer from dental caries, while around 96% are untreated. Among 35 - 44 - year age group 92.5% suffer from dental caries while 69% are untreated. Around half of 35-44-year age group suffer from bleeding gums. Oral cancer is the commonest cancer among Sri Lankan males. Half of the 5- year - olds do not brush their teeth twice a day, and a poor oral health seeking behaviour is seeing among Sri Lankans where 19.7% of 65-74-year-olds have never visited a dental clinic [1].

In May 2022 at the 75th World Health Assembly, global strategy on oral health was adopted, in which one of the strategic objectives was 'Oral health promotion and oral disease prevention', highlighting its importance [2]. This paper discusses the pivotal role of General Dental Practitioners (GDPs) in addressing high burden of oral diseases and improving poor oral health seeking behaviour among Sri Lankans through community engagement and comprehensive oral health strategies.

Methods of Oral Health Prevention and Promotion

Oral health promotion and disease prevention encompass a range of practices and educational strategies. This includes imparting knowledge about good oral hygiene practices, such as regular brushing with fluoridated toothpaste, flossing, and the use of mouthwashes. It also involves dietary guidance to limit sugary foods and drinks and encourage a balanced diet. Special attention should be given to vulnerable groups, such as pregnant women, children, and the elderly.

GDP can demonstrate commitment to oral health promotion and prevention, through three strategies: BCD- Brushing, Check-up, and Diet. They could play an active role in supporting the client to maintain optimal oral health throughout the life cycle: starting from advice on maintaining good oral hygiene during pregnancy which could be challenging due to hormonal changes resulting in gingival inflammation and nausea; initiation of tooth brushing from the day the first tooth erupts into the oral cavity using a toothbrush and a smear layer of fluoridated toothpaste; to advice to caregivers on maintaining oral hygiene among the elderly and denture care. Providing guidance on a balanced diet that supports oral health and discouraging excessive consumption of sugary foods, including bakery products and drinks is necessary. Keeping abreast with evidence-based public health messages which are updated from time to time is important to avoid giving conflicting messages to the client. For example, current recommendation is that the mothers should exclusively breastfeed the baby for the first 6 months of life and continue up to two years or beyond, and infants should be breastfed on demand – that is as often as the child wants, day and night [3,4,5].

GDP should stress the significance of self-mouth examination using a face mirror and routine dental check-ups, which allows early detection of oral health issues and enables preventive measures to be taken.

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Assessing patients for risk factors such as consumption of sugar and fizzy drinks, tobacco use, excessive alcohol consumption, medical conditions and, a family history of dental issues, enables GDPs to tailor prevention strategies to individual needs. For example with regard to caries prevention- fissure sealants can be applied to the molars of children and adolescents to prevent the development of cavities in the deep fissures of the teeth, and fluoride treatment could be carried out, particularly for high risk individuals. Such treatment options should be incorporated into the overall treatment plan and client education on its importance is also necessary.

GDP could also engage in behavioural counselling (including Brief Motivational Interviewing) to provide tobacco (including smokeless tobacco) cessation support and dietary counselling. When advising patients special emphasis should be given to the connection between oral health and overall well-being to encourage patients to prioritize their dental care. Working collaboratively with physicians, nutritionists, and other healthcare staff ensures a holistic approach to patients' overall health.

Role of the General Dental Practitioner

GDPs are frontline advocates for oral health, providing patient education, risk assessment, and preventive strategies tailored to individual needs. Their role extends to conducting routine dental check-ups for early detection of oral health issues, behavioural counselling for lifestyle modifications, and collaborating with other healthcare professionals for a holistic approach to health. GDPs should effectively integrate current public health messages and evidence-based practices in their counselling and treatment strategies.

Promotion and Prevention in the Community

In the context of Sri Lanka’s economic crisis, the role of GDPs transcends the confines of the clinic. Community engagement and empowerment is important and creative ways should be sought to utilize available resources for enhancing oral health. Potential of digital technologies in preventive care and patient education, and the use of health education materials in clinics need to be explored by all GDPs. For example, electronic health records, can enhance preventive care and patient education. Health education material (posters, leaflets, videos) should be made available for the patient.

Conclusion

The commitment of GDPs to oral health promotion and prevention is vital for improving the overall quality of life in Sri Lanka. This paper emphasizes the need for a concerted effort involving clinical prevention, patient education, community engagement, and the use of innovative strategies to tackle the high burden of oral diseases in the country.

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ORAL AND MAXILLOFACIAL INJURIES OF CHILD ABUSE AND THE JUSTICE IN SRI LANKA: A COMPARATIVE ANALYSIS

Abstract

The aim of this research is to examine the mouth and jaw injuries resulting from child abuse and the consequent justice for victims in Sri Lanka. There are gaps in the legal system regarding the use of oral and maxillofacial manifestations in child abuse cases in Sri Lanka. This study proposes recommendations for legislative and authority amendments. The child abuse laws of the UK and the US are analyzed and compared with those of Sri Lanka. This research relies exclusively on existing literature, including forensic and scientific articles.

The Penal Code related to child abuse is evaluated in the context of oral and maxillofacial manifestations. Concurrently, child abuse laws and case law from the UK and US are analyzed as secondary research sources. The legislation of these countries is compared with Sri Lanka's child abuse laws, particularly in relation to mouth and jaw injuries. Journal articles discussing oral and maxillofacial manifestations of child abuse are also reviewed as secondary sources.

Introduction

Child abuse is a global phenomenon encompassing emotional, physical, economic, and sexual abuse inflicted upon individuals under the age of 18. It is a complex issue, affecting not only strangers but caregivers and child ideals. Dentists, trained in a specific child abuse curriculum, can offer vital information and support to physicians regarding the oral and dental aspects of child abuse and neglect.

Significance of the Study

This study aims to highlight the severity of mouth and jaw injuries from child abuse and the response of the Sri Lankan justice system. It suggests learning from different jurisdictions to enhance current laws in Sri Lanka. The findings will assist legislators and legal agencies in enacting laws that address the specific aspect of mouth and jaw injuries in child abuse cases.

Definitions of a Child

The United Nations Convention on the Rights of the Child (UNCRC) defines a child as any person under the age of 18, unless the law applicable to the child specifies an earlier age for attaining majority. Dentists, including general dentists, dental specialists, dental hygienists, and dental therapists, gain unique insights into the lives of children who visit their dental offices. Therefore, it is both a duty and a necessity for dentists to be informed of both external (extraoral) and internal (oral) clinical evidence that can identify dental injury and trauma resulting from child abuse and neglect. This guide provides a practical perspective on the signs of neglect and trauma, intended to help dentists identify and recognize instances of abuse and neglect.

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It is recommended that all dental patient assessments should follow a holistic approach [Children's Act, Department of Social Development]. A dentist's jurisdiction over such signs may extend beyond dental and oral indications, particularly when trying to identify victims of abuse. This necessitates heightened vigilance in relation to visible bodily harm of suspicious appearance, location, and origin; conflicting verbal utterances; and the child's outward behavior and demeanor, which may indicate neglect or abuse [Children's Act]. It is also crucial to consider the details required to produce a comprehensive report to support or justify alerting the appropriate authorities for further investigation [Children's Act].

Understand the Abuse

It is crucial for dentists to have a clear understanding of abuse and the important terminology associated with neglect. The WHO (2020) defines child abuse as the mistreatment and neglect of children under the age of 18. This definition encompasses all forms of physical and/or mental abuse, sexual abuse, neglect, negligence, and commercial or other exploitation, resulting in actual or potential harm to the health, survival, development, or dignity of the child in connection with a relationship of responsibility, trust, or power.

Physical abuse can lead to burns when electrical, thermal, or chemical substances are used as punishment. In some cases, children can suffer accidental burns, and therefore, it is important to consider the child's age and general development when analyzing the basis of the injury. Cigarette burns have a very unique appearance and may present as oval or round lesions 5 mm to 10 mm in diameter. Conversely, other anomalies, such as those triggered by impetigo or chickenpox, could have a comparable shape and should therefore be excluded from these possibilities.

Orofacial Trauma, Which May Indicate Abuse or Neglect

Various reports indicate that injuries associated with child abuse predominantly occur in the head and neck area, particularly the face, as it is easily accessible and a psychologically important target area for abuse. Because school-age children frequently suffer accidental dental injuries, dentists examining maxillofacial injuries in children must be vigilant to distinguish between abusive and non-abusive injuries.

Physical abuse is more common among younger men, while sexual abuse is more common among younger women. However, it is important to also consider the possibility of outliers from these groups to ensure that no abused child is overlooked. Depending on the type and location of the abuse, there can be a variety of clinical manifestations of abuse, which appear as described below. It is important to note that while these signs can alert the dentist to the possibility of abuse, they should not be viewed in isolation but should be viewed in context.

Injury to the Soft Tissues of the Mouth

The most common abusive injury to the mouth is to the lips, resulting in lacerations, bruising, or swelling of the lips. Intraoral bruising is the most common form of injury, with lacerations being the third most common.

Cuts, Bruises, and Bruises of the Soft Tissues of the Mouth

Oral wounds associated with physical and sexual abuse may present as lacerations, penetrating mucosal wounds, cuts through the mucosa, and bite marks. The location of the injury is often the clue and can help a dentist distinguish suspicious cases of abuse from everyday cases. Injuries to the mucosa near the corner of the mouth can result from gagging with a rope or cloth, suggesting injuries often associated with forms of physical

and sexual abuse. Cuts on the tongue are also frequently reported. Forcibly inserting objects such as cutlery or pacifiers into the mouths of small children can lead to penetrating injuries to the atrium, the floor of the mouth, and more often to the palate.

Injuries can also take the form of bite marks, with adult cases of bite marks on a child's tongue being documented. A bite mark pattern, which generally appears as a central area of bleeding between the upper and lower arch marks, suggests physical or sexual abuse. Regarding the head and neck region, these are rarely reported intraorally but frequently on the cheeks of abused children.

Injuries of the upper lip frenum with a tear of the frenum from the inside of the upper lip is an injury often referred to as an intraoral injury that is pathognomonic for abuse based on reported historical cases. While a frenulum tear can result from force-feeding, gagging, vigorous rubbing, or a direct blow, recent literature does not support a diagnosis of abuse by the presence of an isolated frenulum tear lip. It is important to contextualize the situation to distinguish suspected abuse from non-abuse, such as raising suspicion that the injury is not accidental and having a full oral examination for other possible signs of seek abuse.

When abused, intraoral bruises, ecchymoses, and petechiae are often found. The location of the bruising, ecchymosis, or petechiae may also indicate the presence and nature of the abuse. Unexplained erythema, petechiae, or ecchymosis at the junction of the hard and soft palate or elsewhere in the palatal mucosa may possibly be due to forced oral sex. These bruises are usually non-ulcerated and can be a single lesion or be bilateral and extend along the midline. There have also been reports of alveolar mucosal ecchymosis associated with avulsed teeth.

Burns

Burn injuries can result from electrical, thermal, and chemical sources and represent any form of abuse, including physical, sexual abuse, and neglect. Damage to the skin normally occurs at temperatures above about 49°C and over sufficient contact time, resulting in cellular damage.

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Note By Editor

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