

Original Article

Awareness of parents towards Teething

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Abstract

Objective: The relationship of the first deciduous tooth eruption and the general health of an infant has always been a subject of curiosity. The enigma of teething although historical, continues to pervade contemporary child health care due to many unexplained teething myths. The treatment modalities used in teething have been diverse. The objective of this study was to evaluate the awareness, beliefs and knowledge of parents towards teething symptoms. **Materials and method:** Hundred parents were randomly selected from two kindergarten schools and were interviewed according to a structured questionnaire. Collected data was analyzed by a statistical software known as SPSS. **Results:** Results revealed that though parents knew about teething but there was lack of awareness regarding diverse treatment modalities and the teething myths and realities. **Conclusions:** More educative programs should be initiated to make parents aware of teething myths and realities.

Key Words: teething, awareness, symptoms.

Introduction

The appearance of the first tooth in the oral cavity of an infant is regarded as an important milestone both in terms of functional and psychological changes in the child's life and in emotional terms for the parents. However, sometimes the period associated with the eruption of the deciduous teeth in infants can be difficult and distressing both for the child and their respective parents.

Teething has remained a subject of great concern both to the clinicians as well as to the parents. 'Teething' often remains an inappropriate diagnosis made by many healthcare personals as well as lay people for any disturbance experienced by an infant during period of eruption of deciduous teeth. A variety of disturbances ranging from minor upsets to potentially fatal illness have been attributed to teething.

An insight of teething is essential as various complications may arise due to the misdiagnosis thereby emphasizing the need for an accurate diagnosis and a sound clinical knowledge for its management.

Objective

The aim of the present study was to evaluate the awareness, beliefs and knowledge of parents

towards teething symptoms thereby highlighting the disputed features of teething: its myths and realities prevailing in the society.

Materials And Method

Hundred parents were randomly selected while conducting a routine school dental programme in two Kindergarten schools. A questionnaire form was used to interview the parents who had children of less than 4 years of age to know their level of awareness regarding teething - its signs and symptoms. The basic qualification of either one of the parents were also assessed categorizing into less than senior secondary, till senior secondary, graduate and post graduate. The variable also included parents into two main streams- Medical and others. Data collected was analyzed by a statistical software known as SPSS. .

Results

Out of the total hundred parents eighty three parents were possessing minimum qualification as a graduate, thirteen parents were post- graduates and only three percent were possessing minimum qualification as till senior secondary while rest three percent were educated less than senior secondary. Seventeen percent belonged to a medical background.

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Most of the parents 97% knew about the term teething from either friends, family or from their own children's experience. Majority of the parents, 88% agreed that teething is a normal process which does not cause severe complications however 6% attributed it to witchcraft. More than two thirds of the respondents, 92% agreed that there is an association between teething and the symptoms which were asked during the interview. The most common symptom reported was fever(86%) followed by diarrhea(69%) and vomiting (63%). Other symptoms reported were drooling (60%), loss of appetite(40%), skin rashes(39%), coughing(33%), constipation(30%), painful swollen gums (26%) and occasionally headache and conjunctivitis (4%). More than half of the parents, 61% agreed that a child must be given systemic treatment for teething symptoms whereby syrups in the form of analgesics and antibiotics were the commonly used medications. Fifty four percent of the parents claimed that consulting a paediatrician was not their immediate first line treatment approach as few symptoms such as diarrhea, fever and skin rash in teething is normal and could be corrected by using routine analgesic and antibiotic. Teething rings were used by sixty four percent parents but the accurate knowledge of using teething rings was only observed in eleven percent parents.

Discussion

The relationship between eruption of the deciduous teeth and general health of infants has been documented for over 5000 years. Hippocrates regarded primary tooth eruption as a cause of severe illness, including fever, diarrhoea and convulsions.¹ In the 16th - 19th centuries teething was even regarded as being the cause of death in a significant number of infants.² Such was the importance of teething as a diagnosis and a latin term 'Dentio Difficilis' was coined, literally meaning difficult dentition, however, the terms pathological dentition and teething have been in common use at different historical times^{1,2}.

Although the extreme sequelae of teething have been discarded to the annals of history, much debate still exists as to the influence teething has on the developing child. The present study provides first information on the levels of awareness of teething in the Indian population. This should establish a baseline from which to monitor the clinical situation. It

has been reported that teething is associated with an 8 day window- 4 days before and 3 days after emergence of the tooth.³ Few signs and symptoms believed to be associated with teething by many healthcare professionals include pain, inflammation of the mucous membrane overlying the tooth (possibly with small hemorrhage), general irritability / malaise, disturbed sleep / wakefulness, facial flushing, drooling of saliva/sialorrhoea, gum rubbing/biting/sucking, bowel upset (ranging from constipation to loose stools and diarrhoea), loss of appetite and ear rubbing on the same side of the erupting tooth^{1,3,4,5}. These findings are concurrent with the present study where majority of the parents reported their infants to suffer from these problems at the time of teething.

Whether teething is the cause of systemic upset is a topic for argument as especially the timing of eruption of deciduous incisors (6-12 months), coincides with the diminution of the circulating maternal humoral immunity conferred via the placenta, and the establishment of the child's own humoral immunity which probably could be the reason to why children of this age group are relatively more susceptible to a myriad of minor infections¹. In the present study majority of the parents believed teething to be a cause of systemic disturbance which is concurrent to other studies in the literature.^{1,3,4,5} Pain, a common feature of teething could be the result of localized inflammatory response which further develops due to eicosanoids, cytokines and growth factors, released from the dental follicle.⁶

Literature review reveals the possibility of certain reported teething symptoms e.g., fever, irritability and eating disturbance due to an undiagnosed primary herpetic infection and systemic problem to be promptly referred to a Paediatrician to rule out the delaying of diagnosis and treatment of any serious disorder.⁷ The present study reveals the lack of awareness regarding the importance of getting medical checkup as soon as any systemic problem occurs at the time of teething thereby stressing upon more educative programs to be initiated for awareness of teething- its myths and realities in the Indian population.

Though there is a spectrum of opinions held by parents regarding teething associated symptoms, the dogma of 'teething troubles' also prevail in some of the healthcare professionals. In a survey of US pae-

diatricians it was found that only 5 of 64 paediatricians believed that irritability, eating problems, wakefulness and rashes were not consequent to teething, and 18 paediatricians believed that fevers up to 39°C could be caused by teething⁸. In the present study the medical background of the parents was known only to assess their possible relation to their awareness level. The present study shows majority of parents consider few symptoms as a normal process in teething thereby ignoring the need to have a thorough medical checkup of their infant. This is a topic of concern as it has been stated that fever, diarrhea, rashes, fits and bronchitis should not be attributed to teething as this can delay the treatment of other serious disorders¹.

Both past and current literature reveals that teething has been reported to have varied clinical characteristics. Most of the studies report the varied complications that may arise due to the misdiagnosis of teething emphasizing the role of accurate knowledge. Such findings are difficult to ignore. A wide variety of treatment approaches have been reported in the literature till date regarding the management of teething.

The historical management of teething is shocking and could only be described as barbaric by contemporary standards of clinical practice. Remedies that have been prescribed for teething in the past include blistering, bleeding, placing leeches on the gums and applying cauterly to the back of the head¹.

Gum lancing, introduced by Dr. Ambroise Pare in the 16th century, became a skilled technique for the management of teething. This procedure was carried out in the absence of any anesthesia and generally required two incisions crossing at right angles to each other overlying the so called 'difficult tooth'^{1, 9}.

Ironically certain systemic medicaments used in the past for managing teething contained opiates and poisons such as lead acetate, mercurials and bromide. Whereas various topical medicaments used for teething pain included hare's brain, animal milk, butter, a honey/salt mixture and even hen's grease¹⁰.

Present approach for managing teething problems^{1, 11} can be either pressure based which includes use of Teething rings/rattles, Frozen pacifiers, Chilled vegetables, peeled chilled cucumbers and frozen

bananas, cold spoon. Teething rings should be sugar free, non-toxic and not easily broken into small pieces to avoid an airway blockage risk. Solid silicone based teething rings are superior to their liquid filled counterparts, as first of all the potentially irritant content of the liquid filled rings may leak if damaged and secondly, usually they cannot be sterilized. Recently manufacturers have stopped using the carcinogen diisononyl pthalate as a softening agent in teething rings and rattles as it was found to leach out¹². Chilled objects offer greater relief. Pressure based treatments enable the child to soothe localized tender areas of gingivae, probably by the gate theory of pain control¹¹. In the present study only eleven percent parents knew the use of frozen teething rings to be effective for pain control.

Drug based therapy either systemic or local has also been recommended however, an accurate diagnosis is very essential before using pharmacological approach. A misdiagnosis of teething has been reported to compromise a patient's life and later the same patient suffered from topical analgesic misuse during the recovery period¹¹. Parents should be warned against the uncontrolled use of both topical and systemic medicaments. Alternative holistic therapy e.g., acupressure, aromatherapy massage and homeopathy have also been reported in the literature as one of the recent modalities to manage teething problem¹. In the present study majority of the parents considered systemic approach to be effective for managing teething. However, they also consider giving medicine as a routine procedure without the urgent need of consulting a paediatrician as a first line treatment approach. This is a topic of high concern as it may lead to drug misuse. This also highlights the lack of awareness amongst the parents regarding other recent management approaches.

Literature review reveals that care should be taken that the excess salivation drooling out onto the infant's skin should be wiped away or else a rash which may be considered pathognomic of teething may develop¹. The present study reports that though the majority of parents were educated and aware of teething symptoms but the accurate knowledge regarding teething was required so as to enable them to make critical and important decisions for the benefit of their children. A great percentage had a belief that most of the systemic symptoms during teething is a normal physiologic process, therefore, more emphasis in the form of oral health education is

required to disregard any misunderstanding that people may have with concerns to teething symptoms as a whole.

Conclusion

Awareness in the society regarding teething and its myths is essential. Teething often remains a convenient diagnosis for many parents to explain any local and systemic upset in a young child. Severe systemic upsets in infants are most of the times unrelated to teething therefore; the patient should be promptly referred to a physician. An accurate diagnosis and an appropriate conservative treatment is the only effective way to deal with teething troubles. Although alternative holistic medicine has been suggested for teething more study work should be initiated to determine a quick, safe and most reliable method for relieving pain of teething.

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