

## Child Dental Neglect: A Short Review

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**Context:** Child dental neglect is a terrible tragedy with a high prevalence. Dealing with this issue is important regarding psychological and physical health policies. The current review was conducted to provide health professionals insight into the different aspects of child dental neglect as reported in previous literature.

**Evidence Acquisition:** Our review was prepared through an electronic search using Pub Med, Science Direct, Medline, Google, Cochran Library, Google Scholar and EMBASE databases. Relevant papers published since 2000 until now in English, discussing child dental neglect were retrieved. Both original and review papers were included. Eligible articles were fully read by the author. A data form was used to record useful findings.

**Results:** Distinguishing the direct and indirect signs of dental neglect is the first step for improvement of this matter. The dental team are the main professionals who can improve parental knowledge about the consequences of child dental neglect. Victims suffer from short and long-term adverse outcomes. Collaborative attempts need to be made by different health professionals to deal with this problem.

**Conclusions:** Child dental neglect has many long-term impacts. The main professionals who are responsible for identification, intervention and treatment of child dental neglect are dental practitioners. However, other professionals cannot ignore this task. Finally, child dental neglect, despite its derivative outcomes, may be a presentation of a broader maltreatment.

**Keywords:** Dental Care for Children; Child Abuse; Oral Health; Oral Manifestations

### 1. Context

Dental caries is the most prevalent infectious disease in the child population (1-3). Pain, lack of appetite, lethargy and malocclusion are some consequences of untreated dental caries. Beside these, long-term health outcomes such as psychological, emotional and social adverse effects may arise that will affect the child's overall well-being (4).

Child neglect is described as follows: the willful failure of parents or other people in a position of trust to provide basic child-needed care (1, 5-7). Child neglect is a significant issue in respect to prevalence, incidence, and consequences (1, 8). It is a serious problem related to children as the most vulnerable population (9). The consequences may be real or potential in nature (10). It may originate from ethnic, race, socioeconomic, cultural, religious and educational backgrounds (9, 11-13). In spite of its high prevalence, it is the least diagnosed (9, 14, 15). The risk of adult health outcomes such as pulmonary disease, diabetes and oral health-related problems are greater in victims of child neglect (16). Dental neglect is defined by the American Academy of Pediatric Dentistry (AAPD) as failure of caregivers to provide prerequisites of proper oral function via seeking and timely dental treatment services necessary to be free from pain and infec-

tion (1, 8, 17, 18). The victims often demonstrate changes in behavior. However it is likely that child dental neglect represents an isolation problem; it is known that it may be a suitable indicator of other types of neglect (8, 19).

Many relevant studies have been conducted in different populations across the world. However, it is important to obtain information regarding different aspects of child dental neglect. This information can help us deal with suspected cases and help the victims. Thus, the main purpose of this article was to provide useful and comprehensive information on child dental neglect through a review of the available literature. This review was conducted to address the following questions: What are the manifestations and consequences of child dental neglect? What interventions can be done? What are the roles of parents, caregivers and health professionals?

### 2. Evidence Acquisition

Computerized searches were conducted to find published articles on child dental neglect. Pub Med, Science Direct, Medline, Google, Cochran library, Google Scholar and EMBASE were the electronic databases from which the articles were retrieved. Different keywords including

neglect, child neglect, health professionals, dental care, clinical factors, child maltreatment, oral manifestation, children, prevalence, dental neglect, prevention, treatment, oral health, dentists, dental, oral, knowledge, attitude, early childhood caries, public health were used in the literature search. Moreover, the references of all papers were again searched for further relevant studies. The inclusion criteria were: original or reviewed articles in English on the topic and the year of publication had to be between 2000 and 2014. After getting started by reading the title and abstract of suitable articles, the full text was retrieved, read in full and carefully checked by the author. Subsequently, useful findings were extracted using the designated data form.

The number of studies initially selected was 46. Eleven studies were excluded because they had misleading titles or abstracts or didn't meet the inclusion criteria. Three articles, which didn't apply the universal definition of child dental neglect, were also omitted. Moreover, two studies, in which more than one examiner was used without any calibration and inter rater reliability, were excluded. Thus, the total number of studies included was 30.

## 2.1. Manifestations of Child Dental Neglect

Although it is not possible to set out exact indicators for child dental neglect (5), there are many alerting findings, which help this maltreatment to be suspected. Three distinct signs of child dental neglect are: 1) oral manifestation and history; 2) social determinants; 3) characteristics of parents or caregivers (8).

### 2.1.1. Oral Manifestation and History

Oral manifestations that indicate child dental neglect include: visually untreated caries that can be easily detected by an average individual or a non-dental related health professional; untreated ulcers involving the intra-oral or extraoral regions; dental disease that has an impact on the child; lack of care in the existence of pathological conditions (8).

Distinguishing dental caries from dental neglect is difficult (20) and there is also no certain criterion for dental caries observed in neglect (5). Moreover, careful attention should be paid that a diagnosis of dental caries may reflect the possibility of neglect but not necessarily a neglectful attitude (5). Other than direct observation, history of improper dietary habits and poor dental hygiene practices may facilitate diagnosis (8).

### 2.1.2. Social Determinants

Although child dental neglect may occur in any family, typical social determinants such as poverty, unemployment, homelessness, family isolation, illness, overcrowded housing, poor housing, economic status and substance abuse can attribute to this kind of maltreatment (8, 15, 17, 21). Family socioeconomic status is among

the well-documented factors profoundly affecting oral health (2). Indeed, child dental neglect is more commonly seen in the lower socioeconomic classes (16).

### 2.1.3. Characteristics of Parents or Caregivers

Characteristics of parents as an evidence of child dental neglect include: causing delayed attendance and repeated missed appointments for scheduled dental assessment, no interest for oral hygiene education, repeated attendance for emergency pain relief, failure to access dental treatments and rehabilitation services, failure to complete treatment plans, poor dental status, poor knowledge and attitude in respect to oral health and inadequately performed home oral hygiene (1, 8).

## 2.2. Consequences of Child Dental Neglect

Victims may suffer from dental pain, difficulty eating, infection, loss of oral function, disrupted sleep, poor appearance, low weight, poor performance in school, low self-esteem and finally, poor quality of life (1, 20). These undesirable outcomes can lead to negative effects on nutrition, learning capacity, and any other activity of the child, which is fundamental for normal growth and development (18).

## 2.3. Interventions

Inaction is the worst option that could be chosen in cases of dental neglect (11). Intervention is not only the responsibility of a particular individual or groups, but rather is a shared public challenge (10, 22, 23). Three main interventions which should be done, once a case of dental neglect is identified, are: advising about practicing oral hygiene, referral to receive and follow dental services and finally assessing for broader neglect. When a child suffers from untreated gross caries or dental pain and parents fail to meet the child's treatment needs, referral is indicated (8).

## 2.4. The Role of Parents and Caregivers

Parental involvement, through preventive services, is a basic concept in children oral health care (24). Their involvement enhances children oral health status (25). Up to the age of seven, it is still the responsibility of the parents to be engaged directly in their child's daily oral hygiene practices (1). In fact, parents' attention in respect to child oral hygiene is one indicator of their interest to provide the child with essential requirements of wellbeing. Moreover, children are largely dependent on their caregivers to access dental treatment. Thus, to achieve a good result, the parents have to be involved in dental care.

## 2.5. The Role of Dentists and Other Health Professionals

The dental team is in the position to diagnose the cases

(26-32). Dentists and dental hygienists must be familiar with the signs of dental neglect (33), not only as a concern in itself, but also as it may be an alert of general neglect. They can improve family knowledge about child dental neglect by different routes. For example, pamphlets regarding the consequences of this issue are helpful and must be displayed in their office. This source should also give valuable information about how to maintain good oral health for children, as an integral part of optimal general health; via proper diet, adequate daily oral hygiene, fluoride and regular dental visits (5, 34).

Beside dentists, other health-related professionals, such as trained public health nurses, can provide the family with information to prevent dental caries (8, 35). Perhaps their role may be more critical and influential than the dental team because of their closer relationship to the family and having a greater chance to discuss child oral health with parents during their children's preschool age (8).

### 3. Results

Recognizing the victims is the definitive foundation for providing help. Development of a dental neglect assessment guideline, which involves age and other characteristics, will be useful. In this guideline dental health should be interpreted in the context of physical, mental, social and developmental status. There is also a range of worthwhile indirect indicators. Dental practitioners are continually in contact with parents, as children are nearly always accompanied by their parents.

Some family characteristics result in parental ignorance and low dental intelligence, which prevent parents from meeting their child's dental care needs. Unfortunately, some parents only seek healthcare in case of dental emergencies. It is likely for parents to adopt such an approach for their children. Care must be taken when differentiating parents without awareness of the child's dental need from parent with adequate knowledge of child's oral status. The later parents have been alerted about their child's dental problems, the treatment needed and how to receive services yet they tend to show persistent failure to meet their child's need.

The consequences of child dental neglect may extend to older ages and have major impacts on wellbeing. It is now clear that some adulthood diseases originate from developmental problems occurring during the childhood years. There is clear evidence that child dental neglect impacts adulthood health regarding the elevated risk of disorders such as malnutrition.

Professionals must ensure that the caregiver realizes the nature and extent of the disease and attempts to overcome the barriers of accessing dental services for the child. Since dental neglect is rarely isolated and nearly always present as a marker of broader neglect, hence, non-dental-related interventions seem necessary. Parents are responsible to pursue health related necessities of their children. In this regard, the lack of parents or guard-

ian's attention has destructive impact on the child's oral status. One responsibility of dentists is to provide a constructive educational and therapeutic relationship with the family. Trained other health-related professionals can set dental appointments, facilitate attendance for dental treatments or refer patients to register in public primary health care services.

## 4. Conclusions

The serious impacts of dental neglect on children, their family and society have been supported by cumulative findings of reviewed studies. Moreover, all papers have suggested that it has many life lasting effects and health professionals, especially dentists, are responsible for children's dental neglect. Also, in cases of identified dental neglect, appropriate assessment in terms of broader picture of neglect was emphasized. Finally, the health professionals are recommended to consider various aspects of child dental neglect discussed in the current paper.

### 4.1. Suggestions

It is strongly believed that improving the knowledge of parents toward daily oral health practices as well as the correct feeding habits is essential. Educational programs devoted to enhance public awareness, addressing the concern with parents and providing social worker counseling and working with families affected by dental child neglect seem promising. Dentists are in the position to diagnose child dental neglect, thus more emphasis should be placed on this topic as part of undergraduate dental education. Dental curriculum doesn't properly train students to detect dental neglect cases. Routinely, dental students hear the topic of child neglect in traditional lecture-based classes. Hence, this approach results in a passive recipient who may not be competent to diagnose dental neglect. Thus, it cannot be expected for graduates to be able to diagnose suspicious cases or victims. This problem may be alleviated by revisiting the curricula and including a detailed topic on this issue and its clinical recognition. Thus, in this way, when students initiate their private practice, they will deal with dental neglect more competently. Postgraduate education is another way to provide dentists with the features of child dental neglect. Physicians as a professional with the highest level of pediatric patients may not diagnose the dental aspects of neglect. Thus, it is also suggested that physicians and dental team should collaborate with each other to maximize prevention, identification and treatment of dental neglect victims. Moreover, the role of establishing public health as an integral part of enhancing community health should not be ignored. However, a clear guideline tool to help nurses distinguish victims of child dental neglect and engage in follow-ups is mandatory. Finally, realizing the mechanisms that place victims at greater risk for diseases during young and middle adulthood is strongly advocated.

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