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DENTAL NEGLECT- A REVIEW

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Review Article

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ABSTRACT

Although neglect is generally viewed as less 'dramatic' than other forms of abuse, the effect can be just as severe. Neglect, in general, and dental neglect, in particular, are the least known and detected types of abuse, even though they are the most frequent ones. In addition to poor oral health, dental neglect is associated with increased oral functional limitations and social and physical disabilities. Tools used for the measurement of dental neglect are Dental Neglect Scale and Dental Indifference Scale. The concept of dental neglect may allow a better understanding of the complex relationship between individual behaviour, environmental factors and dental diseases. Collaborative efforts between different dental disciplines can unravel the true dental scenario and help to develop appropriate policies and programmes. Dental neglect should be considered a priority for future research. This review explores the various aspects of dental neglect and provides recommendations.

Introduction

Oral health is fundamental to general health and well-being. A healthy mouth enables an individual to speak, eat and socialize without experiencing active disease, discomfort or embarrassment. Oral disease is one of the most costly diet and life style related diseases. The cost of treating dental decay alone could easily exhaust a country's total health care budget for children. However, the cost of neglect is also high in terms of its financial, social and personal impacts^[1]. The World Health Organization has stated that neglect has to be distinguished from circumstances of poverty, implying that neglect can only occur in cases where reasonable resources are available to the family or caregiver^[2].

There is a great deal of uncertainty around estimates of the frequency and severity of dental neglect worldwide^[2]. Dental neglect is prevalent in every segment of the society and is witnessed in all social, ethnic, religious and professional strata^[3]. The concept of dental neglect may offer a viable linkage between dental health and the cultural, social and attitudinal factors which have hitherto received little attention^[4]. Investigation of dental neglect as a phenomenon might permit better understanding of the relative contributions of individual behaviour, environment and structural factors to the occurrence of dental diseases^[4].

The aim of this review is to explore and discuss the various aspects of dental neglect and provide recommendations.

Neglect

The word neglect is derived from early 16th century from Latin *neglect*- 'disregarded', from the verb *neglegere*, from *neg*- 'not' + *legere* 'choose, pick up'^[5]. Neglect is "a type of maltreatment that refers to the failure by the caregiver to provide needed, age-appropriate care although financially able to do so or offered financial or other means to do so" ^[6].

Professionals have classified neglect as physical, medical, dental, supervisory, emotional, educational, others (includes exposing children to domestic violence, or engaging or encouraging children to participate in illegal activities such as shoplifting or drug dealing) ^[7].

Dental Neglect

Neglect, in general, and dental neglect, in particular, are the least known and detected types of abuse, even though they are the most frequent ones ^[8]. The American Academy of Pediatric Dentistry defined neglect as parents' failure to pursue the necessary dental treatment required to maintain the child's oral health and to ensure their freedom from pain and infection as dental neglect ^[9]. Also defined as being "the failure to take precautions to maintain oral health, failure to obtain needed dental care and physical neglect of the oral cavity" ^[10].

Although there are a variety of causes, studies have shown that there are links with parental ill-health, substance misuse, domestic abuse, unemployment and poverty, with neglectful families often experiencing a combination of these adverse factors. Studies have also reported that neglectful families often have a number of attributes including, an inability to plan, lack of confidence about the future, difficulty with managing money, emotional immaturity, lack of knowledge of children's needs, a large number of children, being a teenage mother, high levels of stress and poor socioeconomic circumstances^[11].

Types of Dental Neglect^[12]

- 1. Active neglect** - Intentional failure of parents or guardians to fulfill their care giving responsibilities.
- 2. Passive neglect** - Unintentional failure of parents or guardians to fulfill their care giving responsibilities because of knowledge, illness, infirmity, finance or lack of awareness of available community support/resources.
- 3. Self neglect** - A person's inability to provide for his or her own needs because of physical, mental or developmental disability or any combination of these.

Dental neglect can also be classified based on type of care^[13].

1. **Dental prevention neglect** – defined as the neglect of the prevention of oral disease which results in the experience of dental conditions (measured by treated and untreated dental caries and/or traumatic dental injuries and/or dental pain).
2. **Dental treatment neglect**– defined as the neglect of necessary dental treatment that results in the experience of untreated dental caries and/or traumatic dental injuries and/or dental pain.

Tools of Measurement

1) Dental Indifference Scale

Nuttall (1996) reported on an eight-item scale to measure “dental indifference”. The scale sought responses to items on respondents’ usual oral hygiene and dental service use practices, current state of oral health, previous five years’ dental care pattern, and their care-seeking behaviour in the following three clinical situations- a lost filling in a posterior tooth, non-painful bleeding gums and a very painful posterior tooth^[14].

2) Dental Neglect Scale

In 1996, the development and testing of the seven item Adelaide dental neglect scale was developed for children based on parental ratings^[4]. It was later designed for use in adults by (Thomson and Locker 2000). Dental neglect scale represent a relevant instrument for population surveys aimed at identifying risk groups based on information about oral health, oral health related behavior and attitudes. It assesses the extent to which an individual cares for his/her teeth, receives professional dental care, and believes oral health to be important. This scale may be a useful substitute for clinical data in oral health surveys when resource constraints preclude the examination of participants^[14-17].

Dental Neglect and Socio-Demographic Factors

Various studies have reported the association between dental neglect and socio-demographic factors such as age, gender, socio-economic status etc^[4,10,14-19]. Dental Neglect is seen at each and every step of life with different reasons involved with it. It begins from the childhood, traversing through adolescence to finally old-age. It is observed that dental neglect is more at the extremes of age groups¹⁹ while among adolescents dental neglect increases with increasing age^[17,18]. Among gender distribution, dental neglect is higher among males when compared to females^[4,15,19]. Higher dental neglect was seen in person with low educational attainment^[10,17,19]; with lower income^[19]; low occupational group^[17,19] and finally from lower socioeconomic class^[10,15]. Association of dental neglect and oral health quality of life was found to be significant as person with high dental neglect had low oral health quality of life, also self-reported oral health is found to be poor in these groups^[10,15,17,19].

To begin with childhood, it has been shown that children who are victims of abuse may have as much eight times the caries levels of their peers^[14]. Also children who suffer from poor oral health are 12 times more likely to have restricted activity days than those who do not^[4]. More than 50 million school

hours are lost annually because of oral health problems which affect children's performance at school and success in later life^[1].

Dental neglect in adolescence has been mentioned by many authors^[15-18,19]. Adolescence has been identified as a time when personal oral health behaviors may be internalized and become habits, as parents become increasingly less directly involved in their children's care. Oral care during adolescence is important for several reasons, including the eruption of permanent dentition which increases the number of tooth surfaces which may decay, and an increase in early periodontal disease. Dental avoidance is apparent in some individuals by adolescence, as youth of this age are able to influence their dental attendance due to the increased autonomy^[16].

Neglect of dental treatment during pregnancy has been reported in literature^[10]. The most common reason for not accessing dental care during pregnancy is the belief that dental examination and treatment might result in adverse birth outcomes^[10]. Elderly people residing in nursing homes have a substantial number of vulnerabilities, including diminished physical and cognitive capabilities that can compromise their further general and oral health. In spite of this they are host of dental diseases and rarely seek dental care services due to various reasons^[20].

Disabled individuals are at a higher risk of being targets of neglect by caregivers than people without disability and are thus more prone to dental disease consequences. They can be abused and/or neglected by family members, home care attendants or institutional health care workers or they may even be self-neglecting^[21]. Although dental neglect may be considered abusive behaviour in its own right, it is important to remember that it is more often a sign of wider neglect (which in itself is often found in combination with other types of abuse)^[11].

Impact of dental neglect

Dental neglect can have long lasting impact on general health and oral health. There is abnormal social-emotional development. There is reduction in body weight, head circumference, growth and quality of life, loss of sleep, time off school and interference with playing and socialization. Increased risk for psychiatric problems, disorganized attachment style associated with number of developmental problems, including dissociative symptoms, anxiety, depressive and acting out symptoms has been reported. Severe pain, acute and chronic infection and damage to underlying permanent teeth along with decreased oral health quality of life and poor/low self-reported oral health are seen^[2,17,18,19,22].

Diagnosis

The National Institute of Health and Care Excellence (NICE) has indicated that clinicians should suspect neglect in general when there are repeated observations of poor standards of hygiene which affect the child's health and in circumstances where parents or carers have access to, but persistently fail to obtain treatment for dental caries from National Health Services^[2].

General indicators include: repeated non-attendance for scheduled oral health assessments (dental checkups); attendance for emergency pain relief more than once; and requirement for dental extractions/care under general anesthetic more than once^[12].

Other indicators for dental neglect are: history of lack of continuity of care in the presence of previously identified dental pathology such as untreated rampant caries, untreated pain, infection, bleeding or trauma affecting the oro-facial region. The impact of the caries on the child should be assessed, dental records studied and parental awareness and knowledge, access to dental care and the child's willingness to undergo treatment considered when suspecting dental neglect^[2].

There is clearly no threshold level of dental decay beyond which a diagnosis of dental neglect can be made. Although severity and extent of dental disease may seem obvious indicators of dental neglect, these factors cannot be considered in isolation^[23].

Management

Among health professionals, dentists are probably in the most favorable position to recognize Child Abuse and Neglect (CAN), because 50% to 75% of reported lesions involve the mouth region, the face and the neck^[23]. Still dental professionals do not raise concerns due lack of training or clear guidance, fear of impact on their practice, fear of family violence against the dental team itself, or against the child, fear of litigation and lack of certainty of diagnosis^[2].

Dental neglect is often a component of overall neglect. When health care professionals recognize signs of general neglect in patients, they should look for the possibility of dental neglect. The dental professional's role in child abuse and neglect is to know the current state law regarding reporting child abuse and to follow the law. Awareness, identification, documentation, and notification should be carried out by the dentist^[24].

Safeguarding children from maltreatment and neglect is part of the responsibility of all health professionals^[8]. Screening for maltreatment should be an integral part of any clinical examination performed on a child. When dental neglect has been recognized, it is essential to remember that the welfare of child is the paramount consideration. The primary aim of intervention is not to blame the family or caregiver, but to ensure that children receive the support needed^[25].

Three stages of intervention^[22,26] are recommended according to level of concern,

- (i) Preventive dental team and management,
- (ii) Preventive multiagency management and
- (iii) Child protection referral.

(i) Preventive dental team management

Dental care should be focused on relief of pain and other symptoms, followed by appropriate restoration of function and appearance. The following guiding principles for the preventive dental team response have been recommended: raising concerns with parents/caregivers, explaining what changes are needed, offering support, keeping accurate records, continuing to liaise with parents or carers and reviewing progress.

(ii) Preventive multi-agency management

If concerns remain or the situation is deteriorating, the dental team should seek parental consent to consult other professionals who have contact with the child to see if concerns are shared. This may include the child's health visitor, school nurse, doctor, or social worker if they have one. The dental team should, jointly with these other professionals, discuss any concerns about the child, and seek to clarify what steps can be taken to support the family and address the concerns.

(iii) Child protection referral

If at any point there is concern that the child is suffering significant harm from dental neglect or showing other signs of neglect or abuse, a child protection referral should be made.

Who may be responsible for dental neglect in children?

The issue of who is responsible for dental neglect in children is a complex one. Both the American and NICE definitions of dental neglect place responsibility solely on the child's parents or carers whereas Belsky stated that while children's health, including oral health, is the responsibility of their parents and it is also affected by the child's environment. Belsky placed high importance on these socio-economic determinants. Governmental failure to recognize and respond to the challenges that vulnerable families face – such as poverty, lone parents, and large families – may also amount to children's dental neglect. Vulnerable families may be unable to promote good oral health in their children due to the unaffordability of fruit and vegetables and the unavailability of free toothpastes^[27].

Recommendations

Government should assign adequate health budgets and its officials should also ensure that governmental funds are properly utilized. State systems should be in place to ensure rigorous follow-up of children with dental neglect who fails to attend treatment appointments. Rural panchayats (local self-government) and urban local councils can ensure that every child is safely born, receives basic health care and nutrition, and protection from abuse or neglect- and can feel secure throughout childhood. Awareness campaigns, designed to awaken not only physicians and dental professionals, but also parents and society in general, could reduce the frequency of dental abuse and neglect. Dentists are mandated by law to report any suspicion of child abuse and neglect in all provincial jurisdictions^[28,29].

Helping parents improve their children's treatment is advocacy on behalf of children who are unable to express or meet their own needs. Advocacy is needed at different levels: the individual child, parent, family, community and society ^[30]. By partnering with advocacy groups, professionals can work to secure additional resources for families to reduce the likelihood of neglect or provide services for children who have experienced neglect. Each of these levels of advocacy is valuable in addressing the problems underpinning the neglect of children's health care^[30].

Strong links should be established with other health and social care professionals to facilitate communication. Dental services should consider developing care pathways for management of dental neglect in consultation with local agencies. Children who are at risk of abuse or neglect should also be considered as high priority for preventive care and be given additional support to access dental services.

The issue of dental neglect has received little attention in dental literature. Collaborative working both between different disciplines and will be necessary to identify priorities for future research in order to establish an improved evidence base for provision of guidance for practitioners. Suggested areas for research are relationship between oral health and maltreatment, establish and test diagnostic criteria for dental neglect and thresholds for intervention, and investigate management strategies for severe untreated dental caries.

Conclusion

Dental services should address the needs of vulnerable children and adults. Adolescents should be counseled, motivated about their oral health and their reasons for neglectful behavior should be addressed. Also minimal level of oral health care should be guaranteed to vulnerable elderly people who reside in nursing homes.

Dentists can provide valuable information and assistance to physicians about oral and dental aspects of child abuse and neglect. Considering the importance of a healthy dentition in digestion, knowing the role of primary dentition in tooth exchange, and being aware of the consequences of infections and toothaches in the child's social life, we should feel it our duty to detect and treat cases of neglect at the earliest for better quality of life.

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