American Journal of Medical Case Reports, 2022, Vol. 10, No. 5, 131-137
Available online at http://pubs.sciepub.com/ajmcr/10/5/4
Published by Science and Education Publishing
DOI:10.12691/ajmcr-10-5-4

Parental Neglect in Early Childhood Emerging to Adulthood Self-neglect

Khurshid A Mattoo[1,*], Iti Gupta[2], Areej Darraj[3], Muneera Gohal RA[3]

[1]Department of Prosthetic Dental Sciences, College of Dentistry, Jazan University, Saudi Arabia
[2]Department of Restorative Dental Sciences, College of Dentistry, Jazan University, Saudi Arabia
[3]Comprehensive Care Clinics, College of Dentistry, Jazan University, Saudi Arabia
*Corresponding author: drkamattoo@rediffmail.com

Received April 01, 2022; Revised May 04, 2022; Accepted May 12, 2022

Abstract Child neglect is the outcome of poor parenting practices, which can be readily identified by the child's dental status. Unhealthy eating practices by parents during one's childhood has been found to be continued by the child when he attains adulthood. Self-regulation and self-care skills in adults, develop proficiencies when guided properly during childhood. Dental caries progression is slow and may not cause any warnings, unless damage is irreparable. We present three cases of adult patients who revealed three different themes of dental neglect during their childhood, namely dental care being sought only in case of emergency, multiple missing appointments after initiating dental care and patient presenting with the extensive untreated dental disease. All three cases, were comprehensively treated with full mouth rehabilitation using a multidisciplinary approach. While, the parental neglect may apply till an individual gains adulthood, what influences one to continue same behavior amounts to self-neglect. The relation between the two is unexplored. All patients received intensive dental rehabilitation that took months of planning. All patients were indifferent towards follow up and continued to disregard the protocol.

Keywords: *parenting style, full mouth rehabilitation, self-care, parental neglect, endodontics*

Cite This Article: Khurshid A Mattoo, Iti Gupta, Areej Darraj, and Muneera Gohal RA, "Parental Neglect in Early Childhood Emerging to Adulthood Self-neglect." *American Journal of Medical Case Reports*, vol. 10, no. 5 (2022): 131-137. doi: 10.12691/ajmcr-10-5-4.

1. Introduction

It is the primary responsibility of a parent to meet the needs of their children. An important aspect of such responsibility is the care of a child. [1] In medical terms, the word healthcare is more appropriate as it encompasses the entire spectrum of the child's normal growth and development. Adequate health care is though difficult to have a layout, since it varies across individuals and cultures. Generally, for adequate healthcare of a child, a parent must be able to provide reasonable care for minor problems, professional care (that meets accepted standards) for severe problems and adequate and appropriate treatment when required. In cases, where the healthcare recommendations are ignored by the parent, it results in actual harm to that child. It is also the responsibility of the parent to foster eating habits and develop self-care skills in early childhood. [2,3] Evidence shows that child neglect by parents is one of the most prevalent form of child maltreatment (more than 50 percent). [4] It is also true that in some cases, any form of parental neglect may not be intentional, therefore the term neglect of children, encompasses the persistent failure to meet his needs (physical, emotional, nutritional) that result or may progress in the development of impairment. [5] Apart from intent, there are however, environmental factors that may either result or contribute to child neglect. Factors are more linked to maternal issues and the environment that start as early as conception till the child gains adulthood. [6] Dental neglect is a term that has been defined as the wilful failure of a parent, to seek and follow through with treatment that is necessary to ensure an oral health level for adequate function and freedom from pain and infection. [7] Since the transition from childhood to adulthood involves the presence of three different types of dentition (deciduous, mixed and permanent), caries or periodontal problems will adversely affect the long term outcome of a healthy child. Among many, communication and nutrition are two aspects of dental neglect that can have a major impact on the growing child. [8] Diagnosing a parent with neglecting his child requires a health care worker to formally alert the parent about the nature and extent of the child's dental condition. [9] This is absolutely required to warrant any form of intervention in such cases. Dental health care that is based on intervention is expensive in most part of the world and therefore the onus on preventive aspects are extremely beneficial. Also, many parents face challenges in accessing dental care despite having the resources.

Dental diseases that are commonly encountered in childhood are dental caries and periodontitis. Both diseases do not have a clear threshold level, where one can

claim that the disease is due to neglect. A child may have multiple carious lesions that are just a pit and fissure caries, yet his oral hygiene may be excellent. In almost all cases of dental neglect, the evidence of parental neglect may surface to either a general dentist or a child specialist in dentistry (Pedodontist). They have moral and professional obligation to alert the parent of the child's poor or extremely poor dental status and must follow up in such cases to ensure that the parent has obliged to their suggestions. The critical factor in the diagnosis of dental neglect is the response of the parent to the presence of the dental disease in his child and the measures the parent or the carer takes to minimize the impact of such diseases. [10] Studies, however, have shown that a majority of dental professionals fail in communication of such cases encountered in their practice, despite having government guidance and procedures for safeguarding children. [11] Besides dental issues, the role of parental neglect has been widely studied in developing of adulthood obesity, [12] which is considered to be more of a behavioural disorder of life style that develops from childhood. [13] On first encounter, the history of a child patient is critical to give a clue about his parents being negligent to his needs. History of multiple missed appointments, use of multiple general anaesthesia, delayed treatment of a severe oral pathology and attending emergency appointments only indicate some form of child neglect in the dental office.

Child maltreatment in the Kingdom of Saudi Arabia has been seen as a sensitive issue that is related ignorantly to culture and religion, since the country is portrayed largely on such basis. [14] Despite government recognition along with installation of child protection centres, the topic of child maltreatment has been underreported despite having evidence. Between year 2010 and 2012, around 1400 child abuse cases were registered with 35 percent being registered under parental neglect. [15,16] Recognition of role of parental neglect in development of successive dentitions has still not been accepted as a research modality. This article in the form of a series of three cases is intended to recognize the fact that parental neglect of a child during childhood may progress into adulthood, which will manifest, in the form of self-neglect as evidenced by these three cases. The authors would like to stress that such cases have been observed regularly in their dental OPD. All three cases are that of female patients, since the authors observed higher prevalence of such extreme cases among the female patients.

2. Case 1: (Dental Care was Pursued in Childhood by Parents only when an Emergency Arose)

An adult female patient aged 27 years reported to the comprehensive care clinic at college of dentistry, for restoring her facial appearance that was largely impaired due to loss of maxillary teeth. The patient belonged to a rural area that was approximately a 2 hour driving distance from the place where she sought dental care. The patient also complained of a click in the temporomandibular joint that would cause her some discomfort at times. Patients extra oral appearance showed an ovoid tapering face, with taper being more prominent in the lower third of the face. The patient was unmarried but was seeking marriage, which was also the motivation for both her and her parents to seek dental rehabilitation. Patients social, personal, drug history was non-contributory. Patients dental history revealed that as a child she would consume lots of sweets and carbonated drinks. Her deciduous teeth were also affected by decay and she never had sought any care for the teeth. As a child she recalled to have visited a local dentist in the primary health care (PHC) centre, only two or three times when she had developed pain. In all instances, she was accompanied by her parents and were advised by respective dentists that the condition of their child's dentition was not appropriate and that they needed to take more care. She was first encouraged to seek dental care at the age of 17 years, with one of her relative as her teeth were impairing her facial appearance. She recalled that her parents had never sought or taught her the advantages of using oral hygiene maintenance aids. She also disclosed that in her family most of the men practice use of traditional tooth cleaning tools like the bark of trees. Her temporomandibular joint problems had started two years back, initially there was a pain which later progressed to clicking. There was no pain once clicking was noticed by the patient. Intra oral examination revealed the complete loss of coronal tooth structure of maxillary anterior teeth (Figure 1A), with evidence of large proximal carious lesions on all mandibular anterior teeth. The patient had lost both her mandibular first and second molars (Figure 1B) in the space of two years, when they were extracted due to pain. The teeth were extracted 3 or 4 years back, but the correct timing was not recalled. In centric position of the mandible, the maxillary anterior teeth encroached maxillary restorative space (Figure 1C) and the incisal mandibular plane was not falling within the confines of the lower posterior occlusal plane. Maxillary posterior teeth on both sides had undergone substantial supraeruption to alter the occlusal plane (Figure 1C, D). An orthopantomograph of the maxillary and mandibular arch showed embedded roots of maxillary anterior teeth (Figure 1E), mesial migration of posterior teeth on both sides, altered crown to root ratio of migrated teeth and large carious lesions that were generalized. Radiographic evidence of pulp involvement was observed in multiple anterior and posterior teeth. The panoramic radiographs of the temporomandibular joints showed evidence of altered joint space on the right side with the condyle being displaced far downward than the left side (Figure 1F). Other tests like fremitus test, pulp vitality tests and test for tooth mobility were carried to formulate a complete treatment plan. Treatment options presented to the patient was principally a full mouth rehabilitation after performing a multidisciplinary approach that consisted of oral prophylaxis, removal of caries, endodontic and restorative treatments, pre prosthetic mouth preparations like post and cores and finally a combination of fixed or removable prosthetic options like implants, conventional fixed partial denture and/or removable partial denture. The patient consented to the treatment and a systematic planning was made to effect full mouth rehabilitation for her.

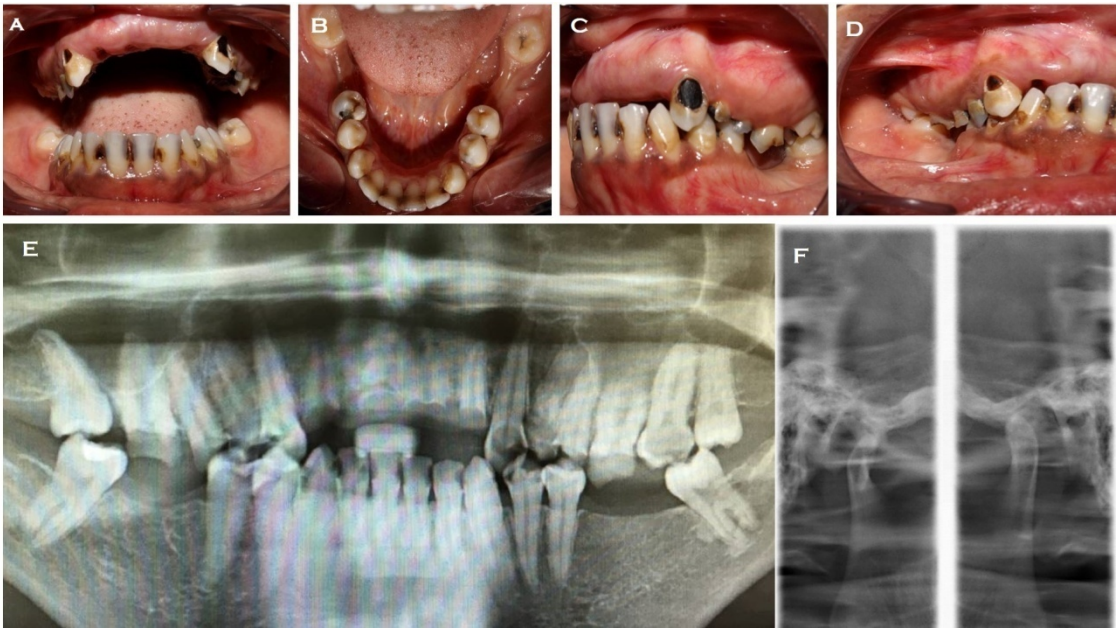

Figure 1. (A) Crowns of maxillary anteriors missing (B) Mandibular arch with bilateral missing first and second molars (C) Maximum intercuspation position showing relation of maxillary and mandibular teeth (D) Right lateral side showing the level of occlusal plane (E) Orthopantomograph showing the status of dentition (F) Orthopantomograph of temporomandibular joint

3. Case 2: Multiple Missed Dental Appointments during Childhood after Initiating Dental Treatment

A young adult female patient in her late twenties, reported to the comprehensive care clinics at college of dentistry, with chief complaint of difficulty in eating due to grossly decayed teeth. The patient reported that despite having visited the local dentist regularly, she had to lose many of her teeth since the dentist was in no position to correct them and had to be either extracted or left as such. Patients medical history was not significant, her social/personal history revealed that she belonged to a rural area nearby, was unmarried and would spend most of her time doing household work. Dental history revealed that the patient had suffered from a similar condition during her childhood and had visited a local dentist many times for extracting her teeth. The patient revealed that there were times when extractions were not done, and that the dentist would fill material in her teeth, but would ask her to come for further treatment which she never complied to. The patient reported that she believed that the condition of her teeth was due to excessive intake of sweets. Upon investigation, she revealed that mostly after dinner, she likes to eat sweets (traditionally) and sleep. The patient did not recall of using any oral health aid and claimed to clean her teeth only at times. The patient had undergone extraction of maxillary posterior teeth few years back. The reason for extraction was decay, although some sort of treatment was done on those teeth (fillings). The patient had also got a maxillary anterior tooth extracted with similar reason. Extra oral examination revealed normal features except for the presence of a thin maxillary lip that was also hypertonic in nature. Patients lower third of the face was decreased. No abnormality of temporomandibular joints was observed. Intra oral examination revealed a Kennedy class 2 modification 2 partial edentulous situation in the maxillary arch (Figure 2A) and a Kennedy class 3 modification 1 in the mandibular arch (Figure 2B, C). The maximum intercuspation position of the mandible showed the presence of an anterior deep bite (Figure 2B) with most of the posterior vertical stop absent. Maxillary arch in total showed the presence of 4 natural teeth that had an intact coronal portion left. Maxillary right central incisor had a restoration present, which had further developed secondary caries under it (Figure 2B). The mandibular anterior segment was the only one that had intact natural teeth. Orthopantomograph (Figure 2D) disclosed a slightly supraerupted maxillary right canine, medially migrated right second molar, periapically involved left second premolar, root stumps in both maxillary and mandibular arch and pulp involvement of maxillary left second molar which was longstanding. The pantograph of temporomandibular joint showed a normal, healthy joint with no evidence of altered joint space or bony components (Figure 2E). To accomplish diagnosis and treatment plan, all caries were removed from grossly decayed teeth following which the status of the pulp was established. This was followed by diagnostic impression making and mounting of diagnostic casts on a semi adjustable articulator which was programmed according to patients condylar and incisal guidance. The patient was presented with the treatment plan of a multidisciplinary full mouth rehabilitation that would be sequentially implemented. Pre prosthetic preparations included endodontic treatment, crown lengthening and restorative procedures. Prosthetic rehabilitation was planned to be achieved by fixed partial denture in mandibular arch and a cast partial denture supported on multiple surveyed crowns of abutment teeth. The patient was not indicated for implants supported fixed restoration since the restorative space was encroached and extra surgery was not approved or desired by her. The patient was put on a follow up which she failed to comply.

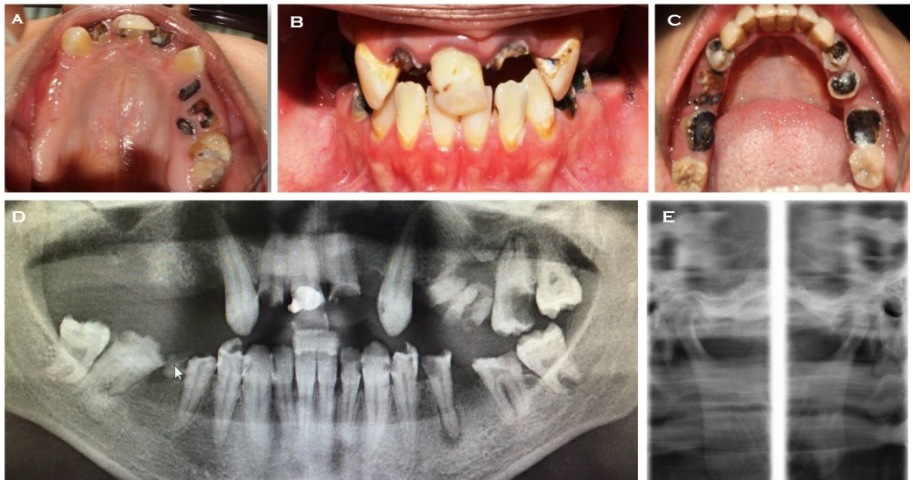

Figure 2. (A) Maxillary arch with few natural teeth remaining (B) Teeth in maximum intercuspation (C) Mandibular arch showing severe decay of posterior teeth (D) Orthopantomograph showing the status of permanent dentition (E) Orthopantomograph of temporomandibular joint

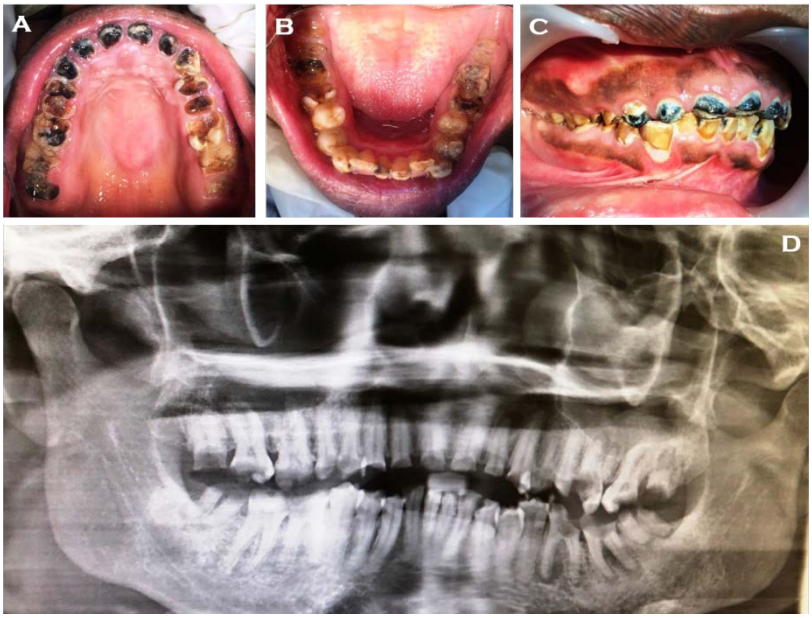

Figure 3. (A) Maxillary arch showing decayed teeth (B) Mandibular arch with decayed teeth (C) Teeth in centric occlusion (D) Orthopantomograph showing the extent of decay and periapical

4. Case 3: Patient Presents with Extensive Untreated Dental Disease despite Facing Functional Problems

A female patient aged 24 years, reported to the comprehensive care clinics at college of dentistry, for restoration of her natural teeth which were affecting her facial appearance and social influence. The patient reported that many of her friends have complained to her about the appearance of natural teeth and malodour associated with her speech. The patient reported with never having visited to any dentist for her dental treatment. She neither recalled visiting a dentist during her childhood at the time of either deciduous or mixed dentition. She was also reportedly told by her elder sister and some of her relatives about what others had observed in her appearance. There were no compulsions or motivations of seeking dental care except those of social in nature. Medical history revealed that the patient was taking medicine for the treatment of rheumatoid arthritis and that she was suffering from it since last 5 to 6 years. Extra oral examination revealed a chubby face, with well-balanced proportions between facial thirds. Intra oral examination revealed grossly caries entire permanent maxillary and mandibular natural teeth (Figure 3A, B). The coronal part of the natural teeth were destroyed completely to the level of gingiva. Large deposits of carious materials had replaced the tooth coronal tooth structure. In maximum intercuspation, the vertical dimensions were maintained by occluding molars although it was doubtful that they were at original vertical dimensions (Figure 3C). Anterior guidance was completely non-functional while mandibular anteriors were supra erupted since no opposing tooth contact was functional. An orthopantomograph showed grossly decayed teeth some of which had reached to the level of alveolar crest (Figure 3D). There was no evidence of any restorative material in any of the tooth. Maxillary anterior teeth and mandibular left molars also showed evidence of periapical infection that was never treated.

The patient had never sought treatment for pain or emergency related conditions despite claiming that she had developed severe pain in teeth at different times. Diagnosis and treatment planning were initiated by the removal of caries followed by temporary restorations. Diagnostic impressions were made and casts mounted on a semi adjustable articulator. After collecting the diagnostic data, the patient was presented with the treatment plan of full mouth rehabilitation, which would be accomplished after few extractions, crown lengthening procedures, endodontic and restorative treatment that included multiple cast post core pre prosthetic restorations. Maxillary arch was finally restored with individual post core crowns and a fixed partial denture while the mandibular arch was restored using single crowns, fixed partial and removable partial denture. The patient was put on regular follow up which she failed to comply despite repeated requests.

5. Discussion

Three different cases with three different themes emerging from their respective dental histories, have been presented in this article. The main feature of this article is the presentation of three different cases of dental neglect that mount to parental neglect. In all three cases, the elaborate and detailed case history recording is critical. Since diagnosing child neglect is not a simple problem, it encompasses many domains and has roots with other types of neglect that is encountered in human beings. These are elder neglect and self-neglect. But it is important to first start the discussion with 'parenting' and 'parenting practices' because parenting does aggregate to both forms of neglect. Parenting is basically defined as typology of attitudes and behaviours that characterizes parent's interaction with his child across various parenting domains. [13,17] Parenting has basically been classified into four styles: authoritative, authoritarian, indulgent or neglectful. [12,13,16,18] Parenting does not start after the child is born, but has been extended to the time when a mother conceives a child. The main reason for such extension being it is the responsibility of both parents, to provide a favourable intra uterine environment for the child after conception. There is exemplary scientific evidence that implicates mothers suffering from gestational diabetes and under or over nutrition during pregnancy to impose a high risk for obesity to the developing child. [13,16,19] Once the child is born, the parental responsibility increase including their routine behaviour. These behaviours may be related to their eating, self-care, hygiene and attitudes. [20] Eating habits like consuming sweets after dinner were presented by two patients in this case report. Such eating behaviour develops a conducive environment for progression of dental caries if one does not clean them before going to bed. Likewise, parents also play an important role in aiding their children and adolescents to adopt healthful behaviour including maintaining oral hygiene. [21] Caries promoting food preferences should be identified by the parents and supervise their children regularly regarding the timing or amount of such food stuff. Parents also are responsible for the food that the children must eat and the food that must be present at home. Cariogenic food during childhood should be restricted, while the same should be supervised when the child reaches adolescence. Once the child is a fully grown adult, he is free to determine his own choices which are actually influenced by his childhood environment and parenting. Parents also must know that a large part of the media are directed targeting their children, most of which are related to food products that are essentially cariogenic in nature. [22]

Children are not essentially the biggest users of the healthcare system, that privilege goes to elderly people who occupy around two thirds of the hospital beds. [23] Yet, both elders as well as children are subjected to maltreatment and in the majority (80 %) of child maltreatment cases, the offenders are parents. [24] Surprisingly, 88 percent of those parents were found to be biological parents with 53% being women aged 18 to 44 years old. [24] All cases presented in this series are that of young adults and can be classified as either self-neglect or the product of parental neglect. In childhood, in order to maintain optimum oral health, parents must provide regular fluoride (tooth paste, water), proper diet (limit cariogenic diet), maintain and develop oral hygiene skills and when need arises visit dentist. [25] It is evident in all three cases that parents have neglected most of these factors. The basis of the first case being a case of parental neglect is based on the history in which patient recalled of seeking dental care only when an emergency arose. The emergency in this case was the pain that was associated with progression of caries into the pulp. In the context of Saudi Arabia, there has been a history of harsh physical treatment of juveniles till 1990, after which it has widely recognized its child abuse and neglect problem. [26] Despite having free dental treatment centres all over Saudi Arabia, the prevalence of caries has been very high. [27] All three cases presented in this article provide a clue to indifferent parental attitude rather than availability or lack of resources. The second case in which most of the maxillary teeth were lost early in adulthood, had a very significant finding in the dental history. The patient had missed multiple dental appointments clearly showing neglect. Self-neglect can be ruled out because females of rural Saudi are generally more dependent on males to drive them to places where health care is being provided. It is very rare that a female patient will go to a far off health care facility alone. Missing multiple appointments after initiating dental care could be of the social dependence on males rather than their own choice. Self-neglect is basically implied when one is unable meeting one's own basic needs to such an extent that it poses threat to personal health. [28] While, one may consider self-neglect to be life threatening, example of a patient suffering from cancer, [29] its repercussions in caries can range from early tooth loss and the effects of such loss consequently.

All three patients presented in this article were cases of full mouth rehabilitation. Full mouth rehabilitation is generally indicated at young age when one is suffering from some congenital or developmental dental anomaly. [30] Full mouth rehabilitation of these three cases have been already published. [31-36] Each patient presented their individual challenges during pre-prosthetic and prosthetic rehabilitations. For the first patient the main

challenge was correcting the occlusal plane while maintaining a workable and comfortable vertical dimension. This was successfully achieved by applying the principles as mentioned in the literature. [30,31] Restoration of anterior guidance was another challenge which was successfully restored during prosthetic rehabilitation. [32] The third patient posed challenges in all stages of rehabilitation, especially during pre-prosthetic mouth preparation. Planning surgical procedures for patient taking immunosuppressant was done after consultation with her physician. [33,34] During core build up, the main challenge faced was to determine the core inclination which was accomplished by a novel procedure. [35,36] The only disappointment that perhaps wasn't addressed properly was to change the patient's attitude towards their treatment and the responsibility they needed to demonstrate for long term success of their treatment. All patients did not turn up for follow up visits except one of the patient who had a crown decemented within the first year of rehabilitation. Five years or more now, the patients still elude the follow up visits.

6. Conclusion

Child neglect is factual and could be intentional or unintentional. Parenting is a responsibility and starts immediately after conception of a child. Both parents are equally responsible for developing healthy eating habits and self-regulation skills in their offspring's. Dental caries progresses slowly, thereby giving ample time for correction. If neglected it can destroy dentitions which have social, functional and psychological implications for the child. Parental neglect should not progress into self-neglect and dentists must ensure to intervene and report cases where they suspect parental dental neglect.

Acknowledgements

The authors would like to acknowledge the efforts of the staff of the comprehensive care clinics for their wider contribution in the treatment of these cases.

References

[1] Dubowitz H, Black M, Starr R, Zuravin S. A conceptual definition of child neglect. Criminal Justice Behav. 1993; 20(1): 8-26.

[2] Gaeta ML, Cavazos J, Cabrera MD, Rosário P. Fostering oral hygiene habits and self-regulation skills. Family and Community Health. 2018; 41(1): 47-54.

[3] Dubowitz H, Giardino A, Gustavson E. Child neglect: guidance for pediatricians. Pediatrics in Review. 2000; 21(4): 111-6.

[4] Jenny C. Committee on Child Abuse and Neglect. Recognizing and responding to medical neglect. Pediatrics. 2007; 120(6): 1385-9.

[5] HM Government. Working Together to Safeguard Children: A Guide to Inter-Agency Working to Safeguard and Promote the Welfare of Children. London: The Stationery Office; 2006.

[6] Dubowitz H, Black MM, Kerr M, Starr RH, Harrington D. Fathers and child neglect. Arch Pediatr Adolesc Med. 2000; 154(2): 135-141.

[7] American Academy of Pediatric Dentistry. Definition of dental neglect. Available at: www.aapd.org/policies/.

[8] Scorca A, Santoro V, De Donno A, Grattagliano I, Tafuri S, Introna F. Early childhood caries (ECC) and neglect in child care: analysis of an Italian sample. Clin Ter. 2013 Jan 1; 164(5): e365-71.

[9] Bhatia SK, Maguire SA, Chadwick BL, et al. Characteristics of child dental neglect: a systematic review. J Dent. 2014; 42(3): 229-239.

[10] General Dental Council. Standards guidance. Standards for dental professionals. London: General Dental Council, 2005.

[11] Harris JC, Elcock C, Sidebotham PD, Welbury RR. Safeguarding children in dentistry: 2. Do paediatric dentists neglect child dental neglect? British dental journal. 2009; 206(9): 465-70.

[12] Mattoo KA, Moaleem M, Shubayr M. An analytical survey to define the dimensions of a scaled questionnaire that would determine the existence of parental neglect in environmentally modulated obese subjects - A pre - pilot and pilot study. International Journal of Medical Research and Pharmaceutical Sciences 2018; 5(3): 1-10.

[13] Mattoo KA, Shubayr M. Association between parental negligence in feeding and social activity of obese adults among jazan population. Niger J Clin Pract 2020; 23:1356-67.

[14] Al-Eissa MA, Saleheen HN, AlMadani S, AlBuhairan FS, Weber A, Fluke JD, et al. Determining prevalence of maltreatment among children in the Kingdom of Saudi Arabia. Child Care Health Dev 2016; 42:565-71.

[15] Health Ministry. The National Family Safety Registry Report, 2011.

[16] Shubayr MA, Mattoo KA. Parental neglect of feeding in obese individuals: A review of scientific evidence and its application among Saudi population. Saudi Med J 2020; 41 (5): 451-458.

[17] Gong X, Fletcher KL, Bolin JH. Dimensions of perfectionism mediate the relationship between parenting styles and coping. Journal of Counseling & Development. 2015; 93(3): 259-68.

[18] Zhang L. Education Expenditure and Parenting Styles: Evidence from Cognitive Development in China. Journal of Family and Economic Issues. 2021; 42(4): 729-44.

[19] Whitaker RC, Dietz WH. Role of the Prenatal Environment in the Development of Obesity. Journal of Pediatrics 1998; 132(5): 768-76.

[20] Hood MY, Moore LL, Sundarajan-Ramamurti A, Singer M, Cupples LA, Ellison RC. Parental eating attitudes and the development of obesity in children. The Framingham Children's Study. International journal of obesity. 2000; 24(10): 1319-25.

[21] Story M, Neumark-Sztainer D, French S. Individual and environmental influences on adolescent eating behaviors. J Am Diet Assoc. 2002;102 (3 suppl): S40-S51

[22] Thompson G. International consumer demand for organic foods. Hort Technology. 2000; 10(4): 663-74.

[23] Mattoo KA, Shalabh K, Khan A. Prevelance of elder abuse among completely edentulous patients seeking complete denture prosthesis - A survey. J Ind Acad Geriat 2009; 5(4): 177-180

[24] Reportin R. US Department of Health & Human Services Administration for Children and Families Administration on Children, Youth and Families Children's Bureau.

[25] Harris J. Dental neglect in children. Paediatrics and Child Health. 2012; 22(11): 476-82.

[26] Mattoo KA, Moaleem M, Shubayr M. Assessing the validity and reliability of a questionnaire to identify existence of parental neglect in terms of developing feeding style and social activity in obese adult saudi population. Journal of Medical Science and Clinical Research 2018; 6(4): 377-83.

[27] Aldosari AM, Wyne AH, Akpata ES, Khan NB. Caries prevalence and its relation to water fluoride levels among schoolchildren in Central Province of Saudi Arabia. International Dental Journal. 2004; 54(6): 424-8.

[28] Pavlou MP, Lachs MS. Self-neglect in older adults: a primer for clinicians. Journal of General Internal Medicine. 2008; 23(11): 1841-6.

[29] Nagaraj K, Mattoo KA, Brar A. Self-Neglect associated with a patient having oral cancer. Journal of Medical Science and Clinical Research 2014; 2(10): 2543-46.

[30] Rathi N, Mattoo K, Bhatnagar S. Extending the use of a diagnostic occlusal splint to overcome existing lacunae of vertical dimension transfer in full mouth rehabilitation cases. American Journal of Medical Case Reports 2014; 2(12): 291-297.

[31] Darraj A, Mattoo KA. Full Mouth Rehabilitation Involving Occlusal Plane Correction-Case Report. Journal of Medical Science and Clinical Research 2017; 5(9): 28204-208.

[32] Gohal MRA, Mattoo KA, Nazish A, Youseef AM. Corrective Prosthodontics - Curating Semi Functional Anterior Guidance in Full Mouth Rehabilitation: Case Report. Journal of Medical Science and Clinical Research. 2017; 5(08): 26777-781.

[33] Darraj A, Mattoo KA, Gupta I. Full mouth rehabilitation of a rheumatoid arthritis patient - The Muzyanas Challenge. Annals of International Medical and Dental Research 2017; 3(6): DE09-DE13.

[34] Darraj A, Mattoo KA, Nazish M. Scheduling multiple surgical procedures in immunocompromised rheumatoid patient on immune suppressant regimen. Journal of Medical Science and Clinical Research 2017; 5 (08): 26828-833.

[35] Muneera RAG, Mattoo KA, Youseef AM. A Novel Approach to Determine the Aesthetic Inclination of Cast Post Core - Case Report. Annals of International Medical and Dental Research 2017; 3(6): DE14-DE17.

[36] Mattoo KA, Darraj A, Gupta I. Determining the cast core inclination in absence of guidance from natural teeth - a distinctive clinical technique. Journal of Medical Science and Clinical Research, 2019; 7(3): 232-236.