



ISSN: 0976-3031

Available Online at <http://www.recentscientific.com>

International Journal of Recent Scientific Research
Vol. 8, Issue, 2, pp. 15554-15557, February, 2017

**International Journal of
Recent Scientific
Research**

Research Article

AWARENESS OF GENERAL DENTISTS' VIEWS PERTAINING TO INSTRUCTIVE AND TREATMENT ISSUES INFLUENCING ACCESS TO CARE FOR MEDICALLY COMPROMISED CHILDREN AN ONLINE SURVEY

**Shantanu Choudhari*, Sandip Saxena., Chirag Vaghela., Parikrama Solanki
Swati Goyal and Bhawna Verma**

Department of Pedodontics and Preventive Dentistry, Govt. Dental College & Hospital,
Ahmedabad/ Gujarat University, India

ARTICLE INFO

Article History:

Received 15th November, 2016

Received in revised form 25th

December, 2016

Accepted 23rd January, 2017

Published online 28th February, 2017

Key Words:

General dentist; Medically compromised children; Online Survey; Specialized dental care.

ABSTRACT

The aim of this study was to gauge the awareness of general dental practitioners' concerns of providing dental treatment for medically compromised children. **Materials And Method:** A rundown of inquiries by means of questionnaires for gauging and quantifying statistically the confidence, experience and willingness for treating medically compromised children was sent via email to 300 general dental practitioners utilizing Google Online Survey form. **Result:** Out of 300 questionnaires, 165 responded to the survey; the response rate being 55%. The result of this study showed that children suffering from Congenital Heart Disease were 55%, Haemophilia or any other coagulopathy, Insulin dependent diabetes and Epilepsy patients encountered were 8%, 5% and 30% respectively. Only 2% children were encountered with acute malignancy. Willingness to provide treatment varied, depending upon the child's condition. 60% of dentists were willing to provide preventive dental care and dental restorative treatment. 15% of dentists were ready to perform endodontic treatment under L.A. Only 8% of the dentists were willing to perform extraction under L.A. Responses were grouped using self-appraised scales into 'not confident', 'confident' and 'very confident'. 75% of respondents were confident for providing dental treatment, but only 6% were very confident. 90% respondents needed the requirement for arrangement of further training for medically compromised children. **Conclusion:** Study reflected that less number of medically compromised children reported to general dental practitioners. Out of these, not many general dental practitioners exuberated confidence in treating medically compromised children. A remedial effort towards a collaborated or coordinated network of medical and specialized dental care is required.

Copyright © Shantanu Choudhari et al, 2017, this is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution and reproduction in any medium, provided the original work is properly cited.

INTRODUCTION

The American Academy of Paediatric Dentistry (AAPD) upholds the ideology that giving both primary and thorough preventive and therapeutic oral health care to individuals with special health care needs is a necessary part of the specialty of paediatric dentistry.

With medical science expanding the wings of its progressive horizons over the previous decades, numerous children who would have succumbed to death at early ages are presently surviving upto adulthood (Grundy MC et al., 1993). The forecast of restorability of medically compromised children is turning out to be better with early diagnosis and new treatment standards, thus increasing the probability of their survival. Medically compromised children are more prone towards getting infected with oral diseases, in light of the fact, that the pathological ailment itself may have oral manifestations.

Besides, the treatment or medicine endorsed may bring about diminished host resistance and manifests in adverse effects in the oral cavity (Arnrup K et al., 1993).

Untreated dental ailment in medically compromised children can significantly influence their general overall wellbeing. Likewise, in a few conditions, an acute dental infection can be life threatening. The significance of good dental health is often an unheeded or delinquent aspect that parents neglect in the initial years of their children upbringing. When analysing from a dental medicine viewpoint, there are two noteworthy issues related with the medically compromised children: First one is the absence of specialized dental offices / skills necessary to combat these health issues. Secondly the oral manifestations get faded into oblivion, as the medical treatment facet is the paramount criterion of consideration for the parent/guardian.

Despite the fact that information concerning the oral health condition of medically compromised children is a relatively

*Corresponding author: **Shantanu Choudhari**

Department of Pedodontics and Preventive Dentistry, Govt. Dental College & Hospital, Ahmedabad/ Gujarat University, India

rare occurrence, a few reports have demonstrated that oral disease levels are frequently higher among these groups of patients (Nunn JH 1987, Kerr M et al. 1996, Francis JR et al. 1997, and Gizani S et al. 1997). Likewise, dental treatment levels in these patients are lower than those encountered in healthy individuals (Gizani S et al. 1997). Handfuls of reviews have affirmed that deficient levels of comprehensive dental services are being rendered to children with special health care needs (Casamassimo PS et al. 2004, Loeppyk WP et al. 2006, and Newacheck PW et al. 2000).

Several justifications have been presented to throw light upon these findings, like inaccessibility to dental care facilities, non willingness of dental practitioners to treat disabled and medically compromised patients and sparse expert attitudes towards impaired individuals. Thereby the hypothesis formulated against the backdrop of this study was that the presence of medical conditions may pose a hindrance towards accepting dental health care services.

MATERIALS AND METHODS

This study was conducted in Ahmedabad district of Gujarat, India. The study population included General Dental Practitioners (GDPs), Community Dental Service and Hospital Dental Care in Ahmedabad district.

The list comprised of 300 dental practitioners. Total 300 questionnaires were conveyed by utilizing Google Online Survey Form. A mail clarifying the aims of this study was sent alongside basic information and coded surveys. Reminder was sent after 15 days of initial mailing. Those dental practitioners, who neglected to answer the reminder, were reached by phone at their practice. On the off chance that the practitioners had lost the original questionnaire, they were again sent to them. Surveys were acknowledged upto 6 weeks after the starting date.

Dentists were asked the following questions

- 1) Which of the accompanying medically compromised conditions they encounter the most? Congenital Heart Disease, Haemophilia or any other coagulopathy, Acute malignancy, Insulin dependent diabetes or Epilepsy.
- 2) Which sort of treatment they will provide? Preventive dental care and dental restorations, Endodontic treatment under L.A, Extraction under L.A or all.
- 3) Confidence in managing abovementioned patients on a self-appraised score (1, 2.....10). 'Not confident' 0-3, 'Confident' 4-7, and 'Very confident' 8-10.
- 4) Requirement for further training?

Responses were classified and information was examined.

RESULTS

Of the 300 questionnaires sent to dentists, a total of 165 responses were obtained. Practitioners who had retired, resigned or were not practicing were excluded from this study. The response rate was 55%.

The result of this study shows that in medically compromised children; Children suffering from congenital heart disease were

55%. Haemophilia or any other coagulopathy, Insulin dependent diabetes and Epilepsy patients encountered were 8%, 5% and 30% respectively. Only 2% children were encountered with acute malignancy [Figure 1].

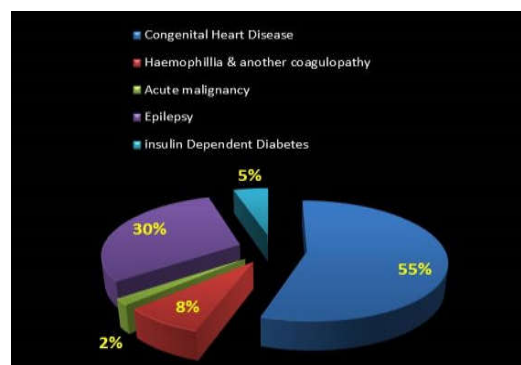


Figure 1 Medically compromised children encountered the most

Practitioners reported on the readiness to provide dental care to all groups of medically compromised children. Readiness to provide treatment depends upon the child's medical condition. 60% of dentists were ready to deal with preventive dental care and dental restorative treatment. 15% of dentists were ready for endodontic treatment under local anaesthesia. Only 8% of the dentists were ready to perform extraction under L.A [Figure 2].

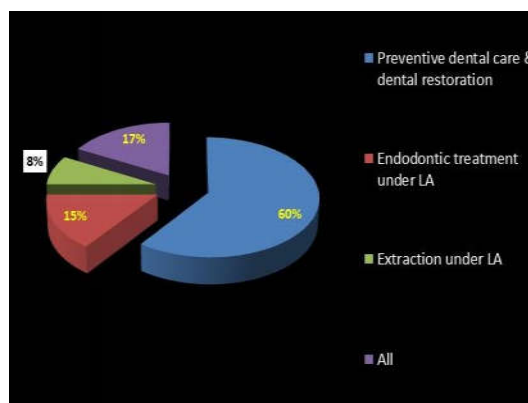


Figure 2 Willingness to provide treatment

Respondents were asked to react on a self-appraised score of 1 to 10, how sure they were in treating patients with a specific medical condition. Responses were gathered utilizing self-appraised scale into 'not confident', 'confident', and 'very confident'. 75% of respondents were confident for providing dental treatment, yet just 6% were very confident for providing treatment for medically compromised children [Figure 3].



Figure 3 Confidence in providing treatment

The response to the requirement for further training was very high. 90% respondents needed some sort of training in terms of classes, short courses and guidelines for proceeding with continuing dental care in their practice [Figure 4].

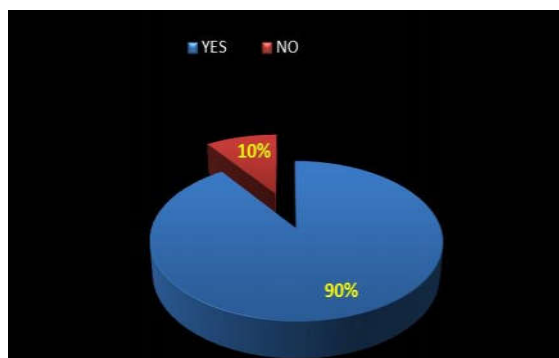


Figure 4 Interested for additional training

DISCUSSION

The information from the past studies of general dentists' care of children with special health care needs offered a unique chance to assess the practitioner's ability to treat them. The response rate was modest, yet the information gave a valid picture of access of medically compromised children to the general dental private practice network. Dental treatment for medically compromised children was not taken into consideration because of underlying medical conditions.

Children who have a medical disability in the dental situation can be defined as those whose medical condition is such that their general health is put at further risk if they suffer from dental diseases (Saunders P *et al.*, 1997). Dental disease itself or the treatment for dental disease can have serious implications for medically compromised children and their caregivers. Expanded introduction to prophylactic antibiotics or haematological factors might be required preceding dental treatment (Parry JA *et al.*, 2000). Dental disease can contrarily influence the accomplishment of medical treatment; consequently their dental care is of key significance.

Regular tooth brushing, dietary counselling, fluoride supplementation and other oral hygiene practices can help to prevent dental caries (Kidd EAM, 1997). Medically compromised children should be given the most noteworthy means for comprehensive and preventive dental care from an age as early as possible (Zimmer S *et al.*, 1999). In this study, children experiencing Congenital Heart Disease were 55%. Haemophilia or other coagulopathy, Insulin dependent diabetes and Epilepsy were 8%, 5% and 30% respectively. Practitioners had treated very few children with malignancies (2%) [Figure 2].

The absence of commonality with respect to different medical conditions and pharmacological regimens is of concern and recommend the requirement of promptly accessible care for children requiring dental treatment. Medically compromised children who have high caries risk should undergo dental check-ups every 3-6 months regardless of the possibility that they don't have any issue concerning their teeth (AAPD Guidelines, 2002). Also, the oral hygiene status of medically compromised children is poor as compared to that of the general population. However, in case of medically compromised children, prevention of dental diseases becomes

more important because sometimes, dental disease can be life threatening (Arnrup K *et al.*, 1993). In case of medically compromised children poor oral hygiene status turns to be more critical in light of the fact that occasionally, dental infection can prove life threatening (Arnrup K *et al.*, 1993).

General dental practitioners presented with non willingness in treating medically compromised children and related dental procedures. Preventive dental disease is important for these children and we agree with other investigators who have suggested that a remedial effort towards a collaborated or coordinated network of medical and specialized dental care is required (Dens F *et al.*, 1995). Many investigators have recommended that there should be an arrangement of incorporated medical and dental network when needed because preventive dental treatment is vital for these children. Such network would give quick access to data relating to medical and dental care requirements (Murray JJ, 1998).

CONCLUSIONS

- General dental practitioners encountered less number of medically compromised children.
- Majority of general dental practitioners are not confident in being involved for treating medically compromised children.
- Furthermore, it is concluded that there should be a remedial effort towards a collaborated or coordinated network of medical and specialized dental care is required for these children as a part of treatment protocol.

References

1. AAPD Guidelines. Dental management of pediatric patients receiving chemotherapy, bone marrow transplantation and/or radiotherapy. *Pediatr Dent.* 24(7): 120-122, 2002
2. Arnrup K, Lundsén SA, Dahllöf G. Analysis of paediatric dental services provided at a regional hospital in Sweden. *Swed Dent J.* 17: 255-259, 1993.
3. Casamassimo PS, Seale NS, Ruehs K. General dentist's perceptions of educational and treatment issues affecting access to care for children with special health care needs. *J Dent Educ* 2004; 68(1): 23-8.
4. Dens F, Boute P, Otten J, Vinckier F, Declerck D. Dental Caries, gingival health, and oral hygiene of long term survivors of paediatric malignant diseases. *Archives of Disease in childhood* 1995; 72:129-132
5. Francis JR, Stevenson DR, Palmer JD. Dental health and dental care requirements of young handicapped adults in Wessex. *Community Dental Health* 1997; 8: 131-7.
6. Gizani S, Declerck D, Vinckier F, Martens L, Marks L, Goffin G. Oral health condition of 12-year-old handicapped children in Flanders (Belgium). *Community Dent Oral Epidemiol* 1997; 25: 352-7.
7. Grundy MC, Shaw L, Hamilton DV. *An Illustrated Guide to Dental Care for the Medically Compromised Patient.* Aylesbury: Wolfe Pub.; 1993: 6.
8. Kerr M, Richards D, Glover G. Primary care for people with a learning disability – a group practice survey. *Journal of Applied Research in Intellectual Disability* 1996; 9: 347-52.

9. Kidd EAM, Joyston-Bechal S. Essential Dental Caries The Disease and Its Management. 2nd ed. Hong Kong: Oxford University Press; 1997:1-18
10. Loeppky WP, Sigal MJ. Patients with special health care needs in general and pediatric dental practices in Ontario. *J Can Dent Assoc* 2006; 72(10): 915.
11. Murray JJ. Whither paediatric dentistry? *International journal of Paediatric Dentistry* 1998; 235-242.
12. Newacheck PW, McManus M, Fox HB, Hung YY, Halfon N. Access to health care for children with special health care needs. *Pediatrics* 2000; 105(4): 760-6.
13. Nunn JH. The dental health of mentally and physically handicapped children: a review of the literature. *Community Dent Health* 1987; 4: 157-68.
14. Parry JA, Khan FA. Provision of dental care for medically compromised children in the UK by general dental practitioners. *Int J Paediatr Dent* 10:322-327, 2000
15. Saunders P, Roberts GJ. Dental attitudes, knowledge and health practices of parents of children with congenital heart disease. *Arch Dis Child.* 76(6): 539-540, 1997.
16. Shenkin JD, Davis MJ, Corbin SB. The oral health of special needs children: dentistry's challenge to provide dental care. *ASDC J Dent Child* 2001; 68(3): 201-5.
17. Zimmer S, Robke FJ, Roulet JF. Caries prevention with fluoride varnish in a socially deprived community. *Community Dent Oral Epidemiol.* 27:103-108, 1999.

How to cite this article:

Shantanu Choudhari *et al.* 2017, Awareness of General Dentists' Views Pertaining To Instructive And Treatment Issues Influencing Access To Care For Medically Compromised Children an online survey. *Int J Recent Sci Res.* 8(2), pp. 15554-15557.