

ORIGINAL RESEARCH

DENTAL EXPERIENCE, ANXIETY, AND ORAL HEALTH IN LOW-INCOME GHAZIABAD CHILDREN

Avneet Kaur

Department of Prosthodontics, Indraprastha Dental College & Hospital, Ghaziabad, U.P.

ABSTRACT

Aim & Objectives: Anxiety and fear towards dental treatment are common problems frequently experienced by patients worldwide, hence for better understanding, management and development of treatment strategies for dentally anxious patients, and their dental experience and oral health the present study was undertaken. The study aimed to evaluate the prevalence of dental anxiety and the factors influencing dental anxiety, poor oral health among the Low-income children in Ghaziabad, U.P.

Materials & Methods: One hundred and fifty children were examined. Oral health status was assessed based on the decayed, extracted, or filled teeth index, simplified oral hygiene index, and Streptococcus mutans score. Dental anxiety was assessed using the facial image scale and Frankl scale. Early dental experience was classified as: no previous dental visits; preventive control; restorative treatment; and emergency visit. Dental caries is the key factor for the child to visit the dental clinic. The dental setup and its factors are one of the triggering agent to child's anxious and the previous dental experiences. Patients with systemic problems have high rate of dental caries.

Result & Conclusion: Prior dental experiences of six-year-old children were directly related to their dental caries experience. Children who had preventive visits and those who had never seen a dentist before had low rates of dental caries. Patients have low percentage of dental visit for their preventive treatment due to unawareness of their parents. Simplified oral hygiene index and dental anxiety levels showed no statistically significant differences among the types of previous dental experiences.

KEY WORDS

Dental caries, Anxiety, Oral health, Dental experience, Fear, Preventive treatment, Low-Income.

How To Cite This Article: Avneet Kaur Dental experience, anxiety, and oral health in low-income ghaziabad children Int J Prosthodont Rehabil 2020; 1: 1:63-71

Received: 06-02-20; Accepted: 18-04-20; Web Published: 13-06-2020

Introduction

Dental caries is the most common chronic disease of childhood and is, therefore, of great importance to public health. Dental caries is the key factor for the child to visit the dental clinic. The dental setup and its factors are one of the triggering agent to child's anxious and the previous dental experiences. Patients with systemic problems have high rate of dental caries. Anxiety and fear towards dental treatment are common problems frequently experienced by patients worldwide, hence for better understanding, management and development of treatment strategies for dentally anxious patients, and their dental experience and oral health the present study was undertaken^[1] The study aimed to evaluate the prevalence of dental anxiety and the factors influencing dental anxiety, poor oral health among the Low-income children in Ghaziabad and is about the anxious and experience of the child in dental clinic and how their anxious makes the treatment complicated and the background of their anxious is dental caries. The severity of dental caries measured by the decayed, missing, filling teeth and OHI-(S) index^[2].

Materials and methods

One hundred and fifty children were examined. A sample of 150 questionnaire were circulated containing 15 questions. Oral health status was assessed based on the decayed, extracted, or filled teeth index, simplified oral hygiene index, and Streptococcus mutans

score. Dental anxiety was assessed using the facial image scale and Frankl scale. Early dental experience was classified

Address of correspondence

Dr. Avneet Kaur
Indraprastha Dental College & Hospital, Ghaziabad, U.P.

E-mail Address- kaurdravneet@gmail.com

as: no previous dental visits; preventive control; restorative treatment; and emergency visit.

QUESTIONNAIRE

DENTAL EXPERIENCE, ANXIETY, AND ORAL HEALTH IN LOW-INCOME GHAZIABAD CHILDREN

NAME: _____ SEX: MALE/FEMALE

AGE: _____

SOCIOECONOMIC STATUS: A) <25,000/YEAR, B) 25,000-50,000/YEAR, C) 50,000-1,00,000/YEAR

QUESTIONS:

1) Does your child had any previous dental visit?

A) Yes

B) No

2) How was the child's experience for the first dental visit?

A) Pleasant

B) Fair

C) Poor

D) Unpleasant

3) Does the child is anxious to any of the dental set up?

A) Yes

B) No

If YES –To what:

4) Does your child had any treatment on his/her first dental visit?

A) Yes

B) No

C) Emergency

5) Does your child has any forward looking to the dentist after their first dental visit?

A) Yes

B) No-Why?

6) How was your child's oral health before visiting a dentist?

A) Excellent

B) Good

C) Fair

D) Poor

7) What's your child's daily frequency of brushing?

A) Once

B) Twice

8) Does your child brushes their teeth on their own?

A) Yes

B) No

9) What kind of snacks Does your child take often?

A) Chocolate/sweets

B) Beverages

C) Ice cream

10) Have your child had any preventive treatment for dental caries?

A) Yes

B) No

11) How was the child's behaviour during the dental procedure?

A) Uncooperative

B) Cooperative

12) Are you aware of the preventive treatment for your child's dental caries?

A) Yes-How?

B) No

13) Does your child has any systemic problems?

A) Malnutrition

B) Communicable disease

C) Infectious disease

D) Congenital disease

E) Learning /Speech difficulties

F) Growth retardation

14) What's the rate of caries in children undergoing restorative and emergency treatment?

A) <2

B) 2-5

C) >5

15) Oral health assessment:

A) OHI-S:

B) DMFT/S: Decay-

Filling-

Missing-

Results

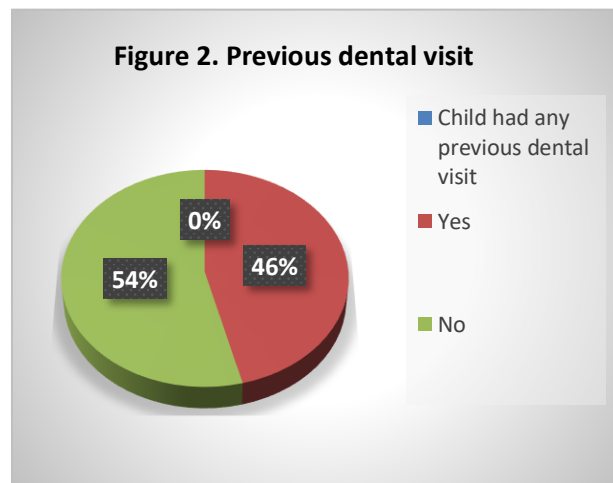


Figure 2- Childs attitude after first dental visit

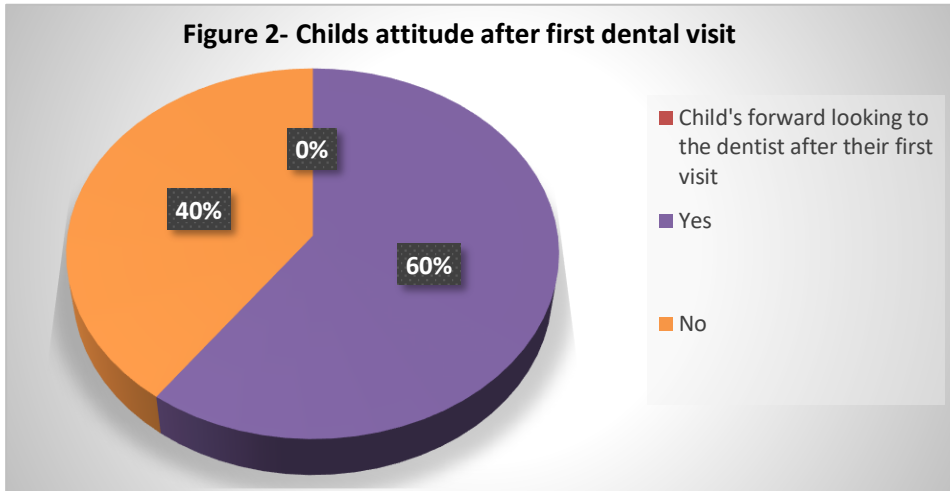


Figure 3- Childs anxiousness to dental setup

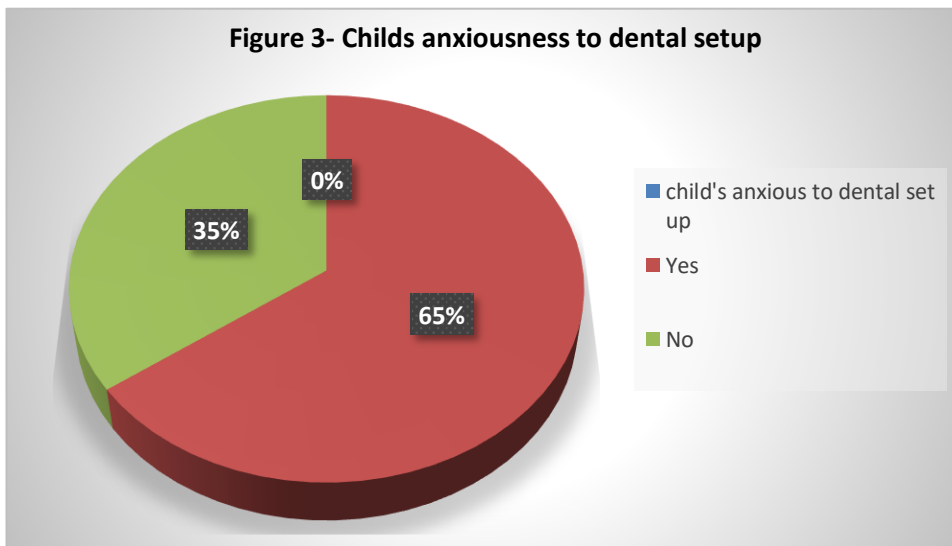


Figure 4- Childs snacking habit

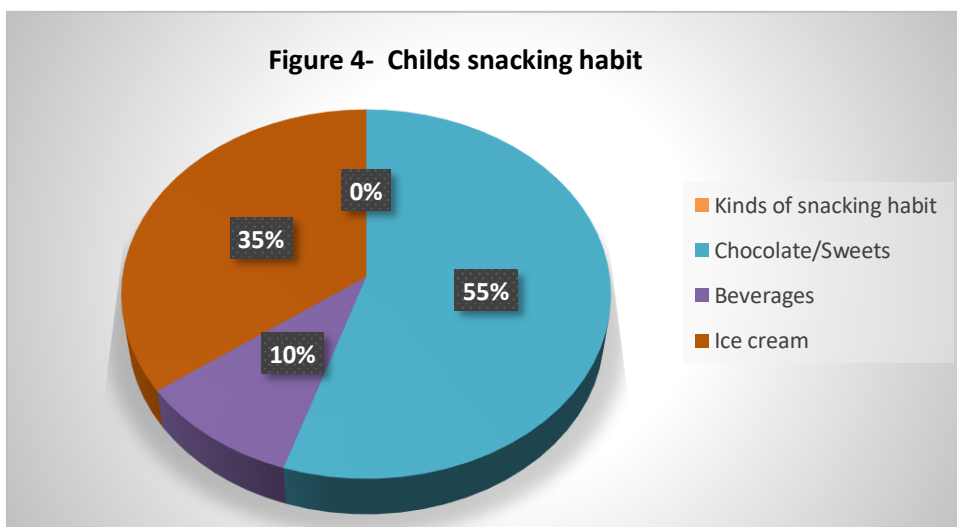


Figure 5 - Any preventive treatment done for dental caries

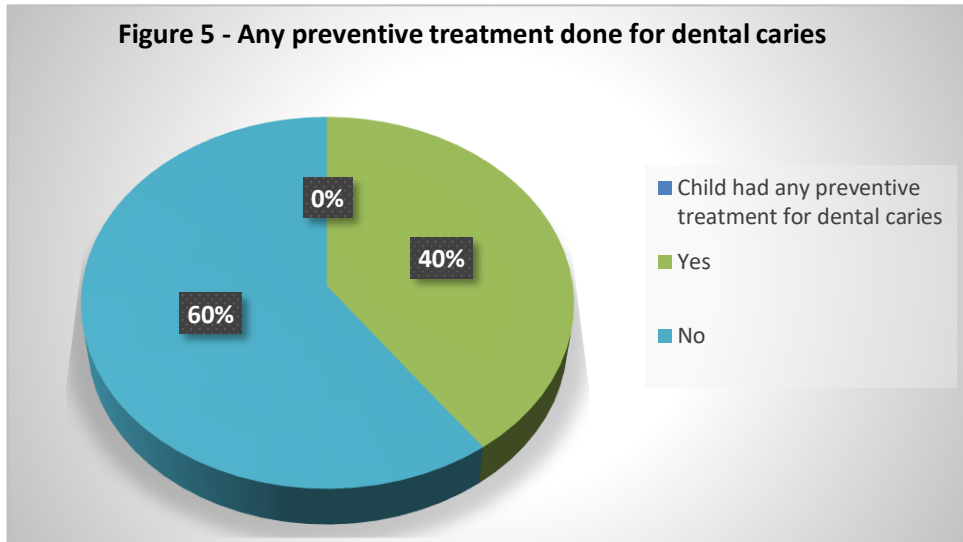


Figure 6- Childs daily frequency of brushing

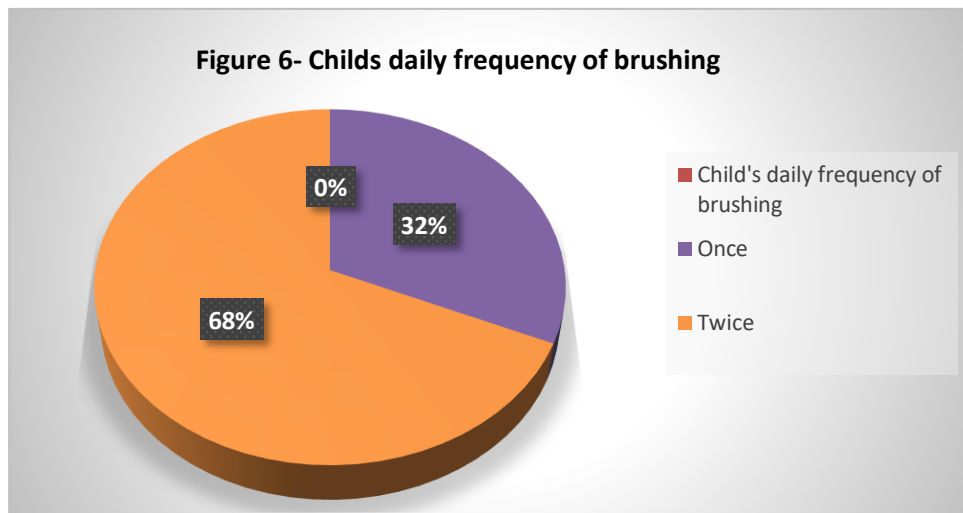


Figure 7- Child brushing the teeth on their own

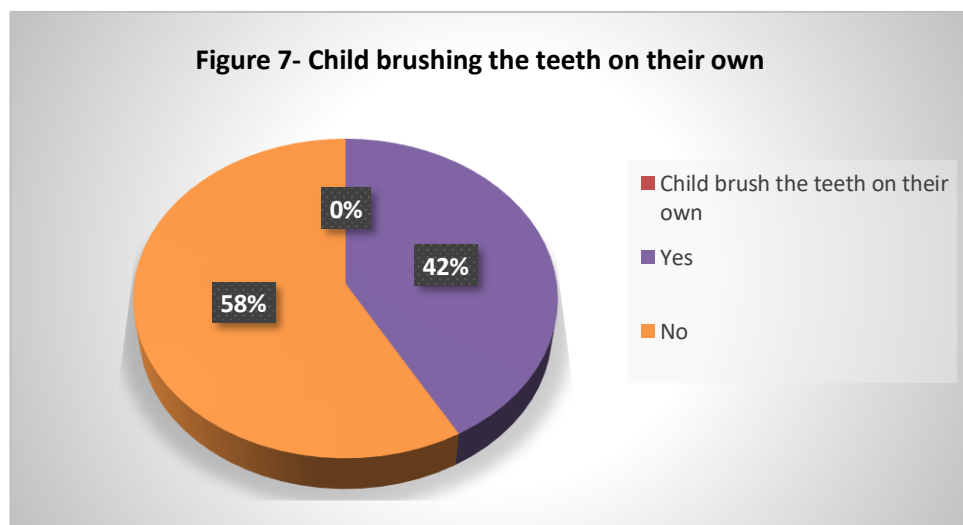


Figure 8- Any treatment done on their first dental visit

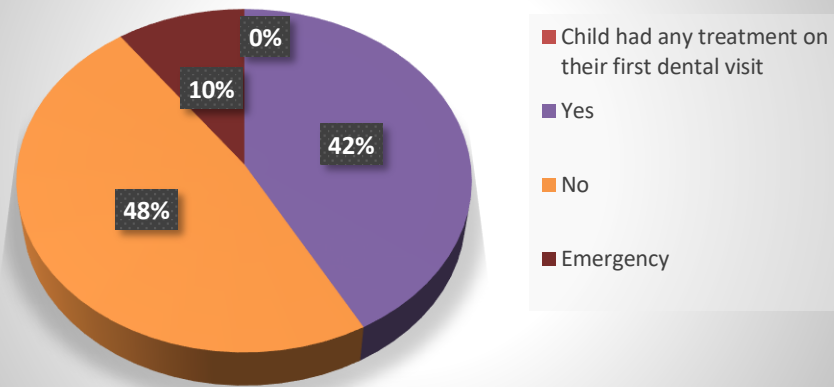


Figure 9- Awareness about the preventive treatment for dental caries

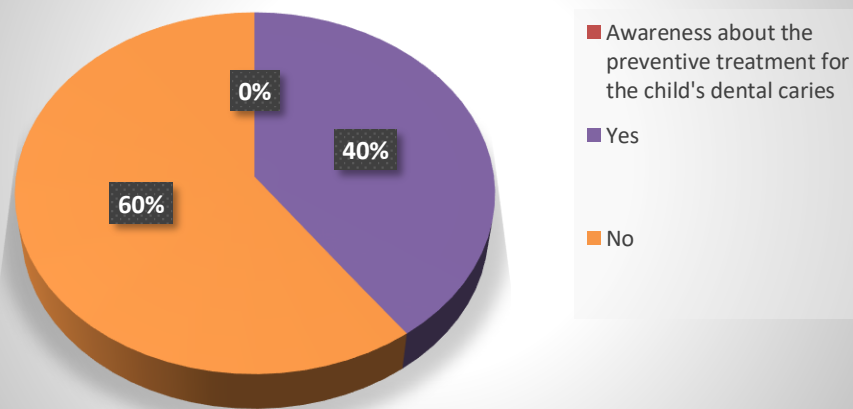
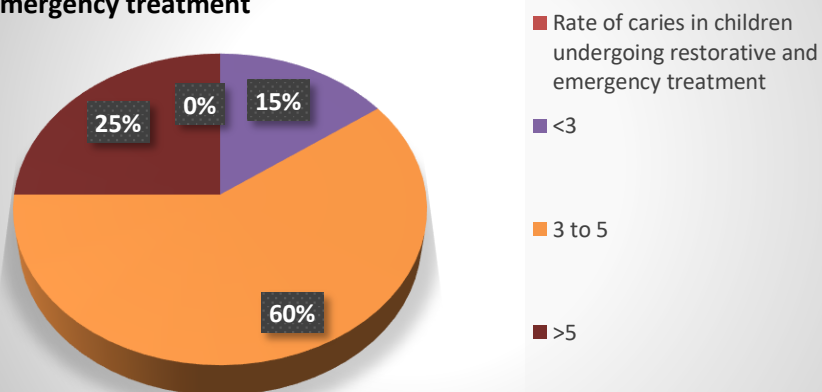
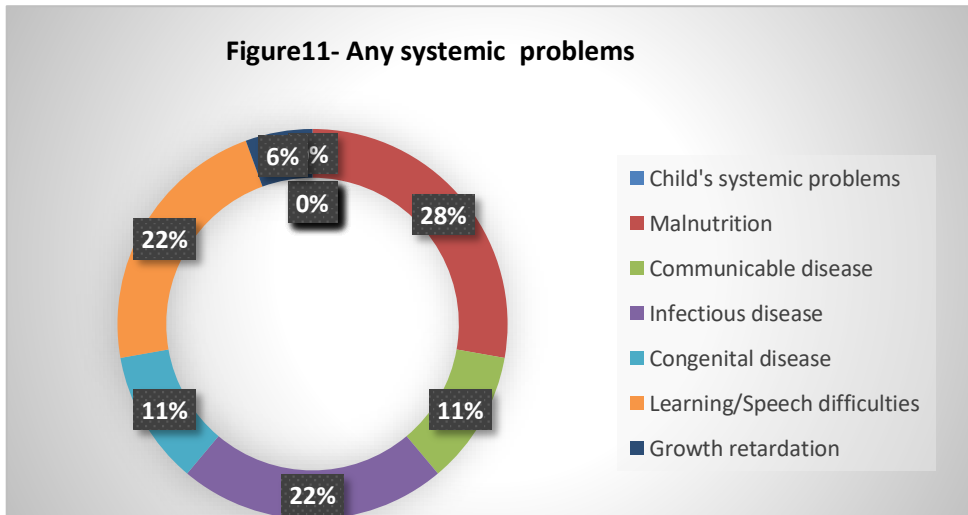
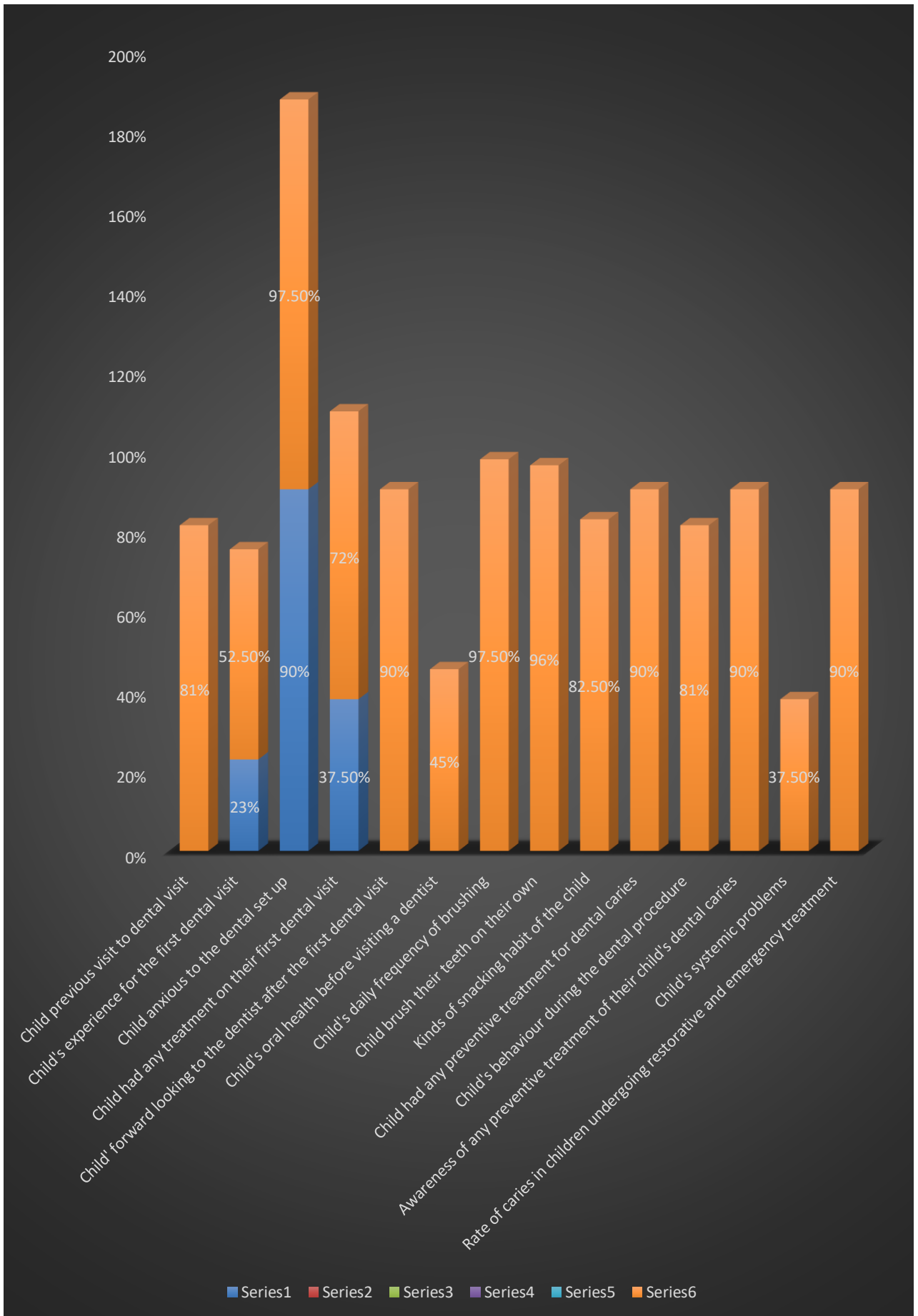


Figure 10 - Rate of caries in children undergoing restorative and emergency treatment







Discussion

This study aimed to assess the relationship between early dental experience and clinical/microbiological indicators of oral health status and dental anxiety at the time of admission to a dental clinic for oral health assessment of the children. Few children who visited to dental clinic due to emergency visit had a dmft/S index of zero. The emergency in these cases was most likely not related to dental caries but to other causes, such as dental trauma. The preventive control had a significantly lower prevalence of caries and comprised the highest percentage of children without caries. The oral health assessment showed that the child underwent restorative treatment and emergency visit to dental clinic had a higher caries risk than child had preventive control treatment and no prior dental visit groups. Our results are consistent with those of Wennhall et al., who showed that an early start in oral health programs has significant benefit in the prevention of caries and that the more children attend dental exams, the lower the incidence of caries. In this study, children attending the dentist for the first time at six years of age did not exhibit significant differences in dmft/S scores compared to children who had previous preventive treatment. However, there was a significant difference in the caries component, with higher values for the Non-Visitors to dental clinic than children whom already had preventive treatment group. Therefore, while the values for the dmft/S index were similar, children who never had a dental visit had poorer oral health than children who attended Preventive treatment highlighting its importance. AnniLuoto et al.,^[14] in which associations between Child Perceptions Questionnaire and dental fear were not statistically significant. This may be due to the fact that non-school going children are mainly street children, and among them there is a false impression that dentistry is mainly involved with extraction and is a painful procedure that may be further complicated by wide range of health problems, including malnutrition, communicable and infectious disease, poor oral health, cognitive disorders and learning difficulty^[15]. The study showed that subjects who rated their oral health as poor had higher levels of dental anxiety than those subjects who rated their oral health as good or average, this was in accordance with the findings by Locker and Liddell^[4], Doerr et al^[7]. Contrary to the findings of Erten et al^[8], Skaret et al^[9], Hagglin et al^[10] the results from the present study showed no significant difference in dental attendance based on anxiety level and this was similar to the reports from Indian studies by Acharya^[3], EktaMalvania and Ajithrishnan^[11] but contrary to the findings of Pavi et al.^[12], Stole et al^[13]. The relationship between dental anxiety and socio economic status has not been clearly determined. In this study uneducated patients and patients with less or no income had no knowledge about their child's dental caries preventive treatment; this is in accordance with other studies^[5,6].

Conclusion

Based on the results of this study, the following conclusion can be made:

1. Prior dental experiences of six-year-old children were directly related to their dental caries experience.
2. Children who had preventive visits and those who had never seen a dentist before had low rates of dental caries.
3. Patients have low percentage of dental visit for their preventive treatment due to unawareness of their parents.
4. Simplified oral hygiene index and dental anxiety levels showed no statistically significant differences among the types of previous dental experiences.

Authors Contribution

Avneet Kaur- Manuscript editing, data collection, data analysis

Acknowledgement

The authors would thank all the participants for their valuable support and thank the dental institutions for the support

Conflict of Interest

All the authors declare no conflict of interest

Source of Funding

None

References

- [1]. Sheilam A. Oral health, general health and quality of life. Bull World Health Organ 2005;83(9): 644-5.
- [2]. Chilean Ministry of Health. National Oral Health Diagnosis of six-year-old children. Division of Disease Prevention and Control. Oral Health Department; 2007. Available at: "http://web.minsal.cl/portal/url/item/7dc33df0bb34ec58e04001011e01_1c36.pdf". Accessed November 16, 2015.
- [3]. Acharya S. Factors affecting dental anxiety and beliefs in an Indian population. Journal of oral rehabilitation. 2008 Apr;35(4):259-67.
- [4]. Locker D, Liddell AM. Correlates of dental anxiety among older adults. Journal of Dental Research. 1991 Mar;70(3):198-203..
- [5]. Moore R, Birn H, Kirkegaard E, Brødsgaard I, Scheutz F. Prevalence and characteristics of dental anxiety in Danish adults. Community dentistry and oral epidemiology. 1993 Oct;21(5):292-6.
- [6]. Armfield JM, Spencer AJ, Stewart JF. Dental fear in Australia: who's afraid of the dentist?. Australian dental journal. 2006 Mar;51(1):78-85..
- [7]. Doerr PA, Lang WP, Nyquist LV, Ronis DL. Factors associated with dental anxiety. The Journal of the American Dental Association. 1998 Aug 1;129(8):1111-9..
- [8]. Erten H, Akarlan ZZ, Bodrumlu E. Dental fear and anxiety levels of patients attending a dental clinic. Quintessence international. 2006 Apr 1;37(4)..
- [9]. Skaret E, Raadal M, Berg E, Kvale G. Dental anxiety and dental avoidance among 12 to 18 year olds in Norway. European journal of oral sciences. 1999 Dec;107(6):422-8.
- [10]. Hägglin C, Hakeberg M, Ahlqwist M, Sullivan M, Berggren U. Factors associated with dental anxiety and attendance in middle-aged and elderly women. Community dentistry and oral epidemiology. 2000 Dec;28(6):451-60. [11]. Malvania EA, Ajithkrishnan CG. Prevalence and socio-demographic correlates of dental anxiety among a group of adult patients attending a dental institution in Vadodara city, Gujarat, India. Indian Journal of Dental Research. 2011 Jan 1;22(1):179..
- [12]. Pavi E, Kay EJ, Stephen KW. The effect of social and personal factors on the utilisation of dental services in Glasgow, Scotland. Community Dental Health. 1995 Dec 1;12(4):208-15.
- [13]. Støle AC, Holst D, Schuller AA. Decreasing numbers of young adults seeking dental care on yearly basis. A reason for concern. Nor Tannlegeforen Tid (in Norwegian). 1999;109:392-5.
- [14]. Luoto A, Lahti S, Nevanperä T, Tolvanen M, Locker D. Oral-health-related quality of life among children with and without dental fear. International Journal of Paediatric Dentistry. 2009 Mar;19(2):115-20.

[15]. Reading J. The crisis of chronic disease among Aboriginal peoples: A challenge for public health, population health and social policy. Centre for Aboriginal Health Research; 2009.

This work is licensed under the Creative Commons Attribution-Non Commercial 4.0 International License. To view a copy of this license, visit <http://creativecommons.org/licenses/by-nc/4.0/> or send a letter to Creative Commons, PO Box 1866, Mountain View, CA 94042, USA.