Original Research Paper

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Pediatric dentistry

COMPARISON OF SOCIOECONOMIC DATA & ORAL HEALTH RELATED QUALITY OF LIFE IN PATIENTS WITH OR WITHOUT CLEFT LIP & PALATE DEFORMITIES

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ABSTRACT **Introduction:** The aim of this study will be to compare the socioeconomic status & quality of life in Cleft & non-cleft patients up to 18 years old children in Rajasthan. Materials and methods: The sample consisted of hundred cleft patients in the study group and hundred patients in the control group of under 18 years of age. A questionnaire survey was designed for CLP cases that came to the Darshan Dental college and Hospital, Udaipur, were included in the study. These patients were compared with fifty matched patients (control group) who had no CLP. A questionnaire was designed and pretested, and informed consent from the cases and careers was taken for both the groups. The questionnaire was answered individually, only once, at a private place. Student's t-test was used to compare the means between cleft group and the control group. Results: The literacy status of the parents, their socioeconomic status, and occupation had a significant interrelation for the occurrence of CLP ($P < 0.05$) as compared with the controls. According to the parents' perception on the WHOQoL-Bref of children with and without cleft lip and palate, oral health of children with oral clefts had a statistically significant impact on WHOQoL-Bref. Conclusion: The group comparison revealed that the cleft lip and palate negatively impacted on WHOQoL of children and their parents. Education about oral health must be given repeatedly.

KEYWORDS :

INTRODUCTION

The relationship between quality of life (QoL) and oral health has gained attention in Dentistry because of the importance of oral health problems resulting in physical and psychosocial impacts on people's lives. Oral health problems can cause pain, discomfort, and put on some limitations, and other esthetics problems that affect the individual's social life, feeding, daily activities, and well-being, consequently leading to significant impacts on QoL1. Thus, it is important to understand how a person understands the oral condition, because the behavior is conditioned by this perception.

The oral health of children affects feeding, smiling, speaking, and socialization. The facial appearance and its relation with body image, self-stem, and emotional well-being play an important role in social interaction. Thus, interfering in these functions will influence the QoL of these children. Negative feelings regarding facial esthetics make the child believe that oral health negatively affects their daily life activities2. The World Health Organization Quality of Life – Bref (WHOQOL-Bref) is an important auxiliary measure for clinical indicators to assess health, especially in children. The number of factors such as literacy level of their parents, socioeconomic status, and occupation of the parents also contributes to the poor QoL of CLP cases.

Hence, the aims of this study were to determine the levels of socioeconomic-demographic data and oral health-related quality of life in subjects with CLP as compared with non-cleft controls in Rajasthan.

MATERIALS AND METHOD:

Hundred healthy patients visiting the Department of Pediatric and Preventive Dentistry, Darshan Dental college and Hospital, Udaipur under the 18 years age were selected. Ethical clearance was obtained from the Ethical committee to perform clinical and Radiological examination on patients. Selection of Participants were done with Inclusion Criteria Patients willing to participate in the study, Patient up to the age of 18 years, patients who have already been diagnosed with cleft. Exclusion Criteria Patients who are un-cooperative or not willing for the study and surgically treated patients.

The study was carried out on a total number of 100 cleft children patient from new born to 18 years with mean age (10.64±3.94) in cleft care center located in the suburbs area of the city of Rajasthan. There was a total of 100 patients, including 54 boys and 46 girls, with cleft lip and/or cleft palate. Subjects were interviewed to determine oral health-related quality of life by 2 trained dental students. Other information was obtained by interview and medical record retrieval. Parents of the subjects were also interviewed about their child's oral health behaviors and history of dental treatment. Subjects were interviewed to determine oral health-related quality of life by 2 trained dental students. Other information was obtained by interview and medical record retrieval. Parents of the subjects were also interviewed about their child's oral health behaviors and history of dental treatment. The WHOQOL-Bref refers to the short version of WHOQOL-100 proposed by the World Health Organization, adapted and validated, selected because it includes questions that met the study objective, adding reliable answers and for being easy to use. This consists of 26 questions, two questions of general aspects (one concerning the QoL and another concerning health), and other 24 questions divided into four domains: Physical, Psychological, Social Relationships and Environment. For each question, there are five possible answers, in this scale 5 is the best condition, and 1 the worst condition, except in questions 3, 4 and 26 with reverse score. For the analysis of the WHOQOL-Bref, we performed the transformation of the scale values from 4 to 20 points proportionally to values from 0 to 100 in each domain, and general quality of life questions, the higher the score, the better the QoL.

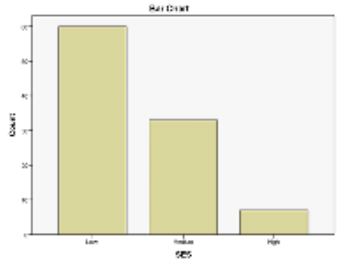
All the assessment criteria of study group were also compared & evaluated according to their socioeconomic & demographic information. So, the demographic & socioeconomic information were recorded for each subject prior to the clinical examination. In evaluation of the socioeconomic status, it was categorized as low, average, and high as per criteria set by the Government of India, i.e., below poverty line (BPL). The patients' parents who were farmers, beedi workers and rollers, construction workers, factory laborers, small shopkeepers, drivers, etc., were categorized into low category. The parents who were on service, government, and private company jobs were categorized into the average category and the individuals who were coming from established businesses, jobs in IT, health care, etc., were categorized into high socioeconomic status. There were also evaluated that was there any connection with parental oral habits or any effect of medication during gestation period or any family pedigree influence in prevalence of cleft child. So we have prepared some questions, was to be asked each & every parents of the study group. The parents are asked to fill the form by answering in “yes” or “no”. The questions were asked - 1) Was mom/dad smoker or chewer during pregnancy period of the mother? 2) Was the mother on medication during pregnancy? 3) Is there any family history of this oral defect? 4) Is the oral defect present in patient's parent or siblings? 5) Is the patient have any syndromic disease?

OBSERVATIONS, CALCULATION & STATISTICAL ANALYSIS:

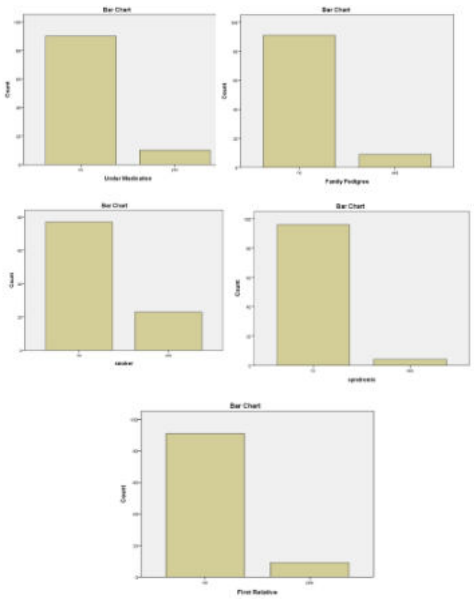
Data was analyzed using Statistical Package for Social Sciences (SPSS) version 21, IBM Inc. Descriptive data was reported for each variable. Descriptive statistics such as mean and standard deviation for continuous variables was calculated.

In this study a total number of 100 cleft children patient from new born to 18 years with mean age (10.64±3.94) were collected from the cleft care center located in the suburbs area of the city of Rajasthan. There was a total of 100 patients in the study group, including 54 boys and 46 girls, with cleft lip and/or cleft palate. To evaluate the oral health status. The data were analyzed by SPSS (21.0 version). Chi-Square test was done to compare all the categorical variables and the independent t-test to compare the two groups. Level of statistical significance was set at p-value less than 1.

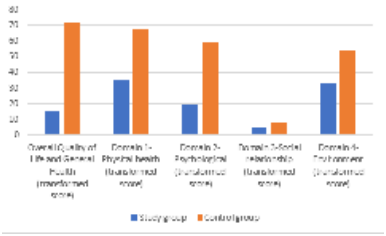
RESULT:



Graph I: Socioeconomic status wise distribution



Graph II: Socioeconomic status wise distribution



Graph III: Overall comparison of WHO-QOL in between study group & control group

Discussion:

In the present study, 68 out of 100 cases came from rural areas whereas only 32 cases came from urban areas of the Western states of India. The socioeconomic status of a family determines the nutritional status of the children that in turn determines their general health. Female children were neglected since birth in poor families belonging to rural areas of the eastern part of India. This leads to the poor general health of these future mothers. In spite of the best efforts by government, rural people still live under unhygienic conditions which leads to repeated childhood infections and poor growth and general health of the females. Living in unhygienic conditions increased the risk of antenatal infections most of which go unnoticed and remain untreated due to ignorance as well as social discrimination shown towards the girl child. According to Wyszynski DF, Duffy DL, Beaty TH (1997) 56 mothers of the affected children gave history of antenatal gastrointestinal and upper airways infection, which they ignored and left untreated. In absence of definite diagnosis, it is plausible that some of these women (who gave history of antenatal upper airway symptoms) may have been affected by rubella, which was an upper airway infection mentioned to have a causal relation with cleft. Some of the mothers also gave history of drinking alcohol and smoking habits during antenatal period. Alcohol and smoking were also mentioned to have a direct effect in causation of cleft in the offspring. The present study was carried out at Darshan Dental College & Hospital, Rajasthan state, India to evaluate the number of CLP patients with their socioeconomic status. Sample size selected was 100 CLP patients out of which 68 from rural areas & rest one from urban areas to the hospital.

Demographic & Socioeconomic Data: Children's oral health status is often related to social dimensions, such as parental income and education. The parents who are less educated and the parents worked as daily wagers (laborer) in India. Since these jobs are quite stressful, the parents develop recreational habits of tobacco and alcohol drinking which seems to reduce their stress. 57 The present study in accordance with Aggarwal et al. (2014) evaluated the demographic and socioeconomic status of parents in relation to CLP children. Where 8% of the mothers were involved in labor work and 88% were homemakers during the time of gestation. The results revealed that 23% of mothers had habits of either smoking or tobacco chewing before the period of gestation of a cleft child. The earlier studies were not able to establish an association between differential participation in case–control studies and variations in inclusion criteria for cases.58 In our study, we found that nearly 60% belonged to below poverty level group and showed a significant risk between the occurrence of cleft.

Quality of Life: The families of cleft children may be affected more than the normal families in terms of family functions and life quality owing to the long-term treatment procedures, repeated surgical interventions, frequent clinic visits, and psychosocial affects. In the organization of services for families with cleft children, it is important to evaluate the functions and life quality of these families, to determine in which areas the families function healthy or unhealthy and to learn in which areas they provide more or less satisfying. Detailed knowledge of impacts might be helpful for multidisciplinary cleft team to improve cooperation and also to support care for the patients and their families. 69 In the present study, QoL of cleft defects child was found to had moderate levels of satisfaction in physical, social, psychological, and environmental fields of life quality. However, QoL of cleft child showed significant lower values compared to control groups in the fields of physical, social, and psychological aspect. This might be because of dependent culture, lack of support from close relationships and social support especially at childhood period. Such support can motivate feelings of self-esteem, belongingness, sense of feeling valued, and more positive outlook and all these senses affect well-being. During adolescence, social support may be decreased, Speltz et al12 stated that parents social support depends on child's age and this support was found higher during infancy yet diminished through childhood and adolescence. In addition, by puberty, children begin to explore their independence, bodies, environments, and spiritual worlds, which also reduce the impact of family functioning on children. As the child's interest turns to herself, changes occur in the structure, role, and QoL. Although cleft children have completed lip and palate operations before this age stage, the esthetic processes, dental/ orthodontic/ orthognathic treatments, and speech development interventions still continue throughout adolescence. These factors may cause cleft families leaving less time for them and explain the lower life satisfaction than the control group. Thus, this present study was done to compare the dental defects & quality of life of the cleft lip & palate patients with the non-cleft individuals. It was observed that there was poor oral hygiene status & depressed quality of life in cleft lip & palate patient with the non-cleft individuals.

CONCLUSION:

Our study results found that there is a significant association between literacy, occupation, socioeconomic status in the occurrence of CLP. Based on the results obtained, we concluded that the group comparison revealed that the cleft lip and palate presence had a negative impacted on WHOQoL-Bref of children.

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