

Effect of Parental Employment and Family Status (Nuclear–J) on the Child’s Oral Health in Jammu Population: A Cross-sectional Study

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ABSTRACT

This study was conducted to assess or evaluate the influence of parental employment on the child’s oral and dental health.

Aims and objectives: This study aims to assess the repercussions of working parents in Jammu belonging to nuclear and joint families on the oral and dental health of children aged 2–14.

Materials and methods: A cross-sectional study was conducted in which a total of 1,848 children were examined from March 01, 2012, to February 28, 2014, who came to seek treatment in the Department of Pediatric and Preventive Dentistry, Indira Gandhi Govt. Dental College and Hospital, Jammu, along with the accompanying parents. Assessment was based on the following parameters: dental caries, eruption status of teeth, and orthodontic status.

Results: Age-wise distribution of the patients was done in four groups, 2–5 years (33%), 5–8 years (30%), 8–11 years (21%), and 11–14 years (16%), and were examined as per the above-mentioned criteria. The results were compiled and statistically analyzed using Chi-square test. Children of working parents exhibited more incidence of dental caries which was statistically analyzed (p value = 0.111) and was found insignificant and when analyzed as per the retained deciduous teeth and orthodontic anomalies (p value <0.05) was found to be highly significant. Also, children belonging to the nuclear families whether employed or unemployed were found to be more affected by the above-mentioned dental diseases.

Conclusion: It was seen that the children whose both parents were working had more incidence of dental caries, over-retained deciduous teeth, and were possessing habits that lead to orthodontic anomalies.

Keywords: Dental caries, Malposed teeth, Nuclear–J family, Oral health, Over-retained teeth, Parental employment.

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INTRODUCTION

The awareness of the parents toward their child’s oral health is a fundamental component that is responsible for the preventive measures, thus establishing a good oral health status of their child. Lack of parents’ knowledge and awareness regarding their child’s oral health will also affect their children’s future oral health attitudes and practices that they adopt, which will be carried over into adulthood.¹ In the present study, we included working parents and the type of family (nuclear or joint) they belonged to as major factors that affected the parental knowledge and awareness regarding their child’s oral health.

Family environment is one of the contributing factors for the overall development of a child who can acquire habits responsible for his or her oral habits. The aim of this study was to assess the repercussions of working parents belonging to nuclear and joint families, on the oral and dental health of the child ranging from 2 to 14 years of age. Most parents now are working, and the consequence of both parents being employed on overall child’s development is a matter of concern. Traditionally, in India, especially in semi-urban societies, the care of the child was under the supervision of a close-knit family, families were joint, and upbringing of the children was not localized to the parents and rather was joint family based.² Not just parents but elders in the family, which include grandparents, uncles etc., also have a positive impact on the overall health of the child.² Traditional families have broken into nuclear families, where both parents working try to find safe and good alternatives for their children while at workplace, and the consequence of the same is

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seen on child’s oral health. Therefore, the study was conducted to assess the association of employed parents as well as family status with the oral health status of children. In addition to the social status, the quality of time parents dedicate toward upbringing their child/ children can also impact health and developmental outcomes. This

is specifically relevant in developing good oral hygiene practices among children.³

Parental family status comprising age, education, and occupation play a major role on the child's oral health. Hectic lifestyles have resulted in increased stress and social problems. Some parents forget their parental responsibilities. Children spend more time with their peers, computers, and televisions. These changes may affect parents' behavior about their child's oral health, resulting in less attention being paid to their child's dental health.³ Although parental employment will fulfill the basic needs of a child; nevertheless, when both parents work, they must seek nonparental care of some type including day care, care by extended family, or self-care.⁴ It is therefore expected that preventive oral health behavior of parents for their children would influence their child's behavior in adapting preventive oral health practices as they grow.⁵

MATERIALS AND METHODS

A cross-sectional study was conducted in the Department of Pediatric and Preventive Dentistry, Indira Gandhi Govt. Dental College and Hospital, Jammu. A total of 1,848 children were examined from March 01, 2012, to February 28, 2014, who came to seek treatment in our department. The patients examined were accompanied by their parents from whom a prior consent for the study was also taken. The oral examination was conducted under following headings: dental caries, eruption status of teeth and orthodontic status. Parents/guardians were inquired about their employment status. The results were compiled and statistically analyzed using Chi-square test.

Age distribution was done as mentioned in Table 1. Number of children with carious teeth in employed and unemployed parents in all age-groups were statistically analyzed, and it was inferred that incidence of caries in children of employed parents was much more than children of unemployed parents (Table 2).

Distribution of children having retained deciduous teeth (Table 3) and orthodontic problems (Table 4) was also seen much more in employed parent's children when compared to the unemployed ones which was found to be statistically highly significant although none of these problems was seen in 2–5 years of age-group since over-retained teeth and malposed teeth that

occur at the time of eruption of permanent teeth were obviously absent.

The number of children with all these anomalies were examined per the familial status in which the incidence of these anomalies were found to be more in nuclear families when compared to joint families for employed (Table 5) and was found to be more in joint families of unemployed families (Table 6). The graphical representation is shown below (Figs 1 to 3).

DISCUSSION

The oral health of children whose parents who were employed with some government/private organization and living in nuclear family have a great sense of insecurity. This makes the child to indulge in various habits, which in turn are deleterious to the dentofacial structure. During this fast age and competitive era where most of the people are employed, it is observed that children visiting the Department of Pediatric and Preventive Dentistry, IGGDC, Jammu exhibited more incidence of oral and dental diseases, which included dental caries, over-retained deciduous teeth, and malposed teeth. It was also observed that these children belonged to nuclear families, and it was evident that these working parents hardly spared time for their own children for regular dental and general health checkup. The employed parents fail to meet the basic needs of a child. The habit of prolonged bottle feeding, which is most commonly seen in children of employed parents, leaves the child with grossly decayed teeth. It was also observed that due to guilt, the working mothers after coming back to their home would bribe their children with confectionaries.

The fact is that preschool, school, and challenged children are most vulnerable to maltreatment, dental neglect, and require more support to maintain oral health and need care and protection. In India, with its economic development and fast growing economy, the problem amongst its population is immense. Within such groups, the most vulnerable section is always the children. Persistent failure to meet child's basic physical and or psychological needs is likely to result in the serious impairment of the child's health and development. Tooth disease is the reflection of the extent to which a child's dental visit and behavior is affected by parental attitudes, and persistent failure is reflected as "dental neglect". The consequences are severe pain, loss of sleep, poor school attendance, interference with playing, interference with socialization, damage to underlying permanent teeth, reduction in body weight, and poor growth leading to poor quality of life. The ultimate result is tooth loss due to dental caries, poor periodontal status that reflects the extent of child's dental visit, and parental attitude toward dental consultation. Also, the effects of experiences during infancy and early childhood on brain development create the basis for the expression of intelligence, emotions, and personality.

Table 1: Age distribution

S. no.	Age-group	No. of patients	%
1	2–5 years	608	33
2	5–8 years	550	30
3	8–11 years	400	21
4	11–14 years	290	16
Total		1,848	100

Table 2: Distribution of no. of children with carious teeth in employed and unemployed parents ($\chi^2 = 4.396$; $p = 0.111$; not significant)

Age-group	No. of children with carious teeth					
	Employed parents		Unemployed parents		Total	
	n	(%)	n	(%)		
1	508	84	100	16	608	
2	240	69	110	31	350	
3	100	77	30	23	130	
4	45	64	25	36	70	
Total	893	77	265	23	1,158	

Table 3: Distribution of children having retained deciduous teeth as per employment status of their parents (no problem seen in 2–5 years age-group) $\chi^2 = 6.242$; $p = 0.044$, significant

	Age-group	No. of children with retained deciduous teeth				Total
		Employed parents		Unemployed parents		
		n	(%)	n	(%)	
1	5–8 years	90	60	60	40	150
2	8–11 years	124	69	56	31	180
3	11–14 years	68	55	55	45	123
Total		282	62	1,717	38	453

Table 4: Distribution of children having orthodontic problems with respect to employment status of their parents (no problem was seen in 2–5 years age-group) $\chi^2 = 6.978$; $p = 0.031$, significant

	Age-group	No. of children with orthodontic problems				Total
		Employed parents		Unemployed parents		
		n	(%)	n	(%)	
1	5–8 years	38	76	12	24	50
2	8–11 years	66	74	24	26	90
3	11–14 years	177	86	30	14	207
Total		281	81	66	19	347

Table 5: No. of children with disease belonging to employed parents

S. no.	Type of disease	Nuclear	%	Joint	%
1	Carious	453	57	246	52
2	Retained	146	19	120	25
3	Orthodontic	186	24	108	23
Total		785		474	

Table 6: No. of children with disease belonging to unemployed parents

S. no.	Type of disease	Nuclear	%	Joint	%
1	Carious	197	34	94	62
2	Retained	208	35.3	16	11
3	Orthodontic	185	31.4	41	27
Total		590		151	

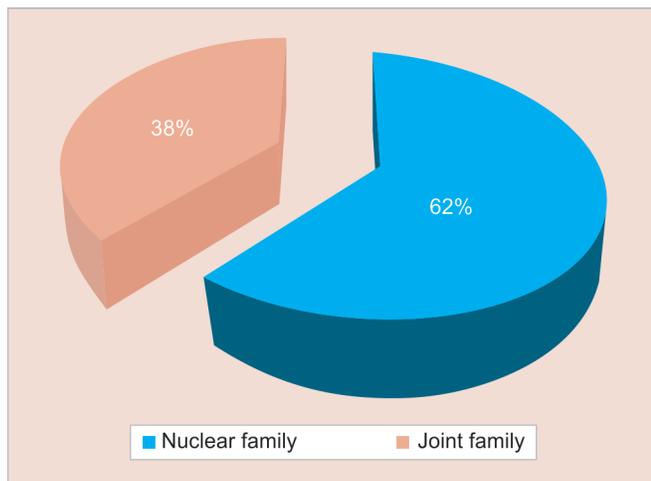


Fig. 1: Classification of children of employed parents

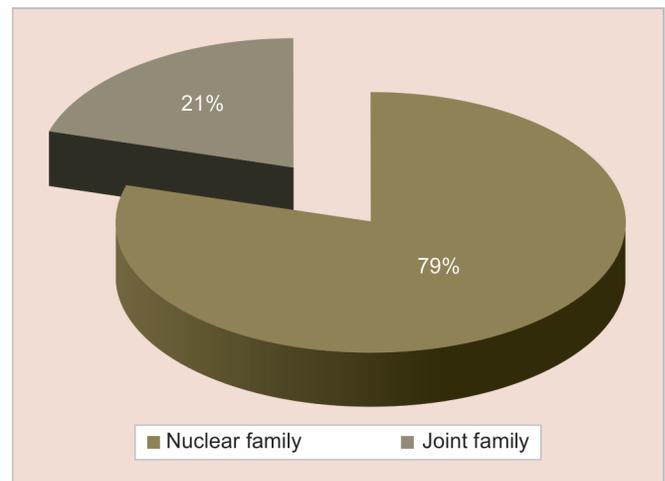


Fig. 2: Classification of children of unemployed parents

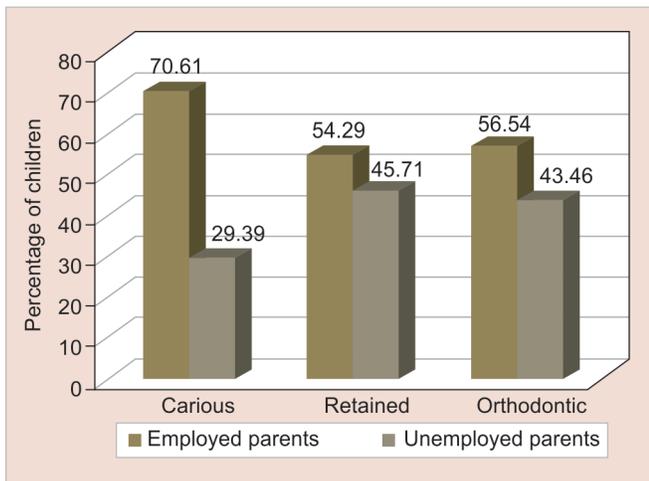


Fig. 3: Comparison of children affected with conditions

When these early experiences are primarily negative, children may develop emotional, behavioral, and learning problems that persist throughout their lifetime, especially if targeted interventions are lacking.

Need of collaboration: Collaborative working both between different dental disciplines and with other disciplines such as pediatrics will enhance the awareness regarding oral health needs of children among parents/guardians/carers.

All dental staff must have regular child protection training.

Taking teachers into confidences would also create a wide range of awareness.

CONCLUSION

Children of employed parents were seen to have a poor oral status, be it caries, over-retained deciduous teeth, or orthodontic problems. Moreover, the oral health status of children staying with working parents only was much poorer than those living with grand parents. Thus, the incidence of these anomalies was found to be more in nuclear families and joint families of unemployed families as compared to joint families of employed.

REFERENCES

1. Sehrawat P, Shivlingesh KK, Gupta B, et al. Oral health knowledge, awareness and associated practices of pre-school children's mothers in Greater Noida, India. *Niger Postgrad Med J* 2016;23(3):152–157. DOI: 10.4103/1117-1936.190344.
2. Karnataka minimum wage, Government of Karnataka, Department of Labour 2012–2013.
3. Ahmed S, Mistry M. Modern education and socio-economic change. *J Arts Sci Commer* 2010;1:139–149.
4. Mahesh Kumar P, Joseph T, Varma RB, et al. Oral health status of 5 years and 12 years school going children in Chennai city: an epidemiological study. *J Indian Soc Pedod Prev Dent* 2005;23(1):17–22. DOI: 10.4103/0970-4388.16021.
5. Sheiham A, Watt RG. The common risk factor approach: a rational basis for promoting oral health. *Community Dent Oral Epidemiol* 2000;28(6):399–406. DOI: 10.1034/j.1600-0528.2000.028006399.x.