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DENTAL SELF-CARE AND DENTAL ATTENDANCE AMONG PEOPLE WITH SOCIAL INEQUALITIES IN INDIA

Vijayalakshmi¹, R. Sindhu¹, M. Sasikala², Lubna Fathima³, D. Prabu*¹, M. Rajmohan¹, V. Gousalya¹

¹Department of Public Health Dentistry, SRM Dental College, Ramapuram, Chennai, Tamil Nadu, India.

²Department of Public Health Dentistry, S.M Dental Clinic, Thiruvallur, Tamil Nadu, India.

³Department of Public Health Dentistry, Madha Dental College and Hospital, Kundrathur, Tamil Nadu, India.

ABSTRACT

Objective: The study was done to describe dental self-care and visiting behaviour in relation to social and educational inequalities in caries experience. **Methods:** A close ended questionnaire was administered among patients who were attending outpatient from a private dental institution, Chennai. **Results:** Multivariate analysis showed dental attendance and dental self-care behaviour of lower socio-economic groups is worse than that of their higher socio-economic groups. **Conclusion:** The study demonstrates the existence of significant socio-economic groups in caries experience. This is worrying, Dental attendance and dental self-care was associated with socio-economic status, with decreasing dental behaviour having negative association of lower economic status and their oral health.

KEYWORDS

Socio-economic status, Dental self-care and Caries experience.

Author for Correspondence:

Prabu D,
Department of Public Health Dentistry,
SRM Dental College,
Ramapuram, Chennai, Tamil Nadu, India.

Email:researchphdsrm@gmail.com

INTRODUCTION

This study was also chosen as there is no proper conclusive data on the subject and in a country like India where there billions who are ignorant and bliss but suffering this kind of data will help the authorities plan proper policies to help them.

Dentistry has been accused of being narrowly focussed on changing behaviour of high-risk individuals¹. Poorer health has often been observed among poorer people², including oral health.

However, dental behaviour has been shown to vary by socio-economic status, for example social inequality in dental visiting³ and dental behaviour has

been associated with oral health⁴, but it has been reported that dental behaviour was less observed with socioeconomic gradients in oral health.

Dental diseases like dental caries, tooth loss, periodontal diseases, are well associated with deprivation gradient and social class in Australia, UK, New Zealand⁶⁻¹². Dental diseases also associated with Behavioural practices¹³, Spencer notified that oral health diseases can be prevented through behavioural change¹⁴.

METHODOLOGY

A questionnaire study with close ended and also clinical examinations was done in outpatient from a private dental institution from Chennai during the month from January to February 2019.

Sample were recruited according to the OP number. It took 2 to 3 minutes approximately for a sample to complete a questionnaire.

The questionnaire has Demographic part and Clinical Examination.

Demographic part included age, gender and income and socio economic status. The clinical examination included the DMFT index. Responses to the questionnaire were then participating in an oral examination using class II examination. Teeth were categorised as missing, decayed and filled. Since last dental visit was classified into those who not visited the dentist, those who visited less than 12 months ago and those visited 12 months ago or longer. The dental self-care variable of tooth brushing was classified into once daily and more than once. Socio-economic status was defined using Kuppaswamy's socio-economic status scale.

Statistical Analysis

Results are present both in tabular form and diagrammatically using frequency tables, chi-square tests and cross tabs.

RESULTS AND DISCUSSION

People with last dental visit within 12 months the number of decayed teeth varied by income within the 0-7 times per week brushing frequency, and varied by brushing frequency within the lower income group (Figure No.1). Among those who had made a dental visit in the last 12 months the number of

decayed teeth varied by income within the 8 more times per week brushing frequency, and varied by brushing frequency within the medium income group (Figure No.2).

Discussion

Socioeconomic status of an individual affect the dental attendance and also their dental behaviour, also their social inequality among their oral health, and also it is noted that level of the oral diseases are more in deprived status¹⁶.

There are making some effect that may reduce social inequalities in intervention of oral health which can make a great success in oral health inequality. Current situation does not have an multiphase explanation for the social inequalities¹⁷. In spite all social determinant in the field of oral health inequality is very less developed when compared to general health¹⁸ there are different types of approaches has been established to develop the inequality and also health outcomes.

It is well known that showing great attention towards single time brushing will lead a good and healthy oral hygiene which may prevent dental caries, but in some cases it is recommended that twice brushing per day makes an healthy oral hygiene of an individual¹⁹. Another study showed that brushing daily with tooth paste containing fluoride prevent dental caries of an individual²⁰.

In the study, we examined whether dental behaviour has a differential association with oral health at different socio economic groups. When measured using relative economic status, the economic status was approximately linear for oral conditions.

S.No	Score	Modified for 2007 (family income per month in RS)
1	12	= 19575
2	10	9788-19575
3	6	7323-9787
4	4	4894-7322
5	3	2936-4893
6	2	980-2935
7	1	<979

Table No.1: Distribution of study population with different variables and profile population

S.No	Oral Health Status	Study population	(95% CI)
1	Total teeth present; Mean	29.8	(27.315-32.285)
2	Denture (upper jaw)	8.2	(6-10.4)
3	Denture (lower jaw)	5.4	(3.7-7.1)
4	Visit pattern in Dental clinic	-	-
5	Last dental visit (less than 12 months)	58.2	(57.57-58.83)
6	Last visit to dental clinic	39.1	(37.4-40.8)
7	Last visit (plans relief)	11.2	(9-13.4)
8	Dental visits (12 months)- mean	1.3	(1.2-1.4)
9	Last visit at private clinic	97.2	(95.1-99.3)
10	Dental behaviour	-	-
11	Tooth brushing (more than 8 per week)	22.3	(20.1-24.5)
12	Mouth rinse usage (more than 1 time per week)	27	(23.9-30.1)
13	Teeth cleaning (1 or more times per week)	0.3	(0.21-0.39)
14	Socio - demographics	-	-
15	Female sex - %	48.5	(47.29-49.71)
16	Patient education status	39.1	(35-43.2)
17	Socio - economic status	-	-
18	House hold income INR 19,575 or more - %	62.1	(59-65.2)

Table No.2: Distribution and bivariate association with caries experience

S.No		%	Cariou teeth		Missing teeth		Filled teeth		DMFT	
			Mean	(SE)	Mean	(SE)	Mean	(SE)	Mean	(SE)
Dental visit pattern										
1	with last 12 months	58.2	0.19	(0.02)	4.2	(0.12)	10.9	(0.18)	14.9	(0.21)
2	over last 12 months	41.8	0.61	(0.07)	4.9	(0.29)	9.1	(0.27)	14.8	(0.33)
Dental self - care (Tooth brushing)										
3	0-7 times per week	88	0.69	(0.11)	6.1	(0.39)	9.9	(0.39)	16.1	(0.41)
4	8 or more times per week	22	0.27	(0.01)	4.3	(0.13)	10.4	(0.17)	15.2	(0.21)
Socio economic status Income (Monthly)										
5	2	1.3	3	(0.87)	1	(0.80)	1	(0.37)	5	(1.12)
6	3	1.5	3	(0.76)	2	(0.60)	0	(0.00)	5	(1.17)
7	4	8	2	(0.27)	2	(0.58)	0	(0.08)	4	(0.66)
8	6	4.8	2	(0.44)	1	(0.27)	1	(0.20)	4	(0.47)
9	10	27.3	2	(0.19)	1	(0.12)	1	(0.11)	4	(0.20)
10	12	57.3	1	(0.09)	0	(0.07)	1	(0.07)	3	(0.11)

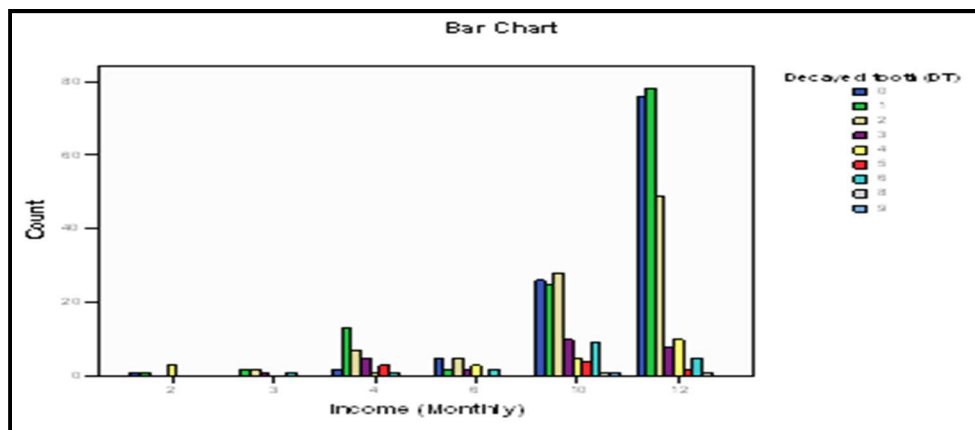


Figure No.1: Bar chart depicting income VS decayed tooth

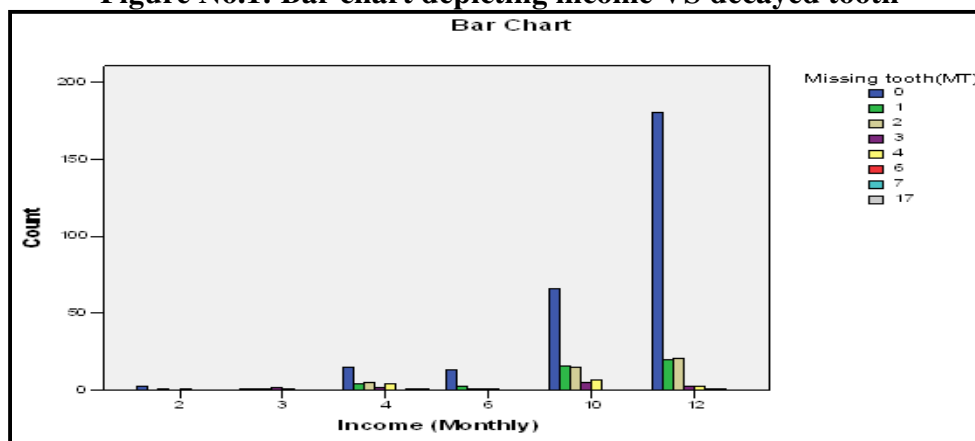


Figure No.2: Bar chart depicting income VS missing tooth

CONCLUSION

Here we conclude that socioeconomic status of an individual was significantly has an influence on dental attendance and their self-care (dental) with decrease in dental behaviouring which shows that negative association of socio economic status and oral health among individual. So there should be more initiative's to improve dental self-care and dental behaviouring.

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CONFLICT OF INTEREST

We declare that we have no conflict of interest.

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