

## Original Article

### *Awareness about Etiology and various Treatment Modalities for Periodontal Diseases*

Rinku Saini Jagnade<sup>1</sup>, Rakhi Bharat<sup>2</sup>, Kapil Jain<sup>3</sup>

<sup>1</sup>Senior Lecturer, Department of Periodontology, Index Institute of Dental Sciences, Indore, Madhya Pradesh, India,

<sup>2</sup>Assistant Professor, Department of Orthodontics, Index Institute of Dental Sciences, Indore, Madhya Pradesh, India,

<sup>3</sup>Professor, Department of Periodontology, Peoples Dental Academy, Bhopal, Madhya Pradesh, India

#### **ABSTRACT:**

**Aim:** To assess the awareness about the various etiological factors and treatment for periodontal diseases among patients attending. **Method:** A total of 300 subjects were included in the study to record modalities the data. A structured questionnaire was answered by each subject to ascertain the following details which included. The obtained data was statistically analyzed to evaluate the level of awareness about the etiology and various treatment modalities for periodontal diseases. **Results and Conclusion:** No awareness was observed regarding the role of other important factors like genetics, systemic conditions, hormonal variations, Immunodeficiency and others.

**Key words:** Etiology, Modalities, Periodontal, Diseases.

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**Correspondence to:** Dr. Rakhi Bharat, Assistant Professor, Department of Periodontology, Index Institute of Dental Sciences, Indore, Madhya Pradesh, India

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## INTRODUCTION

As William Osler said mouth is the mirror of general health. Periodontitis is a complex multifactorial inflammatory disease which is characterized by the destruction of tooth-supporting tissues.<sup>1</sup>

The disease has an enormously negative impact on a wide range of psychological, physical and social aspects of quality of life in affected individuals.

The awareness on the causative factors for dental diseases, oral health-related habits, and behaviors plays a vital role in determining the oral health status of individuals along with Socio economic strata.<sup>2</sup>

Very little is known about the oral health attitudes and behavior of children from developing countries. Comprehensive preventive programs for oral health care are still lacking in countries like India. Oral health negligence is a serious issue and is often overlooked. Parents and children should be provided with dental health

education to improve the oral health standard. According to the literature studies have shown that dental care has been systematically organized to improve dental health attitudes among children and the young. Present study was conducted to assess the awareness about the various etiological factors and treatment for periodontal diseases among patients attending.

#### **MATERIAL & METHOD**

The study was conducted in Peoples college of Dental sciences & Research centre, Bhopal.

#### **Source of Data:**

- Patients were selected from Dept. of Periodontology and Oral Implantology,
- Dept. of Oral Medicine and Radiology.

A total of 300 subjects were included in the study to record the data

A structured questionnaire was answered by each subject to ascertain the following details which included:

- Name, age, sex, address.

Questions related to ----

- Q1.) Awareness about various etiological factors for periodontal diseases, &

- Q2.) Various treatment modalities for periodontal diseases.

All participants were informed about the study and a written consent was obtained. The ethical clearance was obtained by the institutional ethics committee

The obtained data was statistically analyzed to evaluate the level of awareness about the etiology and various treatment modalities for periodontal diseases. Chi –square test and z – test of proportion was used.

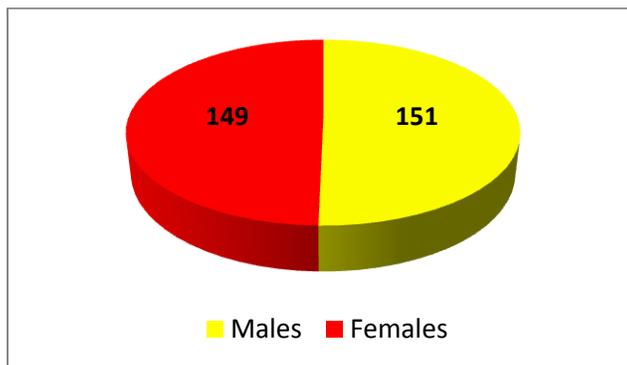
For statistical analysis p value was obtained to evaluate the level of significance.

**RESULTS**

**Table 1:** Total Study Population

<b>Total Number Of Patients (Number and Percentage of Subjects )</b>	<b>300 Age Range ( 17yrs-64 yrs)</b>
MALES 151 ( 50.33% )	FEMALES 149 ( 49.66 % )

**Figure 1:** Total Study Population



**TABLE 2:** Distribution of Subjects According to Awareness about Etiological Factors Of Periodontal Diseases

<b>Total Number Of Subjects</b>	<b>AWARE (Number and percentage of Subjects )</b>	<b>UNAWARE (Number and Percentage of Subjects)</b>	<b>Z-VALUE</b>	<b>P – VALUE</b>	<b>RESULT</b>
300	145 (48.3%)	155 (51.7%)	1.1785	0.2386	Non-Significant

**TABLE 3:** Population Distribution by Gender According to Awareness about Etiological Factors of Periodontal Diseases

		<b>Awareness about Etiology</b>		<b>Total</b>	<b>Chi sq</b>	<b>P value</b>	<b>RESULT</b>
		<b>No</b>	<b>Yes</b>				
Gender	Female	78	67	145	0.680	0.410	Non-Significant
	Male	76	79	155			
Total		154	146	300			

**TABLE 4:** Level of Awareness about Specific Etiological Factors for Periodontal Diseases

Total number of subjects who were aware	Etiology	Know	Don't know	Z value	P value	Result
145	Plaque & calculus	39(26.89% )	106 (73.10%)	12.5498	<0.0001	Highly Significant
	Improper brushing	91(62.75%)	54(37.24%)	6.3537	<0.0001	Highly Significant
	Genetics	0 ( 0% )	145 ( 100 % )	154.63	<0.0001	Highly Significant
	Systemic diseases	0 (0% )	145 ( 100 % )	154.63	<0.0001	Highly Significant
	Hormonal variations	0 ( 0% )	145 ( 100 % )	154.63	<0.0001	Highly Significant
	Immunodeficiency	0 ( 0 % )	145 (100% )	154.63	<0.0001	Highly Significant
	Vitamin deficiency	4 ( 2.75%)	141 (7.24%)	69.5759	<0.0001	Highly Significant
	Alcoholism	4 (2.75%)	141 (97.24%)	69.5759	<0.0001	Highly Significant
	Smoking	7 (4.82%)	138( 95.18%)	50.8	<0.0001	Highly Significant
	Gutkha Tobacco	34(23.44%)	111(76.55%)	15.0966	<0.0001	Highly Significant
	Others	7 (4.82%)	138(95.17%)	50.8	<0.0001	Highly Significant

## DISCUSSION

It may be observed that not many studies have been conducted to evaluate the awareness about the various etiological /risk factors and treatment modalities for periodontal diseases among general population.

In a study conducted by Al-Zarea BK (2013) in Saudi Arabia, among Non dental University students it was found that no much awareness regarding the initiating factors of periodontal diseases was observed but awareness about periodontal disease signs, preventive measures, and relations to general health and systemic disease was found.<sup>3</sup>

In a study conducted by Malik AR et al (2012) in Margalla, Rawalpindi it was found that more than 83% of the participating patients were able to correctly identify the most important cause of gum diseases out of which 30percent of patients showed a correlation between smoking and the severity of periodontal pathology, 19 percent correlated with diabetes, 19% with abnormal

environmental factors while 17% knew the way of their prevention.<sup>4</sup>

Majority of the patients (63%) showed no knowledge of prevention and it was concluded that patients awareness about dental diseases and their prevention was not up to mark and various corrective measures were needed for prevention

The present study consisted of subjects from lower socio economic strata similar observations were observed in a study conducted by Chandra Shekhar BR et al, in (2014), it was found that Awareness on dental diseases was 100% in upper SES and nil in the lower SES. A direct relation was noted between the favorable dental health awareness, attitude, oral hygiene behavior, and SES.<sup>5</sup>

A study was conducted by Grewal N et al, in (2007), in Amritsar Punjab in which it was found that; the Indian population showed low level of oral health awareness and practice as compared to the western population although both the groups showed comparable eating habits.<sup>6</sup>

A study conducted by Meshari Al-Otaib et al in 2004, in Saudi Arabia, showed that Among urban Saudi Arabians, oral hygiene routines were introduced relatively late in life and knowledge and awareness of oral health was relatively low.<sup>7</sup>

Gulia S et al<sup>8</sup> conducted a study on total of 400 school going children were included for the present study. Stratified random sampling method was used to select the sample. All 400 children were examined for decayed, missing, and filled permanent teeth. The subjects completed a questionnaire that aimed to evaluate young school children's behavior, knowledge, and perception towards oral health and dental treatment. Results: 70% children knew what dental caries is whereas 35% had no knowledge about plaque. Only 52% children considered visited dentist regularly important. Most common oral hygiene method used was brushing. Majority of children brushed once daily. They concluded that children and parents perception towards oral hygiene plays immense role in caries prevention. Care should be taken to improve parents as well as children attitude towards dental treatment by conducting awareness camp.<sup>8</sup>

#### CONCLUSION

The Present study included 300 subjects which consisted of 151 males and 149 females. It was found that out of 300, 145 were aware of one or more etiological risk factors for periodontal diseases. 106 subjects were found to be aware about the various periodontal treatment procedures whereas the rest 194 were not aware. Among the etiological and risk factors the awareness was limited to plaque and calculus, (n= 39) improper brushing (n=91), vitamin deficiency (n=4), alcoholism, (n=4) tobacco (n=41) and increase consumption of sugar. (n=7).

No awareness was observed regarding the role of other important factors like genetics, systemic conditions, hormonal variations, Immunodeficiency and others.

Regarding treatment procedures for periodontal diseases awareness was limited to Scaling (n=106), Surgical (n=1), Regenerative technique ( n=1). No awareness was observed about any other periodontal treatment procedures. The level of awareness was not found to be statistically significant. The Level of unawareness was found to be statistically Significant. Further studies including more sample size may be helpful to further evaluate the level of awareness about various etiological and risk factors of periodontal disease and various treatment modalities to educate and motivate the society about periodontal diseases and to take necessary steps to improve the awareness.

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