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DISTRIBUTION OF PRE-DISPOSING FACTORS WITH OBESITY AMONG CASES AND CONTROLS STUDY

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Abstract:

The world over, obesity risk factors are evolving. It has been determined that adolescence is a crucial time for the emergence of metabolic abnormalities linked to obesity. The rising rate of childhood obesity in developing nations and the ensuing socioeconomic and public health burden that these nations will soon confront are the prospective public health issues that are currently arising. Many lifestyle factors, such as nutritional, familial, and behavioural aspects, have been linked to obesity. To prevent overweight/obesity and its negative repercussions, it is vital to teach teenagers about the importance of healthy eating habits and desired lifestyles.

Keywords: Metabolic problem, Pre disposing, Factors, Obesity, Adolescents

1. Introduction:

Around the world, obesity is becoming more common. According to the World Health Organization, overweight and obesity are conditions in which there is an abnormal or excessive buildup of fat. The rising rate of childhood obesity in developing nations and the ensuing socioeconomic and public health burden that these nations will soon confront are the prospective public health issues that are currently arising. Obesity in children and adolescents increases the risk of several diseases in adults, including diabetes mellitus, hypertension, psychological disorders, and social issues. The obesity pandemic has overtaken young people and children. In the world, 200 million school-age children are thought to be overweight, with 40–50 million of them being obese. In India, the prevalence of obesity ranges from 1% to 12.9% and that of overweight from 9% to 27.5%. Obesity is a multi-factorial illness. An energy imbalance between calories consumed and expended is the primary factor

contributing to obesity and overweight. Increased consumption of calorie-dense, high-fat foods has fuelled the obesity and overweight epidemic, which has also been fuelled by increased physical inactivity brought on by a rise in sedentary jobs, new modes of transportation, and a decline in outdoor leisure activities. Although studies have shown harmful effects of obesity, there has only been a little amount of study done to pinpoint particular risk factors related with obesity in the adolescent age range.In the holistic approach to the prevention of the rising incidence of obesity and other non-communicable cardiovascular illnesses, the establishment of linked factors may prove helpful. Several research carried out in India have shown an increase in the frequency of overweight and obesity among kids and teenagers.Yactayo-Alburquerque MT (2021) to examine the impact of oral disorders on oral health-related quality of life in Latin America and the Caribbean (LAC), we conducted a systematic evaluation of research undertaken in the region. Almabadi and Bauman (2021) while periodontal disease is linked to a variety of risk factors, the disease burden is disproportionately high in low-income communities. Opydo-Szymaczek et al. (2021) the goal of this cross-sectional study was to determine the prevalence of dental caries and the factors that influence dental service utilization in a community of 7-year-old children. Peres et al. (2019) outline the magnitude of the global oral disease epidemic, its origins in terms of social and commercial drivers, and its costs in terms of population wellbeing and societal effect in this first of two papers in a series on oral health. Akter et al. (2018) The major goal of this research is to raise public awareness about common dental disorders and to improve people's knowledge about how to maintain good dental health. Herkrath et al. (2018) because there is a significant disparity in the use of dental services in Brazil, they devised a study to assess the relationship between contextual and individual characteristics and the use of dental services by Brazilian individuals. Maniyar et al. (2018) a cross-sectional study was done among 200 insured and uninsured patients to examine awareness and attitudes concerning dental insurance, as well as inclinations toward dental care consumption. Yap, Adrian. (2017) Oral health is crucial for overall health and good quality of life. Oral health is described by the World Health Organization (2012) as a condition of being free of mouth and facial pain, oral infections and sores and oral and other disorders that impair a person's ability to bite, chew, smile, talk, and maintain psychological well-being. Lawal et al. (2017) The goal of their research was to find out how common dental caries were in their target population and how much treatment they needed. Adult females

who attended outreach programmes were the subjects of a cross-sectional study. Kakade SP et al. (2017) Residents of Nimbus Village, Maharashtra, India, participated in a cross-sectional study utilizing a structured interview to analyze their perceived needs, utilization, and constraints.

2. SCOPE OF RESEARCH WORK

- Benefits to the critically ill clients.
- Benefits to the family of a Critically ill client

3. PROBLEMS IN HAND

- Many studies show that the oral problems among critically ill patients are increasing widely day by day.
- Most of the oral problems among critically ill client have the habit of skipping the medication because of their less awareness, therefore, its need to create awareness among the critically ill client and their family.

4. OBJECTIVES OF THE STUDY

- To assess the oral health status of the critically ill patients in hospitals in Chennai.
- To study the Oral health care for the critically ill patients.
- To study the effects of Implementing Oral Care Guidelines on Oral Health Status in Critically ill Patients.

5. DATA COLLECTION

The WHO Oral Health Assessment Form, 2021 will be used to collect data. These forms will be created to facilitate examinations of individuals of all ages in order to determine the prevalence of oral deliciousness and treatment needs.

All sections of the form will be completed using the standard course. To ensure that all possible conditions will be detected, the clinical examination will be conducted in the order specified on the assessment form.

Sampling Techniques

A cluster random sampling procedure will be used to select the study population.

6. Methods and Results

Table 1: shows the distribution of smoking habits in terms of predisposing factors among cases and controls.

The smoking habit	**Case 100**	**Control 200**	**Odds Ratio**	**Relative Risk**
Cigarettesmoking				
Present	60	143	0.66	0.72
Absent	40	57		
Beediessmoking				
Present	80	120	8.64	6.33
Absent	20	80		
Cigarsmoking				
Present	19	16	0.63	0.68
Absent	81	184		
Onsetofsmoking				
25andabove	36	87	-	-
18to24	59	105		
Below17	5	8		
Morethanone				
Present	71	90	3.02	2.42
Absent	29	110		
Cigarettes+Bee dies				
Present 6	71	75	3.27	2.57
Absent	29	125		
No.ofyears use				
Below6	9	84	-	-
7to 21	51	105		
22and above	40	11		
Number of cigarettes, bee dies, and cigars				
Below 12	10	60	-	-
13 to 21	50	110		
22 and above	40	30		

According to the data presented in table 1, the high majority of the cases (80) smoked Bee dies (a type of local cigarette), while the high majority of the controls (143) smoked cigarettes. In terms of when they first picked up the habit of smoking, the vast majority of cases (59) and controls (184) did so between the ages of 18 and 24. The majority of the cases (71), in contrast to the majority of the controls (110), used more than one variety of the same thing. The majority (71) of the cases involved the combination of smoking and using Bee dies. Both the cases (51) and the controls (105) had smoked for at least seven years and up to twenty-one years, respectively. Both groups of people (50 cases and 110 controls) smoked at least 13 and no more than 21 cigarettes, cigars, or Bee dies daily.

The vast majority of the adults in the sample group (203) were regular cigarette smokers, and the average age at which they began the habit was between 18 and 24 years old. When it came to the number of years that an individual had consistently used tobacco, 165 of the adults had a range of years that went from 7 to 21. There are seven factors that predispose something to happen. The odds ratio (OR) and relative risk (RR) for the first risk factor, habit of smoking, Bee dies smoking (OR 8.64) (RR 6.33) and combination of cigarettes and Bee dies smoking (OR 3.27) (RR 2.57), were both greater than one, indicating a possible risk factor, namely a higher odds ratio of exposure among cases than among controls and a higher incidence in cases than controls. The use of Bee dies, as well as the combination of cigarette and Bee die use, has been linked to an increased risk of developing. Exposure to the presence of Bee dies smoking and the combination of cigarettes and Bee dies smoking was 8.64 and 3.27 times greater in cases than in controls, respectively. As a result, smoking Bee dies or a combination of cigarettes and Bee dies may be a risk factor for developing a Prediseaseous oral lesion that progresses to oral disease.

The chances of being exposed to people smoking cigarettes or cigars were 0.66 and 0.63 times lower, respectively, among the controls. As a result, the likelihood of being exposed to the presence of people smoking cigarettes and cigars was lower among the cases than among the controls for this specific exposure.

A level that suggests no link between tobacco use and oral disease. It shows that smoking cigarettes and cigars was less prevalent in cases than in controls. This was true for both types of tobacco consumption. As a result, it may act as a protective factor, lowering the risk of developing Prediseaseous oral lesions.

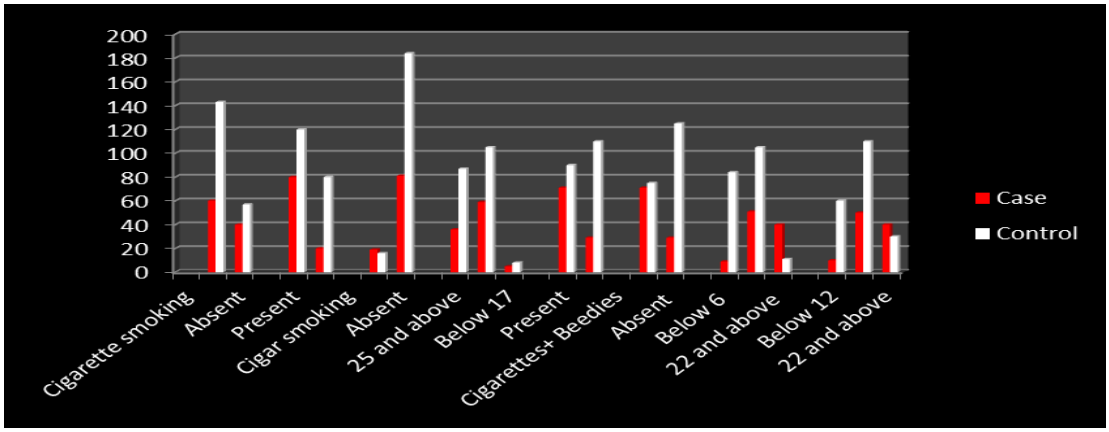

Figure 1:The distribution of smoking habits in terms of predisposing factors among cases and controls

Table2: Mean, SD, and variance distributions statistical value on smoking habits in cases and controls

Predisposing elements	Group	Number	Mean	SD	T-value
Habit of Smoking	Case	100	66.63	13.06	10.80
	Control	200	55.54	13.77	P=0.001

The mean, SD, and statistical results for predisposing factors are displayed in Table 2. Cases and controls are included in the table. Case and CGs were used to develop the t methodology, the test's Concerning the practice the act of smoking calculated The average value was 66.63, with a SD of 13.06 in the Cases, while the calculated mean value for the Controls was 55.54 with a SD of 13.77.

The t-value that was obtained was 10.80, which was significant (p= 0.0011). Inferences were drawn that there was a noteworthy disparity between the Case group and the CG. It demonstrates that the case groups were subjected to a higher level of the habit of smoking compared to the controls.

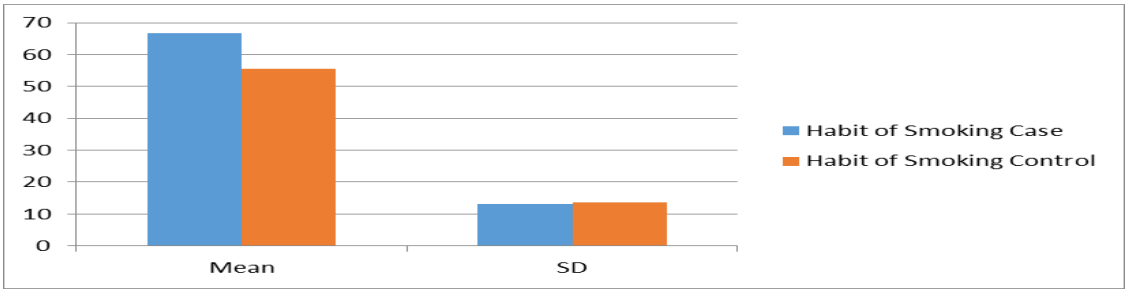

Figure 2:Smoking habits in cases and controls: mean, SD, and statistical value distribution

Table3: the distribution of smokeless tobacco habit in terms of predisposing factors among cases and controls

Tobacco	Case 100	Control 200	Odds Ratio	Relative Risk
Jardha				
Present	42	16	19.88	5.08
Absent	58	184		
Khaini				
Present	37	52	6.57	3.52
Absent	63	148		
Gutka				
Present	23	95	4.60	2.99
Absent	77	105		
Onsetofsmokeless				
Below17	7	42		
18to24	40	66	-	-
25andAbove	53	92		
Morethanone				
Present	12	30	19.79	5.78
Absent	88	170		
Jardha+khaini				
Present	34	6	27.09	4.09
Absent	66	194		
Kaini+gutka				
Present	96	81	1.91	1.67
Absent	4	119		
No. of Smokeless tobacco				
Below 5	94	172		
6 to 10	6	28	-	-

Table 3 shows very clearly that the CG had a lower%age of habit, specifically Jardha 16, Khaini 52, and Gutka 95, whereas Jardha was in the case group 42, Khaini 37, and Gutka 23. This can be seen by comparing the%ages of habit in each group. The majority of the cases,

12, had more than one variety, whereas the controls, for the most part, used only one variety (99.3% of the time). The combination of Khaini and Gutka was used in 34 of the cases.

The vast majority of the cases (94), as well as the controls (172), reported using fewer than five smokeless tobacco packets daily. The majority of the time (92), as well as the controls (211), reported that they had their first experience with smokeless tobacco after the age of 25.

The second odds ratio (OR) and relative risk (RR) predisposing factor, the habit of using Tobacco that does not produce smoke, were calculated as follows: Each of the factors had an odds ratio score greater than one, indicating the presence of at least one potential risk factor.

This indicates that the cases had a higher disease incidence than the controls, as well as a higher odds ratio of disease exposure. As a result of all of the factors that contribute to the habit, the use in these cases, using smokeless tobacco raises the risk of developing Prediseaseous oral lesions.

First and foremost, both Jardha and Khaini were linked to an increased risk of developing Prediseaseous oral lesions. The odds ratio of exposure to the presence of a combination of Jardha and Khaini was 27.09 times greater in cases than in controls, indicating a significant association between the Prediseaseous oral lesion and that combination. This suggests that there was a link between the two. Chewing Jardha (OR 19.88) (RR 5.08), Khaini (OR 6.57) (RR 3.52), Gutka (OR 4.60) (RR 2.99), a combination of Khaini and Gutka (OR 1.91) (RR 1.67) and chewing more than one variety (OR 19.79) (RR 5.78) all increased the likelihood of developing Prediseaseous oral lesions.

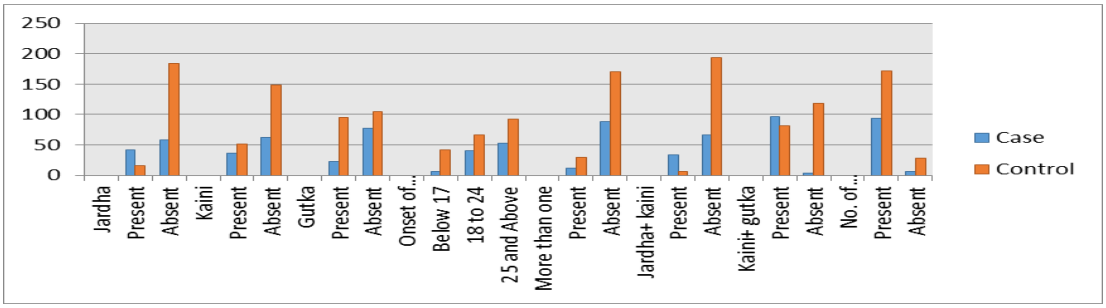

Figure 3:The distribution of smokeless tobacco habit in terms of predisposing factors among cases and controls

Table4: Mean, SD, and variance distributions statisticalvalue on the use of smokeless tobacco by cases and controls

Predisposing elements	Group	Number	Mean	SD	T-value
The habit of not smoking Tobacco	Case	100	47.94	9.40	15.466
	Control	200	37.24	6.54	P=0.001

Regarding smokeless tobacco, the results that they obtained showed a mean value of 47.94 with a SD of 9.40 in the Cases, and a mean value of 37.24 with a SD of 6.54 in the Controls, as shown in Table 4. The t-value that was obtained was 15.466 and it was significant ($p< 0.001$). Inferences were drawn that there was a noteworthy disparity between the Case group and the CG. This demonstrates that the case groups had a much higher frequency of the habit of using smokeless tobacco compared to the controls.

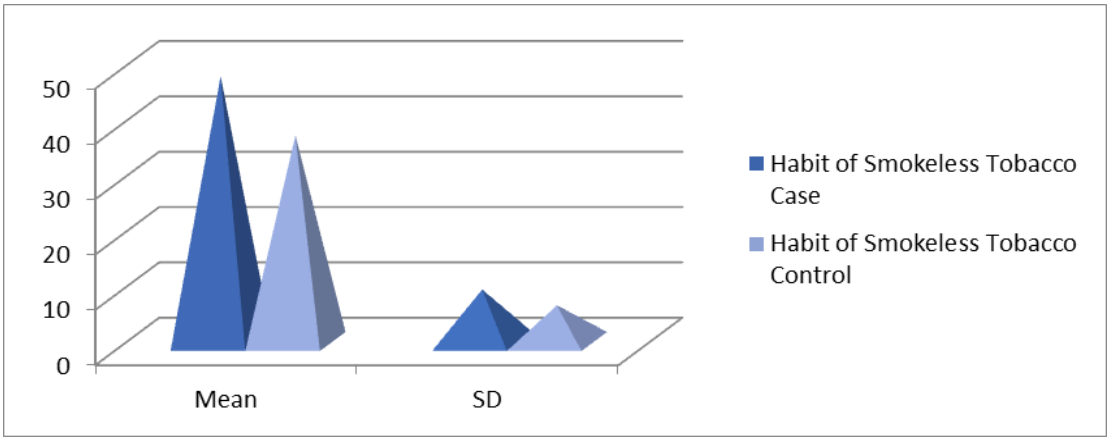

Figure 4:Mean, SD, and statistical value distributions on the use of smokeless tobacco as a habit among cases and controls

Table 5: shows the distribution of expenses for predisposing factors among cases and controls

	Case (100)	Control (200)
Expenses in Rupees		
Below400	5	168
401to500	6	20
501to600	20	7
601to700	4	1
700andAbove	65	4

According to table 5, nearly one-third of the CG respondents CG respondents spent less than

Rs.400 per day, and 20 spent between Rs.400 and Rs.500 per day. On the other hand, 65 of the case group respondents spent more than Rs.700 per day, and 24 of the case group respondents spent between Rs.500 and Rs.600 i.e., 20 between Rs.501 and Rs.600 and 4 between Rs.601 and Rs.700. This demonstrated that cases were significantly more expensive than controls.

Table6: Mean, SD, and statistical value on the distribution of expenses between cases and controls

Predisposing elements	**Group**	**Number**	**Mean**	**SD**	**T-value**
Expenses	Case	100	665.12	210.44	6.39
	Control	200	559.05	227.28	P=0.001

According to the data in table 6, the obtained mean value for expenses in the Cases in the Controls was 665.12, with a SD of 210.44, and 559.05, with a SD of 227.28.

The calculated t-value was 6.39, which was SS (p = 0.001). The difference between the Case and CG groups was determined to be significant, demonstrating unequivocally that adults in the Case group spend more money on tobacco consumption than controls.

Table 7: shows the distribution of reasons for quitting smoking among cases and controls in terms of risk factors

Reasons for quitting smoking	Case 100	Control 200	Odds Ratio	Relative Risk
Previousattempt				
Present	56	87	0.32	0.40
Absent	44	113		
Stoppedatleast1month				
Present	38	78	0.64	0.70
Absent	62	122		
ReasonforquittingNoreason				
Present	44	19	0.62	0.69
Absent	56	181		
Socialpressure				
Present	49	86	0.37	0.48
Absent	51	114		

Presence of medical complications				
Present	15	96	0.19	0.30
Absent	85	104		
Awareness of physical hazards				
Present	40	44	0.23	0.37
Absent	60	156		
Awareness of Addiction				
Present	43	89	0.46	0.55
Absent	57	111		
Lack of productive work				
Present	6	28		
Absent	94	172	-	-
Economic condition				
Present	45	74	0.35	0.47
Absent	55	126		
Family advice				
Present	45	82	0.39	0.50
Absent	55	118		
Medical/Health professional advice				
Present	44	77	0.38	0.49
Absent	56	123		

According to the data presented in table 7, only 143 CG respondents attempted to quit smoking, whereas case group respondents attempted to quit 56 times. Approximately 38% of those who participated in the case study were able to quit smoking for at least one month. Respondents in the case group felt compelled to quit smoking due to the presence of medical complications (15), whereas respondents in the control group made fewer attempts to quit smoking, and all of the predisposing factors influenced less than 77 of the respondents to quit smoking.

For each of the factors classified as reasons for quitting smoking, the OR and relative risk score were both less than one. The odds ratio of exposure to the presence of a previous attempt to quit (OR 0.32) (RR 0.40), stopped for at least one month (OR 0.64) (RR 0.70), and

all reasons for quitting tobacco was lower in cases than in controls, indicating that there was no association between the Prediseaseous oral lesion and any of the reasons for quitting tobacco. It demonstrates that the presence of each of the factors listed under reasons for quitting smoking was less common in cases than in controls. As a result, it may act as a protective factor, lowering the risk of developing Prediseaseous oral lesions.

Table 8: shows the mean, SD, and statistical value distributions for the reason for quitting smoking in cases and controls were calculated.

Predisposing elements	Group	Number	Mean	SD	T-value
Reasons for Giving Up Tobacco	Case	100	71.54	14.01	13.929
	Control	200	85.74	12.90	P=0.001

When talking the obtained mean value for quitting was 71.54, with a SD Cases: 14.01, and 85.74 with a SD of 12.90 in Controls. This information was obtained from table 4.29. The t-value that was obtained was 13.929, which was significant ($p< 0.001$). Inferences were drawn that there was a noteworthy disparity between the Case group and the CG. The presence of symptoms and medical complications led more people in the case group to make an effort to kick their habits than in the CG.

7. Conclusion:

The main finding of this study is that a higher incidence of obesity was connected with low levels of physical activity, watching television, eating junk food, and eating less fruits and vegetables. As a result, engaging in daily chores and getting regular exercise may assist to reduce the prevalence of overweight. Hence, it is important to emphasize the importance of games, sports, and physical activity. Schools should also include facilities for outdoor activities and require students to participate in sports and games during certain hours. To prevent overweight/obesity and its negative repercussions, it is vital to teach teenagers about the importance of healthy eating habits and desired lifestyles.

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