

# Assessment of dental depression among dental patients in Agastheeswaram Taluk

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**Abstract:** Oral hygiene awareness should be evaluated through their dentists. If they are conscious of dental health they will be capable to know what dental practices they should sustain in order to endure the health of their teeth and what practices should they requirement to strengthen to have healthy and strong teeth. The main objective of this study is to evaluate the postoperative depression among the dental patients and to analyze the depression level of the dental patients. Two hundred respondents of various age groups at random from the population are taken as the required sample size by fixing confidence interval of 3 at 0.05 level of significance. The geographical area covered by the present study spread over the Taluk and hence the sampling design is prepared for the selection of 200 respondents at random from the district using stratified random sampling technique. Among the 200 respondents only 196 respondents responded all questions. Out of 196 respondents 20 have (0-4) no/minimal depression, 54 have (5-9) mild depression, and 77 have (10-14) moderate level of depression and 55 people have (15-19) moderately severe level of depression. People with mild depression have to be kept in watch and repeat PHQ-9 at follow up, moderate level of depression have to be treated with counseling, follow-up and/or pharmacotherapy. Moderately severe level of depression has to be given active treatment with pharmacotherapy and/or psychotherapy. Severe level of depression have to be treated immediately by pharmacotherapy and, if severe impairment or poor response to therapy, expedited referral to a mental health specialist for psychotherapy and/or collaborative management. A patient's psychiatric ailment may have a direct influence on dental health and treatment. While it is not mandatory on the treating dentist to identify a depressive ailment, awareness with the patient's medical history, current prescriptions, and overall indicators of depression could alert the dentist to possible hitches, notify the treatment interference, and perhaps enable a suitable recommendation for assessment of the depressive symptoms.

## Introduction

Oral hygiene is a habit of maintaining one's mouth clean and healthy and other issues such as bleeding gums, bad breath and lot others by means of brushing teeth regularly and cleaning between the teeth. It is imperative that oral hygiene has to be performed on a regular basis to permit avoidance of dental disease and bad breath. Oral hygiene awareness has to be kept on track at a very young age. Children should be educated about the significance in keeping their teeth healthy and clean. Consequences oral hygiene and poor food choices should be also elucidated to efficiently repeat the children the requirement to brush their teeth every after meals and evade sweet treats as much as possible. In adults, oral hygiene awareness should be evaluated through their dentists. If they are conscious of dental health they will be capable to know what dental practices they should sustain in order to endure the health of their teeth and what practices should they requirement to strengthen to have healthy and strong teeth. The dentists are accountable in educating their patients the proper technique to avert tooth decay, periodontal diseases and other oral health difficulties. Dentist should also impart their patients in case of dental emergencies and the significance of regular dental check-ups to examine their oral condition. Different dental treatments were made accessible to cosmetically augment the appearance of teeth, to precise orthodontic issues and restore injured or missing teeth. These treatments should be elucidated thoroughly to patients to avert development of fear or anxiety over the dental procedure.

## Review of Literature

Depression is a common disorder that has been validated to affect physical and also mental health. Depression is also experienced as psychiatric disorder in which negative effect, depressed mood, disturbed thoughts, and altered behaviors are present for a minimum of two weeks, and possibly for more protracted periods. Prevalence rates for major depressive disorder (MDD) are 10% to 25% for women and 5% to 12% for men, while point prevalence rates are 5% to 9% for women and 2% to 3% for men (American Psychiatric Association, 1994). Conversely, prevalence in primary care sets has been found to range from 6.6% to 13.5% (Elter & et al, 2002). Modern research is establishing links between depression and dental health. The review of previous studies on depression among dental patients enables us to gather a panoramic view about the particular area. Ravindramurthy (2018) suggested a need for more personalized dental care for patients that includes considering their mental health and its ensuing effects on oral health and hygiene, and modified definitions of follow-up time intervals.

Okoro, et. al., (2012) analyzed the association between depression and anxiety and use of oral health services and tooth loss. Use of oral health services and tooth loss were related to depression and anxiety after controlling for multiple confounders

Vimpari(2003) investigated the relationship of depressive symptoms with oral health and related factors. Depressive symptoms were measured with the Zung Self-Rating Depression Scale (ZSDS). A high rate of depressive symptoms was associated with symptoms of temporomandibular disorders (TMD). Also, considering the discovered association between depressive symptoms and microbial growth, the possibility of an augmented risk for impaired oral health amongst depressed persons is accentuated. Treatment for MDD usually embraces pharmacological or psychotherapeutic interference, or both. Several medications are recommended to treat depression, each with wavering side effects. Friedlander & Mahler (2001) provide a concise summary of classes of antidepressants and their common side effects, with implications for dental management. One of the commonly documented dental implications of depression is the high comorbidity with chronic facial pain, with studies presenting rates of 41% to 78%. Korszun & Ship. (1997) the literature on depression and chronic pain is ample, and cannot be conserved satisfactorily here. Be enough it to say that the research defines a reciprocal relationship between chronic pain and depression that is pertinent to orofacial pain patients and also other types of chronic pain. Reduced energy and motivation and also negative self-views related to depression may have a detrimental effect on oral hygiene habits and acquiescence with treatment endorsements. A depressed patient recurrently has little interest or energy for even rudimentary self-care activities. Negative cognitive distortions further the depressive spiral in which care of self is deserted.

### Scope of the Study

The dental awareness plays a main role in anxiety and depression of the person during dental treatment. People are more anxious and depressed during dental treatment. It is mostly common among the educated people than others. In Tamilnadu, Kanyakumari District, Agastheeswaram Taluk is the second highest literacy rate Taluk. Hence, they have higher dental awareness too. Researcher has chosen the study area for the present study as Kanyakumari District, Agastheeswaram Taluk which is in southern part of Kanyakumari District and Tamilnadu.

### Objectives of the Study

The specific objectives framed for the study are:

1. To evaluate the postoperative depression among the dental patients
2. To analyze the depression level of the dental patients

### Sample for the Study

Two hundred respondents of various age groups at random from the population are taken as the required sample size by fixing confidence interval of 3 at 0.05 level of significance. The geographical area covered by the present study spread over the Taluk and hence the sampling design is prepared for the selection of 200 respondents at random from the district using stratified random sampling technique.

S. no	Name of Taluk	Population as per census 2011	Population of dental patients as on October to October 2018	No of samples
1	Agastheeswaram	278347	6804	200

Source: Census report 2011

### Limitations of the Study

Every research problem has its own limitations in terms of area coverage, scope and other aspects covered. It is very difficult to cover all the psychological aspects related to the dental patients. Hence, the present study is limited to perceived postoperative depression among the dental patients. The present study is confined only to dental patients in Agastheeswaram Taluk. The time period of data collection is between October 2017 and October 2018 alone.

### Collection of Data

The investigator collected the required data in an orderly manner by getting prior permission from the doctors of private clinics. After giving self introduction and establishing good rapport with the dental patients, the investigator explained the purpose of research and encouraged them to feel free and frank to give responses. Selection of the sample is done on the basis of stratified

random sampling technique by giving due weight age to various personal variables such as age, gender, locale, education and occupation. Then the investigator distributed the research tool to the respondents and they were asked to read all the items carefully after filling the persona data form given in the first page. Then they were asked to put tick mark in the corresponding places.

**Tools Used For Data Collection**

The questionnaire for the pilot study consists of tools to measure Depression among demographic variables of the study. The questionnaire used for the measurement of depression is Patient Health Questionnaire-9 (PHQ-9) developed by Dr. Robert L. Spitzer, Janet B.W. Williams, Kurt Kroenke and colleagues, with an educational grant from Pfizer Inc. The questionnaire is available both in English and Tamil so that literate and educated people can respond the questionnaire without any difficulty. The depression level is measured and tabulated accordingly.

**Analysis and Interpretation**

The filled up questionnaire were collected coded and tabulated. The incomplete responses were rejected. Among the two hundred respondents only 196 respondents responded all the questions. Whereas rest of the four respondents returned the incomplete questionnaires. Hence they were not included for analysis.

**Table 2: Basic data of the Respondents**

S.No	Sex	Age group					Education			
		Below 10-20	20-30	30-40	Above 40	Below	Degree	PG	Above PG	
	Female	5	7	18	32	38	19	38	20	23
	Male	7	12	21	28	28	22	38	12	24
	<b>Total</b>	<b>12 (6.1)</b>	<b>19 (9.1)</b>	<b>39 (19.8)</b>	<b>60 (30.6)</b>	<b>66 (33.6)</b>	<b>41 (20.9)</b>	<b>76 (38.7)</b>	<b>32 (16.3)</b>	<b>47 (23.9)</b>

Source: Primary Data

Table 2 explains about sex, age group and educational level of the respondents. The female of the age group above 40 is high in number and the respondents belong to the educational status of both the sex are in the degree level.

**Table 3 Patients depression level**

S.No	Problems	Not at all (0-4)	Several days (5-9)	More than half the days (10-14)	Nearly everyday (15-19)	Total
1	Little interest in doing things	4	8	6	5	23
2	Feeling down, depressed	3	5	8	4	20
3	Sleeping too much	2	6	5	9	22
4	Feeling tired	0	4	12	14	30
5	Poor appetite or overeating	2	9	18	10	39
6	Feeling bad about	5	4	7	8	14
7	Trouble concentrating on things	2	12	14	4	32
8	Speaking/ moving slowly/	2	4	5	1	12
9	Better off dead or hurting yourself	0	2	2	0	4
	<b>Total</b>	<b>20</b>	<b>54</b>	<b>77</b>	<b>55</b>	<b>196</b>

**Table 4 problems faced by the patients**

Difficulty of these problems to do your work, take care of things or get along with other people	Responses				Total
	Not difficult at all	Some what	Very difficult	Extremely difficult	
	20	62	44	70	196

**Source: Primary Data****Interpretation**

Out of 196 respondents 20 have (0 - 4) no/minimal depression, 54 have (5 - 9) mild depression, 77 have (10 - 14) moderate level of depression and 55 people have (15 - 19) moderately severe level of depression. People with mild depression have to be kept in watch and repeat PHQ-9 at follow up, moderate level of depression have to be treated with counseling, follow-up and/or pharmacotherapy. Moderately severe level of depression has to be given active treatment with pharmacotherapy and/or psychotherapy. Severe level of depression (20-27) have to be treated immediately by pharmacotherapy and, if severe impairment or poor response to therapy, expedited referral to a mental health specialist for psychotherapy and/or collaborative management.

**Conclusion**

Symptoms of depression namely decreased energy, self-worth, and motivation restrict patient's oral hygiene or acquiescence with dental endorsements. Physiological impacts of depression may lead to poor dental health as a result of xerostomia, cariogenic diet, and decreased immune functioning contributing to oral infection. Obviously, a patient's psychiatric ailment may have a direct influence on dental health and treatment. While it is not mandatory on the treating dentist to identify a depressive ailment, awareness with the patient's medical history, current prescriptions, and overall indicators of depression could alert the dentist to possible hitches, notify the treatment interference, and perhaps enable a suitable recommendation for assessment of the depressive symptoms.

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