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Original Research

Dental Practice changes- A response to fight the Covid 19 Pandemic

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ABSTRACT:

Introduction: Covid 19, novel coronavirus disease has changed the functioning of life, challenging the global healthcare system. Its unprecedented global spread and nosocomial infectivity of the community is a trial for all. Dentist have risen to this challenge of providing triaged safe patient care, infection control measures and disaster relief. The changes in dental practice with an emphasis on preventing cross infection, type of procedures, updating guidelines and protocols have been instituted despite immense revenue losses. The exigency plans comprising of patient care and management practice has helped in lessening the fatal impact of this deadly disease. Aim : This study is an attempt to understand the level of fear and anxiety associated with Covid-19 among the cohort of dentist. Methods : A cross sectional survey to ascertain practice changes, anxiety and financial affordability was conducted. Statistical analysis was done using SPSS software. Results : A high level (69.1%) of fear and anxiety with a mean of 8.23 +/- 2.26 was seen and a *P* value of < 0.05 was considered statistically significant. Universal precautions were observed by 90.3% . Conclusion : The conclusion suggested a heightened anxiety among dental practitioners , financial difficulties and changes in practice management to provide essential care.

Keywords: Covid 19, Dental Practice, Patient Care Management.

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INTRODUCTION

The novel Coronavirus Disease pandemic ¹ has changed the way the world functions. Every aspect of life has been impacted. ² Medical and Dental practices have had to bring drastic changes in its operations to combat this onslaught, safeguard and provide service.

Covid-19

The emergence of the novel corona virus was first identified from the seafood market in Wuhan, China in Nov 2019, causing atypical pneumonia and deaths in its wake.³ It has since rapidly assumed pandemic proportions. The zoonotic & human transmission ⁴ has resulted in 16.8 crore cases worldwide with 35 lakhs deaths. ⁵ India alone tops the tally at 2.72 crore cases and 3.11 lakh deaths. Punjab accounts for 5.48 lakh cases, 13642 deaths and is at 17 position.

Covid-19 or novel corona virus disease nCVD 6 is caused by an ssRNA enveloped virus of ~350 kilo

base pairs (Kbp) with an incubation period of 5 days, mutating constantly every 7 days and favours ACE-2 receptors as its mode of entry.⁷⁸

The active infections along with a humongous asymptomatic spread ⁹ has cascaded into new, progressively lethal waves of infections ¹⁰ resulting in a worldwide lockdowns and curfews in an attempt to control it. Covid-19 infection ^{11 12} typically presents as an upper respiratory tract infection with fever, ¹³ dry cough, dyspepsia, myalgia, arthalgia, nausea, vomitting and diarrhoea¹⁴ often progressing within days to complications of pneumonia, ¹⁵ Mutiple Inflammatory Syndrome, heart problems and stroke.¹⁶ ¹⁷ ¹⁸ ¹⁹ Dental Covid-19 oral findings are dysgeusia/ageusia, xerostomia. exanthematous lesions like ulcers or blisters and loss of taste and smell.(Figure 1&2)

Figure 1: Tongue ulcers in Covid-19.



Figure 2: a. Periodontitis due to Covid-19. b. Healthy Gums.



The case fatality rate globally is 3.4%, India 1.14% & Punjab is 2.50%.²⁰ ²¹ Various clinical trials and symptomatic treatments have been tried, from antimalarial HCQ to Vitamins ABCD, Anti-virals remdesivir, anti-bacterials lizenoid ²² to antiinflammatory tocizumilab, dexamethasone in an effort to eliminate it.²³ ²⁴ There has been a global race for the emergency development of an efficatious vaccine ²⁵ and rapid detection tests - Antigen/Antibody ²⁶ & RT-PCR. WHO has advocated self quarantine, isolation, social distancing, hand hygiene, sanitising, antiseptic mouth washes, cough ettiquette and wearing of face masks ²⁷ as a precautionary measure to limit contact, fomites or aerosol spread. ^{2829 30 31}

IMPACT

Majority of the global institutions have either shut down or gone on online mode. ³² The resulting recession in the worlds economy ³³ has further aggravated the issues of poverty, unemployment and disease ³⁴ along with bringing widespread mental health problems. ³⁵ Stigma, ³⁶ ³⁷ Boredom, ³⁸ worry, anxiety and an impending fear of death has caused mental anguish among all. ³⁹ ²

The frontline warriors especially health care workers have had to work selflessly & tirelessly in dangerous conditions to keep emergency services open often at the cost of their lives. ^{40 41} Dentist also have been at a higher risk of contacting & spreading the highly contagious virus due to their work in close proximity with the aerosolised viral loaded human saliva. ^{42 43 44} ⁴⁵ Their psychological wellbeing and safety is necessary to bring in a nondiscriminatory, rational standard of care to the needy in accordance with the guidelines on Covid-19 given by WHO and Medical and Dental Councils. ^{46 47 48}

STUDY

This study is an attempt to understand the level of fear and anxiety associated with Covid-19 among the cohort of dentist.

MATERIAL AND METHODS

An online cross - sectional analytical survey was conducted using a questionnaire on Google forms from 15th April to 15th May 2021.

This was circulated through electronic media among dental practitioners . Practicing dentist with a smart phone or internet were included only. It was an anonymous, confidential and voluntary study. A pilot study in January 2021 was done to ascertain the sample size and intricacies of questions followed later by the main study. The ethical committees approval was taken. The survey questionnaire comprised of three sections. Part A recorded the demographic profile of age, gender, marital status, qualification, type of dental practice, years of practice and affordability. Part B dealt with awareness of Covid-19 and practice protocols. Part C noted the worry, anxiety and financial affordability prevalent among dentists in the pandemic.

Sample size was determined using the formula $\mathbf{n} = \mathbf{Z}^2 \mathbf{pq/d}^2$. Where Z = standard normal variate value (Z-value) corresponding to 95 % Confidence level, p = prevalence = 3.91 %, q = 1-p, and d = precision (%) = +/- 4

Tables were constructed of the variables and response to each question was recorded in a Yes (score1) and No (score 0) format out of a score range of 0-11. The categorisation of a low and high level of worry and anxiety was calculated after a cutoff mean fear score of 7. A frequency distribution of responses in the form of numbers and percentages was calculated and a comparison of mean fear score was done using Chi-Square test for 2 variables and analysis of variance ANOVA for 3 or more variables. Multiple logistic regression analysis of the level of fear with demographic variables was done. P < 0.05 was considered statistically significant. Data was analysed using SPSS version 21software.

The survey form was randomly distributed to 120 dentists out of which 103 complete forms were

56.3% were general dentists and 43.7% were specialists.

Part B of the questionnaire asked questions about the knowledge of disease, normal practice in the pandemic with universal precautions and affordability. 95.1% were upto date with the current DCI guidelines and 90.3% used Universal precautions. 42.7% could only afford the extra costs incurred in Covid-19 pandemic.

Part C of the questionnaire asked a few fear and anxiety questions to ascertain the emotional response to Covid-19 pandemic.

The mean fear and anxiety score of this study population reported was 8.23 ± 2.26 , with 69.1% presenting with a high level of fear and anxiety.

35% wanted to defer dental practice till the cases declined or vaccination was given. 84.5% were worried about the cost of treatment of COVID-19 and 89.6% of repeated testing . 94.4% were afraid after hearing of deaths of professional colleagues. 89.3% were worried about the financial status of their families in case of any adversity suffered by them.

The cost of COVID-19 treatment affordability showed a statistically significant difference among gender (P = 0.048) and marital status (P = 0.028). A significant P = 0.004 was seen among specialist dentist worrying about providing treatment to patients with flu and cough symptoms. Practitioners at private hospital were more worried about contacting COVID 19 from colleagues (P = 0.004) and were in favour of deferring patients till vaccination occurred (P = 0.038) or cases declined (P = 0.002).

received with a response rate of 85.8%. 15 dentist did declined (P = 0.002). not volunteer and 2 were not included as incomplete.

Overall the fear and anxiety seen among different variables of age, gender, marital status, designation, place of work and years of dental practice is shown in table 1.

Table 1(11). Results								
This study is anonymous and	No. of	Percenta						
voluntary	participants	ge						
Incomplete	2	1.7%						
Dont Volunteer	15	12.5%						
Volunteer	103	85.8%						
1. Gender								
Female	68	66.0%						
Male	35	34.0%						
2. Marital status								
Married	38	36.9%						
Unmarried	65	63.1%						
3. Age								
20-30 years	64	62.1%						
31-40 years	24	23.3%						
41-50 years	13	12.6%						
51- 60 years	2	1.9%						
4. Designation								
General Dental practitioner	60	58.3%						
Specialist Dental practitioner	43	41.7%						
5. Qualification								
Graduate	60	58.3%						
Post Graduate	43	41.7%						
6. Place of Work								
Clinic	20	19.4%						
Hospital - government	17	16.5%			Minimum	Maximum	Mean	Std.
								Deviation
Hospital - private	66	64.1%	Fear and	03	2.00	11.00	8.23	2.26

Table 1(A): Results

RESULTS

7. Years in dental practice					
< 5 years	65	63.1%			
6-10 years	16	15.5%			
11-15 years	14	13.6%			
>15 years	8	7.8%			
8. Affordability of					
Dental practice					
Dont know	15	14.6%			
No	10	9.7%			
Yes	78	75.7%			

Table 1 (B)

	No		Yes		Don't	Know
	No. of	Percentage	No. of	Percentage	No. of	Percentage
	participants	C	participants	U U	participants	U
1. Have you heard of Covid - 19	0	0.0%	103	100.0%	0	0.0%
pandemic disease						
2. Do you know how Covid -19 is	0	0.0%	103	100.0%	0	0.0%
transmitted						
3. Have you been updated with the	3	2.9%	98	95.1%	2	1.9%
current DCP/DCI/ WHO guidelines						
to control cross infection of Covid -						
19						
4. Currently, do you ask every	18	17.5%	83	80.6%	2	1.9%
patients travel history before dental						
treatment						
5. Currently, do you take every	6	5.8%	96	93.2%	1	1.0%
persons temperature &cough, flu						
history before dental treatment						
6. Currently, do you defer patients	19	18.4%	81	78.6%	3	2.9%
dental treatment if they have come in						
contact with Covid -19 positive cases						
7. Currently, do you maintain social	5	4.9%	91	88.3%	7	6.8%
distancing						
8. Currently, do you wear a N-90	11	10.7%	92	89.3%		
mask or PPE routinely while treating						
patients in your dental practice						
9. In your opinion is a surgical or N-	59	57.3%	34	33.0%	10	9.7%
90 mask enough to prevent cross						
infection of Covid -19						
10. As a routine do you follow the	7	6.8%	93	90.3%	3	2.9%
Universal Precautions of infection						
control for every patient						
11. Do you use rubber dam isolation	74	71.8%	29	28.2%	0	0.0%
for every patient						
12. Do you ask every patient to rinse	16	15.5%	87	84.5%	0	0.0%
their mouth with antiseptic						
mouthwash before and after						
treatment						
13. Do you use high volume suction	48	46.6%	55	53.4%	0	0.0%
in your dental practice for every	56	54.4%	44	42.7%	3	2.9%
patient						
15. Do you always wash your hands	1	1.0%	102	99.0%		0.0%
with soap and water or use sanitizer						
before and after treatment of every						
patient						
16. Is your dental hospital / clinic	13	12.6%	83	80.6%	7	6.8%
adequately sanitized						
17. Are you aware of the policy	12	11.7%	84	81.6%	7	6.8%
&procedure, if you come across a						
suspected covid -19 infection in your						

dental practice						
18. Can you afford the extra cost of	35	34.0%	44	42.7%	24	23.3%
the changes in your dental practice						

Table <u>1 (C)</u>

	No		Ye	S
	No. of	Percentag	No. of	Percentag
	participant	e	participan	e
	S		ts	
1. Is there a fear of contacting Covid -19	11	10.7%	92	89.3%
infection from a patient or coworker in				
your dental practice				
2. Do you have an anxiety to provide	18	17.5%	85	82.5%
treatment to a patient with fever &cough				
and other symptoms of Covid-19				
3. Are you nervous while talking to	19	18.4%	84	81.6%
patients in close vicinity				
4. Are you fearful of passing on the	19	18.4%	84	81.6%
infection to others from acquired				
infection in Dental practice				
5. Do you want to close your Dental	67	65.0%	36	35.0%
practice until the number of Covid-19				
cases start declining				
6. Do you want to close your dental	67	65.0%	36	35.0%
practice until Covid -19 vaccination is				
given				
7. Are you afraid of being quarantined	17	16.5%	86	83.5%
on testing positive to Covid-19				
8. Are you anxious that you cannot	19	18.4%	84	81.6%
afford the cost of repeated Covid -19				
tests				
9. Are you worried about the cost of	16	15.5%	87	84.5%
treatment if you are hospitalized with				
Covid -19 infection				
10. Are you afraid after hearing about	6	5.8%	97	94.2%
Covid -19 deaths especially of health				
workers				
11. Would you be worried financially	11	10.7%	92	89.3%
about your family if you succumb to				
Covid -19				

Table 1(D):

		Age							Chi-	p-value
	20-30	years	31-40	years	41-50	years	51- 60) years	square	-
	(n=64)	-	(n=24)	-	(n=13)	-	(n=2)	-	value	
1. Is there a fear of									2.700	0.440
contacting Covid -19	7	9.1%	0	3.3%	3	00.0%		00.0		
infection from a patient								%		
or coworker in your										
dental practice										
2. Do you have an									4.046	0.257
anxiety to provide	0	8.1%	0	3.3%	3	00.0%		00.0		
treatment to a patient								%		
with fever &cough and										
other symptoms of										
Covid-19										
3. Are you nervous									2.766	0.429
while talking to	6	1.9%	3	4.2%		9.2%		0.0%		
patients in close										

vicinity									
4. Are you fearful of								1.662	0.646
passing on the	4	4.4%	8	5.0%	0	6.9%	00.0		
infection to others from							%		
acquired infection in									
Dental practice									
5. Do you want to close								4.203	0.240
your Dental practice	3	5.9%		9.2%		0.8%	00.0		
until the number of							%		
Covid-19 cases start									
declining									
6. Do you want to close								0.835	0.841
your dental practice	4	7.5%		9.2%		0.8%	0.0%		
until Covid -19									
vaccination is given									
7. Are you afraid of								1.476	0.688
being quarantined on	3	2.8%	9	9.2%	2	2.3%	00.0		
testing positive to							%		
Covid-19									
8. Are you anxious that								1.691	0.639
you cannot afford the	1	9.7%	9	9.2%	2	2.3%	00.0		
cost of repeated Covid							%		
-19 tests									
9. Are you worried								1.65	0.648
about the cost of	2	1.3%	1	7.5%	2	2.3%	00.0		
treatment if you are							%		
hospitalized with									
Covid -19 infection									
10. Are you afraid after								0.348	0.951
hearing about Covid -	0	3.8%	3	5.8%	2	2.3%	00.0		
19 deaths especially of							%		
health workers									
11. Would you be								0.722	0.868
worried financially	6	7.5%	2	1.7%	2	2.3%	00.0		
about your family if							%		
you succumb to Covid									
-19									

Table 1 (E)

	1. (Gender			Chi-	p-value
	Fen	nale (n=68)	Ma	ale (n=35)	square	
					value	
1. Is there a fear of contacting	60	88.2%	32	91.4%	0.247	0.619
Covid -19 infection from a						
patient or coworker in your						
dental practice						
2. Do you have an anxiety to	56	82.4%	29	82.9%	0.004	0.949
provide treatment to a patient						
with fever &cough and other						
symptoms of Covid-19						
3. Are you nervous while talking	49	72.1%	20	57.1%	2.325	0.127
to patients in close vicinity						
4. Are you fearful of passing on	56	82.4%	28	80.0%	0.085	0.771
the infection to others from						
acquired infection in Dental						
practice						
5. Do you want to close your	23	33.8%	13	37.1%	0.112	0.738
Dental practice until the number						

of Covid-19 cases start declining						
6. Do you want to close your	25	36.8%	11	31.4%	0.289	0.591
dental practice until Covid -19						
vaccination is given						
7. Are you afraid of being	56	82.4%	30	85.7%	0.189	0.663
quarantined on testing positive to						
Covid-19						
8. Are you anxious that you	53	77.9%	31	88.6%	1.736	0.28
cannot afford the cost of						
repeated Covid -19 tests						
9. Are you worried about the	54	79.4%	33	94.3%	3.896	0.048
cost of treatment if you are						
hospitalized with Covid -19						
infection						
10. Are you afraid after hearing	62	91.2%	35	100.0%	3.279	0.070
about Covid -19 deaths						
especially of health workers						
11. Would you be worried	60	88.2%	32	91.4%	0.247	0.619
financially about your family if						
you succumb to Covid -19						

Table 1 (F)

	2.1	Marital status		Chi-	p-value	
	Ma	urried	U	nmarried	square	
	(n=38)		(n=65)		value	
1. Is there a fear of contacting	33	86.8%	59	90.8%	0.388	0.534
Covid -19 infection from a						
patient or coworker in your						
dental practice						
2. Do you have an anxiety to	34	89.5%	51	78.5%	2.016	0.156
provide treatment to a patient						
with fever &cough and other						
symptoms of Covid-19						
3. Are you nervous while talking	23	60.5%	46	70.8%	1.138	0.286
to patients in close vicinity						
4. Are you fearful of passing on	32	84.2%	52	80.0%	0.283	0.595
the infection to others from						
acquired infection in Dental						
practice						
5. Do you want to close your	13	34.2%	23	35.4%	0.015	0.904
Dental practice until the number						
of Covid-19 cases start declining						
6. Do you want to close your	11	28.9%	25	38.5%	0.955	0.329
dental practice until Covid -19						
vaccination is given						
7. Are you afraid of being	34	89.5%	52	80.0%	1.562	0.211
quarantined on testing positive to						
Covid-19						
8. Are you anxious that you	34	89.5%	50	76.9%	2.511	0.113
cannot afford the cost of						
repeated Covid -19 tests	2.6	0.4 5 04			4.0.44	0.020
9. Are you worried about the	36	94.7%	51	78.5%	4.841	0.028
cost of treatment if you are						
hospitalized with Covid -19						
	20	100.00/	50	00.00/	2 7 2 5	0.054
10. Are you atraid after hearing	38	100.0%	59	90.8%	3.725	0.054
about Covid -19 deaths						
especially of nealth workers	25	02.10/	57	07.70/	0.40	0.49.4
11. Would you be worried	35	92.1%	57	87.7%	0.49	0.484

financially about your family if			
you succumb to Covid -19			

Table 1 (G)

	2.1	Marital statu		Chi-	p-value	
	Ma	rried	U	nmarried	square	1
	(n=38)		(n=65)		value	
1. Is there a fear of contacting	33	86.8%	59	90.8%	0.388	0.534
Covid -19 infection from a						
patient or coworker in your						
dental practice						
2. Do you have an anxiety to	34	89.5%	51	78.5%	2.016	0.156
provide treatment to a patient						
with fever &cough and other						
symptoms of Covid-19						
3. Are you nervous while talking	23	60.5%	46	70.8%	1.138	0.286
to patients in close vicinity						
4. Are you fearful of passing on	32	84.2%	52	80.0%	0.283	0.595
the infection to others from						
acquired infection in Dental						
practice						
5. Do you want to close your	13	34.2%	23	35.4%	0.015	0.904
Dental practice until the number						
of Covid-19 cases start declining						
6. Do you want to close your	11	28.9%	25	38.5%	0.955	0.329
dental practice until Covid -19						
vaccination is given						
7. Are you afraid of being	34	89.5%	52	80.0%	1.562	0.211
quarantined on testing positive to						
Covid-19						
8. Are you anxious that you	34	89.5%	50	76.9%	2.511	0.113
cannot afford the cost of						
repeated Covid -19 tests						
9. Are you worried about the	36	94.7%	51	78.5%	4.841	0.028
cost of treatment if you are						
hospitalized with Covid -19						
infection					_	
10. Are you afraid after hearing	38	100.0%	59	90.8%	3.725	0.054
about Covid -19 deaths						
especially of health workers						
11. Would you be worried	35	92.1%	57	87.7%	0.49	0.484
financially about your family if						
you succumb to Covid -19						

Table 1 (H)

	4. I	Designation	Chi-	p-value		
	Gei	neral Dental	Sp	ecialist	square	
	practitioner	(n=60)	Dental	practitioner	value	
			(n=43)			
1. Is there a fear of contacting	52	86.7%	40	93.0%	1.061	0.303
Covid -19 infection from a						
patient or coworker in your						
dental practice						
2. Do you have an anxiety to	44	73.3%	41	95.3%	8.418	0.004
provide treatment to a patient						
with fever & cough and other						
symptoms of Covid-19						
3. Are you nervous while talking	40	66.7%	29	67.4%	0.007	0.934
to patients in close vicinity						

4. Are you fearful of passing on the infection to others from acquired infection in Dental	50	83.3%	34	79.1%	0.303	0.582
practice						
5. Do you want to close your Dental practice until the number of Covid-19 cases start declining	21	35.0%	15	34.9%	0.000	0.990
6. Do you want to close your dental practice until Covid -19 vaccination is given	22	36.7%	14	32.6%	0.186	0.666
7. Are you afraid of being quarantined on testing positive to Covid-19	51	85.0%	35	81.4%	0.236	0.627
8. Are you anxious that you cannot afford the cost of repeated Covid -19 tests	49	81.7%	35	81.4%	0.001	0.972
9. Are you worried about the cost of treatment if you are hospitalized with Covid -19 infection	50	83.3%	37	86.0%	0.141	0.708
10. Are you afraid after hearing about Covid -19 deaths especially of health workers	57	95.0%	40	93.0%	0.178	0.673
11. Would you be worried financially about your family if you succumb to Covid -19	55	91.7%	37	86.0%	0.829	0.362

Table 1 (I)

	ť	5. Place of W	Chi-	p-value				
	Clinic			Hospital	square			
	(n=20)		-	government	private (n	=66)	value	
			(n=	17)				
1. Is there a fear of	15	75.0%		76.5%	64	97.0%	11.291	0.004
contacting Covid -19			3					
infection from a patient or								
coworker in your dental								
practice								
2. Do you have an anxiety	17	85.0%		76.5%	55	83.3%	0.547	0.761
to provide treatment to a			3					
patient with fever &cough								
and other symptoms of								
Covid-19								
3. Are you nervous while	11	55.0%	_	58.8%	48	72.7%	2.795	0.247
talking to patients in close			0					
vicinity								
4. Are you fearful of	14	70.0%		82.4%	56	84.8%	2.258	0.323
passing on the infection to			4					
others from acquired								
infection in Dental practice						17.000		0.000
5. Do you want to close	4	20.0%		5.9%	31	47.0%	12.478	0.002
your Dental practice until								
the number of Covid-19								
cases start declining		2 0.00/		15 604	•	10.00/		0.000
6. Do you want to close	4	20.0%		17.6%	29	43.9%	6.551	0.038
your dental practice until								
Covid -19 vaccination is								
given	20	100.00/		76.50	50	00.00/	5.05	0.000
7. Are you atraid of being	20	100.0%		76.5%	53	80.3%	5.05	0.080
quarantined on testing			3					

positive to Covid-19								
8. Are you anxious that	19	95.0%		76.5%	52	78.8%	3.031	0.220
you cannot afford the cost			3					
of repeated Covid -19 tests								
9. Are you worried about	19	95.0%		70.6%	56	84.8%	4.194	0.123
the cost of treatment if you			2					
are hospitalized with								
Covid -19 infection								
10. Are you afraid after	20	100.0%		88.2%	62	93.9%	2.337	0.311
hearing about Covid -19			5					
deaths especially of health								
workers								
11. Would you be worried	20	100.0%		88.2%	57	86.4%	3.017	0.221
financially about your			5					
family if you succumb to								
Covid -19								

Table 1 (J)

	7. Years in dental practice									p-value
		< 5	6-10		11-15			>15	square	I
	years (n=	=65)	years (n	=16)	years (n	=14)	years (n=8)	value	
1. Is there a fear of									1.657	0.647
contacting Covid -19	7	7.7%	5	3.8%	2	5.7%		00.0		
infection from a patient								%		
or coworker in your										
dental practice										
2. Do you have an									4.605	0.203
anxiety to provide	0	6.9%	5	3.8%	2	5.7%		00.0		
treatment to a patient								%		
with fever & cough and										
other symptoms of										
Covid-19										
3. Are you nervous									0.241	0.971
while talking to	3	6.2%	1	8.8%	0	1.4%		2.5%		
patients in close										
vicinity										
4. Are you fearful of									2.554	0.466
passing on the	6	6.2%	2	5.0%	0	1.4%		5.0%		
infection to others from										
acquired infection in										
Dental practice										
5. Do you want to close									1.046	0.790
your Dental practice	1	2.3%		7.5%		5.7%		0.0%		
until the number of										
Covid-19 cases start										
declining									0.7.10	0.001
6. Do you want to close									0.560	0.906
your dental practice	4	6.9%		1.3%		5.7%		5.0%		
until Covid -19										
vaccination is given									1.040	0.702
7. Are you afraid of	~	1.00		5.00/	2	5 70/		7.50	1.040	0.792
being quarantined on	5	4.6%	2	5.0%	2	5.7%		1.5%		
testing positive to										
Covid-19									0.900	0.949
8. Are you anxious that	2	1.50/	2	5.00/	2	5 70/		7.50	0.806	0.848
you cannot afford the	3	1.3%	2	5.0%	2	5.1%		1.5%		
10 tosts										
-19 lesis									2.910	0.282
9. Are you worried							1		5.819	0.282

about the cost of	4	3.1%	4	7.5%	2	5.7%	7.5%		
treatment if you are									
hospitalized with									
Covid -19 infection									
10. Are you afraid after								1.534	0.675
hearing about Covid -	1	3.8%	4	7.5%	5	07.1%	7.5%		
19 deaths especially of									
health workers									
11. Would you be								1.919	0.589
worried financially	0	2.3%	2	5.0%	3	2.9%	7.5%		
about your family if									
you succumb to Covid									
-19									

Table 1 (K)								
			Fear and				7 Chi-	p-value
		anxiety g	group			otal	square	
			<7 (n=31)		\geq 7 (n=72)		value	
3. Age	20-30	21	67.7%	43	59.7%	64	2.542	0.468
	years		_					
	31-40	8	25.8%	16	22.2%	24		
	years		_					
	41-50	2	6.5%	11	15.3%	13		
	years		_					
	51- 60	0	0.0%	2	2.8%	2		
	years							
1. Gender	Female	21	67.7%	47	65.3%	68	0.059	0.809
	Male	10	32.3%	25	34.7%	35		
2. Marital status	Married	8	25.8%	30	41.7%	38	2.341	0.126
	Unmarri	23	74.2%	42	58.3%	65		
	ed							
4. Designation	General	19	61.3%	41	56.9%	60	0.168	0.682
	Dental							
	practitio							
	ner							
	Speciali	12	38.7%	31	43.1%	43		
	st							
	Dental							
	practitio							
	ner							
6. Place of Work	Clinic	7	22.6%	13	18.1%	20	2.860	0.867
	Hospital	5	16.1%	12	16.7%	17		
	-							
	govern							
	ment							
	Hospital	19	61.3%	47	65.3%	66		
	- private							
7. Years in dental	< 5	20	64.5%	45	62.5%	65	1.030	0.794
practice	years							
	6-10	6	19.4%	10	13.9%	16		
	years							
	11-15	3	9.7%	11	15.3%	14		
	years							
	>15	2	6.5%	6	8.3%	8		
	years							
Total		31	100.0%	72	100.0%	103		

	p-value	Odd		95%			percenta
	1	ratio	C.I.for odd ratio				ge
			Lower	Upper	Low	31	30.1%
Gender-Female	0.855	0.898	0.281	2.869	High	72	69.9%
Marital status-married	0.064	4.799	0.910	25.300			
Age-Reference(51-60y)	0.975						
20-30 у	0.999	0.000	0.000				
<i>31-40</i> y	0.999	0.000	0.000				
41-50 y	0.999	0.000	0.000				
Designation-General	0.892	1.093	0.301	3.977			
Place of Work-Clinic	0.343	0.519	0.134	2.013			
Years in dental practice-	0.615						
Reference (> 15years)							
< 5 years	0.999	0.000	0.000				
6-10 years	0.999	0.000	0.000				
11-15 years	0.999	0.000	0.000				
Affordability of Dental	0.241						
practice-Reference (don't							
Know)							
No	0.092	8.324	0.709	97.727			
Yes	0.433	1.696	0.452	6.357			

Table 1(L)

DISCUSSION

WHO has declared Covid -19 as "the Global Public Health Humanitarian Crises" which has impacted every aspect of life.

The constant worry of getting infected and spreading the contagion has been intensified by the explosive spread of the virus. ⁴⁹ The repercussions of containing the pandemic and its effects has increased the mental distress of millions. The previous studies on pandemics ^{50 51} - of plague, influenza, ⁵² SARS-Cov, ⁵³ have highlighted the morbidity and mortality associated with it along with the psychological distress of health workers. ^{54 55}

Ahmed et al., ⁵⁶ and Iranian fear of Covid-19 scale study ^{57 58} has provided a basis for a comprehensive and objective questionnaire which has been further added upon to ascertain and provide an insight into the challenges faced by the dentist in providing essential care. The current Dental guidelines recommendations have prioritised essential and emergency treatment over nonessential dental work . ^{59 60 61 62 63 64 65 66} Emerging literature on the corona virus disease has shown the vulnerability of dentist to

the exposure of highly viral loaded human salivary aerosols produced by the mechanised ultrasonic dental instruments ⁶⁷ in their closely confined work.

Dental practice has adopted certain changes to safeguard against that. $^{68\ 69\ 70\ 48}$

PRE-VISIT:1

Teledentistry with screening, triage and consulting as first point of contact & care. Relevant detailed Medical and travel history and covid 19 testing is asked for. Clinic dental care in positive cases is delayed for 3-4 weeks unless an emergency. Virtual Health services are utilized and topical and oral medications prescribed.

2. Clinics are regularly disinfected and sterlised and nonessential accessories like magazines, display models removed with seating at 2 meters distance with adequate ventilation and air filters. Staff should wear alternate hospital clothes with no accessories and personal protective equipment.

Visit: 1.Patients are called as per appointment and informed about screening procedures and in clinic protocols. Staggering the appointments and discouraging accompanying persons except when necessary reduce cross infection. Screening with temperature recording, hand sanitisers and masks are mandatory before entering the clinic.

2. Operative equipment should be prepared and sterlised. Cardboard and disposable apparatus to be used and disposed off properly. A negative pressure or airborne infection isolation room should be allocated for Covid19 suspects. HEPA air filters to be used in air purifiers and salt recrystallization based virus deactivation systems. Hand hygiene with 80% ethanol or 75% 2-propanol as an alcohol based hand rub (ABHR) should be freely available and used. Personal Protective Equipment (PPE) with gown, gloves, face shields, head hoods, goggles, N95 face mask should be worn while treating.

Pre Treatment antiseptic (1% Hydrogen peroxide, Chlorhexidine, Citrox, 1% Povidone iodine) mouthwash decrease viral load in saliva and aerosols.

TREATMENT

The use of 3-way syringes, high-speed handpieces, and ultrasonic scalers must be avoided and if indispensable, antiretraction or electric friction grip handpieces must be used to prevent debris and fluids getting expelled or aspirated. Low- or high-volume suction can minimize aerosol production considerably.

For restorative treatment, chemomechanical caries removal such as Carisolv and papain gel can be used. For restorations, silver diamine fluoride, biological restoration, and GIC can be utilized. In cases of acute pulpitis, periapical periodontitis, dental and orofacial trauma and infections, or any other dental emergency, patients and accompanying person should have appropriate personal protection. Rubber-dam use reduces airborne particles by 70%. It is advised to maximise usage of resorbable sutures and extraoral radiography.

AFTER TREATMENT

PPE should be doffed off properly and sterlised and disposed off as infectious biomedical waste.

Glasses and face-shields must be washed and disinfected after each procedure. ABHR must be used after each patient.

FOLLOW-UP

of all patients for 7 days for any flu-like symptoms.

Employee care: daily log for employees' temperature and symptoms reviewed periodocally. A registered entry and exit system with time, date and place to be in place for all.

POST TREATMENT

Disinfection, sterlisation and decontamination to be done expediently for all while all disposables should be discarded appropriately. Coronavirus infectivity decreases with concentrations between 62% and 71% of ethanol, 0.1 and 0.5% sodium hypochlorite, and 2% glutaraldehyde. Hydrogen peroxide vaporizer can be utilized for operative decontamination. Patients diagnosed from Covid-19 can receive emergency dental care after 14 days quarantine and clearance as per the latest guidelines.

In the management of Covid 19 the practice protocols should be updated regularly and everyone should keep abreast of the changes, practicing stringent infection control and biomedical waste management measures even after the decline of cases to further prevent community spread.

This survey was conducted after witnessing almost an years devastation caused by successively lethal waves of mutated corona virus and active vaccination of almost 80 crore population getting 2 doses, 5.2% and 1 dose, 10.1% of total population. India vaccinated 15 crore with 3.1% of total population getting 2 doses and 11.2% getting 1 dose.

The electronic media has greatly helped in disseminating our current knowledge of corona virus disease, its pathogenesis and management but it still has not completely dispelled the apprehension surrounding it or cross infections.⁷¹ ⁷² The increased burden on healthcare system and various financial implications have caused immense anxiety among

people. ⁷³ The added expenditure of sanitising, PPE kits, laboratory tests although government subsidised haven't really increased the financial burden in a recessing world economy. People have been worried about their loss of earnings and lack of social support by governments. ^{74 75}

The treatment burden of Covid-19 among 150 crore is not adequately shouldered by the Indian government which is further escalated by the often unaffordable treatment. Although Universal precautions are advocated, ⁷⁶ Covid fatigue has creeped in and rigorous practice of basic cross infection preventative measures ⁷⁷ like mouth wash or rubber dam isolation, social distancing is not being observed by all. The emergency global vaccination program has brought much needed relief and is perceived to change the depressive scenario of the Pandemic years.

LIMITATIONS

This study cannot be generalised as it was conducted in a small cohort of dentists. The total effectiveness of vaccination could not be assured at this point.

CONCLUSION

Some of the previous studies by Ahmed et al., ⁵⁶ Suryakumari et al. ⁷⁹ have shown a high level of mental distress especially amongst high risk professions similar to as seen by this study.

The strident level of coronaphobia among essential care providers needs to be established by national studies. The financial burden needs to be better elucidated.

Internationally and locally relevant different strategic coping mechanisms and government /NGO aids should be advocated. A compliance with WHO guidelines and better patient management would enhance safety and care for all and prepare for future disasters.

FUTURE SCOPE

Constant updates on Covid-19 and research would help formulate better techniques to fight this pandemic and governments should unite to provide solid social security measures to its burgeoning populations in times of distress.⁷⁸

CONFLICT OF INTEREST

There is no conflict of interest.

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