

**Reverberation of marine environs on oral health and its correlation with the year of experience and social economic status of naval personnel**<sup>1</sup>Abhishek S, Undergraduate Student, Department of Public Health Dentistry, SRM Dental College, Chennai, India.<sup>2</sup>Dr. Bharathwaj V V, Senior Lecturer, Department of Public Health Dentistry, SRM Dental College, Chennai, India.<sup>3</sup>Dr. Sathiyapriya S, Senior Lecturer, Department of Public health Dentistry, SRM Dental College, Chennai, India.<sup>4</sup>Dr. Prabu D, Head of the Department, Department of Public Health Dentistry, SRM Dental College, Chennai, India.<sup>5</sup>Dr. Rajmohan M., Reader, Department of Public Health Dentistry, SRM Dental College, Chennai, India.<sup>6</sup>Dr. Sindhu R, Senior Lecturer, Department of Public health Dentistry, SRM Dental College, Chennai, India.<sup>7</sup>Dr. Dinesh Dhamodhar, Reader, Department of Public Health Dentistry, SRM Dental College, Chennai, India.**Corresponding Author:** Dr. Prabu D, Head of the Department, Department of Public Health Dentistry, SRM Dental College, Chennai, India.**Citation of this Article:** Abhishek S, Bharathwaj V V, Sathiyapriya S, Prabhu D, Rajmohan M, Sindhu R, Dinesh Dhamodhar, “Reverberation of marine environs on oral health and its correlation with the year of experience and social economic status of naval personnel”, IJDSIR- March - 2023, Volume – 6, Issue - 2, P. No. 37– 53.**Copyright:** © 2023, Dr. Prabu D, et al. This is an open access journal and article distributed under the terms of the creative commons’ attribution non-commercial License. Which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.**Type of Publication:** Review Article**Conflicts of Interest:** Nil**Abstract****Background:** The study was done to assess the oral hygiene measure and oral health practice among naval personnel, their attitude and knowledge towards it correlation to their year of experience and social economic status.**Methods & Methodology:** The study was conducted among the naval personnel’s residing in ship and naval base from all different naval commands i.e., Kochi, Mumbai, Vishakhapatnam, Delhi and Andaman. The study tool is a pre validated questionnaire consisting 22 questions in google form which are aimed about oral hygiene practice, socioeconomic status and year of experience of naval personnel’s.**Result:** The study was done among 150 naval personnel residing in ship and naval base of all the different commands. It was found that 80% naval personnel are prone to periodontitis and gingivitis. 45% of personnel visit dental centre once in a year. 50 % of personnel change their brushes after 3 months. 10% of personnel visit dental centre only on toothache or any aggravating pain. 90% personnel use toothpaste containing fluoride and 10% of personnel uses powder like charcoal. It also seen that 90% of personnel consumes alcohol, one drink per day.**Conclusion:** The study tells that majority of the personnel’s are not aware about oral hygiene practice

and most of them are affected with bleeding gums and lacks oral health care.

**Keywords:** Oral Health, Periodontal Disease, Rank, Social Economic Status, Year of Experience.

### Introduction

Oral health is the health of the teeth, gums, and the entire oro-facial system that allows us to smile, speak, and chew. Many common diseases that affect our oral health include tooth decay, gum disease, and oral cancer. Oral hygiene is the maintenance of keeping individual's mouth clean and free of disease and other problems by brushing teeth using toothbrush & toothpaste regularly. It is important that oral hygiene to be carried out on a daily basis to enable prevention of disease the working condition of naval personnel vary widely. While on typical they are marine environs and works in different climatic condition and adverse high sea condition and prone to many disease and other habitual. They work in different kinds of vessels like Aircraft carriers , Destroyers , Frigate , Curvets and Oil tankers which goes through different climatic condition which can affects their oral health (1). Another factors are like variation in quality of drinking water, sometimes variation in TMP level of water. According to class of ship there will be difference sailing duration sometimes it may extent from 6 months to 8 months and different naval exercises are performed which are all factors potentially affects the oral health. The personnel's in destroyers are prone to war exercises and radiation due radar frequency, missile launcher signals and other radioactive elements .most severe problem is that on any threat alert there will be 24 to 48 hours of naval operations in which personnel works in watches and this causes lack of sleep which leads to stress , headache etc. On all types of Ships this influences nutritional growth, with frequent consumption of snacks, caffeine

stimulants particularly during the night time. Daily intake of fermentable carbohydrates during the duty time is a prime risk factor for dental caries. At offshore personnel consume alcohol which is another factor affecting the oral health. The purpose or need of this study is to know the oral hygiene of naval personnel residing in ships and base of all the fleet. The study is done from Eastern fleet, Western fleet and Southern fleet. There is a relative studies where a survey is done in Chinese people liberation Army to know the change in periodontal health status. Research in advances in oral health knowledge of Greek Navy (2). Oral health in Iranian Armed forces (3). Oral health in personnel residing in ship is different from personnel residing base. This is due to different lifestyles.

### Methods and Methodology

The study was conducted among the naval personnel's residing in ship and naval base from all different naval commands i.e., Kochi, Mumbai, Vishakhapatnam, Delhi and Andaman. Ethical clearance was given by the Department of Public Health Dentistry, SRM Dental College, and Ramapuram. The head of the department and other faculty members were informed about the purpose of the study and their permission was granted. The study was conducted among 150 samples by convenience sample technique using a structured electronic questionnaire. The study tool is a prevalidated questionnaire consisting 22 questions to evaluate the oral hygiene of naval personnel's in correlation with socioeconomic status and year of experience. The questionnaire was investigator approved, self-administered and closed ended. The study participants were supplied with instruction given the questionnaire in google form.

The questionnaire consisted of 22 questions were it aimed about oral hygiene practice, socioeconomic status

and year of experience of naval personnel's. Few questions were prepared to know their rating and knowledge about oral health and awareness. The questions were asked based on the WHO questions criteria.

## Results

### A. Rank

Questions	Options	Rank						
1. How many natural teeth do you have?		Captain	Commander	CPO	LS	PO	MCPO	P value
	a. 1-9 teeth			1			1	0.804
	b. 10-19 teeth						1	
	c. 20 teeth or more	8	7	28	25	31	28	
2. During the past 12 months, did your teeth or mouth cause any pain or discomfort?	a. Yes						1	0.015
	b. Don't know		1	1	6		2	
	c. No	2	2	18	17	20	12	
3. Do you have any removable dentures?	a. Yes						2	0.811
	i. partial denture							
	ii. full upper denture	8	7				1	
	iii. full lower denture							
	b. No			27	25	30	25	
4. How would you describe the state of your teeth and gums?	a. Poor							0.000
	b. Average	7	5	4	1	4	2	
	c. Good	1	2	17	10	21	22	
	d. Very good			4	13	5	4	
	e. Excellent			3	1	1	1	
5. How often do you clean your teeth?	a. Once a month							
	b. 2-3 times a month	7		1				
	c. Once a week					2	1	

	d. 2–6 times a week							0.310
	e. Once a day			1	6	16	12	
	f. Twice or more a day			12	18	13	16	
6. Do you use any of the following to clean your teeth?	a. Toothbrush	4	4	28	22	30	28	0.000
	b. Wooden toothpicks		2		1			
	c. Plastic toothpicks				1			
	d. Dental floss	2	1					
	e. Charcoal							
	f. Chew stick	1				1	1	
	g. Other	1			1		1	
7. Do you use toothpaste to clean your teeth?	a. Yes	7	7	27	25	31	28	0.650
	b. No	1		1			1	
8. Do you use toothpaste that contains fluoride?	a. Yes	2	2	6	2	3	4	0.742
	b. No	6	5	22	23	28	25	
9. How long is it since you last saw a dentist?	a. Less than 6 months	2		2		3	3	0.179
	b. 6–12 months	4	3	21	21	25	21	
	c. More than 1 year but less than 2 years	1	3	3	2	1	1	
	d. 2 years or more but less than 5 years		1	1			3	
	e. 5 years or more			1			1	
	f. Never received dental care	1			2	2		
10. What was the reason of your last visit to the dentist?	a. Consultation/ Advice		1	2				0.000
	b. Pain or trouble with teeth, gums or mouth	6	5	5		2	6	
	c. Treatment/ follow-up treatment	1		6	3	9	12	
	d. Routine check up	1	1	15	22	20	19	
11. Because of the state of	(a) Difficulty in biting foods	1	2	12	21	21	17	

your teeth or mouth, how often have you experienced any of the following problems during the past 12 months?	(b) Difficulty chewing foods	4	1	9	2	5	1	0.000
	(c) Difficulty with speech/trouble pronouncing words.		1					
	(d) Dry mouth							
	(e) Felt embarrassed due to appearance of teeth.	1						
	(f) Felt tense because of problems with teeth or mouth							
	(g) Have avoided smiling because of teeth			1	1		1	
	(h) Had sleep that is often interrupted							
	(i) Have taken days off work							
	(j) Difficulty doing usual activities			2				
	(k) Felt less tolerant of spouse or people who are close to you			1				
	(l) Have reduced participation in social activities							
12. How often do you eat or drink any of the following foods, even in small quantities?	a. Fresh fruit	1	1	1	1	1	3	0.000
	b. Biscuits and cakes	1	1	1	2	1	1	
	c. Cream cakes		1	1	1	2	1	
	d. Sweet pies, buns	1	1	1			2	
	e. Jam or honey	1	1	1			4	
	f. Chewing gum containing sugar	1	1	5			1	
	g. Sweets/candy	1	1	2	1		1	
	h. Lemonade, i. Coca Cola or other soft drinks	1	1	1	4	4	2	
	j. Tea with sugar	1	1	1	1			
	k. Coffee with sugar							
13. How often	a. Cigars							

do you use any of the following types of tobacco?	b. A pipe							0.741
	c. Chewing tobacco							
	e. No	8	7	26	25	28	25	
14. How often did you go to the dentist during the past 12	a. Once	2	3	15	20	17	9	0.633
	b. Twice	2	2	6	2	6	10	
	c. Three times	3		3		3	5	
	d. Four times	1	1	1		1	1	
	e. More than four times	1		2		1		
	f. I had no visit to dentist during the past 12 months		1	2	2	2	2	
	g. I have never received dental care/visited a dentist	1			1		2	
15. During the past 30 days, on the days you drank alcohol, how many drinks did you usually drink per day ?	a. Less than 1 drink	2		2	2	1		0.020
	b. 1 drink	4	1	5	2	3	7	
	c. 2 drinks		3	2	1	1	4	
	d. 3 drinks	1	1				4	
	e. 4 drinks			1				
	f. 5 or more drinks					1		
	g. Did not drink alcohol during the past 30 days	1	2	19	21	23	13	
16. How often during the past 12 months did you have toothache or feel discomfort due to your teeth?	a. Often			1		2	4	0.003
	b. Occasionally	7	5	11	1	14	14	
	c. Rarely			10	3	7	7	
	d. Never	1	1	1	10	7	3	
	e. Don't know			5	11	7	4	
17. Any periodontal disease like gingivitis and periodontitis?	a. Yes	8	7	28	25	31	29	0.785
	b. No			1	1		1	

18. What level of education have you completed?	a. Secondary school completed	1	1	14	19	21	20	0.001
	b. Science stream	1	1	5		3		
	c. Commerce stream	1		1	2		1	
	d. Undergraduate degree		3	6	4	3	6	
	e. Postgraduate degree	5	2	2			1	
19. Considering your knowledge about the benefits of oral health care, how likely are you to recommend it your friends / colleague?	a. 0							0.001
	b. 1	1					1	
	c. 2							
	d. 3		1	3			2	
	e. 4	4	5	2	3	6	4	
	f. 5	3	1	23	22	25	22	

B. Years of experience

Questions	Options	Years of Experience				P value
1. How many natural teeth do you have?		0-10 years	11-20 years	21-30 years	More than 30 years	0.661
	a. No natural teeth					
	b. 1–9 teeth			1		
	c. 10–19 teeth			1		
	d. 20 teeth or more	56	32	33	6	
2. During the past 12 months, did your teeth or mouth cause any pain or discomfort?	a. Yes			1		0.001
	b. No	6	2	1	1	
	c. Don't Know	43	15	10	3	
3. Do you have any removable dentures?	a. A partial denture		1	1		0.003
	b. A full upper denture			1		
	c. A full lower denture				1	
4. How would you describe the state of your teeth and gums?	a. Excellent	1	3	1	1	
	b. Very good	22	3	1	1	
	c. Good	29	22	20	1	

						0.000
	d. Average	4	4	12	3	
	e. Poor					
	f. Very poor					
5. How often do you clean your teeth?	a. Once a month		1			
	b. 2–3 times a month		3			
	c. Once a week			1		
	d. 2–6 times a week	1				
	e. Once a day	22	18	17	4	
	f. Twice or more a day	33	10	17	2	
6. Do you use any of the following to clean your teeth?	a. Toothbrush	55	29	26	6	
	b. Wooden toothpicks	1	1	1		
	c. Plastic toothpicks					
	d. Dental floss		1	2		
	e. Charcoal			1		
	f. Chew stick					
7. Do you use toothpaste to clean your teeth?	a. Yes	55	32	32	6	
	b. No	1		2		
8. Do you use a toothpaste that contains fluoride?	a. Yes	6	5	5	3	
	b. No	50	27	29	3	
9. How long is it since you last saw a dentist?	a. Less than 6 months	1	2	6	1	
	b. 6–12 months	2	21	25	47	
	c. More than 1 year but less than 2 years	3	2	5	1	
	d. 2 years or more but less than 5 years		2	2	1	
	e. 5 years or more	1			1	
	f. Never received dental care	4	1			
10. What was the reason of your last	a. Consultation/ Advice	1	2			
						0.000



visit to the dentist?	b. Pain or trouble with teeth, gums or mouth	2	5	15	2	
	c. Treatment/ follow-up treatment	4	12	12	3	
	d. Routine check up	49	13	7	1	
11. Because of the state of your teeth or mouth, how often have you experienced any of the following problems during the past 12 months?	(a) Difficulty in biting foods	46	15	11	2	0.000
	(b) Difficulty chewing foods	5	1	9	1	
	(c) Difficulty with speech/trouble pronouncing words.	2	1	1		
	(d) Dry mouth	1	2	1		
	(e) Felt embarrassed due to appearance of teeth.	1	2	2		
	(f) Felt tense because of problems with teeth or mouth			1		
	(g) Have avoided smiling because of teeth	1		1		
	(h) Had sleep that is often interrupted			3	3	
	(i) Have taken days off work					
	(j) Difficulty doing usual activities					
	(k) Felt less tolerant of spouse or people who are close to you					
	(l) Have reduced participation in social activities					
12. How often do you eat or drink any of the	a. Fresh fruit	1	2	2		

following foods, even in small quantities?	b. Biscuits and cakes	1	1	1		0.146
	c. Cream cakes	1	1	1		
	d. Sweet pies, buns	1	1	1	2	
	e. Jam or honey			1		
	f. Chewing gum containing sugar	1	1	1		
	g. Sweets/candy			1		
	h. Lemonade, i. Coca Cola or other soft drinks	4		1		
	j. Tea with sugar		3			
	k. Coffee with sugar					
13. How often do you use any of the following types of tobacco?	a. Cigars					0.000
	b. A pipe					
	c. Chewing tobacco					
	d. Use snuff					
	e. No	55	29	29	8	
14. How often did you go to the dentist during the past 12	a. Once	45	9	10	2	0.000
	b. Twice	5	10	14		
	c. Three times		6	5	1	
	d. Four times	1		3	1	
	e. More than four times		2			
	f. I had no visit to dentist during the past 12 months	3	3	2	1	
	g. I have never received dental care/visited a dentist	2	2		1	
15. During the past 30 days, on the days you drank alcohol, how many drinks did you usually drink per day?	a. Less than 1 drink		3	1	1	0.02
	b. 1 drink	5	6	10	1	
	c. 2 drinks		4	6	1	
	d. 3 drinks	2	1	4	1	
	e. 4 drinks	1				
	f. 5 or more drinks		1			
	g. Did not drink alcohol during the past 30 days	49	17	11	2	

16. How often during the past 12 months did you have toothache or feel discomfort due to your teeth?	a. Often	1	1	2		0.313
	b. Occasionally	11	20	18	2	
	c. Rarely	5	7	9	2	
	d. Never	19	2	1	1	
	e. Don't know	20	2	4	1	
17. Any periodontal disease like gingivitis and periodontitis?	a. Yes	56	32	34	6	0.798
	b. No	1		1		
18. What level of education have you completed?	a. Secondary school completed	34	22	19	1	0.125
	b. Science stream	6	3	1		
	c. Commerce stream	1		4	1	
	d. Undergraduate degree	10	6	4	2	
	e. Postgraduate degree	5	1	6	2	
19. Considering your knowledge about the benefits of oral health care, how likely are you to recommend it your friends / colleague?	a. 0					0.000
	b. 1	1	1			
	c. 2					
	d. 3	1		4	1	
	e. 4	2	11	9	2	
	f. 5	53	21	20	2	

C. Social Economic Status (SES)

Questions	Options	SES				P value
1. How many natural teeth do you have?		Upper Middle	Lower Middle	Upper Lower	Lower	0.544
	a. No natural teeth					
	b. 1-9 teeth		1			
	c. 10-19 teeth	1				
	d. 20 teeth or more	93	15	5	14	
2. During the past 12 months, did your teeth or mouth cause any pain or discomfort?	a. Yes		1			0.531
	b. No	50	11	2	8	
	c. Don't know	7	1	1	1	

3. Do you have any removable dentures?	a. A partial denture			1	1	0.00
	b. A full upper denture		1			
	c. A full lower denture		1			
4. How would you describe the state of your teeth and gums?	a. Excellent	2	1		3	0.010
	b. Very good	20	5	1	1	
	c. Good	58	8	2	4	
	d. Average	14	1	2	6	
	e. Poor		1			
	f. Very poor					
5. How often do you clean your teeth?	a. Once a month		1			0.052
	b. 2–3 times a month	1	2			
	c. Once a week		1			
	d. 2–6 times a week	1				
	e. Once a day	50	4	3	4	
	f. Twice or more a day	42	8	2	10	
6. Do you use any of the following to clean your teeth?	a. Toothbrush	91	13	5	7	0.000
	b. Wooden toothpicks	2	1			
	c. Plastic toothpicks		1		1	
	d. Dental floss				1	
	e. Charcoal				1	
	f. Chew stick					
	g. Other	1			1	
7. Do you use toothpaste to clean your teeth?	a. Yes	92	15	5	13	0.397
	b. No	2			1	
8. Do you use a toothpaste that contains fluoride?	a. Yes	7	2	3	7	0.000
	b. No	87	13	2	7	
9. How long is it since you last saw a dentist?	a. Less than 6 months	7			3	
	b. 6–12 months	74	12	3	6	
	c. More than 1 year	8			3	

	but less than 2 years .					0.026
	d. 2 years or more but less than 5 years	3		1	1	
	e. 5 years or more	1	1			
	f. Never received dental care	1	2	1	1	
10. What was the reason of your last visit to the dentist?	a. Consultation/ Advice	2			1	0.000
	b. Pain or trouble with teeth, gums or mouth	11	1	3	9	
	c. Treatment/ follow-up treatment	25	5	1		
	d. Routine check up	56	9	1	4	
11. Because of the state of your teeth or mouth, how often have you experienced any of the following problems during the past 12 months?	(a) Difficulty in biting foods	1	1		1	0.000
	(b) Difficulty chewing foods	18	2	3		
	(c) Difficulty with speech/trouble pronouncing words.				1	
	(d) Dry mouth	1				
	(e) Felt embarrassed due to appearance of teeth.				1	
	(f) Felt tense because of problems with teeth or mouth	1				
	(g) Have avoided smiling because of teeth	2	1			

	(h) Had sleep that is often interrupted					
	(i) Have taken days off work					
	(j) Difficulty doing usual activities					
	(k) Felt less tolerant of spouse or people who are close to you					
	(l) Have reduced participation in social activities					
12. How often do you eat or drink any of the following foods, even in small quantities?	a. Fresh fruit	11	1			0.000
	b. Biscuits and cakes	5				
	c. Cream cakes		1			
	d. Sweet pies, buns					
	e. Jam or honey	1		1		
	f. Chewing gum containing sugar					
	g. Sweets/candy					
	h. Lemonade, Coca Cola or other soft drinks				2	
	i. Tea with sugar	19	2			
	j. Coffee with sugar	6	3			
13. How often do you use any of the following types of tobacco?	a. Cigars					0.187
	b. A pipe					
	c. Chewing tobacco					
	d. No	87	14	5	13	
14. How often did you go to the dentist during the past 12 months?	a. Once	54	8	2	2	
	b. Twice	20	2		7	
	c. Three times	8	1	1	2	
	d. Four times	5				

						0.145
	e. More than four times	2				
	f. I had no visit to dentist during the past 12 months	4	3		2	
	g. I have never received dental care/visited a dentist	1	1	2	1	
15. During the past 30 days, on the days you drank alcohol, how many drinks did you usually drink per day?	a. Less than 1 drink	1	1	1	2	
	b. 1 drink	16	1		5	
	c. 2 drinks	10	1			
	d. 3 drinks	5		1	2	
	e. 4 drinks	1				
	f. 5 or more drinks	1				
	g. Did not drink alcohol during the past 30 days	59	12	3	5	
16. How often during the past 12 months did you have toothache or feel discomfort due to your teeth?	a. Often	4				
	b. Occasionally	35	7	2	7	
	c. Rarely	16	3	2	2	
	d. Never	18	2		3	
	e. Don't know	21	3	1	2	
17. Any periodontal disease like gingivitis and periodontitis?	a. Yes	1	1			
	b. No	94	15	5	14	
18. What level of education have you completed?	a. Secondary school completed	61	11		4	
	b. Science stream	5		2	3	
	c. Commerce stream	4	1		1	
	d. Undergraduate degree	15	3	2	2	
	e. Postgraduate	9		1	4	
19. Considering your knowledge about	a. 0					

the benefits of oral health care, how likely are you to recommend it your friends / colleague?						
b. 1	1		1			0.001
c. 2						
d. 3	2	1	1	2		
e. 4	14	2	2	6		
f. 5	77	12	1	6		

## Discussion

Mouth is like mirror of our body and the foods we eat enter through our body passes through the oral cavity. Hence it very important to maintain the oral hygiene and practice good oral health and if it is ignored it can lead to many social problems (4). Almost 90 % of the people are not aware of the fact that presence of oral diseases which seen in mouth and can be a risk factor to various systemic diseases or any disorder (5). The most common disease which is seen in oral cavity is periodontitis and dental caries (6). Therefore prevention of the disease is required, so it's very important to do so through proper awareness of the oral hygiene and oral health practice to be done among the people. Keeping all this fact and measures in mind a study was done to understand the level of oral hygiene awareness and practice among naval personnel's correlation to their year of experience and social economic status (7).

The study was done among 150 naval personnel's residing in ship and naval base of all the different commands. The data was collected in the form of questionnaire which consists of 22 questions to evaluate the oral hygiene and oral health practice of naval personnel's. In this study we have 50 officers who include Captain and Commander and 100 sailors which include MCPO, CPO, PO and LS. In this study we have well educated officers and sailors who are undergraduate , science stream and commerce stream and belong to

upper middle , lower middle , upper lower , lower and having year of experience ranging from 0 to 10 year , 11 to 20 years , 21 to 30 years and More than 30 years.

Through this study it is found that naval personnel's residing in ships brushes at least once a day and those who are in base, majority brushes twice a day (8). But this doesn't mean that all of them have a good oral hygiene or oral health practice. But it is found that most of the naval personnel's of different rank , year of experience and social economic status uses tooth brush for brushing teeth ( $P < 0.01$ ). It is also seen the majority of personnel's of different rank and year of experience consumes alcohol 1 drink per day. It is also observed that ship residing personnel's are prone to periodontal and gingivitis and compared to personnel's residing in base around 80% of personnel's are prone to gingivitis and periodontitis. It is also observed that 50 % of personnel's changes their brush after 3 months when it becomes useless which can be traumatic to gum. Around 90% of personnel's use tooth paste containing fluoride and still there are 10 % personnel's who use powder like charcoal

Around 45 % of personnel's visit dental Centre once in a year. In that 10 % visit the dental Centre only on toothache or any aggravating pain. Since, serving personnel's get free dental and medical care not visiting the dental Centre once in 3 months determines the importance they give their oral health. Moreover being a



naval personnel's they don't have habits of taking smoking, pan chewing, and consuming other tobacco products (9).

A question was asked to access their knowledge about benefits about oral health care on the basis of 1 to 5 around 90 % personnel's are aware about their oral health ( $P < 0.01$ ). But as we know due their working pressure and all time serving for country and 24 x 7 working time, oral health care is poor. Few months ago, oral hygiene day was observed in Kochi command where oral hygiene awareness was given and tooth brushes were distributed [10]

### Conclusion

The study was done to access the level of awareness of oral hygiene and oral health practice among naval personnel's and its importance. The study tells that majority of the personnel's are not aware about oral hygiene practice and most of them are affected with bleeding gums and lacks oral health care. It is compulsory that dental surgeons of Indian navy will have to monitor each every naval personnel's and awareness is to be given about oral hygiene and practice through camps and importance of brushing and flossing through regular check-ups.

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