



Awareness Of Oral Hygiene Among Policemen in Mayiladuthurai

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ABSTRACT

Oral health is inevitably important as that of general health. Besides, The Oral cavity is regarded as 'The mirror' of general health as the oral manifestations acts as a delegate of the body's maladies. Oral hygiene is the habit of maintaining the mouth and teeth clean to get rid of dental problems such as dental caries, gingivitis, and Halitosis. Military (Armed forces, Air forces, Navy forces) and Policing are few of the most challenging occupations. As continual work pressure and stress exists among the police personnel in regulating the law and order, they tend to neglect their General health and also oral health. The aim of the survey based study has been carried out to analyse the oral hygiene practices followed by police personnel in Mayiladuthurai during their stressful lifestyle. This survey consists of 100 policemen. 15 self-administered questionnaires were prepared in google forms and distributed via online means. Descriptive statistics was carried out. Chi square analysis along with correlation was done. The results were expressed in the form of pie charts and bar graphs. This study concluded that there exists a moderate level of awareness regarding oral hygiene practices among the policemen in Mayiladuthurai. Moreover, public healthcare programmes and demonstrations can be held to establish furthermore knowledge about oral hygiene practices.

Keywords: Awareness; Survey; Oral hygiene; Policemen; Mayiladuthurai.

INTRODUCTION

Health is an Uncompromisable treasure, which is an overall Compilation of physical, mental and Social Well being. Oral health is inevitably important as that of general health. Besides, The Oral cavity is regarded as 'The mirror' of general health as the oral manifestations acts as a delegate of the body's maladies (Kulshrestha, 2017). Oral hygiene is the habit of maintaining the mouth and teeth clean to get rid of dental problems such as dental caries, gingivitis, and Halitosis (Bad breath) (Overman, 2005). Oral health is an indispensable part and is linked to systemic health (Kamble *et al.*, 2017). In order to achieve good oral hygiene, preventive measures should be taken. Proper oral health greatly reduces the chances of oral diseases and helps in promoting better lifestyle (Petersen, 2004). The World Health Organization signifies the essentiality of Good Oral hygiene, being an integral aspect of overall health (Petersen and Kwan, 2004)[8,9,10]. Numerous dental kits have been used in order to maintain oral health. Most primarily opted oral hygiene aids include toothbrush and toothpaste (Ainamo and Parviainen, 1979). Rest of the oral hygiene aids comprises Dental flosses, Toothpicks, Interdental cleaners, Mouth Rinses, Tongue cleaners, Rubber tip stimulators, Oral irrigators and so on... (Petersen *et al.*, 2005; Umanah and Braimoh, 2017).

The preference of a particular oral hygiene aid by an individual is usually based on the personal decision or guidance from the dental professionals (Davies, Davies and Ellwood, 2003). Moreover, Certain oral hygiene products are not manufactured for routine use, but are meant to be temporary and disposable like that of Floss and toothpicks (Löe, 2000). Dental problems are widely prevalent across the globe and have transformed into a universal burden (Alvarez, 1998). Oral health is ruled by diverse factors such as Dietary habits, Socioeconomic status, Environment etc.. and one among them is 'Occupation' (Institute and National Cancer Institute, 2020). Military (Armed forces, Air forces, Navy forces) and Policing are few of the most challenging occupations (Sutthavong, Cae-Ngow and Rangsin, 2009). Only a very few studies are related to the oral hygiene of cops. As continual work pressure and stress exists among the police personnel in regulating the law and order, they tend to neglect their General health and also oral health (Satapathy, Behera and Tripathy, 2009). Maintenance of oral

hygiene routine should be kept simple, and it has to be followed daily without any postponement (Paik *et al.*, 1994).

Nowadays, health is taken for granted rather than giving priority (Singh *et al.*, 2015). In Spite of having easy and quick access to dental care centers, people get dental diseases and problems due to lack of knowledge and negligence in diet and lifestyle. Owing to rapid tuning in the day and night shifts, police personnel keep missing their timely food, sleep and self care. As a result, their biological clock becomes unable to stick to any stable routine (Sohi *et al.*, 2014)

Our team has extensive knowledge and research experience that has translated into high quality publications (Choudhari and Thenmozhi, 2016; Govindaraju, Jeevanandan and Subramanian, 2017; Ravi *et al.*, 2017; Vikram *et al.*, 2017; Gupta, Ariga and Deogade, 2018; Hannah *et al.*, 2018; Kavarthapu and Thamaraiselvan, 2018; Pandian, Krishnan and Kumar, 2018; Ramamurthy and Mg, 2018; Ashok and Ganapathy, 2019; Ramesh *et al.*, 2019; Sharma *et al.*, 2019; Venu, Raju and Subramani, 2019; Wu *et al.*, 2019; Samuel, Acharya and Rao, 2020)

this vast research experience has inspired us to research about and oral hygiene related awareness studies and this vast research experience has inspired us to research about the oral hygiene of policemen in Mayiladuthurai. Therefore, this survey based study has been carried out to analyse the oral hygiene practices followed by police personnel in Mayiladuthurai during their stressful lifestyle.

MATERIALS AND METHODS

The data of this original research (survey) consisted of 100 policemen. A simple and randomised online survey was carried out to investigate the awareness of oral hygiene practices among policemen in Mayiladuthurai. Ethical approval for conducting the survey was given by the esteemed institutional research department via SRB form. 15 Self-administered questionnaires (including demographic details like age, gender) were framed and distributed to the participants through Online google forms link. The dependent variables include knowledge, awareness, lifestyle and the independent variables are age, sex and gender. The participants were advised to read the questions thoroughly and then begin to answer carefully. The data collected in google sheets was transferred to SPSS software. The data were validated and verified by the primary investigator and guide. Descriptive statistics was carried out. Chi square analysis was done. The results were statistically analysed.

RESULTS AND DISCUSSION

Figure 1 depicts that 49% of the participants were male and 51% of the participants were females. Figure 2 shows that 47% of the participants brush their teeth twice per day and 53% of the participants brush only once. Figure 3 states that 11% of the participants use vertical brushing technique, 16% of the participants use Horizontal brushing technique, 31% of the participants use circular brushing technique and 42% of the participants use all the above mentioned brushing techniques. Figure 4 shows that 68% of the participants clean their tongue while brushing. Figure 5 depicts that 75% of the participants changed their brush once in 6 months. Figure 6 states that 70% of the participants use mouthwash. Figure 7 shows that 64% of the participants visit the dentist only during any problem. Figure 8 shows that 71% of the participants use dental floss. In Figure 9, 67% of the participants responded that oral health is related to systemic health. In figure 10, 70% of the participants answered that they noticed bleeding in gums. In figure 11, 73% of the participants agreed that soft drinks/sweets affect their oral health. In figure 12, 75% of the participants responded that they use fluoridated toothpaste. In figure 13, 60% of the participants reported that they educate people about oral hygiene procedures.

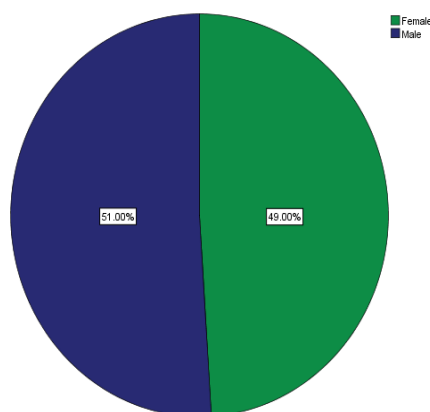


Figure 1: The pie chart depicts the percentage distribution regarding the gender of the study population. 51% of the participants were male (Blue) and 49% of the participants were female (Green).

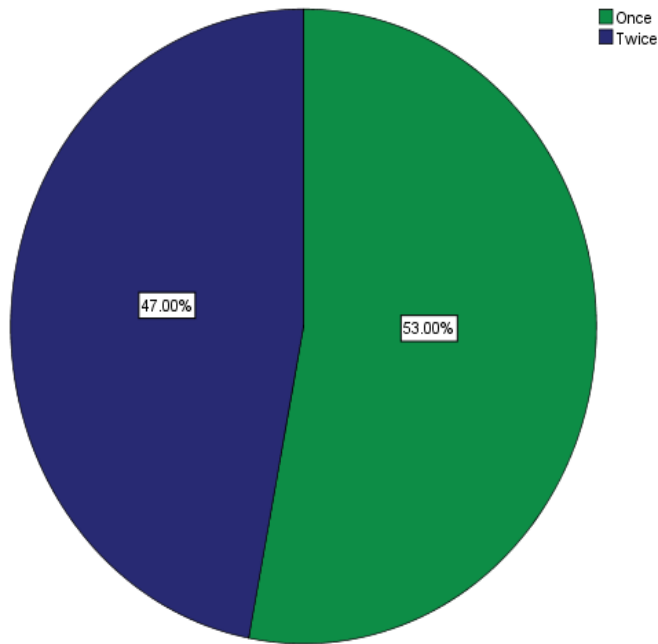


Figure 2: The pie chart depicts the percentage distribution of awareness regarding whether the participants brush their teeth once or twice a day. 47% of the participants reported twice a day (Blue) and 53% of the participants reported once a day (Green).

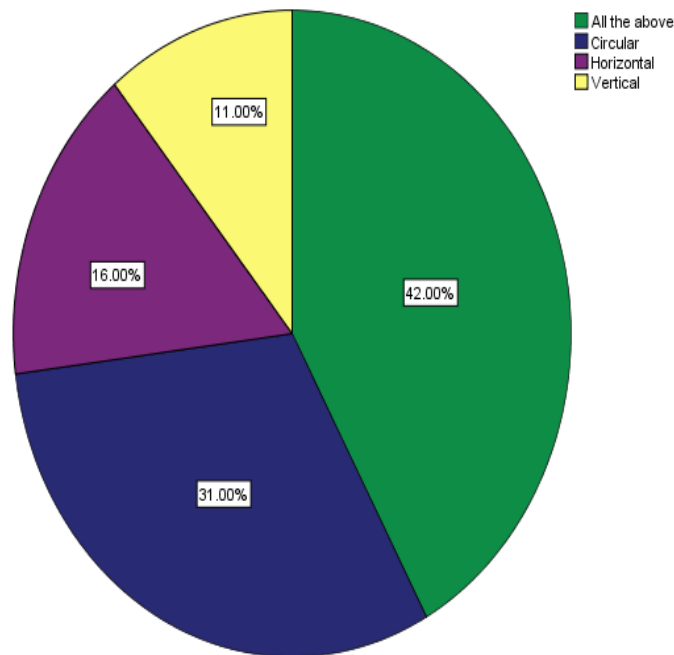


Figure 3: The pie chart depicts the percentage distribution regarding the brushing technique used by the participants. 11% of the participants use vertical brushing technique (Yellow), 16% of the participants use horizontal brushing technique (Violet), 31% of the participants use circular brushing technique (Blue) and 42% of the participants use all the techniques mentioned above (Green).

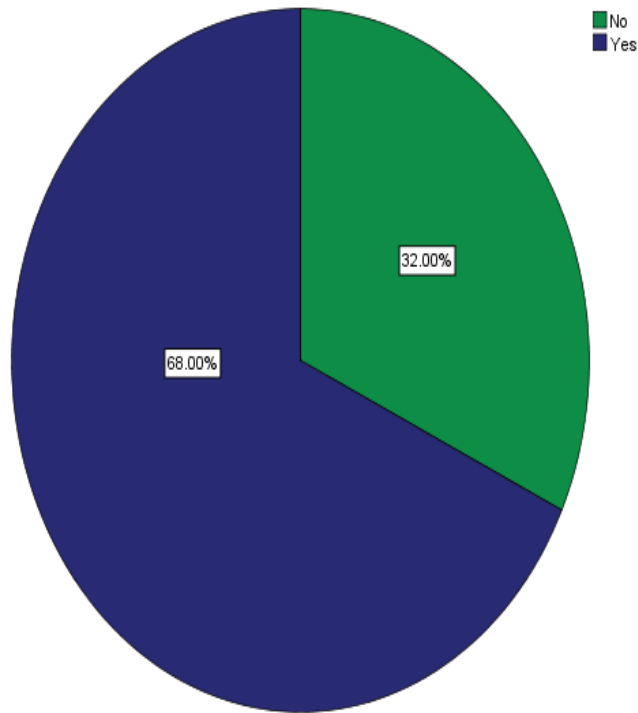


Figure 4: The pie chart depicts the percentage distribution regarding tongue cleaning. 68% of the participants reported yes (Blue) and 32% of the participants reported no (Green).

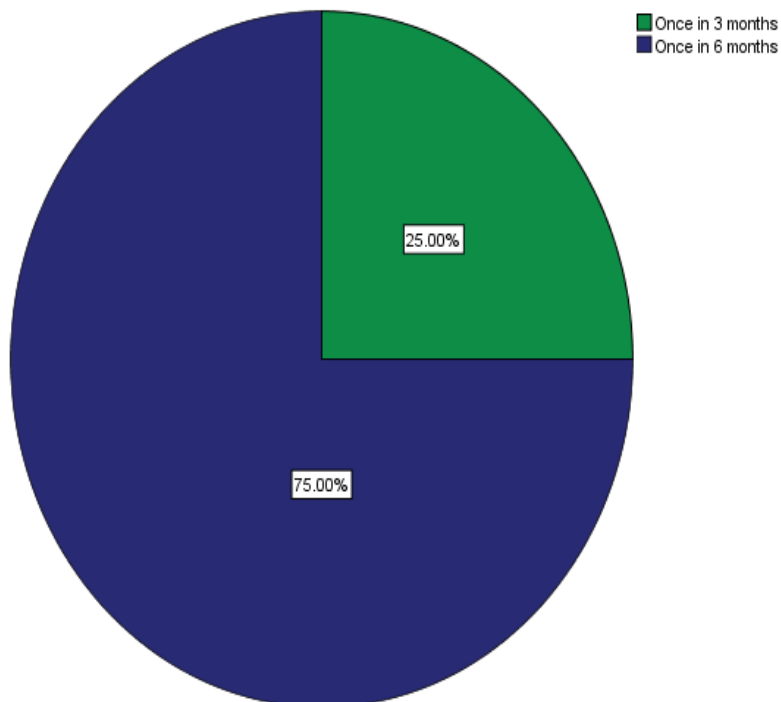


Figure 5: The pie chart depicts the percentage awareness regarding the time period of changing brush. 75% of the participants change their brush once in 6 months (Blue) and 25% of the participants change their brush once in 3 months (Green).

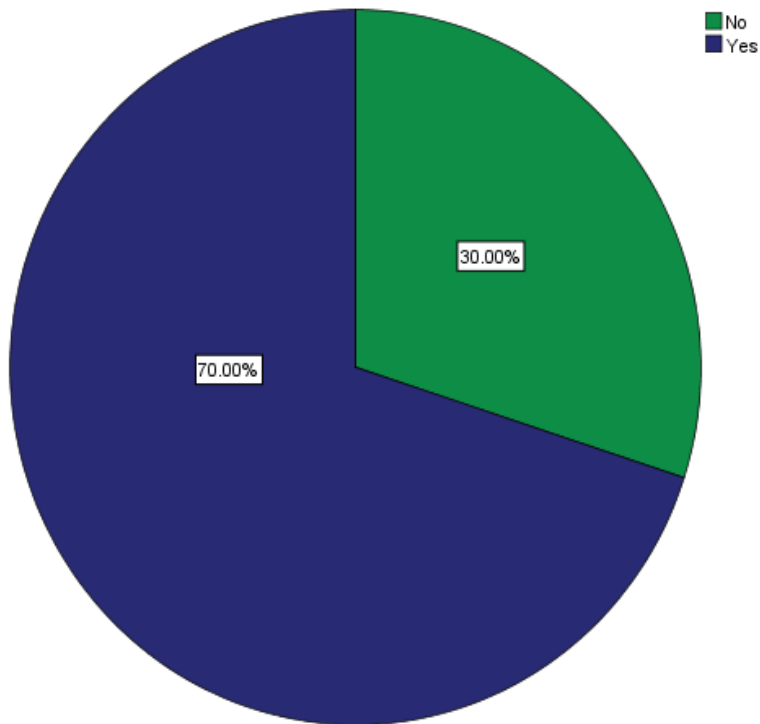


Figure 6: The pie chart depicts the percentage awareness regarding the usage of mouthwash. 70% of the participants reported yes (Blue) and 30% of the participants reported no (Green).

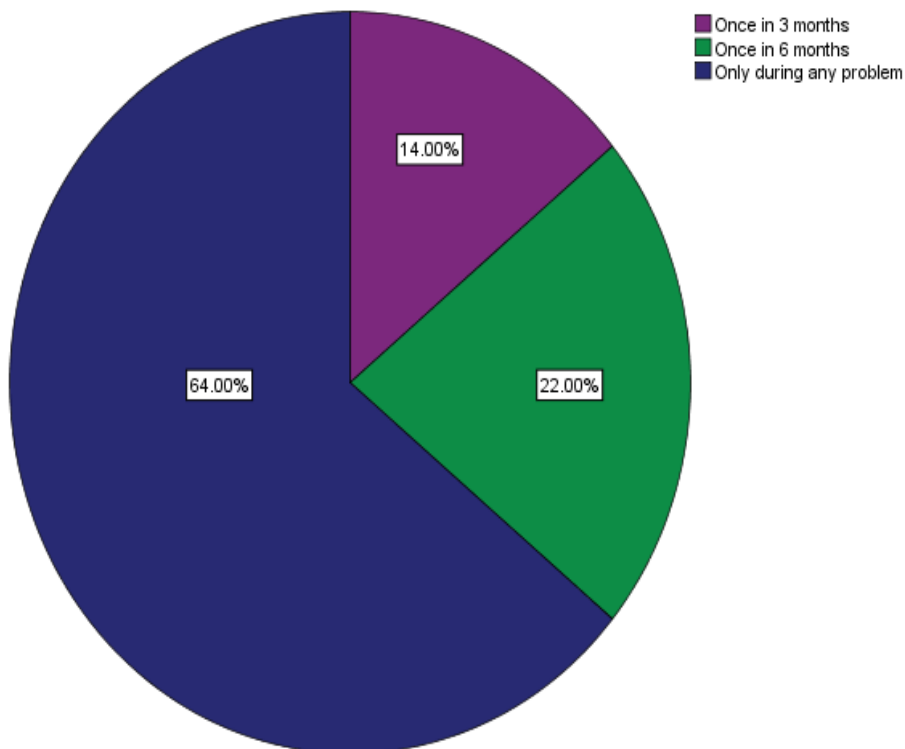


Figure 7: The pie chart depicts the percentage distribution of awareness regarding the visit of dental checkup. 14% of the participants reported once in 3 months (Violet). 22% of the participants reported once in 6 months (Green) and 64% of the participants reported only during any problem (Blue).

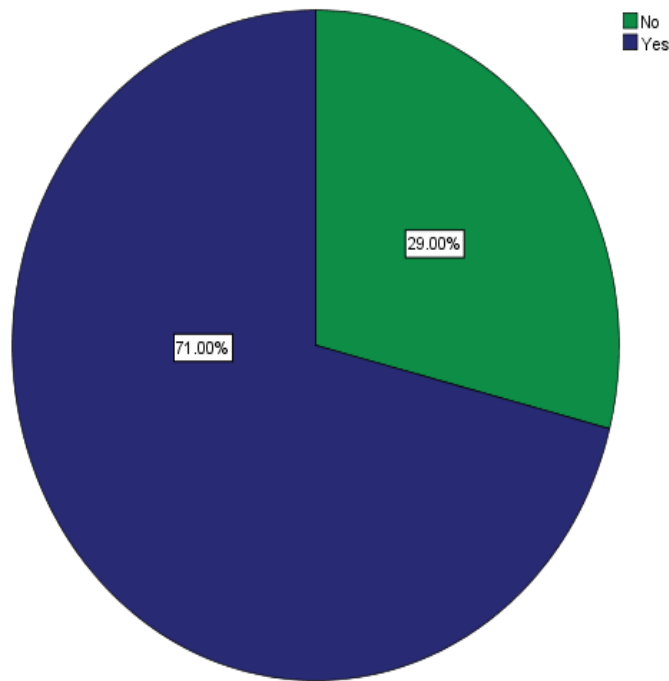


Figure 8: The pie chart depicts the percentage distribution of awareness regarding the usage of dental floss. 71% of the participants reported yes (Blue) and 29% of the participants reported no (Green).

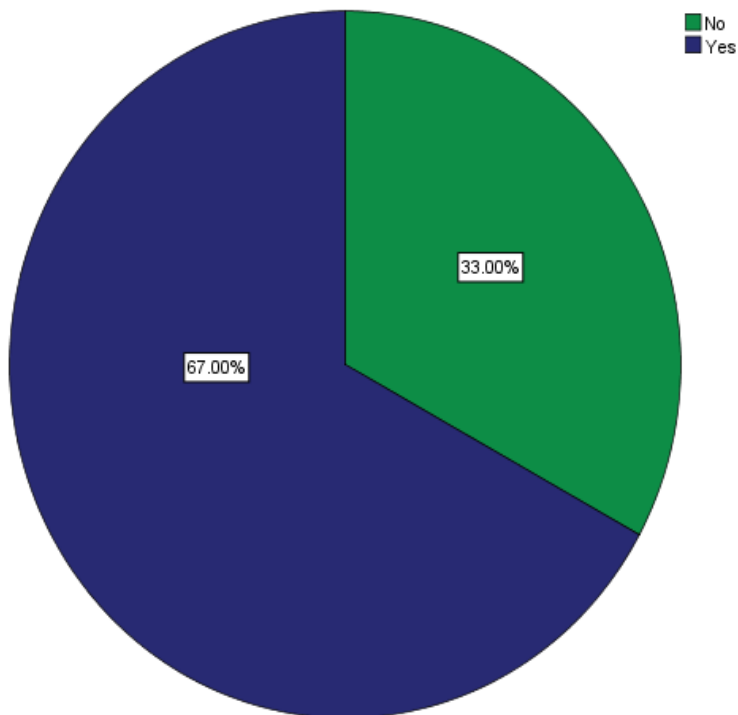


Figure 9: The pie chart depicts the percentage distribution of awareness regarding the relation of oral health to systemic health. 67% of the participants reported (Blue) and 33% of the participants reported no (Green).

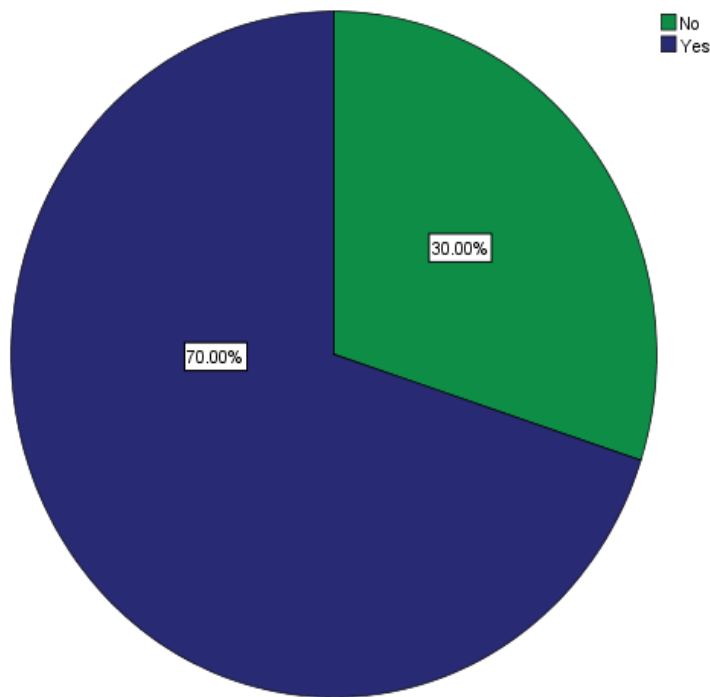


Figure 10: The pie chart depicts the percentage distribution of awareness regarding the observation of bleeding in gums. 70% of the participants reported yes (Blue) and 30% of the participants reported no (Green).

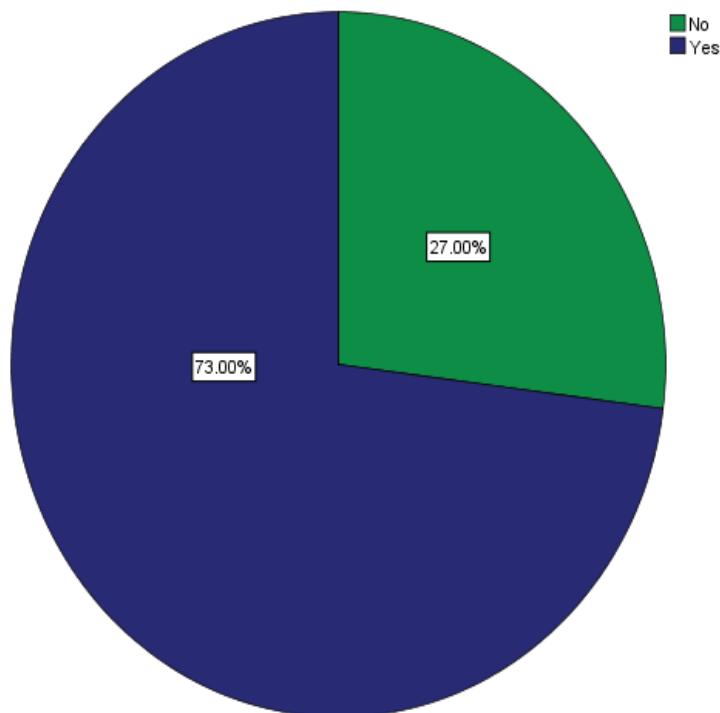


Figure 11: The pie chart depicts the percentage distribution of awareness regarding the effect of soft drinks/sweets on oral health. 73% of the participants reported yes (Blue) and 27% of the participants reported no (Green).

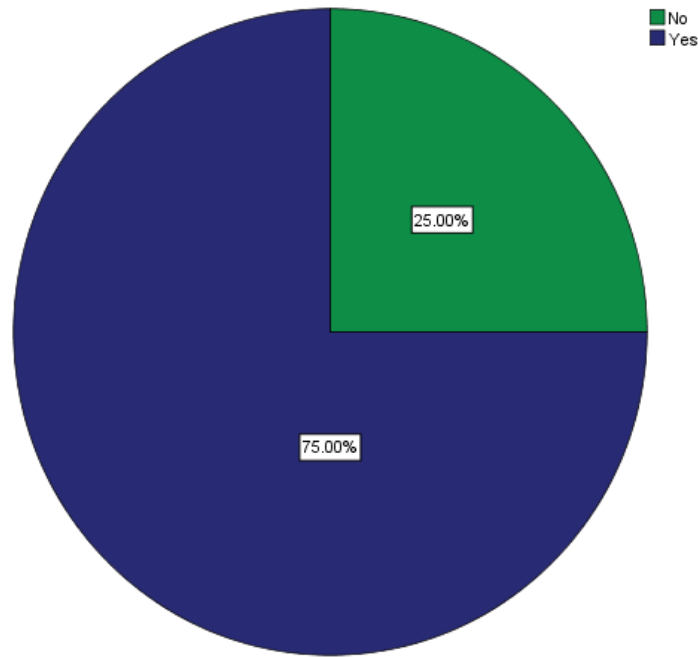


Figure 12: The pie chart depicts the percentage distribution of awareness regarding the usage of fluoridated toothpaste. 75% of the participants reported yes (Blue) and 25% of the participants reported no (Green).

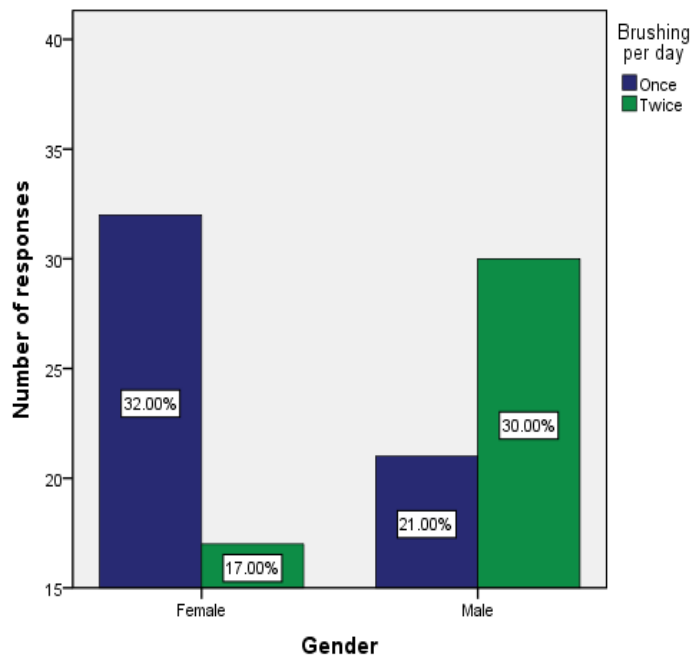


Figure 14: The bar graph represents the association between gender and the knowledge of participants regarding brushing daily. X axis represents the gender and Y axis represents the number of responses. Blue denotes once and green denotes twice. Association was done with Pearson's chi square test, chi square value: 0.013; DF value is 1: p value is 0.016 (<0.05). Hence, it is statistically significant.

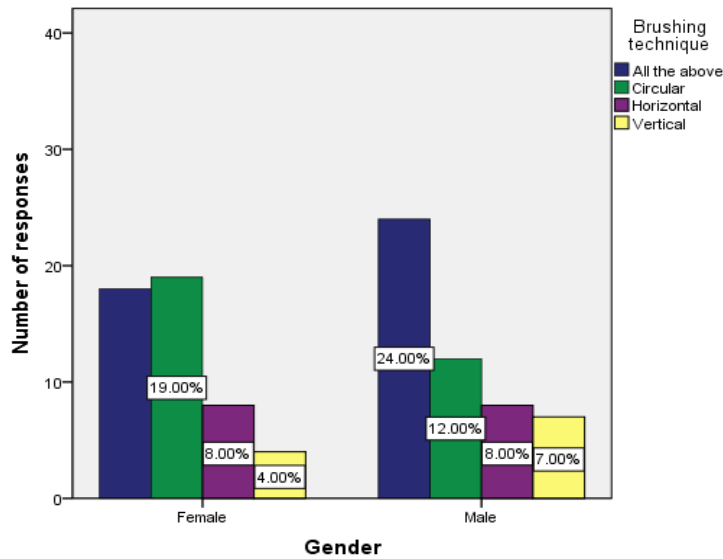


Figure 15: The bar graph represents the association between gender and knowledge of participants regarding the brushing technique used. Z axis represents the gender and Y axis represents the number of responses. Blue denotes all the brushing techniques, green denotes circular brushing technique, violet denotes horizontal brushing technique and yellow denotes vertical brushing technique. Pearson’s chi square test value is 3.217; DF value is 3; p value is 0.359. This proves that the knowledge regarding the brushing technique was similar in both the genders.

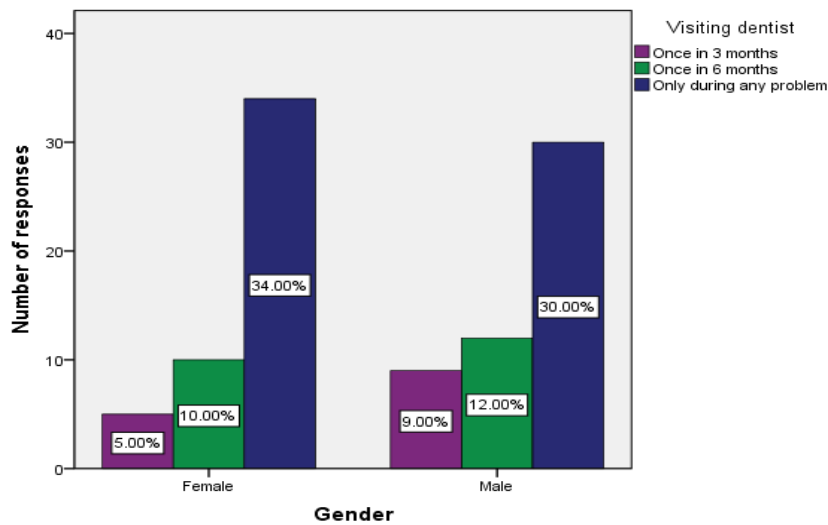


Figure 16: The bar graph represents the association between gender and the knowledge of participants regarding the dental checkup pattern. X axis represents the gender and Y axis represents the number of responses. Blue denotes only during any problem, green denotes once in 6 months and violet denotes once in 3 months. Pearson’s chi square test value is 1.535; DF value is 2; p value is 0.464 (>0.05). Hence, it is not statistically significant. This proves that the knowledge of dental checkup patterns among policemen was similar in both genders.

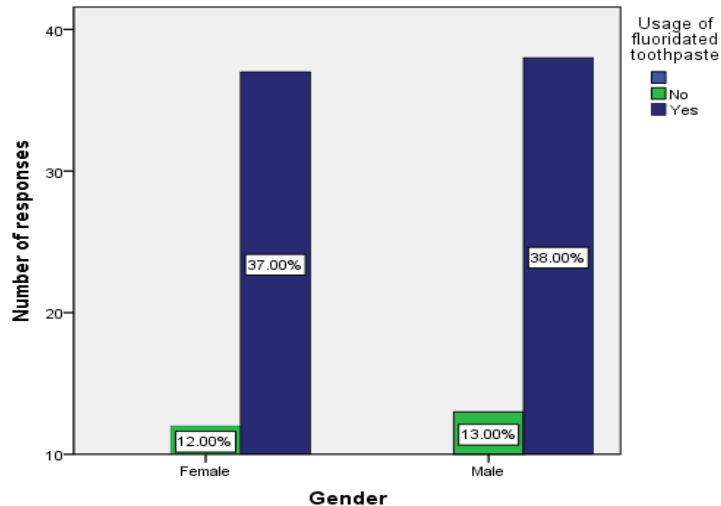


Figure 17: The bar graph represents the association between gender and the knowledge of participants regarding the usage of fluoridated toothpaste. X axis represents the gender and Y axis represents the number of responses. Blue denotes yes and green denotes no. Pearson's chi square test value is 0.013; DF value is 1; p value is 0.908 (>0.05). Hence, it is not statistically significant. This proves that the knowledge regarding the prosthodontists role in geriatrics was similar in both genders.

In a study conducted by Dr. C.L. Dilip among the police recruits in Karnataka regarding the health status, treatment requirements, knowledge and attitude of oral hygiene, it has been reported that 34% of the participants responded that they observed bleeding (Dilip, 2005). In a study conducted by Manish bhalla on Oral health status and treatment needs of police personnel in Mathura city, 25.7% of the participants observed bleeding in their gums (Bhalla *et al.*, 2015). A survey based study carried out by Aishwarya singh reveals that 86.1% of the participants brushed once a day, 51.1% of the participants brushed in horizontal motion. 15.2% of the participants experienced bleeding (Singh *et al.*, 2015). depicted that 96.22% of the participants brushed their teeth once, 3.78% of the participants brushed their teeth twice a day and have proved that people who brushed their teeth twice a day have a lower risk of dental caries (Bhardwaj *et al.*, 2012).

CONCLUSION

This study concludes that there is a moderate level of awareness among the policemen in Mayiladuthurai regarding oral hygiene practices. Furthermore awareness is required for enhancing the knowledge about proper oral hygiene practices and it has to be followed without any postponement. It establishes an awareness among police personnel to take care of their oral health as a part of general health. This survey based study can act as a baseline data for carrying out further health oriented awareness studies in future and can be added with more study population size.

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CONFLICT OF INTEREST

None declared.

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