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Sporting activity among dental students-a survey

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Abstract: A Dentist plays a crucial role in providing health education (General and Oral) to the community. Questions arise regarding their own health, which successively affects their patients' counselling for leading a healthy and a physically active life. Physical activity or exercise can improve your health and reduce the danger of developing several diseases. Itcan have immediate and long-term health benefits. Most over, regular activity can improve your quality of life. The current study aimed to study the practice of physical activity among Dental students. The aim of the survey study is to create awareness and knowledge among people about Sporting activity among dental students. A questionnaire about Sporting activities among dental students, the data are collected using google forms and the results were analysed through SPSS software. Descriptive statistical analysis was carried out and chi square test was used and p value was calculated. According to the data collected about 51% of them said that 1 hour of physical activity is needed. and 37% of them said 2 hours is needed and the remaining 12% of them said 1 hour is needed. About 65% of the people have normal BMI 18.5 to 24.9, 13% of them are underweight which is less than 18.5, 10% of them are overweight 25 to 29.9 and 12% of them are obese which is 30 or more. A gender comparison was done on awareness of practicing sports on a daily basis, improvement in work life and negative effects. It was found that there was statistically non significant difference(p-value >0.05) between the awareness among the males and females in this study. Knowledge and awareness were created among dental students about sporting activities.The prevalence of physical activity was high among dental health professionals in this study. This higher prevalence of physical activity in the study group may be because the respondents were all health professionals and their income, education, and occupation likely led them to engage in healthier behaviors.

Keywords: sporting activity, dentist, students, physical activity, survey, awareness.

INTRODUCTION

A dentist plays an important role in providing health to the community. For most dental professionals diseases have been strongly associated with unhealthy lifestyle habits, including inappropriate nutrition. Lack of exercise, alcohol consumption, smoking, caffeine overuse, and improper sleeping habits. Standard physical movement is a significant perspective on the avoidance of noncommunicable diseases. Physical inactivity is the fourth biggest contributor to worldwide mortality. (McGrady *et al.*, 2007)Positive effects are achieved primarily through physical activity, which is the main part of most sports.(Nowak, 2014) many secondary effects of sports also bring health benefits, such as psychosocial development, later onset, and less consumption of alcohol. (López Villalba *et al.*, 2016) In 2008, the world health organization [WHO] released a health report that globally, around 31% of adults aged 15 years and over were insufficiently physically active(Bastos, Araújo and Hallal, 2008). In addition, Indian council of medical research noncommunicable disease risk factor surveillance reported that job related moderate and vigorous and intense physical activity in the urban,(Ariga *et al.*, 2018) rural and slum population was 35.8%, 55.2%, and 61% respectively, where leisure time, moderate and vigorous-intensity physical activity was 15.6%, 12.1%, and 14% respectively (Jyothi *et al.*, 2017).

Like the general population, healthcare professionals like dentists are commonly found to have variously noncommunicable diseases and getting obese. Dental professionals play an important role in providing health education [both general and oral] to the community/ patients. Working for long hours, stress, and paucity of

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time, a question arises regarding their health and health practices (Duraisamy *et al.*, 2019). A number of studies indicate that doctors who exercise regularly were also more effective in helping patients to practice regular physical exercises. (Gaertner, Firor and Edouard, 1991; Brotons *et al.*, 2005) Most of the studies conclude that physicians are physically more active than the general population (Lobelo, Duperly and Frank, 2009), with physical activity being associated with gender, however, a grim picture is seen amongst the dental professionals of India, where almost 40.8 % of the dental professional leads a sedentary lifestyle and are at a greater risk for developing the chronic disease. (McGrady *et al.*, 2007; Frank and Segura, 2009) The prevalence of work-related musculoskeletal Complaints in dentists is high and therefore the past 20 years have witnessed a pointy rise within the incidence of varied disorders.The prevalence of general musculoskeletal pain may be a range between 64%- 93%. The most affected region for Pain in dentists . have been shown to be the back and heck, While the hand and wrist regions were the most common region for dental hygienists (Hayes, Cockrell and Smith, 2009; Selvan and Ganapathy, 2016) According to a study, the frequency of these. musculoskeletal disorder . is seen higher among females dentists which are nearly double than the males. Women showed a higher frequency of intense pain involving the Cervical, lumbar, dorsal, and wrist area. (Harutunian *et al.*, 2011; Thakar *et al.*, 2015)Our team has rich experience in research and we have collaborated with numerous authors over various topics in the past decade (Deogade, Gupta and Ariga, 2018; Ezhilarasan, 2018; Ezhilarasan, Sokal and Najimi, 2018; Jeevanandan and Govindaraju, 2018; J *et al.*, 2018; Menon *et al.*, 2018; Prabakar *et al.*, 2018; Rajeshkumar *et al.*, 2018, 2019; Vishnu Prasad *et al.*, 2018; Wahab *et al.*, 2018; Dua *et al.*, 2019; Duraisamy *et al.*, 2019; Ezhilarasan, Apoorva and Ashok Vardhan, 2019; Gheena and Ezhilarasan, 2019; Malli Sureshbabu *et al.*, 2019; Mehta *et al.*, 2019; Panchal, Jeevanandan and Subramanian, 2019; Rajendran *et al.*, 2019; Ramakrishnan, Dhanalakshmi and Subramanian, 2019; Sharma *et al.*, 2019; Varghese, Ramesh and Veeraiyan, 2019; Gomathi *et al.*, 2020; Samuel, Acharya and Rao, 2020)

MATERIALS AND METHODS

A questionnaire is prepared about sporting activity and circulated Using the Online Survey portal [google form] among 100 dental students from Saveetha Dental College. The questionnaire had questions eliciting the responses about the various aspects of sporting activities among dental students .The data were extracted and analyzed. The results are extracted in an excel sheet and the Collected data are analyzed using statistical packages for social science (SPSS) software . Descriptive statistical analysis was carried out to analyse sporting activity trends and Chi square analysis was used to test the association between the gender of the participants and their sporting practices, improvement in the quality of life and any perceived negative impact on health .

RESULTS AND DISCUSSION

Overall, 80% of the 100 respondents were physically active which is a bit surprising, with activity at work and commuting activity were the main contributors of physical activity. With increasing age, there was a decrease in physical activity with more sedentary behavior, professionals in the age group of 18–30 years, who were single, those with Bachelor's Degree so The first goal of the research article is to create awareness and knowledge about physical activity for healthy life.

When randomly collected the response for the given question, among them about 80% of them are male, 20% of them are female(Figure 1)(Vijayalakshmi and Ganapathy, 2016) From figure 2 we say that about 80% of them are practicing sports on a daily basis which seems good . Previous studies also state that dentists report a lower level of physical activity compared to other populations (Sharma and Golchha, 2011)From figure 3 According to the response collected, 75%. of them Said sporting activity is important among dental Professionals because it improves your health. and reduces the risk of developing several diseases. According to previous research, as you can see the treatment for(Ganapathy, Kannan and Venugopalan, 2017) non-communicable diseases, like coronary heart disease or type 2 diabetes's Mellitus, causes rising costs for the health system. Physical activity is supported to reduce the risk of their diseases. Cross-sectional studies showed that physical activity is associated with better health and that it could also prevent the development of diseases (Ashok and Suvitha, 2016).From figure 4 According to the data collected about 51% of them said that 1 hour of physical activity is needed. and 37% of them said 2 hours is needed and the remaining 12% of them said 1 hour is needed (Ajay *et al.*, 2017). According to a previous study it is concluded in Copenhagen City Heart that Tested the intensity of physical activity and duration of physical activity which is a better way to improve fitness and the result is intensity plays a major role in physical health than the duration (Laursen *et al.*, 2012). Figure 5 About 65% of the people have normal BMI 18.5 to 24.9, 13% of them are underweight which is less than 18.5, 10% of them are overweight 25 to 29.9 and 12% of them are obese which is 30 or more. It should be understood that in western population-based studies, generally the mean or median of BMI is about 24 to 27. (Nuttall, 2015) This question (Figure 6) was basically to give knowledge that sporting activity is not only to have physical wellness, it also helps to Change and help in various aspects of Life. Research has shown that although people generally recognize. the importance of teaching life skills through sports they often lack confidence (Danish, Nellen and Owens, 1996; Reiner *et al.*, 2013) Figure 7 says there are a lot of different categories of sporting activities like

Games, Athletics, Gymnastics, Dance, Swimming, Outdoor activities according to which the responded percentages are 21%, 29%, 12%, 14%, 5%, and 19% respectively(Ashok *et al.*, 2014). From figure 8 we conclude that about 98% of the people who responded to think practicing sports improve your work life(Venugopalan *et al.*, 2014). Finally from figure 9 we say About 92% of the people who responded think sports do not have any negative effects and the remaining 8% do think sports have negative impacts(Basha, Ganapathy and Venugopalan, 2018; Kannan and Venugopalan, 2018)Males are practising more sports than females with a statistically significant difference (Pearsons's Chi square test;, P=0.01,P>0.05).(Figure 10).Male population shows more improvement in their work life by practicing sporting activity than females. However, this is statistically not significant. (Pearsons's Chi square test;, P= 0.475, P>0.05).(Figure 11). More males perceive no negative effects of sports on heath than the females,however this is statistically not significant..(Pearsons's Chi square test;, P= 0.712 ,P>0.05)

Also it is important that the dentist to be aware of the possible health effects Of obesity and be Counselled to take up physical activity (Hallal and Victora, 2004). But other results indicate the dentist reports a lower level of physical activity as compared to the general population((Srilatha *et al.*, 2016).Our institution is passionate about high quality evidence based research and has excelled in various fields ((Pc, Marimuthu and Devadoss, 2018; Ramesh *et al.*, 2018; Vijayashree Priyadharsini, Smiline Girija and Paramasivam, 2018; Ezhilarasan, Apoorva and Ashok Vardhan, 2019; Ramadurai *et al.*, 2019; Sridharan *et al.*, 2019; Vijayashree Priyadharsini, 2019; Chandrasekar *et al.*, 2020; Mathew *et al.*, 2020; R *et al.*, 2020; Samuel, 2021)

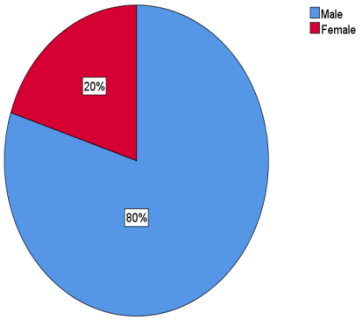

Fig.1: The pie chart shows the percentage of responses given by participants about gender about 80%(Blue) of them are male, 20%(red) of them are female

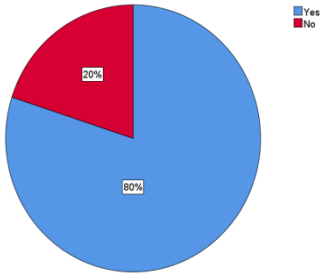

Fig.2: The pie chart shows the percentage of responses given by participants about Practicing sports on a daily basis 80%(Blue) of them are practicing sports on a daily basis and 20% (red) of them do not practice sports on a daily basis

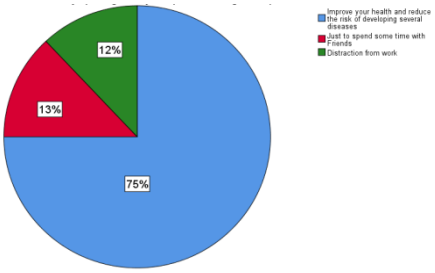

Fig.3: The pie chart shows the percentage of responses given by participants about the importance of sporting activity among Dental professionals about 75%(blue) of them Said sporting activity is important among dental Professionals because it improves your health. and reduces the risk of developing several diseases 13%(red) of them said just to spend time with friends 12%(green) of them said distraction from work

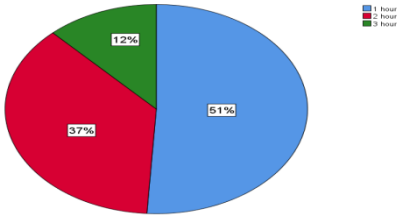

Fig.4: The pie chart shows the percentage of responses given by participants about duration of physical activity needed 51%(Blue) of them said that 1 hour of physical activity is needed. and 37%(red) of them said 2 hours is needed and the remaining 12%(green) of them said 1 hour is needed (Ajay et al., 2017).

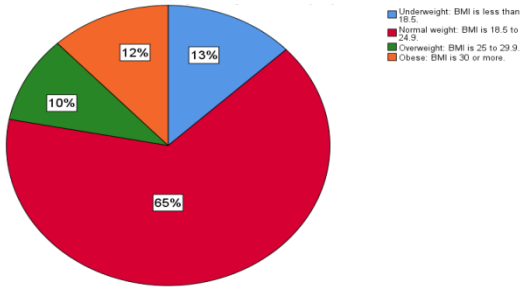

Fig.5: The pie chart shows the percentage of responses given by participants about their BMI 65%(red) of the people have normal BMI 18.5 to 24.9, 13%(Blue) of them are underweight which is less than 18.5, 10%(green) of them are overweight 25 to 29.9 and 12%(orange) of them are obese which is 30 or more.

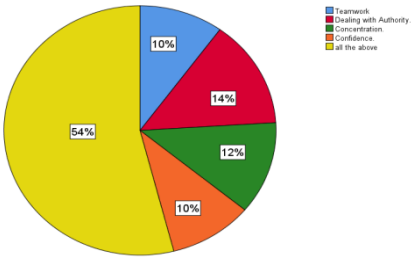

Fig.6: The pie chart shows the percentage of responses given by participants about developing life skills through sporting activity about 10%(blue) of them said teamwork 14%(red) of them said dealing with authority 12%(green) of them said concentration 10%(orange) of them said confidence and 54%(yellow) of them said all of the above

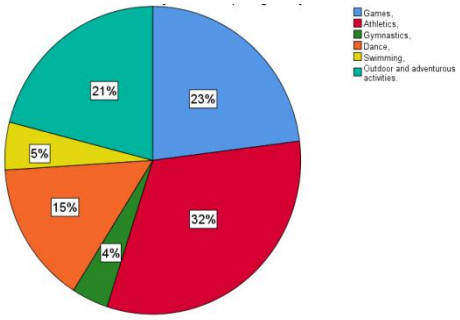

Fig.7: The pie chart shows the percentage of responses given by participants about their favourite sports 23%(blue) said Games, 32%(red) said Athletics,4%(green) said Gymnastics, 15%(orange) said Dance,5%(yellow) Swimming, 21%(turquoise) said Outdoor activities

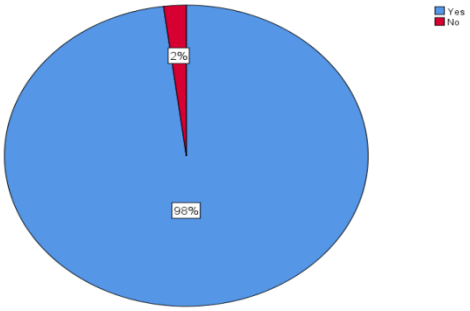

Fig.8: The pie chart shows the percentage of responses given by participants about improvement of work life about 98%(Blue) said yes and 2%(red) said no

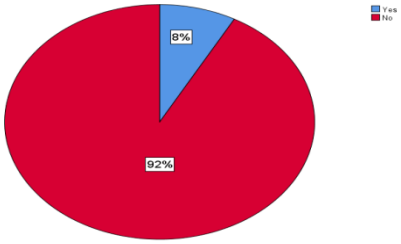

Fig.9: The pie chart shows the percentage of responses given by participants about negative effects about 92%(red) of them said yes and 8%(blue) of them said no

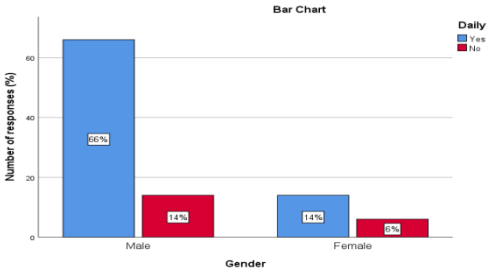

Fig.10: Bar graph showing the association of Gender and practicing sports on a daily basis. X axis represents the Gender of the responded population and Y axis represents the number of responses, in which students Practicing sports(blue) and those who are not practicing sports(red) on a daily basis. 66 % of males practice sports and only 14% of females practice sports.Males are practising more sports than females with a statistically significant. difference (Pearsons's Chi square test; P =0.01 P<0.05).

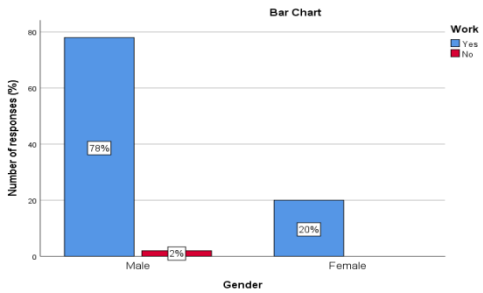

Fig.11: Bar graph showing the association between Gender and about work life improvement. X axis represents the Gender of the responded population and Y axis represents the number of responses, whether there was improvement in work life(blue) or not(red). Male population shows more improvement in their work life by practicing sporting activity than females. However, this is statistically not significant. (Pearsons's Chi square value- 0.510, P= 0.475, P>0.05)..

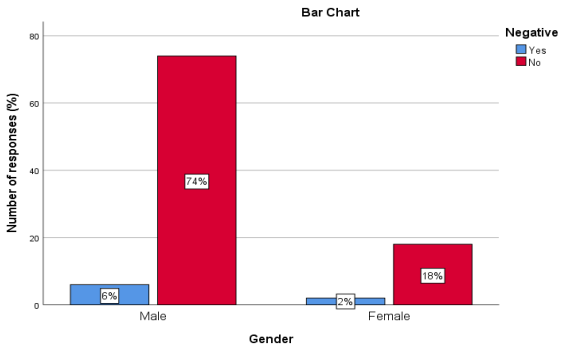

Fig.12: Bar graph showing the association between of Gender and negative effects of sporting activities. X axis represents the Gender of the responded population and Y axis represents the number of responses, in which there are negative effects (blue) or not (red) by practising sporting activity. More males perceive no negative effects of sports on heath than the females, however this is statistically not significant. (Pearsons's Chi square value- 0.136, P= 0.712 ,P>0.05)

CONCLUSION

The prevalence of physical activity (80%) was high among dental health professionals in this study and also male population are practising more sporting activity on a daily basis than female thus shows more improvement in their work life. This higher prevalence of physical activity in the study group may be because the respondents were all health professionals and their income,education, and occupation likely led them to engage in healthier behaviors. Since the personal habits of professionals influence their patients, a healthy lifestyle should be encouraged, and further efforts should be made to promote activity among those who are physically inactive. Change in the Dental Curriculum for dentists College for the population to include at least 30 min of physical excessive for their student.

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