Awareness of conventional risk factors among dental professionals – A survey

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ABSTRACT

This study aims to determine the prevalence of the conventional risk factors among dental professionals. All conventional risk factors are significantly associated with the risk of coronary artery disease. Tobacco use also a conventional risk, current smoking >10 cigarettes or beedi per day is associated with a significant increase in the risk of heart attack. A cross-sectional analysis was conducted on Saveetha Dental College, Tamil Nadu, India, using postgraduate students. Using centers for disease control and prevention growth charts to determine the percentage. 20 questionnaires were prepared for 100 postgraduate students to conclude the awareness about conventional risk factor among dental professionals. About 87.5% of the postgraduates had awareness about conventional risk factors.

Keywords: Risk factors, awareness, cross sectional, heart attack

Introduction

It is commonly suggested that more than 50% of patients with coronary heart disease (CHD) lack any of the conventional risk factors (cigarette smoking, diabetes, hyperlipidemia, and hypertension). CHD risk factors are conditions or habits that raise your risk of CHD and heart attack.[1] These risk factors also increase the chance that existing CHD will worsen. CHD, also called coronary artery disease, is a condition in which a waxy substance called plaque builds up on the inner walls of the coronary arteries.[2] These arteries supply oxygen-rich blood to your heart muscle.[3] Plaque narrows the arteries and reduces blood flow to your heart muscle. Reduced blood flow can cause chest pain, especially when you are active. Eventually, an area of plaque can rupture (break open).[4] This causes a blood clot to form on the surface of the plaque. If the clot becomes large enough, it can block the flow of oxygen-rich blood to the portion of heart muscle fed by the artery. Blocked blood flow to the heart muscle causes a heart attack. Diabetes mellitus caused by family history, environmental factors, presence of damaging immune system cells, dietary factors, and geography.[5] Anemia is the loss of blood from the body which is caused by insufficient nutritional intake and other hereditary factors.[6] Musculoskeletal disorders (MSD) or MSDs are injuries and disorders that affect the human body’s movement or musculoskeletal system (i.e., muscles, tendons, ligaments, nerves, discs, blood vessels, etc.). Common MSDs include carpal tunnel syndrome (tendonitis, muscle/tendon strain).[7]

Materials and Methods

A cross-sectional analysis was conducted on Saveetha Dental College using postgraduate students. Using centers for disease control and prevention growth charts to determine the percentage. 20 questionnaires were prepared for 100 postgraduate students to conclude the awareness about conventional risk factor among dental professionals.[8] Statistics the data were entered into Microsoft Excel and analyses were done using SPSS software and represented in graph form.[9]

Result and Discussion

Awareness about CHD 67% of the dentist responds on high lipid level, whereas for alcohol 70% and hypertension 70% are attained.
The dentist believes that due to hypertension and alcohol consumption coronary disease is caused, but the awareness was found around 60%, whereas 40% of the postgraduate is unaware about the consequence (Graph 1: Awareness of CHD).

**Awareness of diabetes mellitus**

Radiation exposure 67%, viral illness 70%, and geography 62% were responded by the postgraduate dentist and they believe due to viral illness diabetes mellitus occurs. About 79.3% of the dentist were found awareness about diabetes mellitus, whereas 18.7% of the postgraduates is unaware about the consequence (Graph 2: Awareness of diabetes mellitus).

**Awareness of repetitive strain injuries (RSI)**

About 67% of the dentist responds on flexing of the wrist, whereas carpal tunnel syndrome 68% and little finger disorder 62% are obtained. The postgraduates dentist believe due to carpal tunnel syndrome RSI were caused. 88% of the dentist had awareness about repetitive strain injury (Graph 3: Awareness of RSI).

**Awareness about MSD**

Vibration and temperature 67%, varied pace of work 68%, and lack of influence of job 62% were responded by the postgraduates dentist. They believe varied pace of work contributes to the MSD. Dentists of 60.2% had an awareness of MSD whereas 39.8% unaware about the MSD (Graph 4: Awareness of musculoskeletal disorder).

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Graph 1: Awareness of coronary heart disease

Graph 2: Awareness of diabetes mellitus

Graph 3: Awareness of repetitive strain injuries

Graph 4: Awareness of musculoskeletal disorders

Graph 5: Awareness about anemia
Awareness of anemia

About 67% of the dentist responds on hereditary, whereas excessive blood loss 67% and stomach ulcer 70% are attained. The postgraduates believe that due to stomach ulcer anemia occurs. About 70.2% of the dentist had an awareness of anemia, whereas 29.7% of the dentist was unaware about the consequence (Graph 5: Awareness about anemia).

Awareness about chronic kidney disease

Iron deficiency anemia, which increases in prevalence as kidney function decreases, is especially prevalent in those requiring hemodialysis. It is multifactorial in cause but includes increased inflammation, reduction in erythropoietin, and hyperuricemia leading to bone marrow suppression. Anemia 70% and hypertension 60% were responded by the postgraduates. Higher percentage was found to anemia then hypertension. About 82.3% of the dentist were known awareness about chronic kidney disease (Graph 6: Awareness about chronic kidney disease).

Conclusion

Although all the conventional risk factors had ever been heard of by at least one dentist, their overall knowledge about awareness of conventional risk factors is good. Hence, this survey concludes that almost all the dentist have awareness about at least one conventional risk factors.

References