

A Survey on problems faced by Dentists treating patients with Cardiac problems

Sukanth.R, S.Sangeetha

Running title: Problems faced by dentists with heart patients

AUTHORS:

Sukanth R

Saveetha dental college and hospitals,
Saveetha institute of medical and technical sciences,
152001101.sdc@saveetha.com

Saveetha university
Chennai 600077

Mrs.S.Sangeetha

Lecturer,
Saveetha dental college and hospitals,
Saveetha institute of medical and technical sciences,
Saveetha university
Chennai- 600077

Mail id: sangeethas.sdc@saveetha.com

Corresponding author

Mrs.S.Sangeetha

Lecturer
Saveetha dental college and hospitals,
Saveetha institute of medical and technical sciences,
Saveetha university

No.162, Poonamallee Highroad, Velappanchavadi, Chennai-600077

Mobile number: +91 9944953239

Mail id: sangeethas.sdc@saveetha.com

Abstract:

Cardiovascular disease tends to have many complications and also has many impacts over the dental health so the dentists treating the patients must take up special considerations and many precautions must be taken while any kind of treatment is given. Cardiovascular drugs do not work in the way we need it to work while we administer them with some other kinds of drugs and may lead to mild to potential fetal drugs. The first line of defense that should be taken is with the dental treatments in referral and finding of cardiovascular disease. Hence dentists face many problems in treating patients with cardiovascular disorders. Even dentists may face problems in the behavior of their patients due to their hypertensive nature. The upcoming would make us clear whether dentists really face problems and how they overcome while treating a cardiovascular patient.

Aim: To gather information about the problems faced by dentists in treating patients with cardiovascular problems

Materials and methods: A self made questionnaire with 10 questions was circulated among dentists of different places through online platform “ google forms”The data was collected and analysed using SPSS software and the final results were produced.

Result :The results clearly show us that there are many problems faced by dentists in treating patients with cardiac problems, but dentists never hesitate to treat such patients.

Conclusion: Dentists feel difficulties in treating their cardiovascular diseased patients but they show their concern and interest in treating them.

Key words: Cardiovascular disorders, administered, hypertensive, cardiovascular drugs, cerebrovascular disorder.

Introduction

Cardiovascular disease is one of the main causes of death in the developing world, the cardiovascular disorders that cause more death are Ischemic heart disease and Cerebrovascular disease(1). Patients with cardiovascular disease are considered as risky cases in the dental practice (2),(3,4), that too in absence of proper medical control (5–12).

Hence this becomes important for dental surgeons to know the medical problems of each and every patient ,and the possibilities of the dental treatment for them (13). In addition to that, surgeons must be able to know the medical emergencies and adopt the opportune measures to avoid or treat them as quickly as possible(14). Other cardiovascular problems such as Arterial hypertension which has high prevalence and might cause Angina myocardial infarction and which predominantly causes pain over the jaw region and hence the pain is thought to be caused

due to some dental problems(15). Acute myocardial infarction also called as no pain infarction is sensed while undergoing and common over elderly people.(16)Other common diseases may include Arrhythmias, heart failure, endocarditis etc.

The aim of this study is to know problems faced by dentists in treating patients with cardiac problems and whether dentists show interest in treating such patients.

MATERIALS AND METHODS:

A descriptive cross-sectional study was conducted to know the problems faced by dentists in treating patients with cardiac problems. Approval was obtained from the institutional review board to conduct an online survey. The survey was conducted among 100 dentists with 10 self administered questions, which was distributed through an online platform (Google Forms) and the responses were collected and coded in Google sheets and Microsoft Excel respectively. The coded results were sent to SPSS software and the results were represented as bar graphs and pie charts. Chi square test was used to compare the results and some properties such as the age and educational level of the dentists were considered in making graphs. Sample size: 100

The questions and the options given for the questions are given below

- 1) How often does a heart patient visit you?
 - a) often b) very often c) rarely d) never
- 2) How does a hypertensive patient react to you?
 - a) Normal b) tensed c) relaxed d) not noted
- 3) Are you comfortable treating a heart patient?
 - a) Happy b) comfortable c) not interested d) not noted
- 4) Do patients understand when you explain them about the complexity of the treatment
 - a) Yes b) they pretend to understand c) no d) never explained but take precautions
- 5) Is wound healing proper in those patients?
 - a) Yes b) no
- 6) Do you take extra care while extracting tooth in heart patients?
 - a) Yes b) no

- 7) Are people aware of the consequence due to heart disease over their dental health
 a) Yes b) no
- 8) Do you need to convince patients before the treatment on the precautions to be taken
 a) Yes b) no
- 9) Do medications of the patient with cardiovascular disease change with a normal patient
 a) Yes b) no
- 10) Was this survey useful?
 a) Yes b) no

Results:

The results for each question are represented below in the form of graphs.

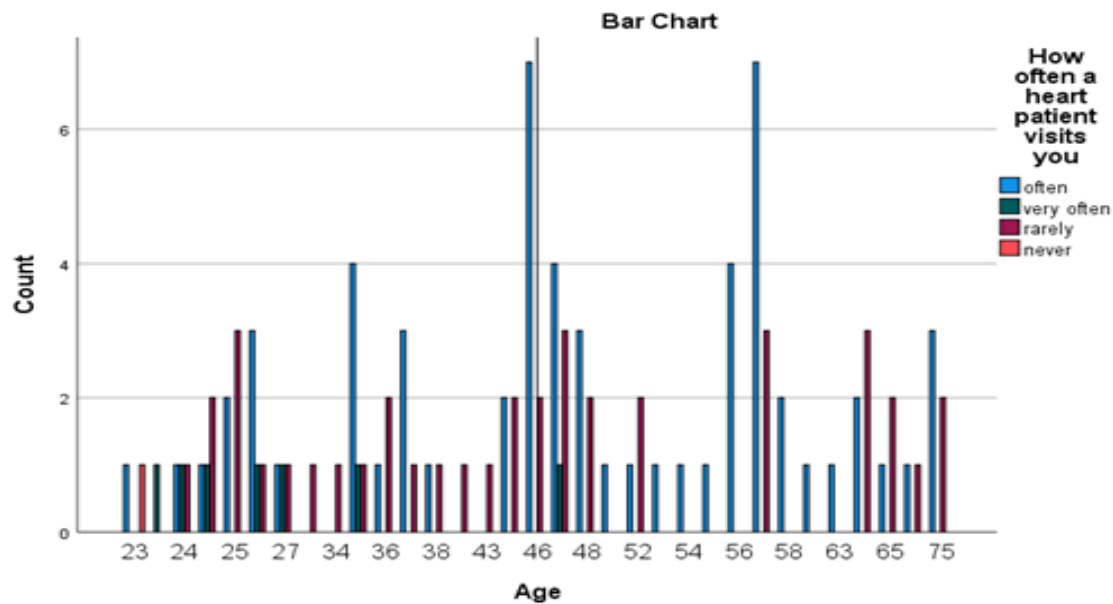


Figure 1 represents the different age groups and their responses to the question “how often a heart patient visits you’ the present observation is significant (0.194) which was calculated using Pearson Chi square test with confidence level 95%.

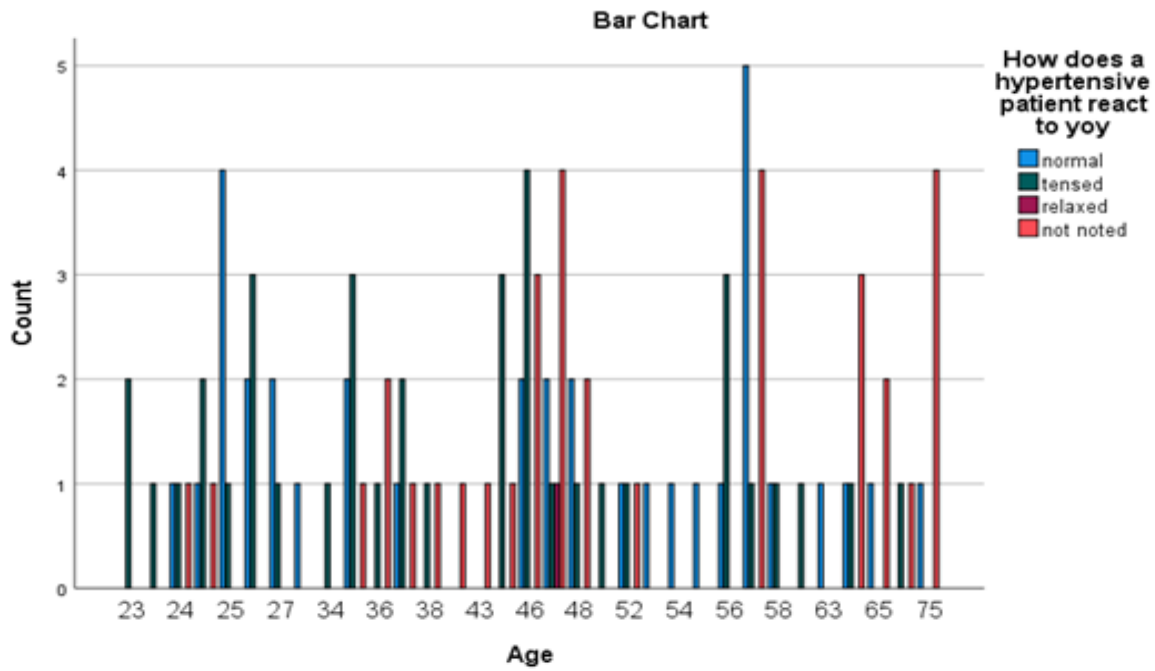


Figure 2 represents the different age groups and their responses to the question “how does a hypertensive patient react to you” the present observation is significant(0.824) and this was calculated using Pearson Chi square test with confidence level 95%

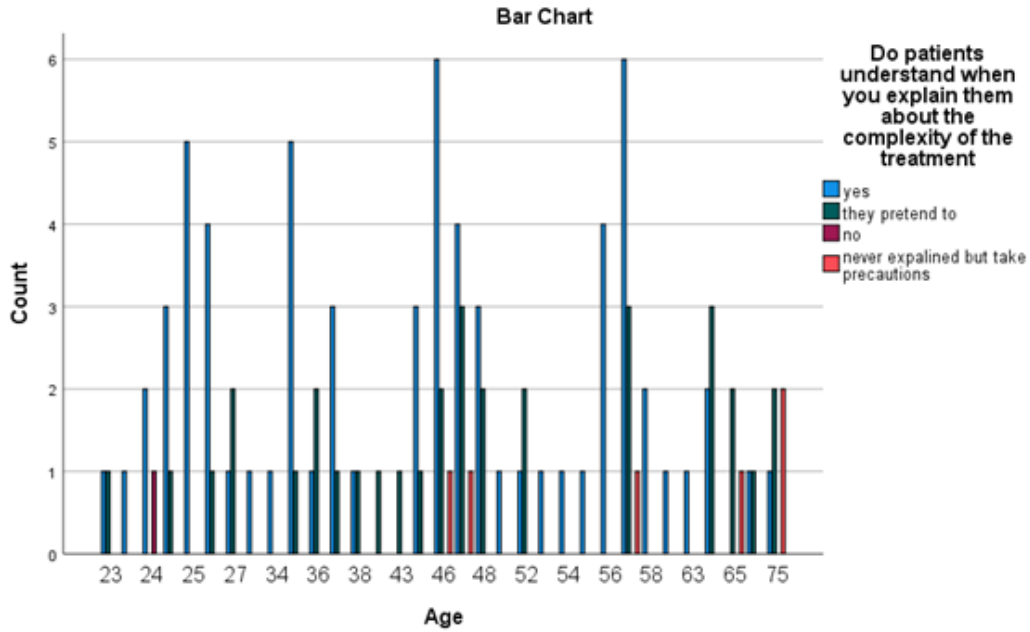


Figure 3 represents the different age groups and their responses to the question “do patients understand when you explain them about the complexity of the treatment”the present observation shows statistically it is significant (0.519) and was calculated using Pearson Chi square test with confidence of 95%

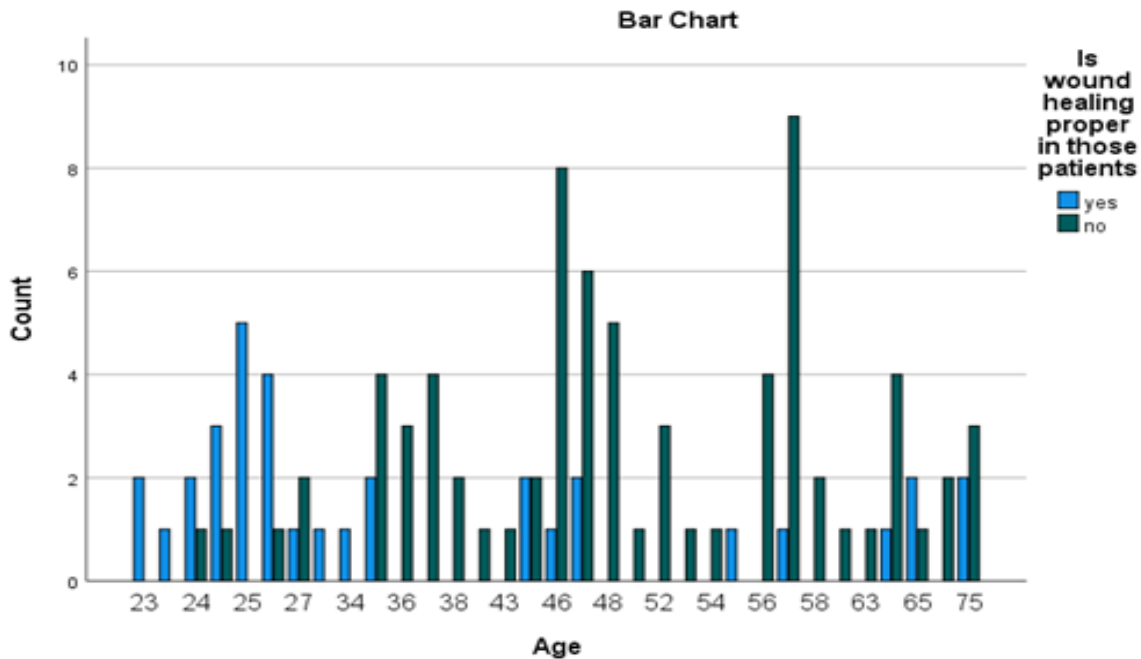


Figure 4 represents the different age groups and their responses to the question “is wound healing proper in those patients”the present observation shows statistically it is significant (.000) and was calculated using Pearson Chi square test with confidence level 95%

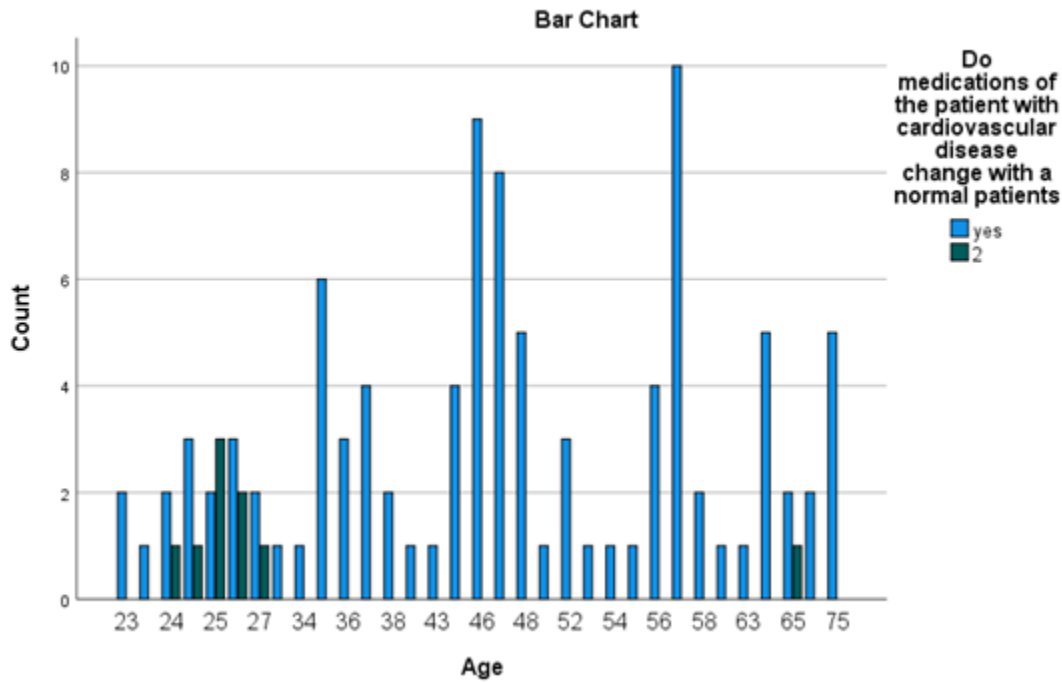


Figure 5 represents the different age groups and their responses to the question “do medications of the patients with cardiovascular disease change with a normal patient ”the present observation shows statistically it is significant (0.213) and was calculated using Pearson Chi square test with confidence level 95%

DISCUSSION:

From the data collected and analysed we could say that dentists face many problems in treating patients with cardiac problems but they are ready to treat such patients and the majority of dentists are happy for treating such patients and they come forward to help such patients(17). Dentists are also ready to educate patients with the knowledge of the effects of their cardiovascular disorder over their oral and dental health(17,18). Dentists mostly try to explain the precautions to be taken by patients who have cardiac problems and undergo dental treatments(19).

From a question about whether people are aware of the consequences of their cardiovascular disease over their dental health we could know that common people are not aware of the consequences of the cardiovascular disease over dental health and they don't know how to handle their medicines and tablets given to them for both their oral and cardiovascular health(20,21). People never try to understand the basic idea of the treatment precautions and they think that it is not so important to know about the medications and precautions before and after the treatment.(20)And according to the results collected we can also say that the dentists feel that a common awareness about the cardiovascular disease is required among the people and that

would help the dentists to effectively treat the patients as they would easily understand the problems and the method used by the dentists to treat the patients (22)(23). The patients are further advised to take their medications properly and if not it could lead to (24) (Figure 1-5).

Due to the pandemic situation only a limited amount of data was collected and analyzed and as the data is limited to a small group there might be variation in the result when done with a large population(25–29).

This survey helps to know the problems faced by dentists in treating heart patients and this gives a brief detail on the procedure, process and problems faced by dentists(30).

CONCLUSION:

Hence, from the survey that we have conducted, we are clear that dentists face many problems in treating cardiovascular patients but they are always ready to treat them and ready to help the patients in all the ways they could help them. People are required to have some basic knowledge over cardiovascular disease as that would help dentists to treat patients effectively.

Author contributions:

Sukanth.R : Literature search, data collection, manuscript writing.

Mrs.S.Sangeetha: Study design, data verification, manuscript drafting

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