

Systemic Periodontal Disease: A Study of the Knowledge and Practice of Medical Practitioners

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Abstract

Oral well-being is complicatedly connected with fundamental well-being. Be that as it may, the information and practice levels of clinical specialists (MPs) about this worry are very factor. Therefore, the purpose of this study was to assess the MPs' current knowledge and practice regarding the connection between periodontal disease and various systemic conditions, as well as the effectiveness of a webinar as an interventional tool in enhancing MPs' knowledge in Saudi Arabia's Jazan Province.

Keywords: Disease of the teeth; Fundamental sickness; Professionals in medicine; Online class review

Introduction

Periodontal disease (PD) is a bacterial infection of the tooth-supporting structures associated with a host-mediated inflammatory process that ultimately leads to loss of periodontal attachment unless treated in a proper and timely manner [1]. The Global Burden of Disease Study ranked severe PD as the 11th most prevalent disease worldwide. The overall prevalence of PD ranges from 20% to 50%. PD is the key leading cause of tooth loss, an impairment that has a significant impact on chewing, nutritional A recent Cochrane review demonstrates that periodontal intervention can reduce blood glucose levels in diabetic patients and adverse pregnancy outcomes. Periodontal treatment appears to improve endothelial function, decrease atherosclerosis biomarkers, and reduce inflammatory burden. Patients who do not respond to periodontal treatment are more likely to develop cardiovascular disease. Medical professionals (MPs) may play a crucial role in encouraging patients to maintain good oral hygiene. They can give their patients information about oral health with the goal of getting them to take good care of their teeth. In light of the foregoing, an immediate need exists to assess the level of knowledge and comprehension of this problem among MPs in order to develop an integrated practice structure for the prevention and effective management of PD and its systemic consequences. In order to do so, MPs first need to acquire the necessary knowledge about oral health and its potential effects on general health, and then convert this knowledge into a daily practice of patient education.

Webinars are recognized as an effective tool for interaction between disciplines and are crucial in health education, disease prevention, and clinical counselling [2]. However, to our knowledge, no study has been organized in the Jazan region of Saudi Arabia that evaluated and enhanced the knowledge of MPs through a webinar-based educational training program. This issue necessitates an immediate educational campaign and communication to bridge the gap between dentists and MPs, promote patients' health, and avoid serious complications. Consequently, the current review expected to assess the information on MPs in regards to the connection among periodontal and foundational sicknesses as well as the viability of an online class as an interventional device in upgrading information and understanding among them.

Materials and Techniques

Populace

The review was of interventional plan and designated all authorized

MPs of various government or confidential areas working in Jazan Region, Realm of Saudi Arabia. The Jazan College Standing Board of trustees on the Morals of Logical Exploration endorsed the review, and the standards of the Helsinki Statement were adhered to.

The questionnaire was adapted from previous surveys on the relationship between PD and systemic conditions. It was written in English and included a clear statement guaranteeing the confidentiality of the data and stating that participation is voluntary [3]. Additionally, it included an introduction outlining the purpose and design of the study as well as the researcher's email address in case of any questions or need for clarification. It was organized as a shut finished poll covering the accompanying: first, the participants' age, sex, level of education, specialties, and number of years in practice, as well as their email address, so that they can be contacted about the upcoming webinar; Second, questions regarding medical professionals' knowledge of the connection between periodontal disease and systemic diseases like diabetes, obesity, cardiovascular disease, respiratory disorders, osteoarthritis, and systemic lupus erythematosus, as well as periodontal treatment's impact on preterm birth and low birth weight. third, a section on professional oral health advice, such as the importance of regular dental checkups, screening, and referral to a dentist; fourthly, a query regarding the professionals' level of familiarity with oral examinations.

A recent Cochrane review demonstrates that periodontal intervention can reduce blood glucose levels in diabetic patients and adverse pregnancy outcomes. Periodontal treatment appears to improve endothelial function, decrease atherosclerosis biomarkers, and reduce inflammatory burden. The overall prevalence of PD ranges from 20% to 50%. PD is the key leading cause of tooth loss, an impairment that Cardiovascular disease is more common in patients who do not respond to periodontal treatment. When it comes to encouraging patients to

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practice good oral hygiene, medical professionals (MPs) may play a crucial role. They can educate their patients about oral health so that they will take better care of their teeth. To develop an integrated practice structure for the prevention and effective management of PD and its systemic consequences, it is urgently necessary to assess MPs' level of knowledge and comprehension of the issue. Webinars are recognized as an effective tool for interaction between disciplines and are essential in health education, disease prevention, and clinical counseling. In order to accomplish this, MPs first need to acquire the necessary knowledge regarding oral health and its potential effects on general health. However, we are aware of no study that has been conducted in the Saudi Arabian region of Jazan to evaluate and improve MPs' knowledge through a webinar-based educational training program. To bridge the gap between dentists and MPs, promote patients' health, and avoid serious complications, this issue calls for immediate education and communication. Subsequently, the ongoing audit expected to survey the data on MPs concerning the association among periodontal and primary afflictions as well as the feasibility of a web-based class as an interventional gadget in updating data and understanding among them.

The poll was adjusted from past overviews on the connection among PD and fundamental circumstances. It was written in English and incorporated an unmistakable proclamation ensuring the privacy of the information and it is deliberate to express that support [4]. Furthermore, it incorporated a presentation framing the reason and plan of the concentrate as well as the scientist's email address in the event of any inquiries or need for explanation. It was conducted as a closed-ended poll on the following topics: first, the participants' age, gender, education level, specialties, and number of years in practice, as well as their email address, so that they can be contacted about the upcoming webinar; Second, questions about whether doctors are aware of the link between periodontal disease and systemic conditions like diabetes, obesity, cardiovascular disease, respiratory disorders, osteoarthritis, and systemic lupus erythematosus, as well as the effect of periodontal treatment on preterm birth and low birth weight. thirdly, a section on expert oral health advice, such as the significance of routine dental exams, screenings, and referrals to dentists; fourthly, a question regarding the professionals' level of experience with oral exams.

Conducting the webinar

The webinar was held two weeks after the previous reminder and after the pre-intervention questionnaire data had been gathered [5]. Briefly, participants who completed the pre-intervention questionnaire were invited to a one-hour webinar on the relationship between Parkinson's disease and systemic diseases via Zoom link via email. Two of the authors SP and MA prepared the webinar material. The online class was as a PowerPoint show and featured the meaning of the bidirectional connection between oral and foundational well-being, with exceptional accentuation on PD, in light of refreshed distributed proof. Numerous doubts regarding the bidirectional connection between PD and systemic disease were dispelled during the webinar.

Measurable investigation

The information of the pre-and post-online course reactions were gotten as a Microsoft Succeed calculation sheet, from which they were brought into a factual program [6]. Statistical Package for the Social Sciences (SPSS) version 22.0 from IBM Corp. was used to analyze the data. The Chi-squared test was used to determine how the learned information related to various variables at each stage of the study. The McNemar test was used to compare the paired data.

Conversation

Inside the setting of the medical services framework, the arrangement of care by MPs is considered very important [7]. The information, mindfulness, mentalities, and practices of MPs in regards to oral wellbeing addresses a basic element that can either energize or frustrate the improvement of a comprehensive wellbeing approach to give proof based care, both dental and clinical experts are expected to regard the body overall and recognize the significance of interdisciplinary references. There is a pressing need to examine MPs' practices, knowledge, and awareness of this pertinent issue in the Jazan region of Saudi Arabia, despite the fact that numerous studies have demonstrated the interrelationship between systemic conditions and periodontitis. There is a lack of knowledge and understanding among MPs about this interrelationship, in line with an unexpected mismatch between the scientific evidence and the practiced behaviors.

According to the results of this study, only MPs are aware of the connection between PD and systemic health. This is in line with other studies that have reported results that are comparable. The current review is reliable with a comparable cross-sectional review among clinical and dental professionals in Saudi Arabia, which saw that as of MPs had low degrees of mindfulness and information, while general dental specialists' practices and mindfulness were observably better [8]. In a similar vein, a study that was carried out in India found that only 14% of MPs believe that PD can lead to cardiovascular disease. On the other hand, a study that was carried out in Pakistan found that 93% of MPs accepted the possibility that poor oral health could lead to cardiovascular disease.

A cross-sectional study that was carried out among general MPs in France found that they had a fair amount of knowledge regarding the relationship that exists between PD and systemic diseases: 75% stated that they were aware of the connection between diabetes and Parkinson's disease; Between 53% and 59% of respondents stated that PD influences respiratory infections, heart disease, and irritable bowel syndrome; PD was identified as a risk factor for both rheumatoid arthritis and Alzheimer's disease less than 15%, respectively. Additionally, despite the fact that of MPs in the current study stated that they had no training in periodontal disease or oral health, the majority of MPs appear to be aware of the connections between periodontal disease and diabetes [9]. In Turkey, comparable outcomes were obtained: Just 28% of clinical specialists guaranteed getting guidelines in regards to the connection between foundational illnesses and PD during their initial or progressing preparing, while 66% accepted that PD affects diabetes. Indeed, studies linking diabetes and Parkinson's disease date back. In point of fact, diabetes-related PD is recognized as the sixth complication; MPs should be familiar with the pathophysiology, complications, and treatment options for these two chronic diseases because there is growing evidence that PD and its treatment have varying effects on systemic health. The latter is also thought to be a risk factor for the former. The World Dental Federation and the International Diabetes Federation have worked together to raise professional health care providers' awareness of the connection between diabetes and oral health. According to our research, the average level of MP knowledge regarding the effects of periodontal therapy on diabetic patients' glucose levels [10]. However, a previous investigation that was carried out in India revealed that all of the endocrinologists who took part in the investigation were aware of such an interrelationship, and when compared to general practitioners, they recommend that their diabetic patients go to the dentist on a regular basis. From 63.64% on the pre-webinar questionnaire on the post-webinar questionnaire, our

corresponding figures significantly improved.

In our study, more than 80% of respondents to the pre-webinar questionnaire stated that they were uneasy performing a basic periodontal examination on their patients, that they never inquired whether a patient had been diagnosed with periodontal disease, and that they never referred patients to a dentist for periodontal evaluation [11]. Most likely because of the absence of information and practice, MPs recommend anti-microbials and torment prescriptions for patients with dental torment who visit essential medical services communities as opposed to performing conclusive dental consideration, a matter which adds to the issues of anti-toxin obstruction and narcotic dependency rather than our discoveries, another review showed that MPs revealed enquiring about dental and oral illnesses among their clinical patients. If there are indications of bad breath or an infection in the mouth, MPs should inquire about oral health and go above and beyond.

Limitations

The self-reported questionnaire used in this study has been criticized for a number of shortcomings, such as recall bias and false reporting. Participation bias could have occurred because this was a survey-based study, and people who are interested in the subjects are more likely to take part. Sadly, this is an irritating issue in the survey study. Despite numerous reminders sent in an effort to obtain a larger sample, the sample size was small. Another limitation was that there was insufficient time to document the MPs' practices' shifts; In this context, the MPs' reports might be more indicative of their increased knowledge than of actual practice [12]. A third constraint is that some might feel a little doubtful about the substance of the online course address, albeit subject matter experts set it up as per the latest proof in setting of interrelationship among PD and fundamental sicknesses.

Conclusion

The review uncovered that MPs had low to direct degrees of information and practice about the interrelationship among periodontal and foundational wellbeing and that leading an online course was critical in working on their insight and practice in this unique situation.

Acknowledgement

None

Conflict of Interest

None

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