

Original Research

Knowledge on patient gag reflex among pedodontists in Saudi Arabia

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ABSTRACT:

Background: The gag reflex (GR) is an innate healthy defence mechanism that helps prevent foreign bodies from entering the trachea. **Aim and Objectives:** This web based cross-sectional survey was done to assess the awareness level and prevention of patient gag reflex among pedodontists in Saudi Arabia. **Materials and methods:** The survey was conducted on 150 pedodontists of Saudi Arabia via mail, out of which only 128 completely responded; thus, response rate was 85.33%. A list of 10 questionnaires was developed that explores the above-mentioned objectives with subcategories. **Results:** Anxiety and fear was found to be the main reason for gag reflex (59%), impression procedures constituted maximum to gagging (95.4%), behavioral methods were considered as the best way to prevent gagging (65.7%), and 73.9% of patients considered gag reflex as a hindrance in clinical dental practice. **Conclusions:** The study clearly pointed out that the level of awareness regarding management of patient's gag is significantly low among pedodontists in Saudi Arabia and illuminated that patient gag is a major hindrance in the clinical practice.

Key words: Gag reflex, anxiety, fear, pedodontists, knowledge.

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INTRODUCTION

The gag reflex (GR) is an innate healthy defence mechanism that helps prevent foreign bodies from entering the trachea.¹ Psychological, anatomic, iatrogenic, local and systemic factors influence the GR. The pharyngeal reflex that prevents choking has five triggering zones in the oral cavity: the postpharyngeal wall, the palatoglossal and palatopharyngeal folds, the palate, the uvula, and the base of the tongue.² Activation of these zones creates afferent impulses to the medulla oblongata which leads to efferent impulses that create the uncoordinated and spasmodic movements of gagging. Psychological factors such as fear and anxiety, which cause approximately 20% of patients to avoid dental treatments, have also been implicated in gagging.^{2,3} The management of the gagging patient may be influenced by the severity and etiology of the problem. It is important that the clinician takes a complete history in an unhurried, sympathetic manner

and the environment should be calm and reassuring. The attitude of the clinician toward the patient may influence the treatment outcome. If the dentist attempts to identify the situations that trigger disruptive gagging, this may optimize patient care and operative success.^{4,9} Thus, this web-based cross-sectional survey was done to assess the awareness level and prevention of patient gag reflex among pedodontists in Saudi Arabia as gagging is more common in children and is challenging to manage.

MATERIALS AND METHODS

The web-based survey was conducted on 150 pedodontists of Saudi Arabia via mail, out of which only 128 completely responded; thus, response rate was 85.33%. A list of 10 questionnaires was developed that explores the above-mentioned objectives with subcategories. The feedback was incorporated into the questionnaire once the questions and options were thoroughly discussed. Analysis of

each questionnaire was performed in percentage.

RESULTS

One hundred and twenty-eight pedodontists of Saudi Arabia were included in the web-based cross-sectional survey. Analysis of each questionnaire was performed in percentage. Anxiety and fear was found to be the main reason for gag reflex (59%) (Figure 1), 91% of patients reported a change in heart rate during gag reflex (Figure 2), 49.6% of patients had a change in treatment plan due to gag reflex, impression procedures constituted maximum to gagging (95.4%), behavioral methods were considered as the best way to prevent gagging (65.7%), and 73.9% of patients considered gag reflex as a hindrance in clinical dental practice.

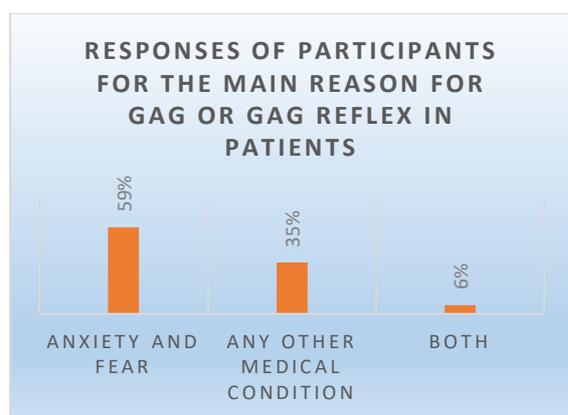


Figure 1: Responses of participants for the main reason for gag or gag reflex in patients

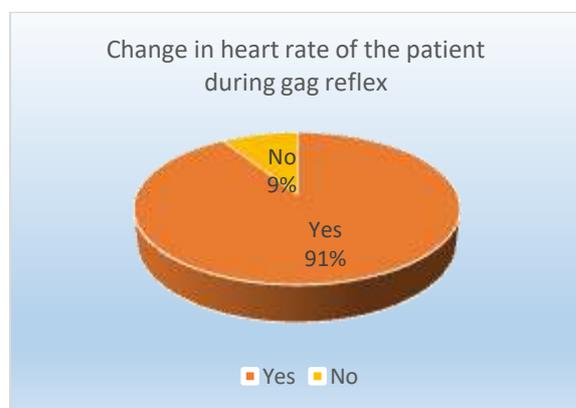


Figure 2: Change in heart rate of the patient during gag reflex

DISCUSSION

Overt gagging can be disturbing for both the patient and clinician. A wide multiplicity of management strategies has been defined and these should be tailored to suit the necessities of individual patients. The gagging difficulties require an imagined attitude using individualized, flexible treatment resolutions by a knowledgeable dental team. In our study, 75 participants reported anxiety and fear as a main cause of gagging and was also supported by a study

conducted by Randall et al. on 478 participants and almost one-half of them recounted higher occurrence of gagging with superior levels of dental care-related fear, fear of pain, and more undesirable opinions about dental experts and dental treatment.¹⁰ 122 (95.4 %) participants encountered maximum gag reflex during Impression procedure. Whereas in the study of Randall et al showed gagging during dental treatment occasioning from many incentives (i.e., fingers in the mouth) informed greater levels of dental care-related fear, than did personages who reported gagging from other stimuli such as instruments or bitewing radiographs and impression materials.¹⁰ Our study revealed that behavioral methods were considered as the best way to prevent gagging (65.7%) whereas NahlaNassif Debs concluded Intellectual distraction is a safe, potentially effectual, and cost-saving technique of GR (Gag-reflex) management in pediatric dentistry.¹¹

CONCLUSIONS

The study clearly pointed out that the level of awareness regarding management of patient's gag is significantly low among pedodontists in Saudi Arabia and illuminated that patient gag is a major hindrance in the clinical practice. The gagging problems require an empathetic attitude via individualized, flexible handling solutions by a knowledgeable dental team.

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