



Optimizing The Waiting Room Environment to Improve the Patient Experience in the Uniandes Dental Care Unit

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Article History	Abstract
Received: 06 June 2023 Revised: 15 Sept 2023 Accepted: 21 Sept 2023	Aim: This study investigated the causes of alterations in the dental behavior of patients, mainly attributed to post-traumatic experiences of their own or of people close to them during dental treatment. Material and method: It focused on the conditioning of the waiting room of the Uniandes Dental Care Unit by means of audiovisual elements, reading material and aromatizers, with the aim of positively influencing the dental behavior of patients. A sample of 178 patients and 64 ninth and tenth semester students was used, collecting data through surveys and interviews. Statistics and Result: The results revealed that the conditioning of the waiting room was fundamental in reducing patients' stress, anxiety, nervousness and fear before receiving dental care. Both students and patients showed a high acceptance of these improvements.
CC License CC-BY-NC-SA 4.0	Keywords: Waiting Room, Posttraumatic Experiences, Dental Treatment, Conditioning, Waiting Room, Dentistry

1. Introduction

"The waiting room is known as a transcendental element to give a first impression to the clients who are going to be served, it is a captivating detail, which goes beyond what most people assume. It is clear that achieving comfort and harmony is the reason for having a waiting room that has tandem chairs and other elements (Ofitipo, 2021; Orozco & Baldares, 2012)."

The environmental characteristics of a waiting room acquire great importance to achieve the comfort of the patient, it must be comfortable pleasant and cozy, both from the physical and psychological point of view. The health professional should sit on it from time to time, to try to perceive the sensation experienced by the patient when entering, it can be useful to detect a possible defect and solve it. The walls should be painted with cold colors such as the range of blue, they are sedative, passive, serene, they are associated with the sky and the sea, they transmit confidence, constancy, cleanliness, meditation, relaxation, harmony and affection. Yellow is associated with alarm signal, light, energy, concentration is a warm color just like red, the latter being the most emotional and active (Scbrid, 2015; Arrieta et al., 2013).

The physical space represents the place where an activity is carried out, so it is necessary that this space can be pleasant and that it has the necessary size to be able to work correctly (Eden, 2015; Leyva & Andres, 2019).

Odors are part of what the patient perceives when entering the waiting room, the control of them should be on the agenda; the smell of medications such as eugenol, can bring memories of previous experiences, which influence the behavior of the person at the time of their care, increasing their anxiety (Health, 2017). (4-17)

It is recommended to use mild environmental that help neutralize strong aromas that exist in a dental office.

The waiting room should be comfortable, spacious and well-lit to avoid crowds and facilitate the reading of magazines (this action decreases anxiety), (Gonzalo, et al., 2017). You can resort to a good assortment of up-to-date magazines on different topics, even the newspaper of the day.

There are clinics that have television and video in the waiting room and so while the patient waits, information is provided on hygienic and preventive measures, advice, recommendations, treatments, distraction programs. It is usually used soft background music that contributes to the relaxation and comfort of the patient, criteria that favor the management of frequent emotions in dental care, such as anxiety, fear and stress in general, in this way a pleasant and relaxed atmosphere is created, it will also serve to dampen possible noises derived from the consultation and dental treatments carried out, Also to stimulate tranquility and create a peaceful climate that induces relaxation and reduces anxiety (Leyva & Andres, 2019).

The programming broadcast in these electronic devices must be with moderate volume since it can affect in different aspects, for example if someone is talking to another person may be annoyed by the noise inside the place due to the high volume of these artifacts, it is also important to control within the room all the conversations that people maintain, This could be done with signs to make silence or simply informed that it is necessary to maintain an adequate tone of voice (Dspace, 2018)

Properly managing the waiting room environment helps keep the patient relaxed while waiting for dental care, otherwise it would generate a state of stress in the patient. It is known as stress to the set of physiological reactions to a pressure or situation exerted on the organism either outside or inside oneself, which gives rise to a response produced by the organism to protect itself from dangerous situations (Leyva et al., 2021; Piloso et al., 2020).

The effects that stress can cause in the body are very varied, they can be direct, indirect or cause side effects, there are physical and psychological effects. All these effects deteriorate the quality of interpersonal relationships, both family and work. Negative stress is detrimental to the health of the person and the social environment, also inhibits creativity, self-esteem and personal development (Gomez et al., 2022; Rodríguez et al., 2020).

Because of stress, the patient can trigger psychological effects that contribute to the appearance of disorders such as fear or anxiety.

Fear is an innate reaction to danger, it is an unpleasant sensation that crosses the body and mind, it is an alteration of the individual's mood that causes anguish in the face of danger or harm, either a product of the imagination or reality itself. In a more extreme version it takes the name of phobia. (SciELO; Villalva et al., 2020) Knowledge of the etiological factors or variables that determine the appearance of fearful behaviors has made it possible to develop strategies aimed at preventing the behavior. It is recommended to create a controlled and safe environment, use non-invasive dental procedures and expose the child to a positive dental experience before undergoing treatment (Osorio & Cardenas, 2017).

When the fear is intense, very frequent cases in dental care becomes phobia, dental phobia occurs in greater numbers among women and young children than in men; there are even people who due to this phobia completely avoid visiting a dental center unless they have very serious dental health problems (Medina & Javier, 2023).

Another possible disorder to present is anxiety which is a "pathological state characterized by the presence of unpleasant sensations in the body, chest pain, feeling physically sick, fear and intense worry that makes the subject unhappy, which has some duration, extravagant sensations in the head (narrowing, crepitus, draining) (Vinaccia, 1998).

"Dental anxiety is a complex state that a person presents when conceiving the idea of undergoing dental treatment and leads to avoid it, which is why disastrous oral health occurs, leading to a long and painful treatment that at the same time reinforces or produces more anxiety (Orozco & Baldares, 2012). "

Anxiety can also be caused by a previous traumatic experience or by attitudes learned from the environment, related to comments from friends and family about traumatic dental experiences (Arrieta et al., 2023; Chuga et al., 2019). When making an analysis of the disorders that a patient can cause, it is necessary to review the conditioning of the waiting room of the dental unit which lacks the necessary comfort. With the creation of an adequate environment (pleasant-educational), it is intended to make the waiting time of patients more pleasant by reducing levels of stress, anxiety, nervousness and fear in the Uniandes Dental Care Unit (U.A.O), in such a way that it influences a positive behavior that allows successful dental treatments.

2. Materials And Methods

The present research was defined according to its methodology as a "Quantitative" research. Qualitative, since it detailed the basic characteristics that the waiting room of a dental office must have, it generated a pleasant-educational environment that contributed positively to the patient's behavior. Quantitative because during the situational diagnosis, statistical evidence was obtained of the emotional state of the patients in the waiting room prior to treatment in the Uniandes Dental Care Unit.

According to the scope, it was a descriptive research where the behavior of the patient was analyzed directly prior to dental care.

A survey was applied to ninth and tenth semester students who provide their care in the (U.A.O) and in this way information related to the environment of the waiting room was obtained, in addition to an interview with the patients who came to be treated in the (U.A.O), from this information was obtained about the environment of the waiting room and their behavior prior to dental care.

Population and Sample

The present research work was carried out with a population of 64 students. (40 students of ninth and 24 of tenth semester) of the academic period May September 2019

Before making the adjustments in the waiting room, the population was 178 patients who came to the (U.A.O) in the week between Monday, August 12, 2019 and Friday, August 16, 2019 in the 2 shifts of clinics between 9 in the morning and 6 in the afternoon. After making the adjustments in the waiting room, the population was 14 patients who came to the (U.A.O) between Thursday, September 12, 2019 and Friday, September 13, 2019 in the 2 shifts of clinics between 9 in the morning and 6 in the afternoon.

The sample of patients for the beginning of the research was established under inclusion and exclusion criteria.

Inclusion criteria

- Patients who attended the Uniandes Dental Care Unit in the week between Monday, August 12, 2019 and Friday, August 16, 2019 in the 2 shifts of clinics between 9 in the morning and 6 in the afternoon.
- Patients over 18 years of age.
- Adult patients up to 64 years of age.

Exclusion criteria

- Patients under 18 years of age.

- Elderly patients.
- Patients with disabilities.

According to the inclusion and exclusion criteria used, a sample of 90 patients is obtained, who will contribute to this research.

3. Results and Discussion

Analysis of interviews conducted with patients regarding their perception of the waiting room before its adaptation.

1. What is your behavior during the stay in the waiting room of the Uniandes Dental Care Unit?

70% of respondents were nervous, while the other 30% said they felt calm while waiting. Therefore, it could be said that inside the waiting room of the Dental Care Unit 63 of the 90 respondents were nervous while waiting to be seen.

2. Do you think that by improving the waiting room environment in the Care Unit?

Will Uniandes Dentistry Decrease Your Pre-Care Nervousness?

In the results obtained from the interviewees, 81% that corresponds to 73 people affirm that undoubtedly the environment inside the waiting room should be improved, because it will decrease the nervousness they have while they are waiting to be attended, the other 19% that are the remaining 17 say that improving the waiting room will not reduce nervousness. Based on these results, it is observed how a good environment can influence the waiting room to reduce the nervousness that each of them may feel in it.

3. Do you think that by decreasing the characteristic odors of a dental office

Will it positively influence your behavior during dental care?

70% of these affirm that if the characteristic odors that the waiting room possesses are reduced, this will positively influence the moment of their dental care, while 30% of the interviewees affirm that odors do not have any type of influence in relation to dental care. Therefore, it could be said that it is necessary to reduce these characteristic odors of the waiting room so that it influences in a positive way in relation to the care of these patients.

4. Do you think that the implementation of audiovisual material will improve your stay in the waiting room of the Uniandes Dental Care Unit?

73% of these affirm that the implementation of audiovisual content will undoubtedly improve their stay inside the waiting room, on the contrary, 27% of those interviewed say that audio-visual content will not improve their stay. It is observed that it would be necessary to implement this type of methods that can undoubtedly make the stay of patients pleasant inside the waiting room.

Analysis of surveys conducted with ninth and tenth semester students who provide care at the (U.A.O)

1. Do you think the atmosphere in the waiting room of the (U.A.O) is pleasant?

Of the students belonging to the ninth and tenth semester who provide their attention in the (U.A.O), it is observed that 64% of these affirm that the environment inside the waiting room is not pleasant, while the remaining 36% affirm that the environment inside the waiting room is pleasant. It could be said that the environment is not considered pleasant, so it is necessary to make changes to improve the stay of patients.

2. Select the items that you think a waiting room should have to foster the pleasant atmosphere.

24% of students surveyed agree that audiovisual elements should be part of a waiting room, 22% of students think that informational material should be generated, another 21% say that an air freshener would be an important element within a waiting room, 22% of students believe that placing

informative posters would be of great importance, While 8% would like there to be electronic games in a waiting room, only 3% think that other types of elements are important such as plants. Therefore, each of the options must be taken into account as important elements to adapt a waiting room.

3. Do you consider that a pleasant-educational environment in the waiting room of the (U.A.O) decreases the levels of anxiety, fear in patients?

59% of the ninth and tenth semester students who were surveyed say that generating a pleasant and educational environment will always decrease the levels of anxiety and fear that patients present inside the waiting room, while 41% believe that almost always the pleasant and educational environment is able to reduce the levels of anxiety and fear. Therefore, creating this area within the waiting room represents an important factor when making the patient feel calm.

4. Do you think that, by reducing the levels of anxiety, fear, nervousness of patients, you will optimize their work time?

100% of students agree that reducing levels of anxiety, fear and nervousness optimize work time, so it is important that elements can be implemented that reduce these levels since it would not only be important for patients but to optimize the time of the entire care process within the (U.A.O).

Analysis of the surveys carried out after conditioning the waiting room.

The waiting room was equipped with: Audiovisual Material, 2 Magazine Racks with Magazines, newspapers, brochures, children's stories and 4 Air Fresheners.

1. Do you like the atmosphere that now exists in the waiting room of the Uniandes Dental Care Unit?

After having set the waiting room 100% agree that they like the environment, therefore the change is observed in terms of the perception that each of these has about the waiting room.

2. What do you think of the videos that are projected in the waiting room?

57% of the patients surveyed affirm that the videos projected during their stay in the waiting room are pleasant, while the remaining 43% state that they are educational, being pleasant and educational the videos generate in the patients tranquility, increase their knowledge in topics related to dentistry, thus decreasing the levels of stress and anxiety that influence their behavior.

3. How does the scent of the waiting room influence your dental care?

All respondents within the waiting room, affirm that the aroma that is presented in the room, positively influences each of them, prior to their dental care, so it represents great importance for patients since it generates in them a pleasant atmosphere

4. Do the changes made in the waiting room decrease your levels of stress, anxiety, nervousness and fear prior to dental care?

86% of the people surveyed in the waiting room, after setting the whole place, say that if it decreases their levels of stress, anxiety, nervousness and fear prior to dental care, while 14% say that it does not decrease, so it can be said that the changes that have been made, if they generate a positive change in the patient's dental behavior.

After applying the atmosphere of the waiting room, it was observed that 100% of the participants agreed with the new environment, expressing their satisfaction with the environment. This supports what was mentioned by Del Pozo et al. (2020), who emphasizes the importance of managing and maintaining an adequate environment in dental offices to facilitate efficiency in the activities carried out by staff.

In relation to the aroma present in the waiting room, 100% of respondents said that it positively influences their experience prior to dental care. This result corroborates what was mentioned by Pillajo et al. (2020), who highlights that ventilation and the use of mild aromas can neutralize the characteristic odors of anesthetics, disinfectants, eugenol and bleach, thus creating a more pleasant environment.

In addition, 86% of the participants, after experiencing the complete setting of the room, said that an ambient waiting room can reduce their levels of stress, anxiety, nervousness and fear before receiving dental care. This finding supports what was mentioned by Solano (2015), who suggests that the inclusion of distractive elements such as magazines, newspapers and audiovisual material in waiting rooms can create a favorable environment to reduce stress and anxiety.

These results are of great relevance, as they demonstrate that the conditioning of the waiting room with audiovisual elements, reading material and air fresheners can have a positive impact on the experience of patients before their dental care. Providing a pleasant and calm environment can contribute to decreasing the levels of emotional distress associated with dental treatments.

This study supports the importance of the appropriate setting of the waiting room in the dental context. By creating a pleasant and welcoming environment, you can improve the patient experience, reduce stress and anxiety, and promote a more positive attitude toward dental care. These findings support the implementation of similar strategies in other dental health institutions, with the aim of improving patient well-being and ensuring quality care.

4. Conclusion

During the development of this research, it was possible to obtain the theoretical-scientific foundations necessary to determine the incidence of a pleasant and educational environment in the behavior of patients before undergoing dental treatment at the Dental Care Unit of the Uniandes University (U.A.O). Through this research project, it was possible to verify that the previous situation in the waiting room had a negative impact on the behavior of patients before receiving dental care at the U.A.O. As a result, a pleasant and educational environment was implemented in the waiting room of this institution, which significantly improved the dental behavior of patients before their treatment. The adequacy of the waiting room became an effective alternative to reduce the levels of anxiety, tension, fear and stress experienced by patients before receiving care at the Uniandes Dental Care Unit. The creation of a welcoming and educational environment contributed to generate a calmer and more relaxing environment, providing patients with a positive experience that allowed them to face more favorably the dental treatment to which they would be subjected. These findings highlight the importance of considering the environment in which medical care is provided, in this case, dental, and how it can affect the patient experience. The implementation of pleasant and educational environments in waiting rooms can be an effective strategy to improve the behavior and general well-being of patients, thus fostering greater satisfaction and success in dental treatments.

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