AuxiliarySensory Media in Oral Surgery: Reductionof Stress and Anxiety

Abstract

Introduction: Putintopracticethe use ofphysical, auditory and visual aids. in oral surgical care in orderto reduce stress and anxietyduringconsultation and treatment in thisspecialty.

Materials and Methods:typeofstudy: prospective, cross-sectional, quasi-experimental, mixed, descriptive, observational, risk-free. Definitionofthestudy universe: patientswhoattendsurgicalconsultation at theMexican Center forStomatology, Morelia campus, in theperiod 2023 – 2024. Samplesize: 34 patientswhoundergo a dental surgicalprocedure. Definitionofobservationunits: stress and anxiety response tophysical, visual and auditorystimuliduringthesurgicalprocedure. Inclusioncriteria: patientswhoattendsurgicalconsultation, haveanagegroupof 18 to 45 yearsofage. Exclusioncriteria: patientswhoattendendodontic, orthodontic and pediatricdentistryconsultations, patientsunder 18 yearsofage and over 45 yearsofage. Eliminationcriteria: patientswhoabandontheresearch, patientswho do notcompletelyanswerthesurvey.

Results: A total of 34 patientswerecountedwhoattendedsurgicalconsultation. Auditory, physical and visual meanswereapplied in ordertodecipherwhichmethodallowsreducingthepatient'sstateofanxiety at the time ofthesurgicalprocedure, and theywereapplied in thesamedistributionof 12 (33.3%). Theacceptanceofthephysicalenvironmentwastheonethatpresentedthegreateststate ofcomfortwith 100% oftheparticipantsstudied.

keyword: Oral Surgery, Psychologicaldistress, Stimuli, music therapy, Third Molar, anxiety, stress, anxiolytics, emotionalintelligence, auxiliaries.

Introduction

Visitingthesurgicaldentistusuallygenerates stress and anxiety in manypatients. Thementionof "surgery" can provokefeelingsofdistrust and uncertainty. Hernández-Vargas CI and Dikinson-Bannack ME, emotionalintelligenceplays a crucial role in the care ofthesepatients, sinceitslack can hindertreatment. Thistypeofintelligencereferstotheabilitytomanageone'sownfeelings and emotions, beingan integral partofthe social intelligenceofthe doctor ortreatingspecialisttowardsthe patient[1].

Toeffectivelymanageemotionsduringtheconsultation, itisessentialthattheprofessionalknows and applieshisorherownemotionalintelligence. Thisallowsyoutoactwithobjectivity and precision, improvingefficiencyforboththepatient and theclinician. Itisessentialthatthedentist can identify and manageemotionalsituationssuch as apprehension and anxietythatmayariseduring oral or dental surgical procedures[2].

From a pathophysiologicalperspective, the stress and anxiety response is short-term adaptive, preparingthebodytofacethreats. However, whenthese responses are prolongedorexcessive, they can have negative physicaleffects, such as increasedriskof cardiovascular disease, suppressionoftheimmunesystem, and metabolicdisorders. Itis crucial tohighlightthatthe hormonal regulationof stress and anxietyiscomplex and varies dependingonthesituation and the individual, dependingonfeedbackmechanisms and fine regulationofthehypothalamic-pituitary-adrenal axis tomaintain hormonal balance in response to stress and emotionallygeneratepost-traumatic stress, apprehension, and refusalof medical or oral care[1,2].

Anxiety

Anxietyisdefined as anemotioncharacterizedbyfeelingsoftension, worry, and physicalchangessuch as increasedheartrate. Tomeasureit, there are variousscalessuch as theCorah Dental AnxietyScale (DAS) and theModified Dental

AnxietyScale (MDAS), specificallydesignedforadults. Additionally, theDiagnosticand Statistical Manual of Mental Disorders (DSM-5) and the International ClassificationofDiseases (ICD-10) provide data onthelevelofanxiety a patientmayexperience, both in thewaitingroom and during and after of elective dental treatment[3].

Stress

Capdevila N is a natural response ofthebodytofear, tensionordanger, classifyingitintopsychological, physical and metabolic stress. They describe itsphases as alarmreaction, resistancestate and exhaustionphase. Theyrecommendconsulting a specialistto determine individual needs, proposingmeasuressuch as a balanceddiet, adequatesleep, regular exercise, and avoidingtheconsumptionof alcohol, tobacco and drugs[4].

Orlandini A explainsthat stress and anxiety are brain responses thatinvolvemetabolic and hormonal changes, initiatedbycorticotropin-releasing factor, whichactivatesthereleaseofnorepinephrine, adrenaline, norepinephrine and cortisol[5,6].

Domínguez TB et al identifyfivemajorsourcesof stress: environmental, family, personal, work and interpersonal, associatedwithdisorderssuch as migraines, headaches, gastrointestinal disorders, chronic fatigue, back pain, insomnia, bruxism and hypertension[7].

Stress managementincludespsychologicalstrategiesorthesupport and consultationofspecialists in thefieldtoidentify and control the causes, ofwhichthey are, goodcommunicationwiththepatienttogenerate trust withthem, as well as pharmacologicalsupportwithpalliative care thatTheyincludesubstancestoregulate hormonal production. Additionally, methodssuch as music therapy and the use ofstuffedanimals are effective in relieving stress and anxiety, providingrelaxation and emotionalsecurityduring medical and dental procedures[8-12].

Managing dental anxiety

Managinganxiety in thefieldofdentistryisessentialforboththeprofessionalproviding care and thepatientreceivingtreatment. Anxietyrelatedto dental visitsiscommon and can negativelyimpactthepatient'sexperience as well as theeffectivenessoftreatment. Below are somestrategiesformanaginganxiety in dentistryforboththedentist and the patient[10-12]:

FortheDentist

Itisimportantthatthedentistestablishesempathetic and understandingcommunicationwiththepatient.
Thisinvolvesactivelylisteningtotheirconcerns and fears, as well as providingclear and honestinformationaboutthe dental procedure. Toachievethisgoal, itisimportantto be educated and prepared, use relaxationtechniques, effectiveanesthesia, and have a comfortableenvironment.

ForthePatient

Wemustgenerate extensive communicationwiththepatientthatspecifiestheimportanceofhaving open communication, carryingoutself-control practices, having social support, distractions and having a regular appointmentschedulethat can help reduce theanxietyassociatedwiththe dental visits.

Materials and methods

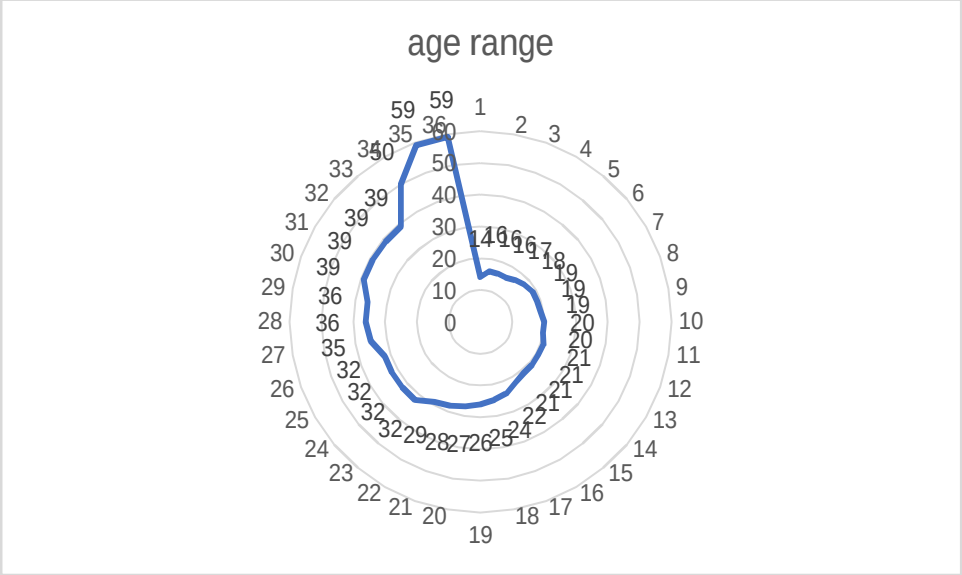
A prospective, cross-sectional, quasi-experimental, mixed, descriptive, observational, risk-free studywascarriedout. In whichpatientswhoattendsurgicalconsultation at theMexican Center forStomatology, Morelia campus, from 2023 to 2024 whoundergo a dental surgicalprocedurewereincluded. Toevaluatethe stress and anxiety response to visual and auditorystimuliduringthesurgicalprocedure. Theinclusioncriteriawereconsidered: patientswhoattendsurgicalconsultation, haveanagegroupof 18 to 45 yearsofage, presentclinicalcharacteristicsof stress and anxietyor be diagnosedwithit. Exclusioncriteria: patientswho come totheMexicanstomatology center forendodontic, orthodontic and

pediatricdentistryconsultation, patientsunder 18 yearsofage and over 45 yearsofage, emotionallystablepatients and eliminationcriteria: patientswhoabandontheresearch, patientswho do notcompletelyanswerthesurvey.

Results

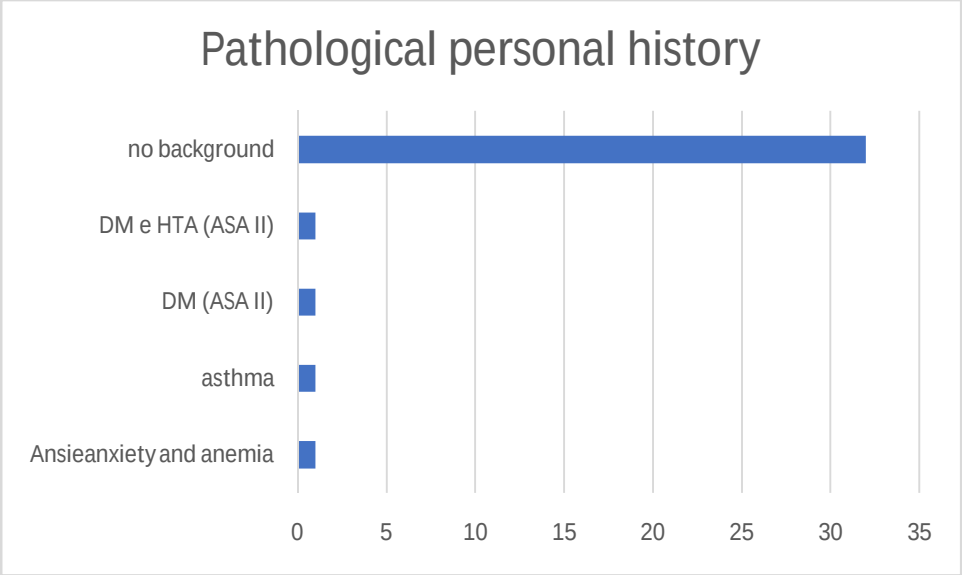
A total of 34 patientswerecountedwhoattendedsurgicalconsultation at theclinicsoftheMexican Center forStomatology, Morelia campus, where 22 (64.7%) femalepatients and 14 (35.3%) weretreated.

Theagerangethatwasattendedwasdistributedbetween 14 and 59 yearsofage, beingincluded in thefollowingagegroups: (1) 14 years; (3)16 yearsold; (1)17 yearsold; (1)18 yearsold; (3)19 yearsold; (2)20 years; (4) 21 yearsold; (1) 22 yearsold; (1) 24 yearsold; (1) 25 years; (1) 26 yearsold; (1) 27 yearsold; (1) 28 yearsold; (1) 29 yearsold; (4) 32 yearsold; (1) 35 yearsold; (2) 36 yearsold; (4) 39 yearsold; (1) 50 years; (2) 59 yearsold. Thefashionbeing 21, 32 and 39 yearsold. Graph 1.



Graph 1: Distributionbyagerangeofpatientswhoagreedto be partoftheresearch in thesurgicalclinicsoftheMexican Center forStomatology.

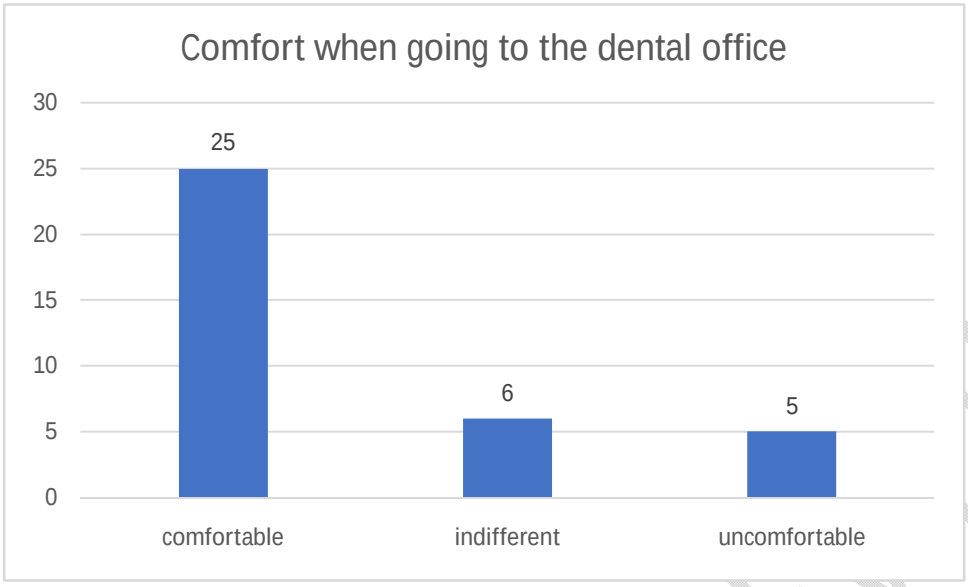
In ordertoestablishtheclinicalsituationofthepatientswhoweresubjectedtotheexperiment, weaskedabouttheir personal pathologicalhistory in ordertoknowiftheyhad a previous diagnosis ofanxietyordepression. Thisbeingconfirmed 1 (2.7%), withAsthma 1 (2.7%), DM (ASA III) 1 (2.7%) and withouthistory 32 (88.8%). Graph 2.



Graph 2: reviewof personal pathologicalhistorywhere 32 patientswithoutconfirmedhistory are presented.

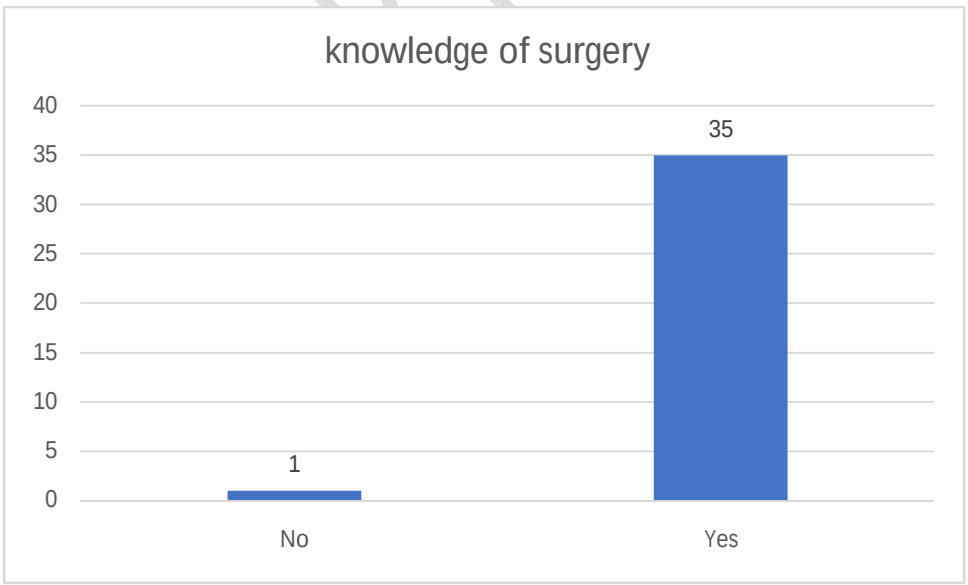
Prior to dental care, thepatientswerequestionedabouthowtheyfeltaboutcomingtotheconsultation, withtheresultthat 25 (69.4%) feltcomfortable, 6 (16.6%) haddiscomfort and 5

(13.8%) Theyexpressedindifferencetowardsdentistry. Graph 3.



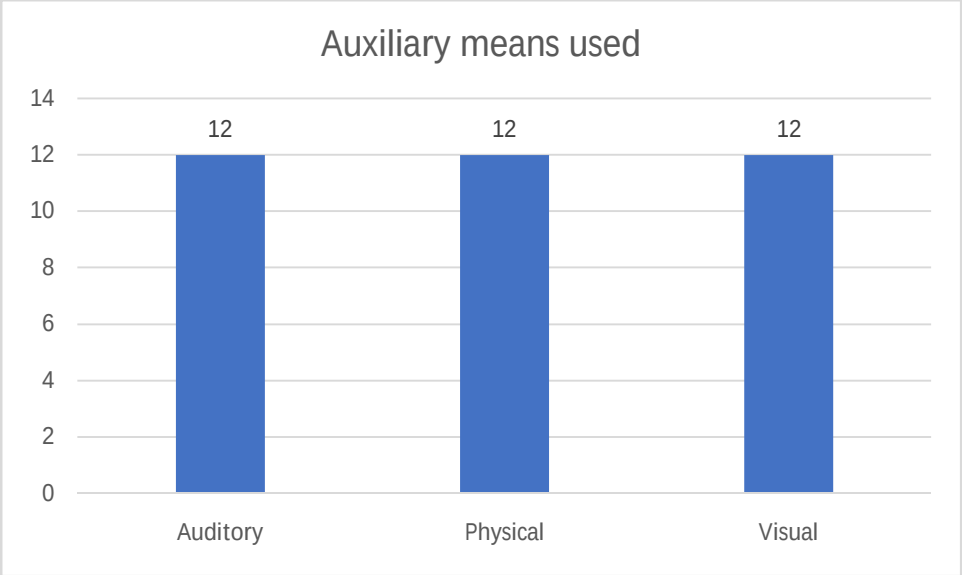
Graph 3: Thecomfortofpatients prior to dental care wasevaluated.

Animportant factor in measuringpatientsisknowingiftheyhave prior knowledgeofsurgery, knowingwhatanincision, osteotomy, odontosection and suturingconsistsof, in ordertoknowtherelationshipthatarisesfrom prior knowledge. withdiscomforttotreatment. Demonstratingthat 35 (97.2%) knewtheprocedure and 69.4% feltcomfortable. Graph 4.



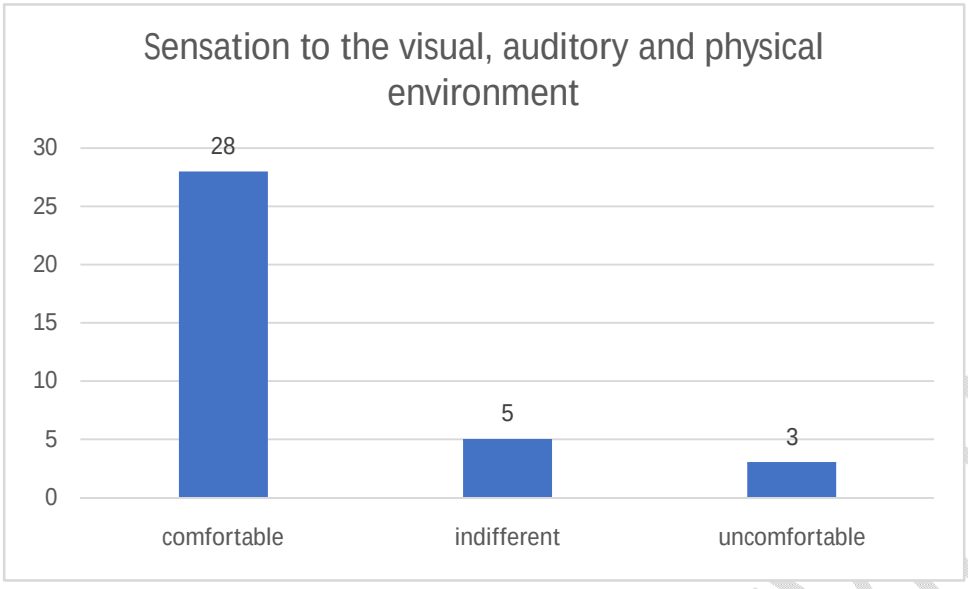
Graph 4: knowledge prior tothesurgicalproceduredoesnotrepresent a factor that can be associatedwiththediscomfortofthesurgicalact.

Auditory, physical and visual meanswereapplied in ordertodecipherwhichisthemethodthatallowsreducingthepatient'sstateofanxiety at the time ofthesurgicalprocedure, beingthatitwasapplied in thesamedistributionof 12 (33.3%). Graph 5.



Graph 5: visual, physical and auditorymeansusedtomanagethepatient'semotionalstate at the time ofsurgery.

The use ofauditory, visual and physicalmeansshowedthatpatientsshowed 77% comfort, 13% wereindifferenttotheassistant and 8.3% wereuncomfortable.Graph 6.



Graph 6: patientacceptanceofthe visual, physical and auditoryenvironment.

Discussion

Stefano V and Bedoya LM in 1998 soughtto reduce anxiety in patientsundergoing dental surgery, thedurationofthesurgery and theamountofanesthesiaused. Thisstudywasapplied in theclinicoftheUniversityof Antioquia in Medellín, where 5 studysubjectswerereviewed and a control groupwasconfirmedwithfourpeoplewhoalsorequiredtheextractionofthirdmolars. Thedurationofthesurgery, theamountofanesthesiaused and thehealing time, measuredthroughgraphicrecords. Theresultswereanalyzedindividually and as a group, comparingthe experimental and control groups. Forthis, theStudent's T test forparametricsampleswasusedwith a significanceof 0.05, findingsignificanceonly in threecomparisons in relationtotheanxiety variable[13].

Lozada-López, FD and Romero-Fernández AJ, in theirarticle, refertothefactthat dental consultations can cause changes in behavior in patients, makingthis a traumaticexperience. Forthisreason, theauthorsproposeconditioningthe dental office with audiovisual tools, reading material and flavoringsto reduce thelevelof stress and anxiety in thewaiting room[14].

Lllamola C, Pintó MS propose in theirworkthat a compilationof oral corpora be generatedthatconstitute a linguistic basis fortheVarGEmpatLingproject

(Genericvariationoflinguisticempathy) and thuspromoteempathy in a veryspecificcontextofinteractionwiththepatient and minimizethedistrust, stress and anxietythatcould be generatedbythewaiting time in the office, duringtheconsultation and dental procedures[15].

Lima ÁM, Casanova RY are awareofthefear and anxietythattreatment and the dental chair can generate, whichiswhy, in theirarticle, theycarryout a literaryreviewtoestablishtheprevalenceof sex and age, relatingitsetiology and thetreatmentsthatcould cause it. as well as itsprevention. Alsodescribingthedifferencebetweenfear, anxiety and dental phobia. Theypropose as a treatment, the control ofanxietywithbehavioral and medicationtherapy, tothetreatingdentist,
preventingthesebehaviorswithgoodcommunicationwiththepatient and the office adapted as a relaxed and calm environment[16].

Cázares LF, Lozano-Laín AJ, Gutiérrez LP. Salinas N. describes in herarticlethat dental anxietyiscommon in dental procedures and particularly in oral surgery, withdifferencesbetweengenders,
observingthatthefemalegenderistheonethatpresents extreme degreesofanxiety, althoughitshould be notedthatTheymustconsiderthe sociocultural factorswhich can determine thebehaviorofeach individual. Finally, itisveryimportantthatthedentistmakes use ofallthetechniques and skillstoavoidlevelsofanxietythat can lead tocriticalstatesduring dental treatment[17].

conclusion

The use ofphysical, visual and auditoryaids; forthemanagement and reductionof stress, anxiety and uncertaintythatthepatientexperiences, fromthe time they are in thewaitingroom, during oral surgical care and after treatment, theyallowgenerating a comfortable and calmenvironment, in additiontocarryingout control. ofanxiety in themajorityofpatients. Thisis in ordernottogenerate negative feelings in thepatientduringtheconsultation and oral surgicaltreatment. Withthis, avoidcausingpost-traumatic stress, rejectionoftreatment, abandonmentoftreatment and odontophobia.

Constantcommunicationbetweenthetreatingdentist and thepatientisofgreatimportancetogenerate a more comfortableenvironmentthatallowsthepatientto reduce the stress causedby a visittothedentist.

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