

ORAL REHABILITATION OF PREGNANT PATIENTS IN THE 7TH MONTH WITH CARDIO-VASCULAR PATHOLOGICAL IMPLICATIONS

Kamel Earar¹, Aurel Nechita¹, Alina Mihaela Calin^{1*}, Ana Magdalena Bratu^{2*}, Ciprian Adrian Dinu¹, Alina-Ramona Dimofte¹, Sonia Teodora Statescu Manaila¹, Gabriela Stan¹, Gabi Topor¹, Victorita Stefanescu¹, Iulian Catalin Bratu³, Doriana Agop Fornu¹, Iulia Alecsandra Salcianu²

1 Faculty of Medicine and Pharmacy, University "Dunarea de Jos" Galati, Romania.

2 Carol Davila University of Medicine and Pharmacy, Bucuresti, Romania.

3 Ovidius University of Constanta, Constanta, Romania

*Corresponding authors: alina_calin@hotmail.com, anaconstm@gmail.com

All authors have the same contribution.

Abstract

During pregnancy, dental care is important for the overall health of the mother and unborn baby. However, it is essential to take into account certain aspects when planning dental treatments in a pregnant woman with cardiovascular pathological implications. It is important to coordinate with your medical and dental team to ensure a safe and effective treatment plan. Pregnancy can bring additional challenges for patients with cardiovascular pathological implications during dental treatments. The medical team must know these aspects to ensure safe and effective dental treatment. Pregnancy itself can affect the cardiovascular system, and this aspect should be taken into account during dental treatments in pregnant women. It is also important to pay attention to medications and procedures used in dentistry to minimize the risk of cardiovascular complications during this delicate period. The dental management of a pregnant patient in the third trimester of pregnancy in the 7th month should be approached with caution and special attention to ensure the safety of both lives. In general, dental treatments are recommended during pregnancy to prevent dental complications that can affect the general health of the mother and fetus

Keywords: Oral rehabilitation, pregnant patient, cardio-vascular pathology, prevention.

Introduction

Pregnancy itself can affect the cardiovascular system, and this aspect should be taken into account during dental treatments in pregnant women. It is also important to pay attention to medications and procedures used in dentistry to minimize the risk of cardiovascular complications during this delicate period. [1-3]

Dental treatments can temporarily increase blood pressure, and this aspect should be taken into account in the case of pregnant women with gestational hypertension or predisposition to this condition. Your dentist and obstetrician should work together to properly manage the procedures and medications used. Gestational hypertension (HAG) is a medical condition in which a pregnant

woman's blood pressure rises significantly after the 20th week of pregnancy without being present before this time. It is important to note that HAG is not always accompanied by the presence of protein in the mother's urine, which is another specific indicator for preeclampsia. [1-3]

The stress associated with dental procedures can affect the cardiovascular system. Stress management techniques, such as deep breathing and muscle relaxation, may be useful to minimize the impact on pregnant women's cardiovascular systems. Managing stress in the dentistry of pregnant patients is essential to ensure a positive dental experience and minimize any negative impact on the health of the mother and fetus. [1-3]

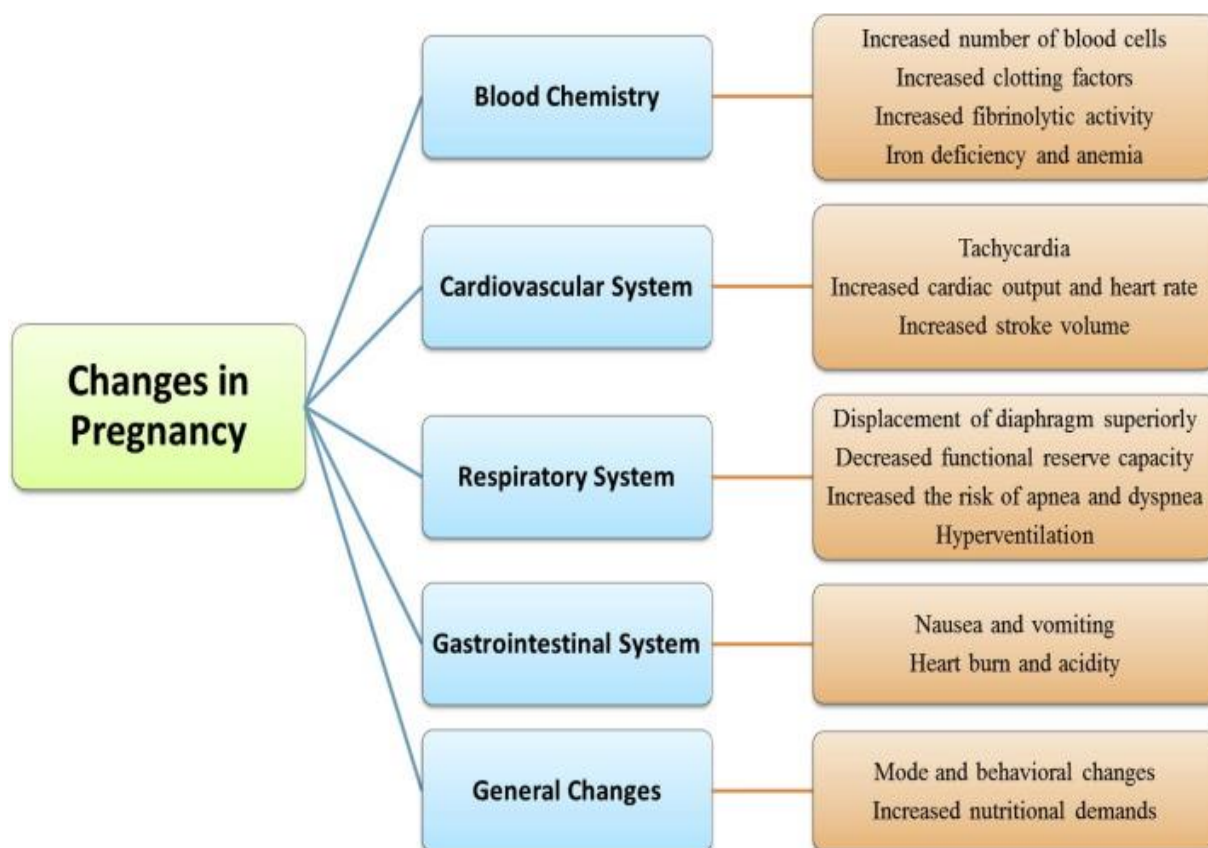


Figure 1. During pregnancy, several physiological changes occur in the body of the woman to support the growth and development of the fetus. Some of the key changes occur in the cardiovascular, respiratory, gastrointestinal, and endocrine systems. [3]

The dentist and all staff in the dental office should provide an environment where the pregnant patient feels comfortable discussing any concerns or fears related to dental procedures. Open and transparent communication can help reduce anxiety. Scheduling dental visits during quieter periods of the day and with enough time can help reduce stress. A well-established schedule can give patients a sense of control and predictability. [2-4]

Stress management techniques during treatment are a must. In the office, doctors can encourage patients to use stress management techniques, such as deep breathing or muscle relaxation, during treatment to keep stress levels under control. [2,3]

Avoiding general anesthesia if possible: General anesthesia may involve additional risks during pregnancy. In some cases, it may be preferable to use local or

regional anesthesia to minimize the impact on the entire cardiovascular system. [2-4]

Interdisciplinary communication

The dentist and obstetrician must cooperate to ensure the best possible care. It is important to share information about the patient's medical history, medications taken, and any possible complications. [4-6]

Communication with the cardiologist is essential to ensure a safe and effective dental treatment in the case of a pregnant patient with cardio-vascular pathological implications. [4-6]

The dentist and cardiologist should have open and transparent communication to share relevant information about the patient's health. This includes your medical history, medications taken, and any specific recommendations for dental care. [4-6]

The dentist should provide the cardiologist with details of the proposed

treatment, including planned procedures, use of anesthetics, pain management, and any associated risks. [4-6]

The cardiologist can provide valuable information about the risks and benefits of dental treatment in the specific context of the patient's cardiovascular problem. [4,5]

Thus, one can collaborate in establishing a treatment plan that minimizes the risks of cardiovascular disease. In some cases, it may be necessary to temporarily

adjust cardio-vascular medication before or during dental treatment. [5,6]

The dentist should be aware of any changes in the medication schedule and ensure that the patient is properly monitored. [4-6]

The cardiologist can provide specific recommendations on blood pressure management and any other aspects relevant to the patient's safety during dental treatment. [4-6]

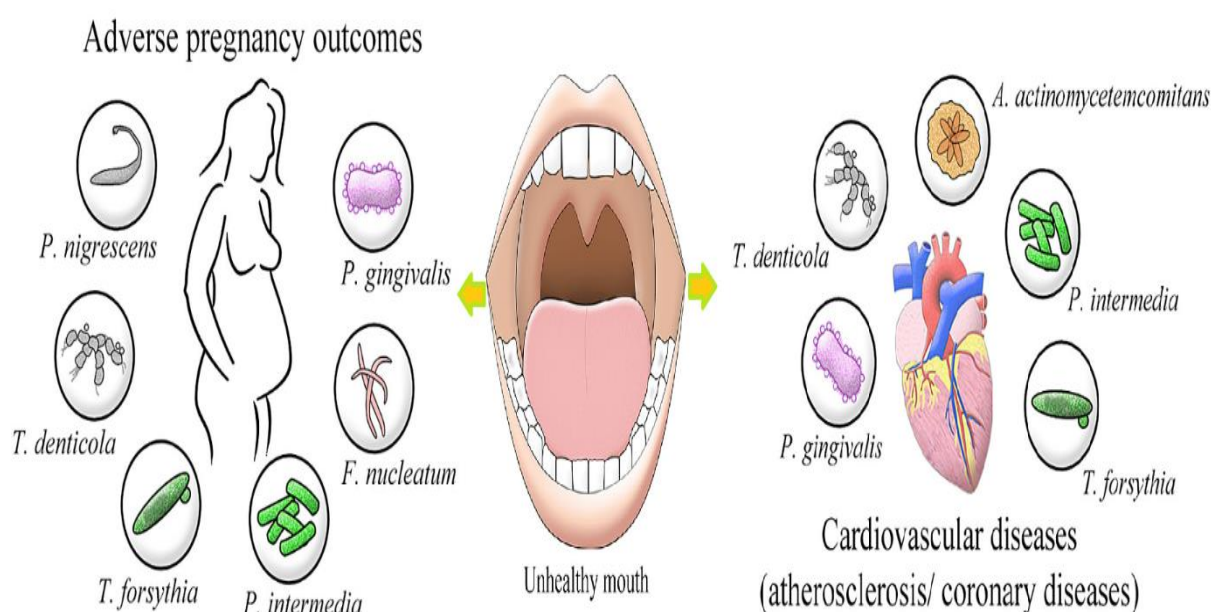


Figure 2. It's amazing to see how interconnected different parts of our body are. Taking care of our oral health is as important as caring for heart health in pregnant women, and neglecting it can lead to serious consequences. [5]

It is important to establish clear procedures for emergencies. Thus, in case of unexpected complications, both the dentist and the cardiologist can know how to respond appropriately to maintain the patient's health. [4-6]

Initiating minimally invasive treatments after preventive consultations

If dental treatment is required, minimally invasive options such as sealing

or painless fillings are recommended. Also, the extractions of the included teeth are not indicated, and only the management of pain during pregnancy and the application of state-of-the-art techniques regarding the application of transdermal systems with controlled yield load [7-9].

It is important to avoid exposure to chemicals or procedures that could create additional stress for the patient. [9-11]

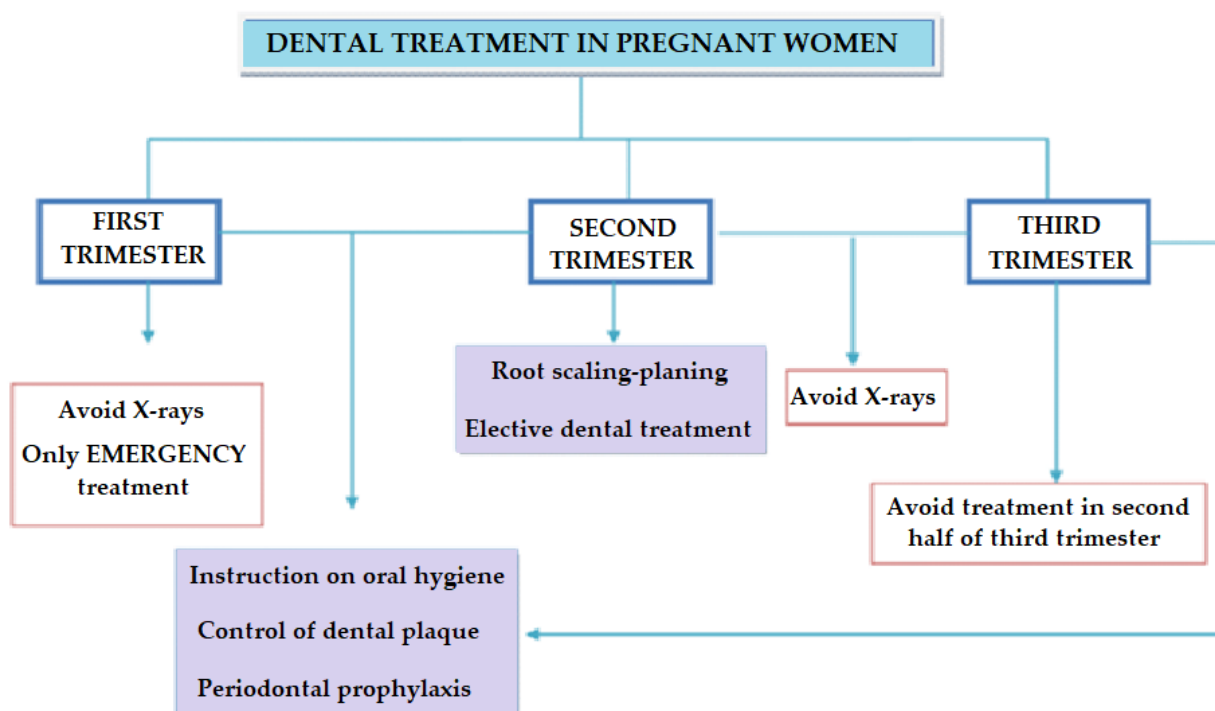


Figure 3. The management of dental care for pregnant women requires a careful balance between the needs of the mother and the safety of the developing fetus. The following algorithm provides a guideline for dental management in pregnant women [11]

Dental sealing is a procedure in which a thin layer of plastic is applied to the chewing surfaces of permanent teeth, especially children's molars and premolars. The goal is to prevent cavities from forming, providing a protective barrier against bacteria and food debris. [11-13]

Some tooth injuries can be treated with painless fillings, which involve removing cavities and filling the resulting cavity with filling materials (usually composite or ionomere glass). They require the removal of a minimum amount of healthy dental tissue. [7,13]

Techniques that involve gently removing stains or superficial lesions from the surface of teeth using a fine abrasive and grinding liquid. It is an option to improve the aesthetic appearance of pregnant patients' teeth, but the necessary precautions are taken into account. [11-14]

In the case of pulp infections, conservative endodontic treatment (such as pulpotomy) can keep the pulp tissue healthy and remove only the affected part. [10-13]

The continuation of orthodontic treatments is done under very rigorous control so that, if necessary, following a dental acid, the reattachment of the devices or components can be done easily and with special systems. [15-17]

Lasers can be used to treat various dental problems, including removing decayed tissue, contouring gums, or treating ulcerative lesions. Laser technology can offer advantages such as minimizing bleeding and postoperative discomfort. Special measures should be taken for pregnant women who have Sjogren's syndrome because this syndrome can prevent both maintaining a balance in the oral cavity and postoperative healing depending on the clinical case and pathology [18,19,38]

In the case of pulp infections, conservative endodontic treatment (such as pulpotomy) can keep the pulp tissue healthy and remove only the affected part. [18,20]

The application of fluoride gels or solutions can strengthen tooth enamel and prevent the

development of caries or periodontal pockets as well as oral candidiasis [20-22]. It is a non-invasive and effective method for preventing tooth decay. In this sense, transdermal systems with transdermal ceding systems can be used, with the possibility of loading either with essential oils or with active pharmaceutical substances compatible with pregnancy. [7-9,20-22]

Reducing the stress associated with dental treatment is crucial for patients with cardiovascular problems, as well as the capacity of the managerial office, so as not to transmit to the patient, especially in the present situation, having cardiac pathology, virally transmitted diseases, especially modified strains of COVID. Planning regular breaks and shortening the duration of treatment can help minimize stress. [23]

Antibiotics and painkillers

When antibiotics are needed, the dentist must choose an antibiotic considered safe for pregnant women and dose the treatment correctly. [24-26]

During dental treatments in pregnant women, avoiding unsafe antibiotics and painkillers is essential to ensure the safety

of both mother and fetus. Avoiding tetracyclines: Tetracyclines can affect the development of fetal teeth and bones, especially in the first and second trimesters. Preference is given to antibiotics of other classes, such as penicillins or cephalosporins, which are considered safer during pregnancy. [24-26]

Doctor's consultation: Before prescribing any antibiotic, your dentist should consult your obstetrician and choose an antibiotic that is safe during pregnancy, given the type of infection. [24-26, 36-42]

Analgezice:

Avoiding aspirin and nonsteroidal anti-inflammatory drugs (NSAIDs): These medications can have potential risks to fetal development, especially in the third trimester. Their use may be associated with complications such as delaying the closure of the ductus arteriosus, which can lead to heart problems in the newborn. [24-26]

Paracetamol preference: Paracetamol is usually considered safer during pregnancy and can be used for pain control. However, in this case, too, the dosage should be by the recommendations of the doctor. [24-26]

Drugs	Use in Pregnancy	Use in Lactation	Remarks
Antibiotics			
Amoxicillin Metronidazole Erythromycin Penicillin Cephalosporins	yes	yes	Fetal ototoxicity with gentamycin. Discoloration of teeth with tetracycline. Maternal toxicity/fetal death with chloramphenicol
Gentamycin Clindamycin	yes	yes	
Tetracycline Chloramphenicol	no	no	
Analgesics			
Acetaminophen Morphine Meperidine	yes	yes	Postpartum hemorrhage associated with aspirin. Respiratory depression with morphine.
Oxycodone Hydrocodone Propoxyphene Pentazocine	With caution	With caution	
Aspirin Ibuprofen Naproxen	Not in 3rd trimester	no	

Tab 1. Anti-inflammatory and analgesic drugs are most commonly used in dental rehabilitation therapies with their limitations and observations. [26]

Antifungals, local anesthesia, corticosteroid, and oral sedatives in oral rehabilitation of pregnant patient in the 7th month with cardio-vascular pathological implications.

In oral rehabilitation of a pregnant patient in the 7th month with cardio-vascular pathological implications, it is important to consider special precautions to ensure the safety of mother and child. [24-26, 43-49]

Avoiding oral antifungals, if possible, it is recommended to avoid oral

antifungals during pregnancy, especially in the first trimester. Instead, they may be considered safe topical or alternative options under your doctor's supervision. [25,26]

Choose local anesthetics carefully because local anesthetics without vasoconstrictors or with low concentrations can be used to minimize risks for patients with cardiovascular problems. Consultation with your cardiologist and obstetrician is crucial to assess the risks and benefits. [24-26]

Antifungals			
Clotrimazole Nystatin	yes	yes	Fetal toxicity with ketoconazole.
Fluconazole Ketoconazole	With caution	With caution	
Local Anesthetics			
Lidocaine Prilocaine Etidocaine	yes	yes	Fetal bradycardia with Mepivacaine & Bupivacaine
Mepivacaine Bupivacaine	With caution	yes	
Corticosteroids			
Prednisolone	yes	yes	
Sedative/Hypnotic			
Nitrous oxide	Not in 1st trimester ++	yes	Spontaneous abortions with Nitrous oxide. Cleft lip/palate with Benzodiazepines
Barbiturate Benzodiazepines	no	no	

Tab 2. Antifungal drugs, local anesthesia, corticosteroids, and oral sedatives from oral rehabilitation of pregnant patients with their limitations and observations. [26]

Systematic administration of corticosteroids may carry risks for fetal development. Local or limited use of corticosteroids may be considered, but the decision should be made in collaboration with your obstetrician and cardiologist. [25,26]

Limiting the use of oral sedatives, it is recommended to avoid oral sedatives, especially in the third trimester of pregnancy, because of the potential risks to the newborn. Alternative anxiety management techniques, such as relaxation or meditation techniques, may be considered under your doctor's guidance. [24-26]

About radiographers and sanitation.

Dental X-rays may be taken during pregnancy, but it is important to consider special precautions to minimize radiation exposure. Dental X-rays are often needed to assess the patient's oral condition and plan appropriate treatment. However, during pregnancy, it is recommended to avoid

unnecessary exposure to radiation to protect the development of the fetus. [27-33]

If it is absolutely necessary to have a dental X-ray taken during pregnancy, the dentist will take precautions, such as using low-dose equipment and using lead screens to protect the patient's abdominal area. It is important to inform your dentist about your pregnancy and discuss the benefits and risks of dental X-rays before deciding to have them. [27-30]

In terms of oral hygiene, it is crucial during pregnancy to prevent dental problems such as gingivitis or periodontal disease, which can affect both the oral health of the mother and the overall health of the fetus. Regular oral hygiene, including brushing and flossing, should be maintained. It is important to know the materials from which the prosthetic works were made, as well as the types of devices, but also the pathology in periodontal pockets. If there is any concern about oral hygiene products or treatments recommended during pregnancy, it is

always advisable to talk to your dentist for personalized advice. [28-33]

Conclusions

Stress management techniques during treatment are a must. In the office, doctors can encourage patients to use stress management techniques, such as deep breathing or muscle relaxation, during treatment to keep stress levels under control.

During dental treatments in pregnant women, avoiding unsafe antibiotics and painkillers is essential to ensure the safety of both mother and fetus.

It is important to evaluate each case individually and adapt the treatment plan according to the specific needs and conditions of the pregnant patient. Close collaboration between the dentist, gynecologist, and patient, along with effective communication and careful planning, can contribute to a more comfortable and effective dental experience during pregnancy.

Gestational hypertension (HAG) is a medical condition in which a pregnant woman's blood pressure rises significantly after the 20th week of pregnancy without being present before this time. It is important to note that HAG is not always accompanied by the presence of protein in the mother's urine, which is another specific indicator for preeclampsia.

Choosing local anesthetics carefully: Local anesthetics without a vasoconstrictor or with low concentrations can be used to minimize risks for patients with cardiovascular problems. Consultation with your cardiologist and obstetrician is crucial to assess the risks and benefits.

Reducing the stress associated with dental treatment is crucial for patients with cardiovascular problems. Planning regular breaks and shortening the duration of treatment can help minimize stress.

REFERENCES

1. Tarsitano, B. F., & Rollings, R. E. (1993). The pregnant dental patient: evaluation and management. *General dentistry*, 41(3), 226-234.
2. Lydon-Rochelle, M. T., Krakowiak, P., Hujoel, P. P., & Peters, R. M. (2004). Dental care use and self-reported dental problems about pregnancy. *American journal of public health*, 94(5), 765-771.
3. Puisoru, M., Forna, N., Fatu, A.M., Fatu, R., Fatu, C., Analysis of mandibular variability in humans of different geographic areas, *Annals of anatomy-Anatomischer Anzeiger*, Volume 188, Issue 6, 2006, Page. 547-554
4. Mustafa Naseem, Zohaib Khurshid, Hammad Ali Khan, Fayez Niazi, Sana Zohaib, Muhammad Sohail Zafar, Oral health challenges in pregnant women: Recommendations for dental care professionals, *The Saudi Journal for Dental Research*, Volume 7, Issue 2, 2016, Pages 138-146, ISSN 2352-0035, <https://doi.org/10.1016/j.sjdr.2015.11.002>.
5. Kurien, S., Kattimani, V. S., Sriram, R. R., Sriram, S. K., VK, P. R., Bhupathi, A., ... & Patil, N. N. (2013). Management of pregnant patients in dentistry. *Journal of International Oral Health: JIOH*, 5(1), 88.
6. Murariu, A., Hanganu, C., Bobu, L., Vasluianu, R., Geletu, G., Baciu, R., Stafie, C.S., Forna, N.C., Comparative study of oral health systems in Europe, *Romanian journal of oral rehabilitation*, 2020, 12 (4), pp.11-17
7. Vasluianu, R.I., Forna, N.C., Baciu, E.R., Zaltariov, M., Vasiliu, L., Murariu, A., In vitro Evaluation of Enamel Surface Treated with Fluoride After Bleaching and Etching Erosive Processes, *Revista De Chimie*, 2018, 69 (7), pp.1714-1717

8. Fiona Q. Bui, Cassio Luiz Coutinho Almeida-da-Silva, Brandon Huynh, Alston Trinh, Jessica Liu, Jacob Woodward, Homer Asadi, David M. Ojcius, Association between periodontal pathogens and systemic disease, *Biomedical Journal*, Volume 42, Issue 1,2019, Pages 27-35, ISSN 2319-4170, <https://doi.org/10.1016/j.bj.2018.12.001>.
9. Cocoş DI, Earar K, Bucur SM, Păcurar M, Mariş M, Cocoş ID, Galea C. FREQUENCY OF THIRD MOLAR PATHOLOGY: INNOVATIVE CAUSES, SYMPTOMS AND TREATMENT OPTIONS. *Romanian Journal of Oral Rehabilitation* Vol. 15, No.4 October-December 2023
10. Agop-Forna, D, Cretu, C., Topoliceanu, C., Salceanu, M., Vasincu, D., Forna, N., Clinical applications of diode lasers in oral surgery, *Romanian journal of oral rehabilitation*, 2021, 13 (1), pp.265-270
11. Feier R, Sireteanu Cucui RM, Ratiu RF, Baci D, Galea C, Sachelarie L, Nistor C, Cocos D, Hurjui LL, Cernei ER. Comparative Study of Ozonated Olive Oil and Extra Virgin Olive Oil Effects on Oral Hygiene. *Applied Sciences*. 2023; 13(5):2831. <https://doi.org/10.3390/app13052831>
12. Dumitriu Buzia O, Păduraru AM, Stefan CS, Dinu M, Cocoş DI, Nwabudike LC, Tatu AL. Strategies for Improving Transdermal Administration: New Approaches to Controlled Drug Release. *Pharmaceutics*. 2023; 15(4):1183. <https://doi.org/10.3390/pharmaceutics15041183>
13. Jahan SS, Hoque Apu E, Sultana ZZ, Islam MI, Siddika N. Oral Healthcare during Pregnancy: Its Importance and Challenges in Lower-Middle-Income Countries (LMICs). *Int J Environ Res Public Health*. 2022 Aug 27;19(17):10681. doi: 10.3390/ijerph191710681. PMID: 36078397; PMCID: PMC9518121.
14. Leca, D., Calin, A.M., Earar, K., Nechita, A., Chiscop, I., Dorobat, G., Dorobat, C., Ilie, M., Debita, M., Biochemical Changes of Cerebrospinal Liquid in Viral Meningitis, *Revista de chimie*, 2015, 66 (12), pp.2005-2008
15. Chaveli Begonya, Pérez Maria Gracia, Jimenez Yolanda. Dental considerations in pregnancy and menopause. *Journal of Clinical and Experimental Dentistry*, 2011/04/01 VL - 3 DO - 10.4317/jced.3.e135
16. Kandan, P. M., Menaga, V., & Kumar, R. R. (2011). Oral health in pregnancy (guidelines to gynaecologists, general physicians & oral health care providers). *JPMMA. The Journal of the Pakistan Medical Association*, 61(10), 1009-1014.
17. Esanu, I., Debita, M., Dorobat, CM, Iliescu, AA, Matei, MN, Palade, DO Earar, K, Chemical and Biological Factors in Infectious Diseases The oral microbial flora, *Revista de chimie*, 2019, 70 (4), pp.1420-142
18. Nemtoi, A., Nemtoi, A., Fochi, A., Sirghe, A.E., Preda, C., Earar, K., Beznea, A., Onisor, C., Iorgulescu, G., Haba, D., CBCT Evaluation of the Mandibular Bone Quality in Relation to Skeletal Status After Treatment with Strontium Renelate in Diabetic Patients, *Revista de chimie*, 2019, 70 (11), pp.4113-4118
19. Ressler-Maerlender, J., Krishna, R., & Robison, V. (2005). Oral health during pregnancy: current research. *Journal of women's health*, 14(10), 880-882.
20. Noora Mohammed Eissa Bushehab, Jayadevan Sreedharan, Sesha Reddy, Jovita D'souza, Hossam Abdelmagyd, "Oral Hygiene Practices and Awareness of Pregnant Women about the Effects of Periodontal Disease on Pregnancy Outcomes", *International Journal of Dentistry*, vol. 2022, Article ID 5195278, 6 pages, 2022. <https://doi.org/10.1155/2022/5195278>
21. Cocoş DI, Bucur SM, Coman TM, Păcurar M. Observational study on the frequency of anchorage auxiliaries in fixed orthodontics, *Romanian Journal of Oral Rehabilitation* vol. 13, nr. 3, (iulie-septembrie) anul 2021.
22. Bucur SM, Cocoş D, Saghin A. Bond strength of three adhesive systems used for bonding orthodontic brackets, *Romanian Journal of Oral Rehabilitation* Vol.12, pag 162-167, No. 1, January - March 2020.
23. Vlasa A, Bud ES, Păcurar M, Lazăr L, Streiche L, Bucur SM, Cocoş DI, Bud A. Effects of Composite Resin on the Enamel after Debonding: An In Vitro Study—Metal Brackets vs. Ceramic Brackets. *Applied Sciences*. 2021; 11(16):7353. <https://doi.org/10.3390/app11167353>

24. Kantor J, Bucur SM, Cocos D, Meroiu A, Decuseara M, Pacurar M. Statistical study concerning doctor's opinion in using the Diode Laser in Endodontics. Romanian Journal of Stomatology – Volume 69, No. 2, 2023. Ref: Ro J Stomatol. 2023;69(2) DOI: 10.37897/RJS.2023.2.5
25. Coman TM, Mănărăzan AD, Cîrstea AS, Cocoş DI. The multidisciplinary approach of a patient with Sjögren's Syndrome in the dental office – case report, Acta Stomatologica Marisiensis 2019 ;2(2)235-240 <https://asmj.ro/tag/hypertension/>
26. Silvano C, Bucur SM, Cocoş DI, Vlăsa A. Statistical analysis on the effect of removable partial dentures on the periodontium Romanian Journal of Oral Rehabilitation Vol. 13, No.4 October-December 2021
27. Ichim, D.L. ; Duceac, L.D., Marcu, C., Iordache, A.C. , Ciomaga, IM , Luca, AC , Goroftei, E.R.B. , Mitrea, G., Damir, D. Stafie, L. , Synthesis and Characterization of Colistin Loaded Nanoparticles Used to Combat Multi-drug Resistant Microorganisms, Revista de chimie, 2019, 70 (10) , pp.3734-3737
28. Popa, M.V.Goroftei, E.R.B., Gutu, C., Duceac, M. , Marcu, C. , Popescu, M.R. , Drugus, D. , Duceac, L.D. , Observational study of post-covid-19 syndrome in health care workers infected with SARS-CoV-2 virus: general and oral cavity complications, Romanian journal of oral rehabilitation, 2023 ,15 (3) , pp.198-207
29. Duceac, LD , Eva, L , Dabija, M., Ciuhodaru, T . Gutu, C ., Romila, L ., Nazarie, S., Prevention and limitation of coronavirus SARS-CoV-2 cases in hospitals and dental medicine offices, International journal of medical dentistry, 2020 24 (2) , pp.149-156
30. Lisa E.L., Dragostin O.M., Petroaie A.D, Gurau G., Cristea A., Pavel A., Bonifate F., Popa P.S., Matei M. The Effect of the New Imidazole Derivatives Complexation with Betacyclodextrin, on the Antifungal Activity in Oropharyngeal Infections. Processes, 2022, 10(12): 2697. DOI: 10.3390/pr10122697
31. Vasluianu, R.I., Ungureanu, D., Jitaru, D. , Ioanid, A.D. , Forna, N.C., Crevicular C-telopeptide and C-propeptide of type I collagen are markers of parodontal disease evolution in diabetic and non-diabetic patients, 2012, Revista romana de medicina de laborator 20 (2) , pp.173-180
32. Galea C, Cocoş DI, Earar K, Moales D, Ratiu RF, Cocoş ID, Păcurar M, Bucur SM. Taxonomic position, cultivation method in romania as well as the rate of obtaining the essential geranium oil grown. Romanian Journal of Oral Rehabilitation. Vol. 15, No.4 October-December 2023
33. Bucur SM, Popa R, Cocoş DI, Tunyogi AB, Istrate P. (2022). PRESENCE OF CANDIDA ALBICANS IN HAWLEY PLATE WEARERS: A PILOT STUDY. Romanian Journal of Oral Rehabilitation, 14(1).
34. Tüzes L, Cocoş DI, Szóts M, Bucur SM. Coronavirus prevention methods in dental practices Romanian Journal of Oral Rehabilitation Vol. 14, No.2 April-June 2022.
35. Michalowicz, B. S., DiAngelis, A. J., Novak, M. J., Buchanan, W., Papapanou, P. N., Mitchell, D. A., ... & Rogers, T. B. (2008). Examining the safety of dental treatment in pregnant women. The Journal of the American Dental Association, 139(6), 685-695.
36. Botnariu G., Forna N., Popa A., Popescu R. , Onofriescu A. , Cioloca D., Lacatusu C. , Mihai B. , Correlation of Glycemic Control Parameters in Non-Diabetic Persons with Cardiovascular Risk Scores - Results from a Cross-Sectional Study, Revista De Chimie , 2017, 68 (1) , pp.108-110
37. Moscalu, M., Moscalu, R., Dascalu, C.G., Tarca, V. , Cojocaru, E. , Costin, I.M. , Tarca, E., Serban, I.L., Histopathological Images Analysis and Predictive Modeling Implemented in Digital Pathology-Current Affairs and Perspectives, DIAGNOSTICS, 2023, 13 (14)
38. Agop-Forna, D., Salceanu, M., Topoliceanu, C. , Cretu, C. , Vasincu, D. , Forna, N. , Dental lasers in restorative dentistry: a review, Romanian journal of oral rehabilitation, 2021, 13 (2) , pp.7-17
39. Duceac, L.D. , Mitrea, G., Banu, E.A., Ciuhodaru, M.I. . Ciomaga, I.M. , Ichim, D.L., Constantin, M. Luca, A.C., Synthesis and Characterization of Carbapenem Based Nanohybrids as Antimicrobial Agents for Multidrug Resistant Bacteria, Materiale plastice, 2019, 56 (2) , pp.388-391

40. Gradinaru, I., Antohe, M.E. , Ioanid, N., Fratila, D . Contemporary therapeutic decisions in the treatment of various types of edentation, Romanian journal of oral rehabilitation, 2016, 8 (2) , pp.44-50
41. Krauer, B., & Krauer, F. (1977). Drug kinetics in pregnancy. Clinical pharmacokinetics, 2, 167-181.
42. Martu M.A., Solomon S.M. , Toma V. , Maftei G.A. , Iovan, A. Gamen A. , Hurjui, L. , Rezus, E. , Foia L. Forna N.C. , The importance of cytokines in periodontal disease and rheumatoid arthritis. review,Romanian Journal Of Oral Rehabilitation,2019, 11 (2) , pp.230-240
43. Buzia, O.D , Con, M., Tatu, A.L., Batir, D.M. , Tiutiuca, C. , Ionuta, G. , Topor, G. , Focsaneanu, S. ,Iamandii, M., Schipor, O., Calin, A.M. ,Stability and microbiological analysis of aloe barbadensis and chamomilla matricaria pharmaceutical forms,Romanian journal of oral rehabilitation, 2022 14 (1) , pp.216-228
44. Duceac, L.D., Banu, E.A., Baci, G., Lupu, V.V. ,Ciomaga, I.M. ,Tarca, E. , Mitrea, G. , Ichim, D.L. , Damir, D., Constantin, M. , Assessment of Bacteria Resistance According to Antibiotic Chemical Structure, Revista de chimie, 2019 70 (3) , pp.906-908
45. Maftei N.M., Iancu A.V., Elisei A.M., Gurau T.V., Ramos-Villarroel A.Y., Lisa E.L., Functional Characterization of fermented beverages based on soy milk and sea buckthorn powder, Microorganism,2023, 4, 11(6):1493
46. Forna N.C., Dascalu C. , Forna D. , Antohe M.E. , Incidence and prevalence of dental - periodontal conditions and edentation in Moldavia, Medical-Surgical Journal-Revista Medico-Chirurgicala , 2013,117 (1) , pp.205-211
47. Puscu, D.C.,Ciuluvica, R.C., Anghel, A., Malaescu, G.D. ,Ciursas, A.N. ,Popa, GV , Forna, D.A. ,Busuioc, C.J. , Silosi, I., Periodontal disease in diabetic patients - clinical and histopathological aspects, Romanian journal of morphology and embryology, 2016, 57 (4) , pp.1323-1329
48. Al Namat, R., Duceac, L.D., Chelaru, L., Dabija, M.G. , Gutu, C, Marcu, C. , Popa, M.V. , Popa, F., Goroftei, E.R.B. ,Tarca, E. Post-Coronary Artery Bypass Grafting Outcomes of Patients with/without Type-2 Diabetes Mellitus and Chronic Kidney Disease Treated with SGLT2 Inhibitor Dapagliflozin: A Single-Center Experience Analysis, 2024,Diagnosics, 14 (1)
49. Patil, S., Thakur, R., Madhu, K., Paul, S. T., & Gadicherla, P. (2013). Oral health coalition: knowledge, attitude, practice behaviors among gynaecologists and dental practitioners. Journal of international oral health: JIOH, 5(1), 8.