

#### FOR NON-ORAL HEALTH PROFESSIONALS

# **Oral Health and Pregnancy**

## Background

Oral health is an integral part of overall health and well-being. It is especially important for women to take care of their oral health during pregnancy, both for their own and their baby's overall health and well-being. This fact sheet provides other healthcare professionals with key information on the effects of pregnancy on oral health, as well as the potential negative effects of poor oral health on pregnancy outcomes. It also includes practical advice on how to support pregnant patients in maintaining good oral health, and when to refer them for dental treatment.

#### Effect of pregnancy on oral health<sup>1,2</sup>

Pregnancy can have a number of effects on oral health. Some of the most common effects include:

- Hormonal changes: hormonal changes during pregnancy can lead to inflammation of the gums which can
  result in increased plaque build-up, leading to red and inflamed gums which may bleed easily. This is known as
  pregnancy gingivitis.
- 2. Sickness: sickness and vomiting can increase the acidity in the mouth, which can lead to erosion of tooth enamel and sensitivity.
- 3. Cravings: pregnant women may experience cravings for particular foods. Frequent snacking on sweet foods can lead to an increase in tooth decay.
- 4. Dry mouth: some pregnant women may experience dry mouth, which can lead to an increase in tooth decay and other oral health problems.
- 5. Difficulty maintaining oral hygiene: pregnancy symptoms such as morning sickness may make it difficult for women to brush and floss their teeth thoroughly.

Despite the challenges above, it is important for pregnant women to maintain good oral hygiene during pregnancy, including brushing with a fluoride toothpaste and flossing at least twice a day, and visiting their dentist regularly for a check-up and cleaning. It is also important to maintain a healthy diet and avoid sugary foods and drinks.





#### Effect of oral diseases on pregnancy<sup>3,4</sup>

Periodontal disease (a severe inflammation of the gums) can have negative effects on the pregnancy, such as,

- 1. Preterm birth: studies have shown that women with periodontal disease are at a higher risk of a preterm baby of low birth weight.
- 2. Gestational diabetes: pregnant women with periodontal disease may also be at a higher risk of developing gestational diabetes, a type of diabetes that develops during pregnancy.
- 3. Preeclampsia: some studies have suggested that periodontal disease may be associated with an increased risk of preeclampsia, a serious pregnancy complication characterized by high blood pressure and protein in the urine.

## Safety of dental treatment during pregnancy<sup>5,6</sup>

Dental treatment is generally considered safe during pregnancy, but certain precautions should be taken to ensure the safety of the mother and baby. Routine dental treatment, such as cleanings and fillings, can be performed at any time during pregnancy. The current American Dental Association policy on treatment during pregnancy indicates that regular and emergency dental care, including the use of local anaesthetics and radiographs, is safe at any stage during pregnancy. At all times shield protection is needed. It is important to note:

- Use of anaesthesia: while local anaesthesia used to control pain and discomfort during dental procedures
  is considered safe, sedation should be used with caution. The type and dosage of sedative used should
  be carefully considered. Nitrous oxide (laughing gas) is classified as a pregnancy risk group Category C
  medication, meaning that there is a risk of foetal harm if administered during pregnancy. It is recommended that
  pregnant women, both patients and staff, should avoid exposure to nitrous oxide.
- Medication use: medications, such as antibiotics and painkillers, should be used with caution during pregnancy. Dentists usually consult with the patient's primary health care providers and obstetrician before prescribing antibiotics and painkillers, as some medications may not be safe and thus strictly contraindicated/forbidden during pregnancy.
- Antibacterial agents: antibacterial agents such as chlorhexidine and povidone-iodine, which are commonly used in dental treatment, are considered safe for use during pregnancy.

It is also important to note that:

- The best way to minimize the need for medication during pregnancy is by maintaining good oral hygiene and visiting the dentist for regular check-ups and cleaning before and during the pregnancy.
- Other healthcare professionals should communicate with the patient's dentist to ensure that the appropriate precautions are taken, and that the best course of treatment is chosen for the patient.

# **Oral healthcare delivery framework**

#### Ask

- 1. How often do you brush and floss your teeth?
- 2. Have you noticed any changes in your gums, such as redness, swelling, or bleeding during brushing or flossing?
- 3. Have you experienced any dental pain or sensitivity?
- 4. Have you had any dental work done recently, such as a filling or extraction?
- 5. Have you seen a dentist or dental hygienist recently?
- 6. Do you have any history of periodontal disease or other oral health issues?
- 7. Have you noticed any changes in your sense of taste or appetite during your pregnancy?
- 8. Are you experiencing sickness or vomiting?
- 9. Are you taking any medications that may affect your oral health?
- 10. Are you experiencing any financial or logistical challenges that may affect your ability to access dental care?
- 11. Are you under the care of a dental professional for your pregnancy?

By asking these questions, you can gather important information about the pregnant patient's oral health and identify any potential issues that may need to be addressed to ensure that the health of both the mother and the baby are safeguarded.

#### Look

All other healthcare professionals, when examining the mouth of a pregnant patient, should look for the following:

- 1. Gum health: check for signs of inflammation, such as redness, swelling, or bleeding. Pregnancy can increase the risk of gingivitis and inflammation of the gums.
- 2. Tooth decay: look for signs of cavities, such as brown or black spots on the teeth.
- 3. Oral hygiene: observe the overall oral hygiene status of the patient, such as the cleanliness of their teeth, and their tongue and the presence of plaque or tartar build-up.
- 4. Dental restoration: examine any dental restoration such as fillings or crowns for any signs of wear or failure.

Healthcare professionals should additionally look for the following during an examination:

- 5. Oral infections: check for signs of oral infections, such as white or red patches on the gums, tongue or cheeks. These can be caused by bacteria or viruses and can be especially dangerous for pregnant women.
- 6. Soft tissues: look for any signs of oral thrush, a yeast infection that can occur in pregnant women due to hormonal changes that make the mouth more susceptible to fungal growth.
- 7. Oral cancer: look for any signs of oral cancer, such as white or red patches on the gums, tongue, or cheeks, or any lumps or bumps in the mouth.

It is important to note that some pregnant women may experience pregnancy tumours or pyogenic granuloma, which are benign growths in the gums. These are usually red in colour, bleed easily and may need to be removed by a dentist.

By looking for these signs, you can identify any oral health issues that may need to be addressed to ensure the health of both mother and baby.

## Decide

Other healthcare professionals should be aware of the following before taking any decision related to dental treatment during pregnancy:

- 1. Periodontal disease may have negative effects on pregnancy: other healthcare professionals should be aware of this and encourage pregnant patients to seek treatment for inflamed and red gums which may indicate gum disease.
- 2. Pregnant patients may require special care during dental treatment: other healthcare professionals should communicate with the patient's dentist to ensure that the appropriate precautions are taken.

#### Act

- 1. Educate the pregnant woman about the importance of oral hygiene during pregnancy and how it can affect both her and her baby's health.
- 2. Encourage the pregnant woman to maintain a regular oral hygiene routine, including brushing and flossing at least twice a day.
- 3. Recommend that the pregnant woman visits a dentist for regular check-ups and cleaning.
- 4. Advise the pregnant woman to avoid sugary and acidic foods and drinks, which can increase the risk of tooth decay.
- 5. Monitor the pregnant woman for pregnancy-related oral health conditions such as pregnancy gingivitis and providing appropriate treatment if necessary.
- 6. Advise the pregnant woman to quit smoking or using other tobacco products, as it increases the risk of oral cancer and other oral health issues and harms the developing foetus.
- 7. Advise the pregnant woman to avoid alcohol consumption as it can cause birth defects and other developmental issues for the baby.
- 8. Refer to a dentist under the following circumstances:
  - a. During the first trimester: it is important to establish a contact to a regular oral healthcare provider for the pregnant woman before, during and after pregnancy. Pregnant patients should be encouraged to visit the dentist during the first trimester.
  - b. Gum disease: if the pregnant woman is experiencing signs of gum disease, such as bleeding gums, red or swollen gums, or persistent bad breath, she should be referred to a dentist for treatment.
  - c. Oral pain or infection: if the pregnant woman is experiencing oral pain or infection, such as a toothache or abscess, she should be referred to a dentist for treatment.
  - d. Dental trauma: if the pregnant woman has experienced dental trauma, such as a broken or knockedout tooth, she should be referred to a dentist for treatment.
  - e. Poor oral hygiene: if the pregnant woman is not maintaining good oral hygiene, such as not brushing or flossing regularly, she should be referred to a dentist for education and treatment.
  - f. Pregnant women with pre-existing medical conditions: if your patient has a pre-existing medical condition such as diabetes, hypertension, autoimmune disorder or cancer, they may have an increased risk of oral health problems during pregnancy and should be referred to a dentist for preventive and/or therapeutic care.

#### Document

It is important to document the following information about your pregnant patient's oral health:

- 1. Oral health history: document any previous oral health problems, such as cavities, gum disease, or oral surgery. Also, document the patient's oral hygiene habits, such as brushing and flossing frequency.
- Current oral health status: document the patient's current oral health status, including any signs of oral disease, such as bleeding gums, red or swollen gums, or persistent bad breath. Document any oral pain or infection, such as a toothache or abscess.
- 3. Dental history: document any previous dental treatment, such as fillings, extractions, or orthodontic treatment.
- 4. Medications: document any medications the patient is currently taking, including any antibiotics or painkillers.
- 5. Pregnancy information: document the patient's gestational age and any pregnancy-related information, such as the due date, any prenatal care received, and any pregnancy-related complications.
- 6. Referrals: document any referrals to a dentist or other healthcare provider, including the date and reason for referral.
- 7. Follow-up: document any follow-up appointments, including the date and reason for the follow-up.

This information will assist the dentist in providing appropriate care for the patient and will also help to ensure continuity of care between the medical and dental teams. Additionally, it is important to keep in mind that pregnant patients have specific needs and considerations, so it is important to document any specific information related to the pregnancy.

## This factsheet is supported by:



## References

- 1. Laine MA. Effect of pregnancy on periodontal and dental health. Acta Odontol Scand. 2002 Oct;60(5):257-64. doi: 10.1080/00016350260248210. PMID: 12418714.
- Fakheran, O., Keyvanara, M., Saied-Moallemi, Z. et al. The impact of pregnancy on women's oral healthrelated quality of life: a qualitative investigation. BMC Oral Health 20, 294 (2020). https://doi.org/10.1186/ s12903-020-01290-5 [Accessed on 13 March 2024].
- 3. Xu B, Han YW. Oral bacteria, oral health, and adverse pregnancy outcomes. Periodontol 2000. 2022 Jun;89(1):181-189. doi: 10.1111/prd.12436. Epub 2022 Mar 4. PMID: 35244963.

# References (continued)

- 4. Bobetsis YA, Graziani F, Gürsoy M, Madianos PN. Periodontal disease and adverse pregnancy outcomes. Periodontol 2000. 2020 Jun;83(1):154-174. doi: 10.1111/prd.12294. PMID: 32385871.
- 5. American Dental Association. Pregnancy. Available from: https://www.ada.org/resources/research/ science-and-research-institute/oral-health-topics/pregnancy [Accessed on 13 March 2024].
- Bao J, Huang X, Wang L, He Y, Rasubala L, Ren YF. Clinical practice guidelines for oral health care during pregnancy: a systematic evaluation and summary recommendations for general dental practitioners. Quintessence Int. 2022 Mar 14;53(4):362-373. doi: 10.3290/j.qi.b2644863. PMID: 35119241.
- Riggs E, Kilpatrick N, Slack-Smith L, Chadwick B, Yelland J, Muthu MS, Gomersall JC. Interventions with pregnant women, new mothers and other primary caregivers for preventing early childhood caries. Cochrane Database Syst Rev. 2019 Nov 20;2019(11):CD012155. doi: 10.1002/14651858.CD012155.pub2. PMID: 31745970; PMCID: PMC6864402.
- Abou El, Fadl R, Blair M, Hassounah S. Integrating Maternal and Children's Oral Health Promotion into Nursing and Midwifery Practice- A Systematic Review. PLoS One. 2016 Nov 23;11(11): e0166760. doi: 10.1371/ journal.pone.0166760. PMID: 27880790; PMCID: PMC5120808.

## **Other Resources**

FDI World Dental Federation. Educational module for other healthcare professionals. Available from: Educational Module for Other Healthcare Professionals | FDI (fdiworlddental.org) [Accessed on 13 March 2024].

FDI World Dental Federation. Policy Statement on Perinatal and Infant Oral Health. Available from: Perinatal and infant oral health care | FDI (fdiworlddental.org) [Accessed on 13 March 2024].

Smiles For Life. Pregnancy and Women's Oral Health. Available from: https://www.smilesforlifeoralhealth.org/ courses/pregnancy-and-women/ [Accessed on 13 March 2024].

National Maternal and Child Oral Health Resource Center. Oral Health Care During Pregnancy: A National Consensus Statement. Available from: https://www.mchoralhalth.org/materials/consensus\_statement.php [Accessed on 13 March 2024].

National Maternal and Child Oral Health Resource Center. Guidance for Prenatal Care Health Professionals. Available from: https://www.mchoralhealth.org/PDFs/handout-prenatal-care-health-professionals.pdf [Accessed on 13 March 2024].

National Maternal and Child Oral Health Resource Center. Pharmacological Considerations for Pregnant Women. Available from: https://www.mchoralhealth.org/PDFs/OralHealthPregnancyPharmacological.pdf [Accessed on 13 March 2024].

American Dental Association. Pregnancy. Available from: https://www.ada.org/resources/research/scienceand-research-institute/oral-health-topics/pregnancy [Accessed on 13 March 2024].

#### **Disclaimer:**

The provided fact sheet offers general information and may require adaptation to suit the unique scope of work and regulations governing other healthcare professionals in each country.

The Educational Module for Other Healthcare Professionals Project is supported by **HALEON** 

