**Key messages for oral-health professionals**

Pregnancy is a unique period during a woman’s life that is characterised by complex physiological changes, which may affect oral health. At the same time, oral health is key to overall health and well-being. It is therefore essential for oral-health professionals (such as dentists, dental hygienists, and periodontists) to provide pregnant women with appropriate and timely oral healthcare, including oral-health education. These are the preventive, diagnostic, and therapeutic recommendations:

**Evaluation:**
When evaluating the periodontal health of any female patient of childbearing age, oral-health professionals should always ask whether she is pregnant or is trying to become pregnant, and they should always consider pregnancy status before recommending any oral-health intervention. Women who are not pregnant should be informed of the importance of oral and periodontal health during pregnancy and the relevance of adequate therapy to treat existing periodontal diseases before becoming pregnant.

**Pregnant women:**
In cases of pregnant women, oral-health professionals should:

- a. Identify the stage of pregnancy;
- b. Retrieve a medical history – with an emphasis on any history of adverse outcomes from previous pregnancies, hypertension, diabetes, cardiovascular disease, etc. – along with details of medications taken;
- c. Perform a comprehensive oral evaluation including a periodontal examination, which should include evaluation of plaque accumulation, gingival inflammatory status (bleeding on probing), and periodontal probing. Depending on the result of this periodontal examination, a periodontal diagnosis of “healthy”, “gingivitis”, or “periodontitis” should be identified and specific measures should be implemented.

**Healthy periodontium:**
Pregnant women with a healthy periodontium should be provided with oral-health education and general health advice. They should be instructed on how to prevent periodontal and oral diseases – not only during pregnancy, but throughout life and in relation to the future oral health of their children. The oral-health professional should inform women of the physiological periodontal events that usually occur during pregnancy (increase in vascularity, possibility of a higher incidence of bleeding, and gingival enlargement) and of the general adverse outcomes that may occur during pregnancy (hypertension, gestational diabetes, etc.).

In case of perceived medical risk, women should be referred to the physician. Even in the absence of disease, an important component in oral-health education should be training and motivation in oral-hygiene practices, with special emphasis on interdental cleaning. Women should be given a re-evaluation at a later stage of their pregnancy.

**Gingivitis:**
Pregnant women with gingivitis should be given the same health advice and educational measures as healthy pregnant women. It is important to emphasise that all preventive, diagnostic, and therapeutic oral procedures are safe throughout pregnancy and that these measures are effective in improving and maintaining oral health. The treatment of gingivitis consists of a professional intervention aimed at removing dental biofilm and calculus from tooth surfaces. As an adjunctive treatment, chemical plaque-control agents in the form of dentifrices and rinses have been shown to be safe and effective in reducing gingival inflammation during pregnancy, when combined with appropriate mechanical plaque control. Once periodontal health has been re-instituted, frequent monitoring of periodontal status should be maintained throughout pregnancy and, if there is a recurrence, a similar intervention should be provided.
**Periodontitis:**
Pregnant women with periodontitis should also be given the same health promotion and educational measures as healthy pregnant women or those with gingivitis, but additional professional intervention should aim to reduce the subgingival biofilm and calculus by means of standard non-surgical periodontal therapy.

**Periodontal therapy:**
Non-surgical periodontal therapy (scaling and root planing) and extractions are safe during pregnancy, and especially during the second trimester of gestation. Dental X-rays can be undertaken and local anaesthesia can be delivered without additional risk to the foetus or the pregnant woman. The use of common painkillers and of systemic antibiotics is generally safe. However, tetracyclines should be avoided. Medication should be prescribed to the pregnant woman after communication with her obstetrician.

Non-surgical periodontal therapy has been shown to be effective in improving the periodontal status of pregnant women with periodontitis.

**Pregnancy tumours:**
In the presence of localised gingival enlargements (pregnancy tumours), surgical excision should be delayed until postpartum and supportive measures (oral-hygiene measures and professional plaque removal) should be carried out during pregnancy and the lesion re-evaluated after delivery.

**Periodontal surgery:**
If possible, extensive traumatic interventions (periodontal surgery) should be avoided during pregnancy. Recommended periodontal treatments should be avoided in the first trimester because of possible stress to the foetus and should preferably be performed during the second or third trimester.

**Evaluation of periodontal therapy:**
Oral-health professionals should evaluate the efficacy of periodontal therapy by means of plaque scores, gingival inflammation, bleeding on probing, and probing pocket depths. Once periodontal health has been re-instituted, frequent monitoring of the periodontal status should be maintained throughout pregnancy and, if there is a recurrence, a similar intervention should be provided.

**Association with adverse pregnancy outcomes:**
Oral-health professionals should be aware that there is a potential association between the presence of periodontitis and adverse pregnancy outcomes. Thus, periodontal treatment should be performed without hesitation during pregnancy. Indeed, although non-surgical periodontal therapy during the second trimester of gestation does not seem to alter the risk of adverse pregnancy outcomes in most women, there does seem to be a reduction in the incidence of such outcomes in specific patient populations, such as pregnant women at high risk of pregnancy complications.

**Pre-pregnancy treatment:**
Based on our current understanding of the biology involved in the possible association of periodontal disease and adverse pregnancy outcomes, it is likely that periodontal therapy would be more effective in reducing the risk of these outcomes if it were performed before conception. Therefore, oral-health professionals should communicate frequently with women in their fertility years and emphasise the possible benefits of pre-pregnancy treatment and of the establishment of healthy periodontal conditions during pregnancy.