Preterm birth has been identified as one of the most important perinatal health problems all over the world, accounting for 80% of all perinatal mortality and is an important determinant of neonatal and infant morbidity. Among preterm infants, mortality rates show marked increases with decreasing gestational age. Evidence indicates that maternal infection and inflammation of the lower and upper genital tract, as well as at sites distant from the pelvis, play a major role in the aetiology of preterm birth in some women. Periodontal disease is a chronic anaerobic inflammatory condition that affects as many as 50% of pregnant women. Recent studies demonstrated an association between maternal periodontal disease and multiple adverse pregnancy outcomes, including preterm birth, preeclampsia, and perinatal mortality. The mechanisms by which periodontal disease and preterm birth are associated are not clearly identified. It has been hypothesized that in the presence of periodontal disease, oral organisms can disseminate by haematogenous route to target the placenta, amniotic fluid and membranes. This bacterial challenge may result in increased cytokine expression and induced uterine activity. The adverse pregnancy outcomes can be reduced by treating the periodontal disease, prior to or during pregnancy.