

# INCREASED RISK OF PRETERM BIRTH AMONG NON- SMOKING, NON- ALCOHOL DRINKING WOMEN WITH MATERNAL PERIODONTITIS

Hang Thi Thu Le<sup>1,2</sup>, Sutthi Jareinpituk<sup>1</sup>, Jaranit Kaewkungwal<sup>3</sup> and Waranuch Pitiphat<sup>4</sup>

<sup>1</sup>Department of Epidemiology, Faculty of Public Health, Mahidol University, Bangkok, Thailand; <sup>2</sup>Department of Odonto-Stomatology, Thai Nguyen Medical University, Thai Nguyen, Vietnam; <sup>3</sup>Department of Tropical Hygiene, Faculty of Tropical Medicine, Mahidol University, Bangkok, Thailand; <sup>4</sup>Department of Community Dentistry, Faculty of Dentistry, Khon Kaen University, Khon Kaen, Thailand

**Abstract.** The aim of this case-control study was to examine the association between periodontitis and preterm birth among non-smoking, non-alcohol drinking women. The cases were 130 women who delivered a live singleton newborn before 37 weeks gestation. A random sample of 260 women who delivered a normal child on the same day as the cases were selected as controls. Periodontal examinations were performed during 24-hour period postpartum at bedside. Other related information was collected by structured questionnaire and medical records. Multiple logistic regression analysis was performed controlling for age, ethnicity, place of residence, education, occupation, income, pre-pregnancy body mass index (BMI), weight gain, antenatal care (ANC), parity, systematic infections, genitourinary infections, antibiotics used, and history of periodontal treatment. Periodontitis (defined as presence of at least 4 teeth having  $\geq 1$  site with a probing depth (PD)  $\geq 4$  mm, clinical attachment loss (CAL)  $\geq 3$  mm and bleeding on probing (BOP) after 10 seconds at the same site) was diagnosed in 33.9% of cases and 10.4% of controls. Periodontitis was significantly associated with preterm birth (adjusted OR = 4.47, 95%CI= 2.43, 8.20). These findings suggest that periodontitis may increase the risk of preterm delivery even among women who do not smoke or drink.

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Correspondence: Hang Thi Thu Le, Department of Epidemiology, Faculty of Public Health, Mahidol University, 420/1 Ratchawithi Road, Bangkok 10400, Thailand.

Tel: 084-0416040

E-mail: hanghung98@gmail.com