

INCIDENCE OF AND FACTORS ASSOCIATED WITH CONGENITAL SYPHILIS AT A TERTIARY HOSPITAL IN BANGKOK, THAILAND

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Abstract. Thailand has the goal to eliminate congenital syphilis (CS) by 2020. In this study we aimed to determine the incidence and trends of and factors associated with CS at a tertiary hospital in Bangkok, Thailand in order to inform efforts to reach the CS elimination goal. We retrospectively reviewed the medical records of all pregnant women diagnosed with syphilis who attended the study hospital during 1 January 2005 to 31 December 2016. We also reviewed the charts of their infants. A total of 195 pregnant women were included in the study. The median (range) age of subjects was 24 (14-43) years. Of the 195 subjects, 58 had a child diagnosed with CS, giving a parent to child transmission (PTCT) of syphilis rate of 29.7%. Among the 195 subjects, 5 (2.6%) had a miscarriage, 7 (3.6%) had a stillbirth and 3 (1.5%) had twins. The incidence of CS among all live births at the study hospital was 0.5 per 1,000 live births. The incidence of CS and PTCT of syphilis all increased after 2013, from 0.3 and 27.3% in 2013 to 2.7 and 70.9% in 2016, respectively. The factors significantly associated with CS on multivariate analysis in our study were younger maternal age (20 vs 28 years) (OR = 0.88; 95% CI: 0.83-0.94), syphilis treatment within 30 days of delivery (OR = 6.5; 95% CI: 2.1-19.6), and no syphilis treatment (OR = 7.3; 95% CI: 2.9-18.3). In summary, the rate of CS among the study group at the study institution was high and increasing and the incidence of maternal syphilis was also high and increasing. Factors associated with CS were young maternal age, late treatment of maternal syphilis, and lack of antenatal care. These factors show a need to educate the population of women in the study area about getting prenatal care early, particularly in young pregnant women, to help strengthen efforts to eliminate CS in Thailand.

Key words: congenital syphilis, syphilitic mother, incidence, risk factors, Thailand

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