Background: Adolescent pregnancy carries a higher risk of adverse birth outcomes. So far, there have been very few longitudinal studies on the growth of children born by adolescent Mothers. This study explores birth outcomes and their determinants in adolescent pregnancies, using subjects drawn from the Taiwan Birth Cohort Study (TBCS).

Methods: Using data of Wave I (6 months old), II (18 months old) and III (36 months old) of TBCS, a national sample of 19,381 pairs of mothers and their children were included for analysis, including 560 pairs resulting from adolescent mothers. Through completed field interviews with structured questionnaires and surveys with mothers or other family members, and with references to each child's birth certificate and Passport of Well-baby Care, differences in birth outcomes and personal, pregnancy and social profiles of mothers were analyzed.

Results: A total of 560 adolescent mothers (<20 years old) and 18,821 adult mothers (20-34 years old) were included in our study. There was no significant difference between two groups in terms of parameters of the child growth. For development, the numbers (proportions) of failure in milestones at 3 years old for gross motor, fine motor, language and social development of children born to adolescent mothers are 13(2.32%), 34(6.07%), 10(1.79%) and 24(4.29%), respectively; while there are 392(2.08%), 1015(5.39%), 308(1.64%) and 512(2.72%) for those born to adult mothers. The determinants of failure in development are “the mother isn't the night-time caregiver” and “family dysfunction”.

Conclusion: There was no significant difference in both growth and development at 3 years old between children born to adolescent and adult mothers.