



PENGARUH PENINGKATAN BERAT BADAN IBU SELAMA HAMIL TERHADAP PANJANG BADAN BAYI BARU LAHIR

INTISARI

Latar Belakang: Prevalensi *stunting* di Indonesia masih cukup tinggi. Risiko dominan *stunting* terjadi pada bayi BBLR, PBL rendah, dan ibu dengan TB rendah. PBL rendah akan mengakibatkan kegagalan pertumbuhan sejak awal kehidupan, bersifat linear sehingga PBL rendah akan menjadi modal yang buruk dan meningkatkan risiko *stunting*. Faktor yang mempengaruhi PBL antara lain TB ibu, usia kehamilan, dan kenaikan berat badan selama hamil. Penelitian yang menilai hubungan antara kenaikan berat badan dan PBL masih jarang ditemukan dan berguna untuk memperkecil kemungkinan *stunting* sejak dini.

Tujuan: Mengetahui pengaruh kenaikan berat badan selama kehamilan terhadap PBL bayi.

Metode: Studi dilakukan dengan metode potong-lintang pada ibu melahirkan di Puskesmas Tegalgrejo dan Jetis Yogyakarta, dengan mengukur BB ibu sebelum bersalin, dan menghitung kenaikan berat badan selama hamil. PBL bayi diukur segera setelah lahir. Dilakukan analisis hubungan antara keduanya.

Hasil: 154 ibu diikutsertakan. Variabel kenaikan berat badan dikelompokkan menjadi kenaikan BB cukup dan kurang berdasarkan klasifikasi IOM. Rerata Panjang badan kedua kelompok 49.0 ± 1.3 dan 48.3 ± 1.6 , $p=0.003$. Stratifikasi menggunakan variabel IMT menunjukkan pada subgrup *underweight* PBL 48.9 ± 1.1 pada kelompok kenaikan BB cukup dan 47.8 ± 1.9 cm pada kelompok kurang ($p=0.215$). Pada normal dan *overweight* 49.0 ± 1.3 dan 48.4 ± 1.5 cm ($p=0.007$). Kelompok TB ibu >155 cm memiliki PBL 49.0 ± 1.5 dan TB ≤ 155 cm sebesar 48.4 ± 1.4 ($p=0.001$). Variabel IMT tidak signifikan mempengaruhi PBL. Pada analisis multivariat didapatkan kedua variabel berpengaruh parsial, dengan Exp(estimates) TB dan kenaikan BB adalah 2.927 dan 2.726.

Kesimpulan: Peningkatan berat badan selama hamil berpengaruh terhadap panjang badan lahir setelah mengalami efek modifikasi akibat stratifikasi IMT dan pengelompokkan kenaikan berat badan cukup dan kurang berdasarkan klasifikasi IOM.

Kata kunci: *stunting*, kenaikan berat badan, hamil, PBL



EFFECT OF GESTATIONAL WEIGHT GAIN ON BODY LENGTH OF NEWBORN

ABSTRACT

Background: Stunting prevalence in Indonesia is quite high. *Stunting risk* occurs in LBW babies, short body length, and mother with short stature. Short body length will result in growth failure in early life and increase risk of *stunting*. Factors that influence body length include maternal stature, gestational age, and gestational weight gain. Studies that assessed the relationship between gestational weight gain and body length was rare, but useful for reducing the likelihood of stunting from an early age.

Aim: Knowing the effect of gestational weight gain on newborn's body length.

Method: The study was conducted using a cross-sectional method for mothers that giving birth at the Tegalrejo and Jetis Health Centers in Yogyakarta. Mother's weight were measured before giving birth, and gestational weight gain were calculated. The newborn's body length were measured immediately after birth. Statistical analysis was conducted to search relationship between variable.

Result: 154 subjects were included. Gestational weight gain was grouped into normal and insufficient weight gain based on the IOM classification. The mean of body length of the two groups were 49.0 ± 1.3 and 48.3 ± 1.6 , $p=0.003$. Stratification using IMT variable *underweight's* body length were 48.9 ± 1.1 and 47.8 ± 1.9 cm ($p=0.251$), Normal and *overweight* 49.0 ± 1.3 and 48.4 ± 1.5 cm ($p=0.007$). Mother with stature >155 cm had mean body length 49.0 ± 1.5 and stature ≤ 155 cm was 48.4 ± 1.4 ($p=0.001$). BMI did not significantly affect neonatal body length. Multivariat analysis showed stature and gestational weight gain partially affect body length with $\exp(\text{estimates})$ 2.927 and 2.726.

Conclusion: Gestational weight gain had an effect on birth length after having modification effect due to BMI stratification and grouping of normal and insufficient weight gain based on IOM classification.

Keyword: *stunting*, gestational weight gain, pregnancy, newborn body length