ABSTRACT

Integrated Antenatal Care and Its Association with Low Birth Weight and Preterm Birth in Indonesia

Diah Puspita Sari, Besral Besral, Ali Yansyah Abdurrahim

Correspondence E-mail : diah017@brin.go.id

Background : Low birth weight and preterm birth increase neonatal morbidity and mortality. Integrated ANC should help detect and manage pregnancy risks early, but visit coverage alone does not reflect the timeliness or completeness of care.

To analyze the association between integrated ANC and the incidence of LBW and preterm birth in Indonesia.

A quantitative cross-sectional study was conducted using data from the 2023 Indonesian Health Survey (SKI 2023). The unit of analysis comprised women aged 15–49 years who gave birth within the last five years. The main independent variable was integrated ANC, defined as the fulfillment of at least six timely visits, contact with a physician during the first and third trimesters, and the receipt of 10T standard services. The dependent variable was neonatal status (LBW and/or preterm birth, as well as infants without LBW and preterm birth). Data were analyzed using descriptive statistics and the chi-square test for bivariate analysis.

Results : The coverage of integrated ANC implementation in Indonesia remains very low (3.9%). Integrated ANC is significantly associated with preterm birth ($p<0.001$) and neonatal outcomes ($p=0.001$). Place of residence showed a significant association with neonatal outcomes in both the integrated ANC ($p=0.031$) and the non-integrated ANC groups ($p<0.001$), whereas high parity (>2) was only significantly associated in the non-integrated ANC group ($p<0.001$).

Conclusion/Lesson Learned : Integrated ANC is associated with preterm birth and combined neonatal outcomes, underscoring the need to improve service quality, completeness, and equitable distribution, especially in rural areas and among high-parity mothers.

Keyword : integrated antenatal care; low birth weight; preterm birth

5th MICTOPH
Mulawarman International Conference on Tropical Public Health