

## **ABSTRACT**

### **THE RELATIONSHIP BETWEEN HIGH-RISK MATERNAL AGE AND THE INCIDENCE OF ANEMIA IN FIRST-TRIMESTER PREGNANT WOMEN IN THE WORKING AREA OF TURI PUBLIC HEALTH CENTER, SLEMAN REGENCY**

Indra Tri Kurniawati<sup>1</sup>, Agus Kharmayana Rubaya<sup>2</sup>, Sumarah<sup>3</sup>

<sup>1,2,3</sup> Jurusan Kebidanan Poltekkes Kemenkes Yogyakarta

Jl. Mangkuyudan MJ III/304 Mantriheron, Kota Yogyakarta

Email: [indratrikurniawati@gmail.com](mailto:indratrikurniawati@gmail.com)

**Background:** *Pregnancy at risk ages (<20 years or >35 years) increases the risk of anemia, which can lead to miscarriage, fetal growth restriction, and delivery complications. According to WHO (2022), the global prevalence of anemia in pregnant women is 43.9%, while in Indonesia it reaches 48.9%. In Sleman, the prevalence is as high as 24.5%, indicating that anemia in pregnant women of high-risk age remains a serious public health issue.*

**Objective:** *To determine the association between high-risk maternal age and the incidence of anemia in first-trimester pregnant women in the working area of Turi Public Health Center, Sleman Regency, in 2024.*

**Methods:** *This study employed an analytical observational design with a case-control approach. The sample consisted of 130 first-trimester pregnant women, divided into 65 cases (anemic) and 65 controls (non-anemic), selected using Simple Random Sampling. Secondary data were obtained from medical records and maternal health service registers. Data analysis was conducted using the chi-square test and calculation of the odds ratio (OR).*

**Results:** *Most first-trimester pregnant women at Puskesmas Turi had no history of chronic diseases and had a secondary education level. Pregnant women with anemia were more likely to be employed compared to those without anemia. First-trimester pregnant women in the high-risk age group had a 2.563 times greater chance of experiencing anemia compared to those in the non-risk age group (OR = 2.563; 95% CI: 1.211–5.425; p = 0.014), and this association was statistically significant.*

**Conclusion:** *There is a significant association between high-risk maternal age and the incidence of anemia in first-trimester pregnant women in the working area of Turi Public Health Center, Sleman Regency.*

**Keywords:** *high-risk age, case control, pregnant women*

## ABSTRAK

### HUBUNGAN KEHAMILAN USIA RISIKO DENGAN KEJADIAN ANEMIA IBU HAMIL TRIMESTER I DI WILAYAH KERJA PUSKESMAS TURI KABUPATEN SLEMAN

Indra Tri Kurniawati<sup>1</sup>, Agus Kharmayana Rubaya<sup>2</sup>, Sumarah<sup>3</sup>

<sup>1,2,3</sup> Jurusan Kebidanan Poltekkes Kemenkes Yogyakarta

Jl. Mangkuyudan MJ III/304 Mantrijeron, Kota Yogyakarta

Email: [indratrikurniawati@gmail.com](mailto:indratrikurniawati@gmail.com)

**Latar Belakang:** Kehamilan pada usia risiko (<20 tahun atau >35 tahun) meningkatkan risiko anemia, yang dapat menyebabkan keguguran, gangguan pertumbuhan janin, dan komplikasi persalinan. WHO (2022) mencatat prevalensi anemia pada ibu hamil sebesar 43,9% secara global, dan di Indonesia mencapai 48,9%. Di Sleman, prevalensinya bahkan mencapai 24,5%, menunjukkan bahwa anemia pada ibu hamil usia risiko masih menjadi masalah kesehatan yang serius.

**Tujuan:** Mengetahui hubungan antara kehamilan usia risiko dengan kejadian anemia ibu hamil trimester I di wilayah kerja Puskesmas Turi tahun 2024.

**Metode:** Penelitian ini menggunakan desain observasional analitik dengan pendekatan *case control*. Sampel terdiri dari 130 ibu hamil trimester I, yang terbagi menjadi 65 kasus (anemia) dan 65 kontrol (tidak anemia), dengan teknik *Simple Random Sampling* (Pengambilan Sampel Secara Acak Sederhana). Data diperoleh dari data sekunder berupa rekam medis dan register pelayanan kehamilan. Analisis data menggunakan uji chi-square dan perhitungan *odds ratio* (OR).

**Hasil:** Sebagian besar ibu hamil trimester I di Puskesmas Turi tidak memiliki riwayat penyakit kronis dan berpendidikan menengah. Ibu hamil dengan anemia lebih banyak berstatus bekerja dibandingkan yang tidak anemia. Ibu hamil trimester I yang termasuk dalam kelompok usia berisiko memiliki peluang 2,563 kali lebih besar mengalami anemia dibandingkan ibu hamil dengan usia tidak berisiko ( $OR = 2,563$ ; 95% CI: 1,211–5,425;  $p = 0,014$ ), dan hubungan ini signifikan secara statistik.

**Kesimpulan:** Terdapat hubungan yang signifikan antara kehamilan usia risiko dengan kejadian anemia pada ibu hamil trimester I di wilayah kerja Puskesmas Turi Kabupaten Sleman.

**Kata Kunci:** usia risiko, *case control*, ibu hamil