

**HUBUNGAN USIA DENGAN KADAR *TUMOR NECROSIS*
FACTOR ALPHA (TNF- α) PADA KEHAMILAN
NORMAL DAN ABORTUS**



Skripsi

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ABSTRACT

THE RELATIONSHIP OF AGE WITH TUMOR NECROSIS FACTOR ALPHA (TNF- α) LEVELS IN PREGNANCY AND ABORTION

By

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The incidence of abortion is increasing every year and can result in fatalities for both the mother and the fetus. Tumor Necrosis Factor Alpha (TNF- α) levels during pregnancy play a crucial role in the early control of abortion. This increase in TNF- α levels can be influenced by age. The purpose of this study was to analyze the relationship between age and TNF- α levels in both normal pregnancies and cases of abortion.

The type of research is analytic with a cross sectional design. Samples were collected using the total sampling technique, resulting in 36 patients who were subsequently assessed for TNF- α levels at the Biomedical Laboratory of Andalas University. The source of research data is secondary data. Data analysis involved the Spearman correlation test, Independent T-test, and Mann-Whitney test.

The results of the study found that the average gestational age was younger, the average maternal age was older, and the average TNF- α levels were higher in abortion compared to normal pregnancy. The BMI of all patients was normal. There is a significant difference between age in normal pregnancy and abortion ($p = 0.001$), there is no relationship between age and TNF- α levels in normal pregnancy ($p = 0.429$), there is no relationship between age and TNF- α levels in abortion ($p = 0.862$), and there is no difference in TNF- α levels between normal pregnancy and abortion ($p = 0.248$).

The conclusion of this study is that there is a significant difference between age in normal pregnancy and abortion. It is hoped that public awareness of the risk factors for abortion will increase.

Keywords: Age, TNF- α , abortion

ABSTRAK

HUBUNGAN USIA DENGAN KADAR *TUMOR NECROSIS FACTOR ALPHA* (TNF- α) PADA KEHAMILAN NORMAL DAN ABORTUS

Oleh

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Kejadian abortus mengalami peningkatan setiap tahun dan dapat menyebabkan kematian baik pada ibu maupun janin. Kadar *Tumor Necrosis Factor Alpha* (TNF- α) selama kehamilan penting untuk kontrol awal kejadian abortus. Peningkatan kadar TNF- α ini dapat dipengaruhi oleh usia. Tujuan penelitian adalah untuk mengetahui hubungan usia dengan kadar TNF- α pada kehamilan normal dan abortus.

Jenis penelitian adalah analitik dengan desain *cross sectional*. Sampel diambil dengan teknik total *sampling*, dan didapatkan sebanyak 36 pasien yang kemudian diperiksa kadar TNF- α di Laboratorium Biomedik Universitas Andalas. Sumber data penelitian adalah data sekunder. Analisis data menggunakan uji korelasi Spearman, uji T-Independen dan uji *Mann-Whitney*.

Hasil dari penelitian ditemukan bahwa rata-rata usia kehamilan lebih muda, rata-rata usia ibu lebih tua, dan rata-rata kadar TNF- α lebih tinggi pada abortus dibandingkan dengan kehamilan normal. IMT semua pasien normal. Terdapat perbedaan bermakna antara usia pada kehamilan normal dan abortus ($p = 0,001$), tidak terdapat hubungan antara usia dengan kadar TNF- α pada kehamilan normal ($p = 0,429$), tidak terdapat hubungan antara usia dengan kadar TNF- α pada abortus ($p = 0,862$), dan tidak terdapat perbedaan kadar TNF- α antara kehamilan normal dan abortus ($p = 0,248$).

Kesimpulan dari penelitian ini adalah terdapat perbedaan bermakna antara usia pada kehamilan normal dan abortus. Diharapkan kesadaran masyarakat terhadap faktor risiko terjadinya abortus meningkat.

Kata Kunci: Usia, TNF- α , abortus