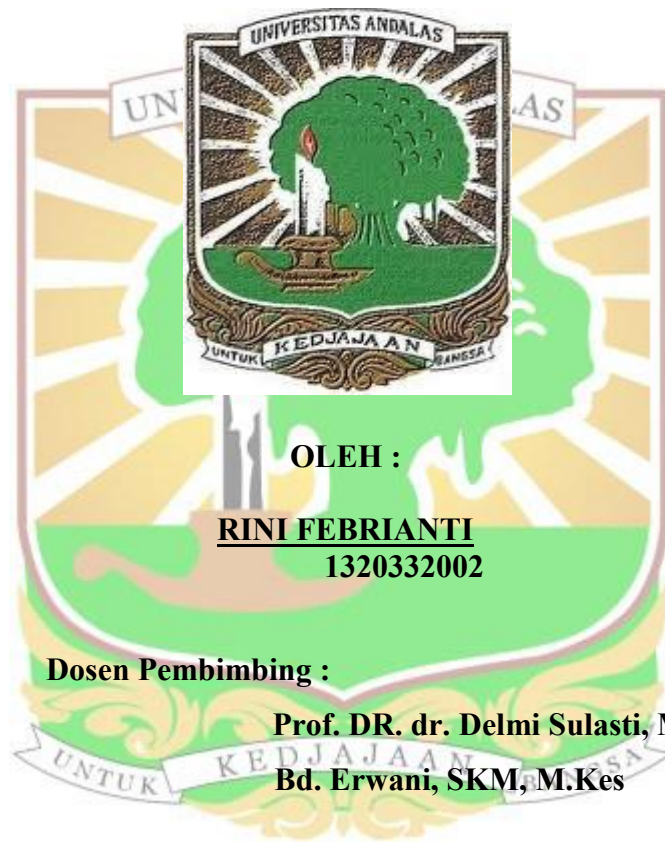


**PERBEDAAN KADAR SERUM LEPTIN PLACENTA  
TERHADAP BERAT BADAN BAYI BARU LAHIR  
DARI IBU OBESITAS DI KOTA PADANG  
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**TESIS**



**PROGRAM PASCASARJANA ILMU KEBIDANAN  
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## ABSTRAK

### PERBEDAAN RERATA KADAR SERUM LEPTIN PLACENTA TERHADAP BERAT BADAN BAYI BARU LAHIR DARI IBU OBESITAS DI KOTA PADANG

Rini Febrianti

Hambatan pertumbuhan janin merupakan penyebab utama morbiditas dan mortalitas neonatal yaitu Berat badan lahir Rendah (BBLR). Insiden BBLR di Indonesia 11,2%. Sumatera Barat 689 meninggal, Data dari Dinas Kesehatan Kota Padang tahun 2014 BBLR 297 kasus. Leptin adalah hormon yang mengatur nafsu makan. Leptin plasenta memiliki fungsi pertumbuhan plasenta, dan pertumbuhan janin. Resistensi leptin pada ibu obesitas merupakan faktor resiko potensial yang menyebabkan terjadinya komplikasi dalam kehamilan dan berat bayi yang dilahirkan. Prevalensi obesitas Di Sumatera Barat 13,46%, Tujuan penelitian untuk membuktikan perbedaan rerata kadar serum leptin placenta antara BBLR dengan bayi berat badan lahir normal.

Penelitian dilakukan secara observasional dengan desain *cross sectional* terhadap ibu obesitas IMT sebelum Hamil  $\geq 30\text{kg/m}^2$  yang melahirkan bayi berat badan lahir normal 28 orang dan 28 orang BBLR di RSUD Dr. Rasidin, RS TK III Reksodiwiryo Padang, RS Bhayangkara Padang pada bulan Juni sampai Agustus 2016. Pengambilan sampel dilakukan dengan teknik *consecutive sampling*. Pemeriksaan Kadar Serum Leptin Placenta diukur dengan menggunakan Metode ELISA di Laboratorium Biomedik Universitas Andalas. Uji normalitas data dengan *Shapiro Wilk*, Uji t tidak berpasangan untuk beda rerata.

Hasil penelitian menunjukkan rerata kadar serum Leptin placenta pada kelompok berat badan lahir normal adalah  $32,00 \pm 22,99$  ng/ml, panjang badan  $48,18 \pm 1,36$ , indeks Ponderal  $2,83 \pm 240$  gr/cm<sup>3</sup>. Pada BBLR  $18,47 \pm 16,52$  ng/ml, Panjang badan  $45,79 \pm 2,54$  cm, Indeks Ponderal  $2,45 \pm 363$ gr/cm<sup>3</sup>, Terdapat perbedaan yang bermakna kadar serum Leptin placenta antara bayi berat badan lahir normal dan BBLR dengan nilai  $p = 0,014$ .

Kesimpulan penelitian ini adalah terdapat perbedaan yang signifikan kadar serum Leptin placenta antara bayi berat badan lahir normal dengan BBLR dari ibu Obesitas.

Kata Kunci : Leptin Placenta , BBLR, Berat Badan Bayi Lahir Normal

## ABSTRACT

### THE MEAN DIFFERENCE OF LEPTIN PLACENTA SERUM LEVEL WITH BIRTH WEIGHT NEWBORN FROM OBESITY MOTHER IN PADANG CITY

Rini Febrianti

Intrauterine growth retardation is a major cause of neonatal morbidity and mortality is Low birth weight (LBW). The incidence of LBW in Indonesia 11,2%, in West Sumatra Province 689 died caused of LBW, data from the Health Department of Padang City in 2014 LBW 297 cases. Leptin is a hormone that regulates appetite. Leptin is derived from the placenta has an important role in controlling the growth function of the placenta, and fetal growth. Leptin resistance that occurs in obesity mothers are potential risk factors that cause complications in pregnancy and the birth weight newborn. The prevalence of obesity in the West Sumatra Province 13,46%. The aim of research to prove the the mean difference of leptin placenta serum level with birth weight newborn from obesity mother in Padang City.

Research conducted observational with cross sectional design from obesity mother with The Body Mass Index before pregnancy  $\geq 30\text{kg/m}^2$  who born infants of normal birth weight 28 people and 28 people low birth weight in Dr.Rasidin Hospitals, Reksodiwiryo Hospital Padang, Bhayangkara Hospital Padang in June until August 2016. Sampling was taken with consecutive sampling technique. Leptin placenta serum levels were measured using ELISA Method in Biomedical Laboratory Andalas University. Normality test data by Shapiro Wilk, Independent T tes for the mean difference.

Results showed the mean serum levels of Leptin placenta in normal birth weight group was  $32,00 \pm 22,99$  ng/ml, body length  $48,18 \pm 1,36$ , Ponderal Index  $2,83 \pm 240$  gr/cm<sup>3</sup>. At Low Birth Weight (LBW)  $18,47 \pm 16,52$  ng/ml, body length  $45,79 \pm 2,54$ , Ponderal Index  $2,45 \pm 363$  gr/cm<sup>3</sup>. There is a significant difference between the serum levels of leptin placenta between normal birth weight and low birth weight with  $p = 0,014$ .

It is concluded that there is a significant difference between the serum levels of leptin placenta between normal birth weight and low birth weight from obesity mother.

**Keywords: Leptin placenta, low birth weight, normal birth weight**