ABSTRACT

Background: *During pregnancy, there is a change in body composition in pregnant women, the body composition profile consists of Basal Metabolic Rate (BMR), visceral fat level, body fat mass, muscle mass, bone mass, Body Mass Index (BMI), total body water. This increase occurs to meet the nutritional needs of the mother during pregnancy and her fetus. The negative impact of inappropriate changes in body composition will cause various complications in the mother and fetus. This study aims to determine the profile of body composition in third-trimester pregnant women in Jambi City.*

Methods: *This type of research is a descriptive, recording data on the body composition of third trimester pregnant women at the Tahtul Yaman and Pakuan Baru Health Center, and a doctor's private practice using Bioelectrical Impedance Analysis (BIA). Data collection used a consecutive sampling technique with a sample of 59 pregnant women.*

Results: *From the total sample, the average BMI of third-trimester pregnant women was 26.95 ± 4.3, average BMR 1256 ± 185.5 kcal, average visceral fat level 6.8 ± 2.4, the average percentage of body fat is 39.1 ± 6.2%, the average muscle mass was 37.1 ± 5 kg, the average bone mass found in this study was 2.27 ± 0.46 kg, and the average total body water was 40.6 ± 3.5%.*

Conclusion: *The average body composition values of third trimester pregnant women were BMI 26.95±4.3, BMR 1256±185.5 kcal, visceral fat level 6.8±2.4, body fat percentage 39.1±6.2%, muscle mass 37.1±5 kg, bone mass 2.27±0.46 kg , body water content 40.6 ± 3.5%.*

Keywords: *bioelectrical impedance, body composition, third trimester.*

ABSTRAK

Latar Belakang: Selama masa kehamilan terjadi perubahan komposisi tubuh, profil komposisi tubuh tersebut terdiri atas *Basal Metabolic Rate* (BMR), level lemak *visceral*, massa lemak tubuh, massa otot, massa tulang, Indeks Massa Tubuh (IMT), kadar air tubuh. Peningkatan ini terjadi untuk mencapai pemenuhan kebutuhan nutrisi bagi ibu selama kehamilan dan janinnya. Dampak negatif dari perubahan komposisi tubuh yang tidak sesuai akan menyebabkan berbagai komplikasi pada ibu dan janin. Penelitian ini bertujuan untuk mengetahui profil komposisi tubuh pada ibu hamil trimester III di Kota Jambi.

Metode: Jenis penelitian ini adalah penelitian deskriptif, mencatat data komposisi tubuh ibu hamil trimester III di puskesmas Tahtul Yaman, Puskesmas Pakuan Baru, dan Praktek pribadi dokter menggunakan *Bioelectrical Impedance Analysis* (BIA). Pengumpulan data menggunakan teknik *consecutive sampling* dengan sampel ibu hamil sebanyak 59 orang.

Hasil: Dari total sampel didapatkan rata-rata IMT ibu hamil trimester III 26.95±4.3. Rata-rata BMR 1256±185.5 kcal, rata-rata level lemak *visceral* 6.8±2.4, rata-rata persentase lemak tubuh 39.1±6.2%, rata-rata massa otot didapatkan 37.1±5 kg, rata-rata massa tulang yang ditemui pada penelitian ini 2.27±0.46 kg, rata-rata kadar air tubuh ibu yang didapatkan 40.6±3.5%.

Kesimpulan: Rata-rata nilai komposisi tubuh ibu hamil trimester III yaitu IMT 26.95±4.3, BMR 1256±185.5 kcal, level lemak *visceral* 6.8±2.4, persentase lemak tubuh 39.1±6.2%, massa otot 37.1±5 kg, massa tulang 2.27±0.46 kg, kadar air tubuh 40.6±3.5%.

Kata Kunci: *bioelectrical impedance analysis*, komposisi tubuh, trimester III.