

Some Somatometric Indicators of Pregnant Women Living in Rural Conditions

Buranova Gulnoza Boymuratovna, Rakhmatullayev Yorqin Shokirovich
Karshi State University, Uzbekistan, Karshi

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Annotation: This study examines somatometric parameters in pregnant women aged 18-29 and 30-39. The findings indicate that while the subjects' Kettle index remains within normative values, their weight gain demonstrates a significant increase in the second and third trimesters compared to the first. This pattern of gestational weight gain is likely influenced by a combination of maternal age, environmental conditions, and obstetric history, including parity.

Keywords: body weight, height, Kettle index, trimester, pregnant women, obesity.

Introduction. Body weight and height are used to assess the nutritional status of pregnant women. In this case, anthropometric indicators are compared to existing standards. Calculation of body mass index also helps to draw appropriate conclusions in this regard. It should also be emphasized that a decrease or increase in body mass index indicators in future mothers compared to the norm, premature birth, low birth weight or a corresponding decrease in the weight of the fetus, it leads to negative consequences, such as an increase in the number of diseases, infant mortality, and a reduction in the lactation period [4; pp. 9-11, 5; p. 10-12. 8; 794-800 p].

The healthiest children are born to women who maintain their natural body mass during pregnancy. This factor helps determine the weight and health of a newborn child. According to statistics, 3.5-4 kg. The mortality rate among babies born up to 2.5 kg and less is less common [2; p. 14].

The relationship between body weight and height is one of the main indicators in assessing the proper nutrition and health of pregnant women. At the same time, the changes caused by one or another level of malnutrition have been studied by many authors [4; p. 3-4].

A significant change in body weight leads to various vegetative disorders (dysmenorrhea, changes in the functions of the reproductive system, etc.). Such people make up an average of 25% of the population [1; pp. 61-64, 4; p. 3-4]. Usually, obesity and underweight in the body are determined on the basis of body mass index indicators. According to WHO reports, the average body mass index (BMI) is 18.50-24.99 kg/m², and such people do not have symptoms of overweight and obesity. This prestigious organization has included obesity among the non-communicable diseases of the 21st century. In 2008, 1.5 billion people worldwide were obese, including 300 million women [7; p. 1253]. Even now, it is difficult to say that these indicators have decreased. It should be said that overeating, inactivity and many other conditions are observed especially among the population of our Republic, Uzbekistan. In this regard, the study of some somatometric indicators of different groups of the population, especially pregnant women, is considered one of the urgent tasks of physiology and medicine.

Material and methodology. Observations were conducted among 124 pregnant women aged 18-29 and 30-39 living in Kasbi, Kitab and Koson districts of Kashkadarya region. Considering their age group, 18-29-year-olds make up 98 people, and 30-39-year-olds make up 26 people.

In this regard, during our observations, we also studied height, body weight (before pregnancy and after pregnancy), Kettle's index and indicators of weight gain during pregnancy from some anthropometric indicators of pregnant women. We present the obtained results in Table 1.

Table 1. Body mass index indicators of pregnant women (n=124)

Age	Height, m	Body weight (pregnant up to) kg	Kettle index, kg/m ²	Body weight at the end of pregnancy, kg	Addition of weight to body weight, kg
25,4±0,29	1,61±0,006	56,9±0,90	21,9±0,33	72,04±0,90	15,1±0,22
33,4±0,59	1,61±0,01	62,6±2,24	23,9±0,73	77,3±2,14	14,5±0,44

The average age of 18-29-year-old pregnant women under observation is 25.4±0.29. Their average height is 1.61 ± 0.006 m, and their body weight (before pregnancy) is 56.9 ± 0.90 kg, and the average Kettle index is 21.9 It was ±0.33 kg/m². At the end of pregnancy, their average body weight was 72.04±0.90 kg. During 40 obstetric weeks, their average body weight is 15.1±0.22 kg. added weight (Table 1). It can be seen that the average Kettle index in pregnant women of this age group does not deviate from the norm (norm is 18.5-25 kg/m²).

The average age of pregnant women aged 30-39 is 33.4±0.59. Their average height is 1.61 ± 0.01 m, and their body weight (before pregnancy) is 62.6 ± 2.24 kg is equal, and the Kettle index is 23.9±0.73 kg/m² on average. In this age group, the average body weight during pregnancy is 14.5±0.44 kg. It was found that weight was added.

If we compare the indicators recorded in both age groups, in 30-39-year-olds compared to 18-29-year-olds, the Kettle index approaches the upper limit of the norm. Of course, such a situation is directly related to their age and the number of births, as well as the Kettle index of weight gain.

Analysis of the distribution of pregnant women according to their body mass index is of particular importance when assessing the nutritional status of pregnant women. We present the results obtained in this regard in Table 2.

Table 2. Distribution of pregnant women according to the Kettle index [22; p. 26]

Kettle index, kg/m ²	18-29 years old (n=98)	30-39 years old (n=26)
Low (less than 18.50)	12 (12,24%)*	-
In the norm (18,50-24,99)	67 (68,37%)	18 (69,23%)
High (above 25.00)	16 (16,32%)	6 (23,07%)
Obesity (above 30.0)	3(3,06%)	2 (7,69%)

in parentheses as a % of the number of respondents

The analysis of the results of the body mass index study of pregnant women (98 18-29-year-olds and 26 30-39-year-olds) shows that 2.04% of women in the first age group has I degree, 3.06% II grade and III grade low body mass were observed in 7.14% of patients. It is also clear from the table that 68.37% of 18-29-year-olds and 69.23% of 30-39-year-olds have Kettle index at the standard level. Level I obesity is 16.32% in the first age group and 23.07% in the second age group, and level II obesity is 3.06% and 7.69% respectively. Grade III and IV obesity was not observed in both age groups (Table 2).

Conclusion. In conclusion, weight gain during pregnancy is not a universal indicator, but is individual for each woman. This process is formed as a result of a complex interaction of the mother's pre-pregnancy health, weight, age, lifestyle, nutritional culture and genetic characteristics. The goal is not only to grow the fetus healthily, but also to maintain the mother's health and create the opportunity to restore a healthy weight after pregnancy. Therefore, every pregnant woman should discuss weight changes with her personal doctor or dietitian and strictly follow their recommendations.

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