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ANALYSIS AND ASSESSMENT OF ANTHROPOMETRIC BODY MASS INDEX FOR WOMEN OF FERTILIZED AGE IN BUKHARA REGION

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ABSTRACT

Changes in anthropometric indicators of body mass index (BMI, kg / m²) in young women are directly related to certain risks associated with both reproductive health and the outcome of subsequent pregnancies. Normal values are: BMI from 18.5 to 24.99 kg / m²; limiting: BMI <18.5 kg / m² and BMI > 30.0 kg / m² (thinness / obesity). Iron loss during menstruation is high - about 1.4 mg iron / day, which increases the average daily iron requirement in young menstruating women to 2.1 mg, compared with girls in the previous age group (before puberty). The largest proportion of women of normal weight (BMI 18.5-24.9) in the distribution of frequencies among all subgroups of young women of fertile age (18-39 years) - for the country as a whole, for rural and urban groups of the population, is established among women living in the city 59.6%.

KEYWORDS: *Body Mass Index, Young Women Of Fertile Age, Risks, Anthropometric Status, Nutrition, Reproductive Health.*

INTRODUCTION

The purpose of this work is to conduct an expert analysis and estimate BMI in women of fertile age in the Bukhara region.

The object of the study was 105 young women of pre-fertile and fertile age (18-39 years), who were subdivided by profession - worker / student, place of residence from the capital, from urban / rural areas.

Methods: A unified WHO methodology was used for measuring height and body weight, as well as for determining BMI = body weight in kg / (height in m)², i.e. - kg / m². Normal values are considered BMI from 18.5 to 24.9, and limit values: BMI <18.5 and BMI > 30.0 (thinness / obesity). The analysis of a huge amount of data was carried out using a computer program and statistical methods.

Results

Women aged 18-39 years in the general sample for the country as a whole with normal weight (BMI 18.5-24.99) accounted for 49.8%. Decreased body weight (BMI <18.5) was observed in 18.8%, and overweight and obesity (BMI over 25.0) were observed in 31.4% (including 19.6% - overweight, and 11.8% - obesity). The distribution of the BMI index depending on the place of residence - urban / rural areas, shows that the largest proportion of thin women (18.6%) are in urban areas, versus 12.3% for the same indicator in rural areas.

The largest proportion of women of normal weight (BMI 18.5-24.9) in the distribution of frequencies among all subgroups of young women of fertile age (18-39 years) - for the country as a whole, for rural and urban groups of the population, is established among women living in the city 59.6%. The lowest rate is for women from villages. For the country as a whole, the proportion of women of childbearing age with normal weight during the study was 48.6%.

Women from rural areas have significantly higher values of the proportion of overweight and obesity than their peers living in cities - 29%, compared with 17% (p <0.001).

Anthropometric indicators of nutritional status are important for assessing nutrition and general health of the general population, and especially women of fertile age. Deviations from the recommendations for normal weight - both in the direction of underweight and overweight, for women of childbearing age (18-39 years old) in the Bukhara region - at the national and regional levels are just as alarming.

In both cases, there is a health risk. This is a population group (young women) whose most important biological role is to bear and give birth to a healthy and viable fetus (1).

It is an indisputable scientific fact that the main etiological factor of underweight is malnutrition.

The problems are mainly related to:

- Protein deficiency;
- deficiency of B vitamins - folic acid, vitamin B12, vitamin C, iron, calcium and other essential biologically active substances.

Iron loss during menstruation is high - about 1.4 mg iron / day, which increases the average daily iron requirement in young menstruating women to 2.1 mg, compared with girls in the previous age group (before puberty). With malnutrition, meeting the high demand for essential nutrients is not possible. If you are thin, you can expect an increased risk of folate deficiency and neural tube defects in the fetus if a woman becomes pregnant.

Lack of bioavailable calcium is another major health problem when underweight is underweight, with all the ensuing consequences for bones and teeth. It becomes difficult and inadequate to

achieve skeletal maturity (peak bone mass) by the end of 20 years (5-6). Possibility of pregnancy if underweight increases the risk of preterm delivery of a low birth weight fetus.

Overweight is a risk factor for the development of chronic non-communicable diseases - type 2 diabetes mellitus, arterial hypertension, coronary heart disease, biliary dyskinesia, gonarthrosis (2,3).

It is now known that adipose tissue is not only a storehouse of bodily energy in the form of triglycerides and glycerol. Adipocytes play an important role in the regulation of energy balance by releasing a number of hormones and molecules - adipokines, which significantly affects the hormonal status of a young woman and her reproductive functions.

A comparative analysis of the results of our study with the data of previous national surveys of the anthropometric nutritional status confirms the conclusion that young women in Bukhara region are a population risk group in terms of the anthropometric nutritional status - both for the whole country as a whole and separately for the urban and rural population:

1. Young women are a population risk group in terms of malnutrition (16.8%), overweight and obesity (23.4%), assessed on the basis of BMI;
2. Women living in rural areas have a higher rate of overweight / obesity (27.6%) than their peers in urban areas;
3. Deviations from the normal BMI (underweight, respectively - overweight / obesity) pose a threat to health and reproductive functions.

The results of the study showed that: 59.8% of women of fertile age surveyed have a normal body weight; 18.8% - underweight; 31.4% are overweight and obese. It is concluded that the assessment of anthropometric status justifies the need to develop an educational program to optimize nutrition, which is a key factor for reproductive health.

CONCLUSION

There is a need for a national strategy to optimize the anthropometric nutritional status of women of fertile age - promoting healthy diets, awareness raising campaigns, introducing good marketing, advertising and food labeling practices (2,4). For it is undeniable that nutritional imbalances are essential for the high social and economic cost that society pays for health problems.

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