

Developing and sustaining evidence-based policy-making to reduce obesity in Romania: The National Health Insurance House Program for the treatment of nutrition and metabolic disorders

Cristina Siclovan, PhD student, SNSPA

International Conference Measuring Development in Turbulent Times

Nov.28-29,2017, Bucharest

Why a Program to reduce Obesity

- **The increasing incidence of obesity in Romania and the emergence of disease in children and adolescents led The Ministry of Health and The National Health Insurance House to initiate, starting with October 2008, The Program for the treatment of nutrition and metabolic disorders**
- **In the last 30 years, the number of obese people has tripled, all over the world, including Romania**
- **25% obese in the total adult population in Romania**
- **In children, the frequency of obesity has increased, we are approaching the European trend, meaning between 12-15% of obesity, especially in children over ten years**

Inclusion criteria in The Weight Loss Program

- **Debut of the Program in October 2008**
- **● 754 obese people received treatment with Orlistatum for 12 months in 2008-2016**
- **● Inclusion criteria: BMI ≥ 35 kg / m² + 1 comorbidity**
- **● BMI ≥ 40 kg / m² \pm co-morbidity**
- **● Lack of weight loss at least 3% after 3 months and / or lack of optimization of biological parameters after 12 weeks of diet + physical activity.**

Inclusion criteria

- **Children aged 12-17 years**
- **BMI $> / = 5$ units over the 95th percentile (enrollment on nomogram growth) or**
- **BMI $> / = 3$ units over the 95th percentile but with persistent significant comorbidities despite standard therapy (diet and physical activity):**
diabetes, glucose intolerance,, dyslipidemia, steatosis, high blood pressure, sleep apnea, orthopedic complications.

Anthropometric features:

- age (years)
- weight (kg)
- height (m)
- waist circumference (cm)
- the hip circumference (cm)
- **waist-hip ratio**
- **BMI=weight (kg) / height² (m²)**

Patients aged 11-83 years old

- **57% obese patients of the second degree obesity and 43% obesity III dgr.(morbid)**
- **gender distribution: 25% male and 75% female**
- **onset of obesity:** 19% in childhood; 37% with the onset of the endocrine disorders; 13% after pregnancy, 5% after menopause, and the rest from other causes
- **provenance environment:** 63% of countryside and 37% of urban area
- **fatty tissue distribution: 30% of patients with abdominal obesity** (risk of metabolic and cardiovascular complications), 47% limb obesity and 23% with generalized obesity
- 32% with a family history of obesity among the first-degree relatives and 21% with diabetes in one of the family members

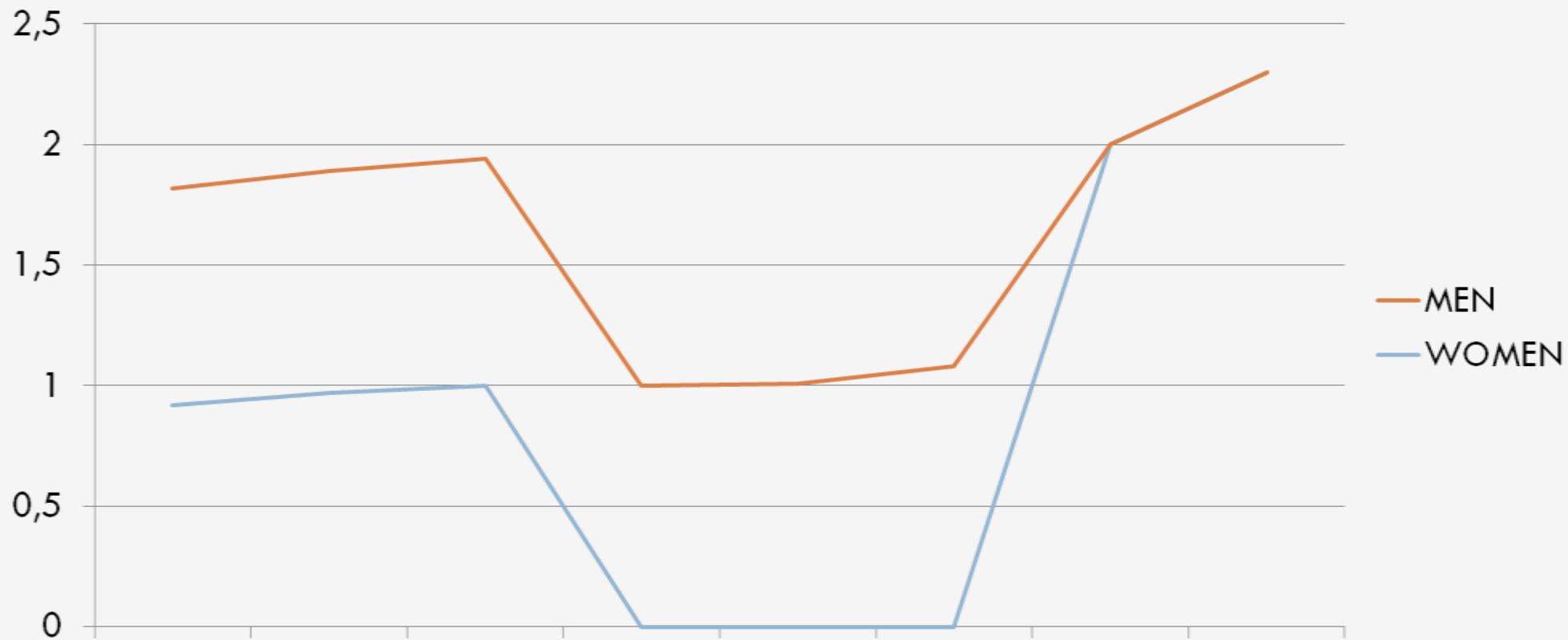
Ideal values for waist / hip ratio

- Women - 0.7
- Men - 0.9
- A waist / hip ratio, which fits into the ideal values above, suggests a healthy body with lower risk of illness. For women, the ratio of 0.7 suggests an optimal estrogen level.

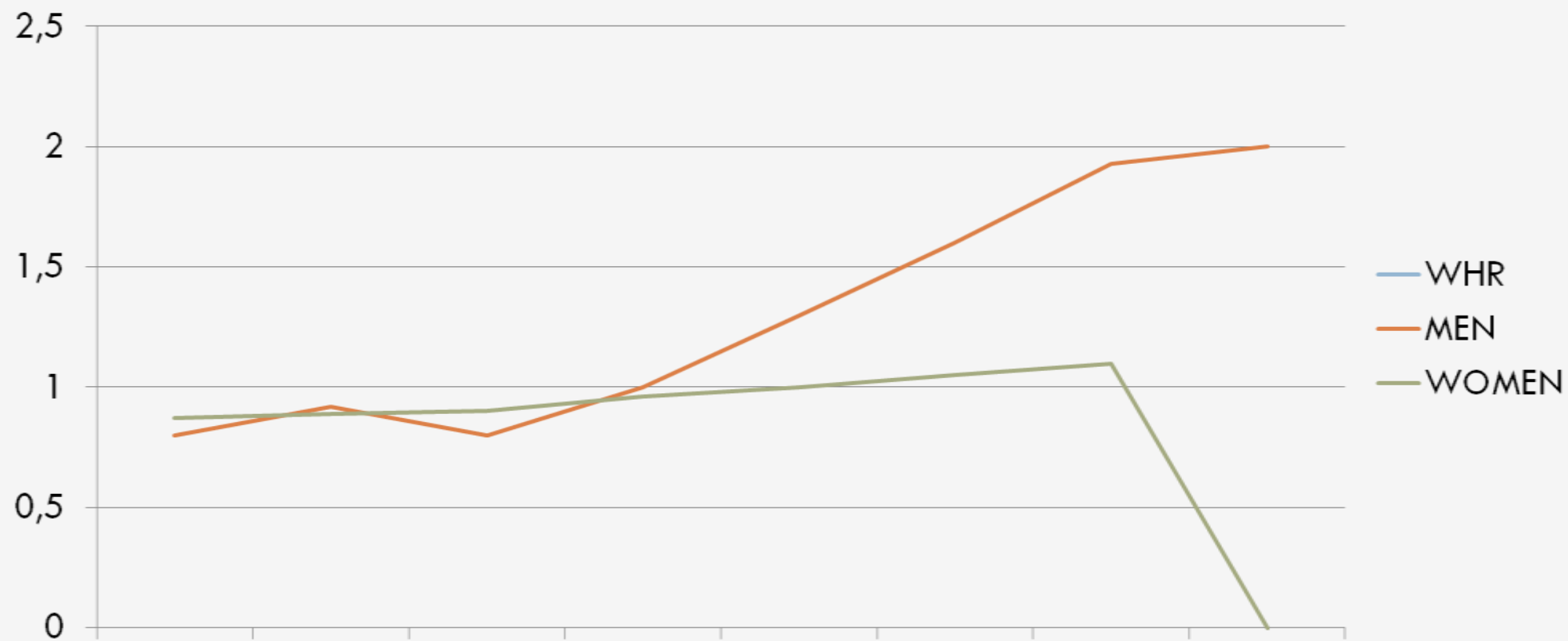
Waist/hip ratio: health and sexuality indicator

MEN	WOMEN	Cardiovascular Risk
< 0.95	< 0.80	very low risk
0.96 - 1	0.81 – 0.85	moderate risk
> 1	> 0.85	increased risk

Waist/hip ratio in men and women on entry into the program



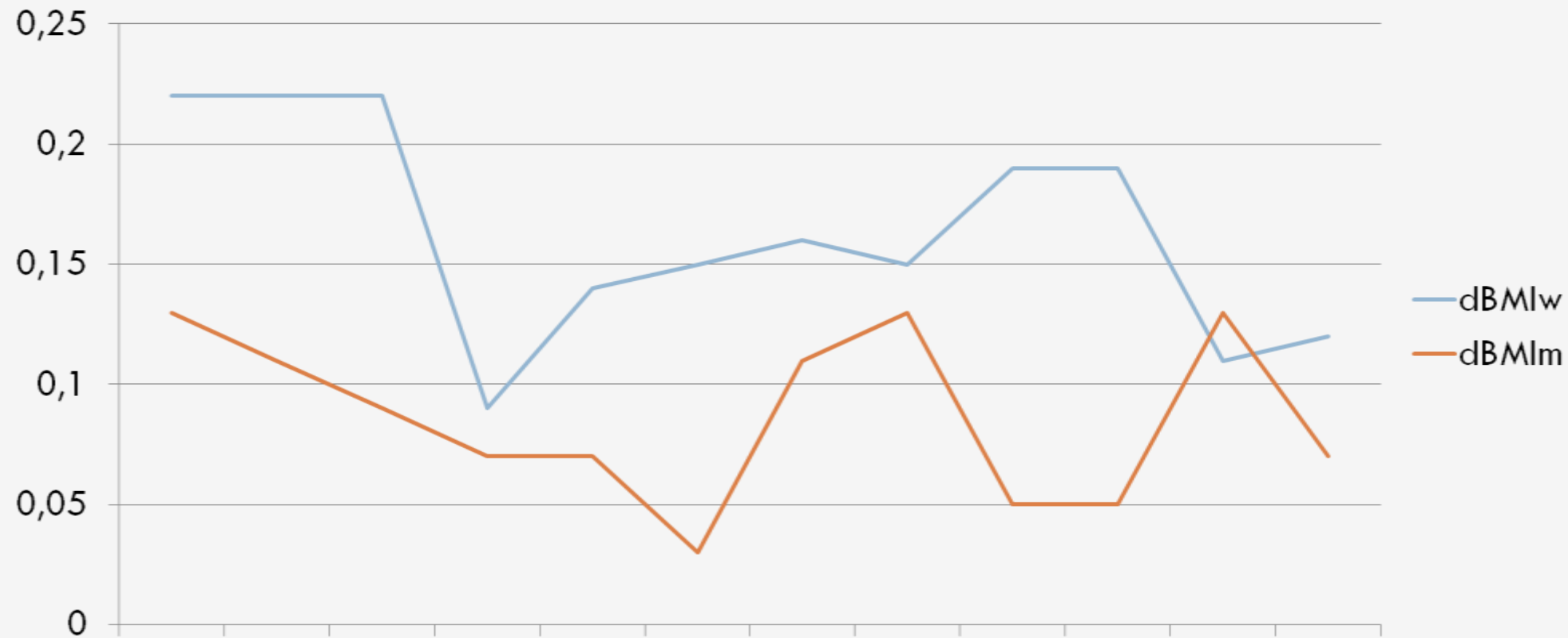
Waist/hip ratio in men and women to output from the program



ADULT WEIGHT CLASSIFICATION (WHO, EASO)

CLASSIFICATION	Body mass index (kg/m ²)
Normal weight	18.5 - 24.9
Overweight	25.0 – 29.9
Obesity	≥ 30.0
Obesity I degree	30.0 – 34.9
Obesity II degree	35.0 – 39.9
Obesity III degree	≥ 40.0

BMI difference in men and women at program entry and at the end of 12 months of treatment



BMI-an accurate measure of health ?

- BMI is a calculation that divides people into one of 4 categories (underweight, normal weight, overweight and obese)
- BMI can't distinguish between fat and muscle (muscle is about 18% more dense than fat)
- BMI doesn't measure where on the body the fat is carried.
- In conclusion: BMI isn't an accurate measure of health → it is used to get on idea of trends at large populations. Most experts like to use a combination of measures when assessing health (body fat percentage, waist to hip ratio, body adiposity index etc).

Compliance with treatment was 64%

- **Compliance is the patient's adherence to all physician recommendations throughout the treatment.**
- **Observational studies show that good treatment compliance is encountered when more than 80% of patients follow the recommended treatment of the physician.**
- **36% non-compliant patients** (irregular dosing / discontinuation of therapy, non-assignment of physical activity, diet and lifestyle change to drug therapy, non-compliance with medical advice regarding calorie diet and periodic assessments).

Developing and sustaining evidence-based policy-making

- *It is necessary to improve the fat measuring tools because obesity is a stringent public health problem*
- *The Correct evaluation by health decision-makers of Weight-Loss Programs supported by public funds will contribute to the development of realistic public health policies*
- *Obesity has multiple causes, so fighting this pandemic disease requires new therapeutic solutions*
- *Feeding is a mystical act, so it must be understood. The physical body is an invaluable gift to be respected and cared for. (Cuviosul Ghelasie Isihastul).*