Measuring height and weight

2nd EHES training seminar
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Why height and weight are measured?

- Obesity is a worldwide health problem and a risk factor for many diseases such as type 2 diabetes and cardiovascular diseases
- To calculate Body Mass Index
- Measured height and weight are needed because self-reported data is not sufficiently reliable to follow population level trends or to make comparisons between populations
Equipment

- Portable or fixed stadiometer
- Steps
- Carpenter’s level
- Length rods
Exclusion criteria

- If participant
  - is immobile or in a wheelchair
  - has difficulties in standing straight
  - has a hairstyle which prevents the proper use of the equipment
EHES protocol for measuring height

- Height is measured without shoes, heavy outer garments and hair ornaments
- The back of the head, shoulder blades, buttocks and heels are touching the stadiometer
• A small gap between the legs (10cm)

• Feet straight ahead

• The ear canal is in a level with the cheek bone
• The head of the stadiometer is lowered so that the hair is pressed flat
• The reading of the height should be done from eye level
If the participant is taller than the measurer, the steps should be used.
Recording

- The height is recorded to the resolution of the stadiometer
- If the height is not measured the reason should be specified and recorded
Calibration and checking the equipment

- The vertical and horizontal placement of the stadiometer should be checked by using the carpenter’s level.
- Depending on the measurement device the height rule/stadiometer should be checked with standardized rod in regular intervals.
Measuring weight
Equipment

- Balanced beam scale or electronic scale
- Calibrated weights
- Carpenter’s level
Exclusion criteria

- If participant
  - is immobile or in a wheelchair
  - has difficulties standing steady, so that measuring the weight is impossible
EHES protocol for measuring weight

Participant is asked to:

- remove heavy outer garments
- take of the shoes
- empty pockets
- The participant is standing still in the centre of platform
- 10 cm gap between the heels
- The weight equally distributed on both legs
The weights are moved until the beam balances
Recording

- The weight is recorded to the resolution of the scale.
- If the participant is pregnant, also the pregnancy weeks should be recorded. The weight before pregnancy is asked and recorded.
- If the weight is not measured the reason should be specified and recorded.
Calibration and checking the equipment

- The scale should be placed on a hard floor
- Carpenter’s level should be used to verify that the floor and the scale are in horizontal position
- Calibration of the beam balance scale should be done at the beginning of the examination day
- Depending on the device the scale should be checked using the standardized weights in regular intervals
Thank you!