# Research on childhood obesity: 3 propositions to be further discussed

#### **EUROPREV**

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## Project 1: Use of Health Information system (HIS) in primary care practice: application in children and teenagers

- The globally increasing prevalence of childhood obesity is one of the most serious public health challenges of the twenty-first century.
- Due to the need for multi-professional therapies that require a high amount of personnel and financial resources, HIS can be considered as an auxiliary aid to GPs'; HIS-supported interventions may be very promising in term of efficacy and efficiency of obesity management in children and teenagers.
- So far, meta-analysis have shown unconsistant results on health outcomes in adults.
- The purpose of this project is to select and help implementing existing health information systems that potentially impact both the «performance» of GPs' involved in obesity management and the children/teenagers.
- The «performance» is assessed through patients' adherence to obesity therapy and positive health outcomes.
- We have made a preliminary evaluation of a new HIS application (*Pathmate* project\*)(Kowatsch et al., 22nd European Conference on Information Systems, Tel Aviv 2014; Pletikosa et al., ibid).
- In conclusion, the results looked promising, but a RCT study is required to confirm these results.

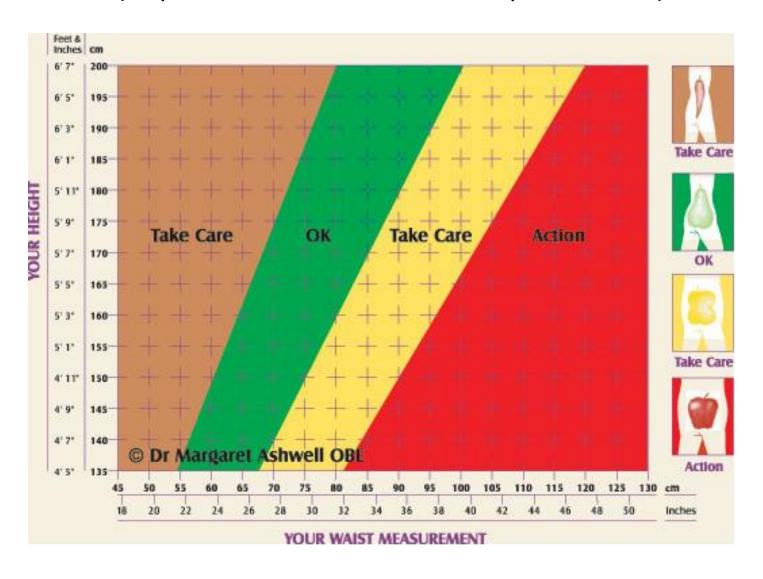
<sup>\*</sup> Supported by the Swiss National Science Foundation

## Project 2: Obesity prevention in childhood and teenagers: tracking waist circumference as a function of height to prevent obesity, independently of body mass index

- Stigmatization of obesity in children and adolescents is often due to the irrational utilization of scale (balance) in order to calculate body mass index (weight/height squarred). In addition, the major risk factor is not necessarily the excess weight *per se*, but the amount of intraabdominal fat (visceral fat) which can be easily estimated by waist circumference. Physical activity level contributes more to decrease abdominal fat than total body fat. As a result, «fit obese» adolescents (who have a lower waist circumference than their sedentary counterparts but the same BMI) may be wrongly classified in the high risk factors groups.
- Mac Carthy and Ashwell (1) have suggested a very simple message ('keep your waist circumference to less than half your height) which has been applied to adults for more than 20 years in a schematic diagram, easy to understand and to use without the utilization of a computer or a calculator (see chart below)
- <u>Objective</u>: to test and apply the simple and didactic approach of Ashwell (new chart tailored to children respectively adolescents) in different countries in primary care practice to explore the following parameters:
- A) Acceptance of this infographic approach by the GPs' and Pediatricians.
- B) Preliminary validation of the chart tailored for children and adolescents would be needed, although Dr Ashwell claimed that the chart is valid from 5 years onward.
- C) Utilization of this adjusted chart (if necessary) to prevent excess weight gain in the central
  area of the body as a specific prevention target.

<sup>• &</sup>lt;u>1) McCarthy HD</u>, <u>Ashwell M</u>, a study of central fatness using waist-to-height ratios in UK children and adolescents over two decades supports the simple message--'keep your waist circumference to less than half your height', <u>Int J Obes (Lond)</u>. 2006 Jun;30(6):988-92

The Ashwell chart used in adulthood: management of risk factors as a function of body height and waist circumference (http://www.ashwell.uk.com/shapechart.htm)



## **Project 3: Stigmatisation in healthcare setting project**

- Body weight stigmatisation can be defined as negative attitude and belief regarding obese people. These are expressed under different forms such as: stereotypes, prejudice and inappropriate and biais treatments towards individuals with excess body weight or more frequently obese. The most frequent are negative verbal comments or biais judgment, expressed as nasty remarks, taunts...etc.
- There is an occupation where, *a priori*, we do not expect stigmatization, namely the general practitioner (GPs') and pediatricians, obesity specialists or other health professionals. We expect they should be full of empathy, to understand their patients. Yet, many doctors have negative attitudes or are biased towards obese patients. Many doctors wrongly believe that obesity is fully controllable. This is clearly linked to stigma.
- The perception by the health professional about the causes of obesity can
  considerably influence their own attitudes towards obese patients. Number of
  doctors think that obese are lazy, non compliant, weak willed, unintelligent,
  poorly self-controlled and even dishonest. They have less respect for them.
  With massive obesity patients, the doctors show less patience and less desire
  to treat them, thinking that it's a waste of time to follow these patients. It will
  be especially deleterious for children and adolescents.

## **Project 3: Stigmatisation in healthcare setting project**

The 8 main consequences of stigmatisation are important:

- 1. Increase risk of depression.
- 2. Low self-esteem
- 3. Poor body image
- 4. An important issue is the increase of eating disorders and binge eating
- 5. Exercise avoidance
- 6. Further weight gain
- 7. Avoidance of medical consultation
- 8. Suicide

### **Project 3: Stigmatisation in healthcare setting project**

- A recent study has reported that the negative attitudes of doctors have a
  deleterious impact on the obese patients. They explain of being dismissed by their
  doctor, their feelings of disrespect, criticism. This can lead to patients avoiding
  and cancelling appointments with their doctor. So they will not be treated!
   Stigma increases eating disorders and decreases physical activity in obese
  patients. It is frequently responsible of additional weight gain and depression.
- Objective:
- The main objective of this project is to decrease stigmatisation in healthcare setting, knowing the deleterious impact it has on obese patients, especially children and adlescents
- Specific objectives:
- 1. To evaluate stigmatisation in healthcare setting in different European countries
- 2. To develop educational materials about stigmatization for GPs' and Pediatricians.
- 3. To implement continuing education to avoid stigmatisation and educate GPs' and Pediatrician about motivational interviewing
- 4. To evaluate the efficacy of the intervention