



Treatment of childhood obesity – lessons and challenges

Carl-Erik Flodmark, MD, PhD
Childhood Obesity Unit

Treatment and Prevention of Obesity
13 September 2007



Possible strategies

- Prevention
 - Pedagogical techniques
- A professional conversation
 - A conversation where you know where you are heading
- Future strategies
 - Drug therapy
 - Surgery
 - Pedagogical and conversational treatments combined
 - Sports society

A professional conversation

- How do you do it?
- Is it effective?
- Is it cost-effective?
- Is it safe?

Childhood Obesity Unit

- A knowledge and treatment centre for obese children in the Region Skåne was started in 2001
 - To treat obese children
 - To inform about the disease
 - To spread an evidence based model
 - To start a dialog with health care providers
- The unit was approved as a state financed centre in 2004

Multi-disciplinary approach

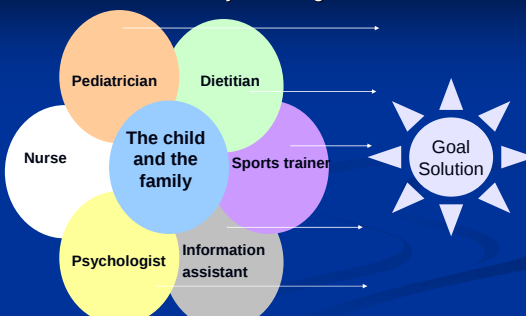


- Medical (pediatric)
- Nutrition
- Physical activity
- Psychological/social

➤ Co-operation within a team is necessary to offer a treatment specially designed for the family

Multidisciplinary team

at Childhood Obesity Unit Region Skåne



Treatment models

- Single family treatment:
 - First visit includes
 - Full team
 - Investigation
 - Evaluation
 - Goals for this family
 - Follow-up is done using smaller teams

Nowicka, International Journal of Obesity, 2004, Vol 28, Suppl 1

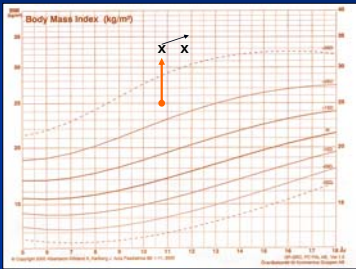


Evaluation of the SOFT model

- 233 children were recruited during 18 months
- 44 children had been treated more then 6 months
- 26 boys, 18 girls , age 10.9 years (mean; range 6-16)
- BMI 32.1 (mean)
- 33 children had been treated more than 1 year
- All children were recruited for follow-up. 81% participation rate
- Change in BMI
 - 3.4% (-14% - +17%) for the whole group
 - 5.5% for younger children (-15% - +6%)
 - 37/44 (84%) were successful (e.g. did not increase BMI)

Int J Obese 2004;28: S193

BMI for the average patient



The reasons for this model

- Psychoanalytic therapy
- Behavioral therapy
 - Using behavioral performance based procedures to induce changes in behavior (re-learning)
- Cognitive behavioral therapy
 - Using behavioral performance based procedures and cognitive interventions to produce changes in thinking, feeling and behavior

Psychological models cont

- Family (systems) therapy
 - Using the encounter with a family to improve the members health by observing and analyzing interactions between family members but also with the therapists and improving the family's ability to use their own resources
- Group therapy
- Review
 - Flodmark CE. Childhood Obesity.
 - Clinical Child Psychology and Psychiatry 1997;2: 283-295

Family weight school

- Multiple family treatment 12-19 years of age
- 72 families were treated for one year
- BMI 34,6 (27,6-50,4) unchanged in the treatment group
- The control group increased 34,5-35,8 ($p < 0,02$)
- Quality of life lower after 14-19 years of age

Nowicka, *Obesity Research*, Vol 13, September 2005
Nowicka, *International Journal of Obesity*, Vol 29, September 2005



Cost effectiveness

- Cost-benefit
 - Braet (Belgium) 30 visits per patient for one year
 - Epstein (USA) 14 visits
 - SOFT model 3.8 – 6 visits
- Conclusion
 - A multi disciplinary team is not necessarily requiring many visits
 - Does not increase eating disorders

The SOFT model

- One visit every third month
- 600 patients in active treatment
- 2000 GBP per family per yeat
- Family weight school 725 GBP per family
- Four visits in one year



Reflexions

- Non-blaming approach showing respect (requires training)
- Realistic goals (biological knowledge)
- Small steps
- Age adjusted strategies (requires understanding of psychological development)

Obesity and eating disorders

- No support in empirical studies for dieting inducing eating disorders in adults
 - National Task Force on the Prevention and Treatment of Obesity. Arch Intern Med 2000;160:2581-9.
- Binge eating disorder good prognosis
 - Fairburn C, Arch Gen Psychiatry. 2000 Jul;57(7):659-65

A professional conversation

- | | |
|-------------------------|---|
| ■ How do you do it? | ■ Use psychological based treatments |
| ■ Is it effective? | ■ Better long-term results than in adults |
| ■ Is it cost-effective? | ■ The method chosen might be important |
| ■ Is it safe? | ■ No indication of increased eating disorders |

Tools in Teenagers

- Quality of life
 - The effect of a health condition on daily activities, physical symptoms, social interactions and emotional well being (S Friedlander, 2003).
- Self-esteem
 - Reality-based attainments relative to one's goals or aspirations (William James, 1890) or the self as a social object (Cooley, 1902, SA French, 1995).

To be a patient or a person

■ Patient perspective

- Health related quality of life in obesity is similar as in cancer (JB Schwimmer 2003)
- 106 children aged 5-18 years



To be a patient or a person (cont.)

■ Population perspective

- Self-esteem and peer acceptance only different in subscales for athletic competence and physical appearance (RG Phillips, 1998)
 - 313 children aged 9-11
- Self-esteem only different in the subscale for physical characteristics (C Renman, 1999)
 - 6319 children aged 14-18
- Quality of life decreased in physical and social functioning but not emotional and school functioning (J Williams, 2005)
 - 1256 children, aged 9-12

The SOFT model

- The global scale was improved from low to normal (4.1-5.3)
- Physical characteristics were improved (3.0-4.1)
- Psychological well-being was improved from low to normal (3.6-4.7)
- Relations to others were improved (5.0-5.9)
- A tendency towards normalization for other subscales
 - Relation to parents and the family (5.0-5.2)
 - Talents and skills (5.8-6.5)

Conclusions

- Obese patients have lower quality of life
- In the population obese children have normal quality of life but subscales for physical characteristics are lower
- Parents regard children's quality of life as low
- Quality of life is lower in older children
- Socioeconomic status is important



Reflexions

- Obese children are happy as normal children
- Obese patients are unhappy
- Parents becomes unhappy before the obese child does
- What will happen if the therapist becomes unhappy and depressed?



More information

The web page for Childhood Obesity Unit
Region Skåne:

www.bravikt.info