Reviewer’s report

Title: Growth curves in short supply: A descriptive study of the availability and utility of growth curve data in adolescents with eating disorders

Version: 1 Date: 3 June 2013

Reviewer: Lars Gelander

Reviewer’s report:

First, I would like to express my appreciation for this well written manuscript that addresses several important issues. I do agree with the authors that the growth chart and BMI should be available at all health care visits for all children, as it is such an important marker for health and such a good tool to focus on diseases as well as child abuse and neglect.

Major Compulsory Revisions

1. I would really like to see graphics of the results part "Using growth curves for estimates of HBW goals". This could be done, by showing individual BMI-SDS plots for the children overlaid in one figure with a marker for ROM.

Minor Essential Revisions

1. One important question that is addressed but not stressed is if the child really has had a healthy BMI before the onset of ED. We know that BMI is a rough estimate of body fat and that BMI correlates with height. Thus, a taller person has relatively longer legs and the BMI value will be relatively lower, and vice versa. The relationship between sitting height and total height is also dependent upon the age, when the individual enters puberty; roughly the earlier puberty the shorter legs. It could then be possible to estimate sitting height and include this as a measure to evaluate if the child should have a BMI at the normal mean or not in relation to body proportion. In addition, puberty itself affects BMI and during adolescence BMI really correlates to pubertal development and not to age. This could be worth mentioning in the discussion about future development since it affects how a more precise evaluation tool might be developed.

2. Another issue is how close correlation could be expected between BMI and ROM. Leptin, adiponectin, inhibin B, ghrelin and a disturbed pattern of the hypothalamic regulation of menstruation is likely to disturb the direct correlation between BMI and ROM. The complex relationship is worth mentioning.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.
**Declaration of competing interests:**

I have no conflict of interest regarding the manuscript, neither financial or non-financial.
I declare that I have no competing interests.