Reviewer's report

Title: Nutritional knowledge as a determinant of vitamin and mineral supplementation during pregnancy

Version: 1 Date: 1 March 2013

Reviewer: Vibeke Kildegaard Knudsen

Reviewer's report:

This is a well written paper, and the topic is of importance in public health promotion. However few corrections and additions will improve the manuscript, please see below:

Major compulsory comments

1) One of your outcome measures is use of folic acid supplements. The protective effect of folic acid supplementation in the prevention of neural tube defects is probably one of the best established associations. However, you did not mention neural tube defects before the discussion section (page 12).

2) Another major issue is the timing of use of dietary supplements in relation to pregnancy. Especially regarding use of folic acid, it is well-known that the preventive effect of folic acid supplements is early in gestation, underlining the importance of using folic acid supplements already when pregnancy is planned. If the study contains details about when in pregnancy use of supplements took place it should be included. If not, it is a drawback of the study. At least it should be included in the discussion section.

3) The description of the sample size consideration is not clear. Which factors did you take into account? What was the outcome of interest (difference in supplement use of %). 

4) In the discussion section it is stated that the Romanian authorities recommend pregnant women to take iron supplements in accordance with their Hb level, thus an individual iron prophylaxis is implemented. Did you include this information in your survey? Where data available of the individuals’ Hb level and thus need for iron supplementation?

Minor essential revisions

5) Discussion section page 12: “The Institute of Medicine recommends a daily intake of 400 mcg folic acid and 30 mg iron for all pregnant women”. Please specify this statement (when in pregnancy?) and include a reference.

6) Page 13: “Lack of insurance coverage for folic acid” Please elaborate

7) Page 13. The results from a meta-analysis include proportions between 0.5 and 52, which is stated as being comparable to the present study. However, the variations are very wide, and are not suitable for a comparison.

8) Page 16-. Limitations: Should include a description of the representativeness of the present study, and how it can affect the conclusions.
9) Page 17, top. “Previous studies have proved that the positive effect of supplements on iron level is proportional to the dose and duration of use”. It seems like this paragraph should have been included somewhere else in the manuscript.

Discretionary comments
10) Consider use of decimals when presenting OR’s (max two decimals) and number of visits at GP (0 or 1). It is unnecessary to present mean, median, SEM and SD (page 10)

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

No competing interests