Subje BMJ - Decision on Manuscript ID BMJ.2016.036114.R1

Body: 02-Jun-2017

Dear Miss Rogozińska:

Manuscript ID BMJ.2016.036114.R1 entitled "Effect of diet and physical activity based interventions in pregnancy on gestational weight gain and pregnancy outcomes: Individual participant data (IPD) meta-analysis of randomised trials" which you submitted to BMJ.

Thank you for sending us your paper. We are pleased to say that we would like to publish it in the BMJ as long you are willing and able to revise your paper in line with some additional reviewer comments, which are available below.

We are provisionally offering acceptance but will make the final decision when we see the revised version.

We are looking forward to reading the revised manuscript and, we hope, making a final acceptance decision.

Please note that the BMJ might choose to shorten content or replace or re-size images for the print issue.

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Yours sincerely

Kristina Fišter kfister@bmj.com,

In your response please provide, point by point, your replies to the comments made by the reviewer, explaining how you have dealt with them in the paper.

** Additional comments from the external peer reviewer**

REFEREE COMMENTS

Reviewer: 1

Recommendation:

Comments:

The study addresses an important policy question on whether diet and /or physical activity (PA) -related interventions in pregnancy influence gestational weight gain and pregnancy outcomes. This large meta-analysis pools data from several countries using IPD data (36 trials) and study level data (67 trials). Overall effects are analysed and for IPD and non-IPD data separately overall and for pre-selected subgroups. 45 trials have been published since the work was carried out.

The authors found a small (0.7kg) but clinically important reduction in gestational weight gain in the intervention groups overall and across all the subgroups examined. Overall the paper is well laid out, and well structured.

Although the paper is entitled diet and physical activity, there is a much greater number of PA trials (IPD 15, total 52), than primarily diet-related trials (IPD 4 total 16).

Introduction:

Because of the potential effect of smoking on gestational weight, in my view this should be one of the subgroups examined and its influence reported.

Methods:

Design, data synthesis and quality control overall are satisfactory and appropriate.

Results

Sample sizes for some of the subgroups are small.

The lack of effect of dietary interventions on gestational diabetes needs discussion. Only four studies (490 participants) are included here, hence the lack of effect may be due to small sample size.

Regarding ethnicity, the proposition of non-Caucasian, (<650), to Caucasians is very small, hence it is more difficult to show

difference. Again this needs further elaboration.

Discussion

Implications for clinical practice p29.

"Healthcare professionals should avoid variations in care and lifestyle advice provided to mothers based on ethnicity, age and underlying medical conditions, since no differential effects were found"

This sentence should be removed /reworded as this conclusion is not justified cf. comments under Results above. Advice and care will always need to be tailored according to presence of underlying medical condition, ethnicity and age.

Box p33

The last sentence is incomplete.

Table 1- Format numbers need to be aligned to the right.

Summary

The study is an important contribution to the literature in this area and with these amendments is worthy of publication.

Additional Questions:

Please enter your name: Catherine Hayes

Job Title: Associate Professor in Public Health

Institution: Trinity College Dublin

Reimbursement for attending a symposium?: No

A fee for speaking?: No

A fee for organising education?: No

Funds for research?: No

Funds for a member of staff?: No.

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