# PEER REVIEW HISTORY

BMJ Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form (http://bmjopen.bmj.com/site/about/resources/checklist.pdf) and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below.

# **ARTICLE DETAILS**

TITLE (PROVISIONAL)	A comparison of pregnancy outcomes in Ghanaian women with
	different dietary diversity: a prospective cohort study protocol
AUTHORS	Osman, Shaibu; Saaka, Mahama; Siassi, Fereydoun; Qorbani,
	Mostafa; Yavari, Parvaneh; Danquah, Ina; Sotoudeh, Gity

# **VERSION 1 - REVIEW**

REVIEWER	Raul Zamora Ros
	Unit of Nutrition and Cancer,
	Cancer Epidemiology Research Programme
	Bellvitge Biomedical Research Institute (IDIBELL)
	Catalan Institute of Oncology (ICO)
	Spain.
REVIEW RETURNED	03-Mar-2016

GENERAL COMMENTS	This is a study protocol for a cohort study on pregnancy outcomes in
	Ghanaian women.
	Major points:
	My main concern is about the generalizability of the study. Is the
	sample representative of the Northern part of Ghana? Are there
	differences between mothers that want to have their babies in the
	health facility (antenatal care clinic ANC)? In the line 147-148, the
	authors commented that the study I focused on women in low socio-
	economic environment, are all women with low socioeconomic
	status? Are big differences between primipara and multipara women?
	• Please explain why you expect 30-40% of women with low DDS. It
	is a very important point for the calculation of your sample size.
	Please add more information about the dietary intake assessment.
	Will 24-h recalls be self-reported? Will they collect in an interview?
	Move the paragraph (lines 329-332) to the dietary intake
	assessment section. Add references of the software and food
	composition tables.
	Minor points:
	• Page 2 there are 3 corresponding authors and in page 4 only one.
	<ul> <li>Please add in the abstract the main outcomes of your study.</li> </ul>
	<ul> <li>Please, do not repeat sentences in the abstract and in the</li> </ul>
	introduction section.
	Line 181, delete "main" because all study subjects were pregnant
	women.
	• Lines 263 and 264, please delete the name or the digits of the
	number 5 and 10. You are duplicating the information.
	• Line 316, one of the potential confounding will be BMI, but when
	will be measured? The weight will be at the one measured at basal,
	at the end, in the middle of the study, before being pregnant

DEVIEWED	Dr. Francia D. Zatar
REVIEWER	Dr Francis B. Zotor
	University of Health and Allied Sciences, School of Public Health,
DEVIEW DETUBNIES	PMB 31, Ho Volta Region, Ghana.
REVIEW RETURNED	09-Mar-2016
GENERAL COMMENTS	I have read this manuscript with great interest as the protocol if
	executed may produce important evidence that will add to the body
	of knowledge on pregnancy outcomes amongst Ghanaian women
	based of dietary diversities.
	This is only a protocol and not sure if it warranted publication when
	the study has not been conducted to ascertain what findings may be
	attained. Unless this is the slant of the journal, to accept protocols
	and publish them, I would have suggested the authors ganarate
	results from the study.
	results from the study.
REVIEWER	Dr Zubia Qureshi
	APEX Consulting, Islamabad, Pakistan
REVIEW RETURNED	01-Apr-2016
GENERAL COMMENTS	Study title and objective is good but results of this study are missing
CLITERAL COMMINICIALS	in whole document i.e in abstract and in article description. Article
	fail to explain the objective of the study.
	Methodology is clear but too lengthy, need to concise.
	Need to rewrite the discussion after proper analysis of the study
	data.
REVIEWER	Edmonds, Sally
	St Augustines Hospital, Muheza, Tanzania
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if a 7 day food frequency is also added.
The reviewer also provided a marked copy with additional comments. Please contact the publisher for full details.

## **VERSION 1 – AUTHOR RESPONSE**

#### Reviewer 1

"No competing interest" has been stated at line 371.

Yes, it can be generalized for Northern Ghana because some of the facilities that are used for the data collection are referral facilities for the communities in Northern Ghana.

Yes, there are differences among mothers who attend ANC and/or would want to deliver in health facilities in Northern Ghana.

No, all the women are not of low socio-economic standing. However, majority are.

Yes, there is. But there isn't much difference between primipara and multipara women.

It is a projection and the real proportion would be determined after the baseline data collection or recruitment.

No, the 24-hour recall would not be self administered or reported. It would be administered to the study participants by research assistants.

Yes, it would be collected in an interview.

Yes, the corresponding authors are 3 and the reason why there are three corresponding authors on page 3 and only one on page 4 is due to the format of the journal and the author on page 4 is the main corresponding author.

It will be measured by computing the weight (kg) against the height (cm). The weight and height would be measured at the first trimester (≤12 weeks) of gestation and only the weight would be repeated at the late third trimester before delivery. The BMI would be calculated at each level and difference between the two would be determined and reported as the weight gain. The assumption of universal 1kg weight gain factor at first trimester would be used to estimate pre-pregnancy weight since weight before pregnancy cannot be reliably obtained from all the study participants.

### Reviewer 2

Yes, protocols are accepted by the journal.

## Reviewer 3

It is a protocol manuscript and the results would be presented in due time.

#### Reviewer 4

It would be measured 3 times because of time and number of subjects involved. It may not be sufficient but the average would be used and this would give us a fair idea about their dietary behaviour or intake.

## Reviewer 5

Line 113 is my own sentence.

Yes, it is a projection and the exact proportion would be determined after the baseline data collection or recruitment.

Three 24-hour recall would be collected in this study as the dietary assessment and the average of it would be used in the analysis.