STROBE Statement—Checklist of items that should be included in reports of ***cross-sectional studies***

	Item No	Recommendation
Title and abstract	1	(*a*) Indicate the study's design with a commonly used term in the title or the abstract: **Answer:** Under the heading methods
		(*b*) Provide in the abstract an informative and balanced summary of what was done and what was found. **Answer:** Written
Introduction		
Background/rationale	2	Explain the scientific background and rationale for the investigation being reported **Answer:** Scientific background in the second paragraph and rationale in the third paragraph.
Objectives	3	State specific objectives, including any prespecified hypotheses **Answer:** 6th line of third paragraph (The objective of this study was to find out association between levels of NRG4 and insulin in women with GDM and to find out their relationship with other metabolic parameters.)
Methods		
Study design	4	Present key elements of study design early in the paper **Answer:** Written in the first line of 1st paragraph under the heading Methods
Setting	5	Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection. **Answer:** Mentioned in the first paragraph
Participants	6	(*a*) Give the eligibility criteria, and the sources and methods of selection of participants **Answer:** 3rd, 4th, and 5th lines of first paragraph explains the selection of participants and eligibility criteria.
Variables	7	Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers. Give diagnostic criteria, if applicable **Answer:** Diagnostic criteria is given in 3rd paragraph of Methods.
Data sources/ measurement	8*	For each variable of interest, give sources of data and details of methods of assessment (measurement). Describe comparability of assessment methods if there is more than one group **Answer:** Mentioned in the 3rd paragraph
Bias	9	Describe any efforts to address potential sources of bias **Answer:** Not applicable
Study size	10	Explain how the study size was arrived at **Answer:** 6th and 7th line of the 1st paragraph.
Quantitative variables	11	Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why **Answer:** Last paragraph of Methods
Statistical methods	12	(*a*) Describe all statistical methods, including those used to control for confounding. **Answer:** Mentioned in the last paragraph of Methods
		(*b*) Describe any methods used to examine subgroups and interactions **Answer:** Mentioned in the last paragraph of Methods
		(*c*) Explain how missing data were addressed **Answer:** Not Applicable
		(*d*) If applicable, describe analytical methods taking account of sampling strategy **Answer:** Not Applicable

		(*e*) Describe any sensitivity analyses **Answer:** Not Applicable
Results		
Participants	13*	(a) Report numbers of individuals at each stage of study—eg numbers potentially eligible, examined for eligibility, confirmed eligible, included in the study, completing follow-up, and analysed **Answer:** It's mentioned in the 1st paragraph. The flowchart of study population in figure1.
		(b) Give reasons for non-participation at each stage **Answer:** Not applicable
		(c) Consider use of a flow diagram **Answer:** Figure1.
Descriptive data	14*	(a) Give characteristics of study participants (eg demographic, clinical, social) and information on exposures and potential confounders **Answer:** It mentioned in the table 1, 2, 3 and 4.
		(b) Indicate number of participants with missing data for each variable of interest **Answer:** Not applicable
Outcome data	15*	Report numbers of outcome events or summary measures **Answer:** It is mentioned in table1, 2 and figure3.
Main results	16	(*a*) Give unadjusted estimates and, if applicable, confounder-adjusted estimates and their precision (eg, 95% confidence interval). Make clear which confounders were adjusted for and why they were included **Answer:** Not applicable
		(*b*) Report category boundaries when continuous variables were categorized **Answer:** Not applicable
		(*c*) If relevant, consider translating estimates of relative risk into absolute risk for a meaningful time period **Answer:** Not applicable
Other analyses	17	Report other analyses done—eg analyses of subgroups and interactions, and sensitivity analyses **Answer:** Table 2 and 4
Discussion		
Key results	18	Summarise key results with reference to study objectives **Answer:** 1. NGR4 had a weak but direct association with insulin in women with GDM 2. Serum NRG4 level were found low in GDM compared to non-GDM ($p<0.03$) 3. HOMA IR and fasting insulin levels were directly related to circulating NRG4 in blood 4. There is an inverse association of NRG4 with Cholesterol and LDL in our study 5. No association of NRG4 was observed with FBS, TGs, and HDL. All the results were statistically not significant.
Limitations	19	Discuss limitations of the study, taking into account sources of potential bias or imprecision. Discuss both direction and magnitude of any potential bias **Answer:** Last 3 lines of discussion

Interpretation	20	Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies, and other relevant evidence **Answer:** The results of the study suggest that NRG4 has the potential to become a marker. Women with low levels of NGR4 are at risk of developing GDM
Generalisability	21	Discuss the generalisability (external validity) of the study results **Answer:** In women who have low levels, awareness sessions could be conducted amongst pregnant women and who plan to conceive to increase brown fat activity through strictly modifying diet and lifestyle.
Other information		
Funding	22	Give the source of funding and the role of the funders for the present study and, if applicable, for the original study on which the present article is based **Answer:** Not applicable

*Give information separately for exposed and unexposed groups.

Note: An Explanation and Elaboration article discusses each checklist item and gives methodological background and published examples of transparent reporting. The STROBE checklist is best used in conjunction with this article (freely available on the Web sites of PLoS Medicine at http://www.plosmedicine.org/, Annals of Internal Medicine at http://www.annals.org/, and Epidemiology at http://www.epidem.com/). Information on the STROBE Initiative is available at www.strobe-statement.org.