

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

	<b>Item No</b>	<b>Recommendation</b>
<b>Title and abstract</b>	1	(a) Indicate the study’s design with a commonly used term in the title or the abstract (b) Abstract contains summary of the method and the results
<b>Introduction</b>		
Background/rationale	2	Included in the introduction
Objectives	3	Hypothesis stated clearly at the end of the introduction
<b>Methods</b>		
Study design	4	Cross sectional, observational
Setting	5	Tertiary referral hospital, over a 3 month period, data from clinician requested routine test results
Participants	6	100 consecutive newborns in a tertiary referral hospital and their mothers
Variables	7	Serum vitamin D (25OHD) measured in the mother during the 3 <sup>rd</sup> trimester, Newborn 25 OH D.
Data sources/ measurement	8*	25OH D levels in 100 consecutive newborns (routinely measured in all South Australian Newborn Laboratory data storage to find maternal 3 <sup>rd</sup> trimester vitamin D levels for the mothers of each of them Because the immunoassay used to measure adult vitamin D levels was not validated for newborns immunoassay for the newborns
Bias	9	We did not have access to detailed medical records and we did not interview each mother. Therefore maternal serum samples were collected for vitamin D. However if they had started on vitamin D at birth would not have been sufficient time for vitamin D to reach a new steady state by the time they delivered
Study size	10	Study size of 100 neonates was arrived at by the duration of the data collection period, ie there were 100 neonates
Quantitative variables	11	1. neonatal serum vitamin D – all measured by enzyme immunoassay (EIA) 2. maternal serum vitamin D – all measured by enzyme immunoassay 3. Several neonatal samples were also measured by HPLC-MS/MS to verify the validity of EIA
Statistical methods	12	1. Regression analysis between 3 <sup>rd</sup> trimester maternal vitamin D and neonatal vitamin D 2. regression analysis of neonatal vitamin D measured by EIA and HPLC-MS/MS
<b>Results</b>		
Participants	13*	(b) No subject was excluded Demographic data of the maternal population given in results.
Descriptive data	14*	Given in results
Outcome data	15*	Confounder adjustments – for neonatal samples measured on EIA validated by HPLC-MS/MS
Main results	16	Regression analysis between maternal 3 <sup>rd</sup> trimester and newborn vitamin D levels given.
Other analyses	17	Subgroup analysis – a subgroup of neonatal samples also measured on HPLC MS/MS
<b>Discussion</b>		
Key results	18	discussed
Limitations	19	Limitations addressed
Interpretation	20	Generalised

Generalisability 21 Discussed

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**Other information**

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Funding 22 No funding was received for this study.

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\*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](http://www.strobe-statement.org).