

ESPS Peer-review Report

Name of Journal: World Journal of Meta-Analysis

Ms: 2423

Title: Subclinical hypothyroidism and the metabolic syndrome -- a meta-analysis of cross-sectional studies

Reviewer code: 02457919

Science editor: l.l.wen@wjgnet.com

Date sent for review: 2013-02-21 19:17

Date reviewed: 2013-02-22 04:57

CLASSIFICATION	LANGUAGE EVALUATION	RECOMMENDATION	CONCLUSION
<input type="checkbox"/> Grade A (Excellent)	<input type="checkbox"/> Grade A: Priority Publishing	Google Search:	<input type="checkbox"/> Accept
<input type="checkbox"/> Grade B (Very good)	<input checked="" type="checkbox"/> Grade B: minor language polishing	<input type="checkbox"/> Existed	<input type="checkbox"/> High priority for publication
<input checked="" type="checkbox"/> Grade C (Good)	<input type="checkbox"/> Grade C: a great deal of language polishing	<input type="checkbox"/> No records	<input type="checkbox"/> Rejection
<input type="checkbox"/> Grade D (Fair)		BPG Search:	<input type="checkbox"/> Minor revision
<input type="checkbox"/> Grade E (Poor)	<input type="checkbox"/> Grade D: rejected	<input type="checkbox"/> Existed	<input type="checkbox"/> Major revision
		<input type="checkbox"/> No records	

COMMENTS

CONFIDENTIAL COMMENTS TO EDITOR:

Dear Editor: Overall article is correct, some methodological aspects could increase the risk of bias of risk estimates (particularly the use of crude numbers in the main analyses). I think that the study is interesting and I suggest some changes before accept it.

COMMENTS TO AUTHORS:

Doctor Zhang and colleagues report the results of a meta-analysis of observational studies evaluating the association between subclinical hypothyroidism and metabolic syndrome and its individual components. Overall methodology and spelling is correct, and the results are very interesting. Comments: 1- Abstract: in line 34 authors state that they used random or fixed models as appropriate, but there is no reference to which method was used. 2-Methods: in line 66, authors state that they follow QUOROM statement, please update to PRISMA guidelines. 3-Data synthesis: in line 114 and 115, authors state that they computed pooled OR and WMD. In this section it should be mentioned if they used for this purpose the numbers reported in the studies or adjusted OR (estimate more reliable of effect size at study level in observational studies, and should be used). 4-Data synthesis: in line 114 and 115, authors mention that they used fixed- or random-effect models as appropriate, but there is no indication in the text or figures of which method was used. I suggest to change this sentence, and replace it by one stating the method used and an explanation of the reason for the choice. 5-Data synthesis: line 115 to 118. X2 (or Cochran Q test) and I2, measure two different (although related) concepts. The first measures the heterogeneity and the second the inconsistency, please clarify these concepts. Also, note that the power of the heterogeneity test have low power when the number of included studies is small (as is the case) so the p value considered as significant should be greater than the reported by the authors. 6-Data synthesis: line 121, the Egger's test is also a low power test when the number of studies is small, for this reason the p value commonly accepted as significant is <0.1. 7-Overall: article could gain in clarity improving the english.

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Name of Journal: World Journal of Meta-Analysis

Ms: 2423

Title: Subclinical hypothyroidism and the metabolic syndrome -- a meta-analysis of cross-sectional studies

Reviewer code: 02455479

Science editor: l.l.wen@wjgnet.com

Date sent for review: 2013-02-21 19:17

Date reviewed: 2013-02-25 11:12

CLASSIFICATION	LANGUAGE EVALUATION	RECOMMENDATION	CONCLUSION
<input type="checkbox"/> Grade A (Excellent)	<input type="checkbox"/> Grade A: Priority Publishing	Google Search:	<input checked="" type="checkbox"/> Accept
<input type="checkbox"/> Grade B (Very good)	<input checked="" type="checkbox"/> Grade B: minor language polishing	<input type="checkbox"/> Existed	<input type="checkbox"/> High priority for publication
<input checked="" type="checkbox"/> Grade C (Good)	<input type="checkbox"/> Grade C: a great deal of language polishing	<input type="checkbox"/> No records	<input type="checkbox"/> Rejection
<input type="checkbox"/> Grade D (Fair)		BPG Search:	
<input type="checkbox"/> Grade E (Poor)	<input type="checkbox"/> Grade D: rejected	<input type="checkbox"/> Existed	<input type="checkbox"/> Minor revision
		<input type="checkbox"/> No records	<input type="checkbox"/> Major revision

COMMENTS

CONFIDENTIAL COMMENTS TO EDITOR:

This meta-analysis is needed and valuable. However, the manuscript requires some clarifications regarding the following: 1. Authors only mentioned "Six cross-sectional studies" in the abstract. They were not mentioned in the text, what are they? And why only cross-sectional studies? So what are their inclusion criteria? 2. The authors described in the last paragraph of result, "No significant publication bias was found after assessment using the Begg's funnel plot ($p=0.573$)". However, in the 6 included studies, the participants in 3 Chinese population occupy more than half of the total participants (13978/19546, 71%). There may be race heterogeneity. If so, the results should be carefully explained. Therefore, further statistical analysis should be carried out after the three studies from China are excluded.

COMMENTS TO AUTHORS:

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ESPS Peer-review Report

Name of Journal: World Journal of Meta-Analysis

Ms: 2423

Title: Subclinical hypothyroidism and the metabolic syndrome -- a meta-analysis of cross-sectional studies

Reviewer code: 02455946

Science editor: l.l.wen@wjgnet.com

Date sent for review: 2013-02-21 19:17

Date reviewed: 2013-02-26 02:29

CLASSIFICATION	LANGUAGE EVALUATION	RECOMMENDATION	CONCLUSION
<input type="checkbox"/> Grade A (Excellent)	<input type="checkbox"/> Grade A: Priority Publishing	Google Search:	<input type="checkbox"/> Accept
<input type="checkbox"/> Grade B (Very good)	<input type="checkbox"/> Grade B: minor language polishing	<input type="checkbox"/> Existed	<input type="checkbox"/> High priority for publication
<input type="checkbox"/> Grade C (Good)	<input type="checkbox"/> Grade C: a great deal of language polishing	<input type="checkbox"/> No records	<input type="checkbox"/> Rejection
<input type="checkbox"/> Grade D (Fair)	<input type="checkbox"/> Grade D: rejected	<input type="checkbox"/> Existed	<input type="checkbox"/> Minor revision
<input type="checkbox"/> Grade E (Poor)		<input type="checkbox"/> No records	<input type="checkbox"/> Major revision

COMMENTS

CONFIDENTIAL COMMENTS TO EDITOR:

The authors performed a meta-analysis about the correlation of subclinical hypothyroidism and metabolic syndrome. The article is interesting and the statistical analysis well performed. I recommend minor revisions, and in particular revision of english language

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Name of Journal: World Journal of Meta-Analysis

Ms: 2423

Title: Subclinical hypothyroidism and the metabolic syndrome -- a meta-analysis of cross-sectional studies

Reviewer code: 02455620

Science editor: l.l.wen@wjgnet.com

Date sent for review: 2013-02-21 19:17

Date reviewed: 2013-02-27 00:35

CLASSIFICATION	LANGUAGE EVALUATION	RECOMMENDATION	CONCLUSION
<input type="checkbox"/> Grade A (Excellent)	<input type="checkbox"/> Grade A: Priority Publishing	Google Search:	<input checked="" type="checkbox"/> Accept
<input type="checkbox"/> Grade B (Very good)	<input checked="" type="checkbox"/> Grade B: minor language polishing	<input type="checkbox"/> Existed	<input type="checkbox"/> High priority for publication
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		<input type="checkbox"/> No records	<input type="checkbox"/> Major revision

COMMENTS

CONFIDENTIAL COMMENTS TO EDITOR:

I am not a statistician and so one should review the statistics to verify accuracy.

COMMENTS TO AUTHORS:

Please see my comments that are attached.

ESPS Peer-review Report

Name of Journal: World Journal of Meta-Analysis

Ms: 2423

Title: Subclinical hypothyroidism and the metabolic syndrome -- a meta-analysis of cross-sectional studies

Reviewer code: 02460696

Science editor: l.l.wen@wjgnet.com

Date sent for review: 2013-02-21 19:17

Date reviewed: 2013-03-04 23:58

CLASSIFICATION	LANGUAGE EVALUATION	RECOMMENDATION	CONCLUSION
[] Grade A (Excellent)	[] Grade A: Priority Publishing	Google Search:	[] Accept
[Y] Grade B (Very good)	[] Grade B: minor language polishing	[] Existed	[] High priority for publication
[] Grade C (Good)	[Y] Grade C: a great deal of language polishing	[] No records	[] Rejection
[] Grade D (Fair)	[] Grade D: rejected	[] Existed	[] Minor revision
[] Grade E (Poor)		[] No records	[Y] Major revision

COMMENTS

CONFIDENTIAL COMMENTS TO EDITOR:

This study addresses an important area related to subclinical hypothyroidism, but language needs large improvement.

COMMENTS TO AUTHORS:

Ye et al. performed a meta-analysis of subclinical hypothyroidism and metabolic syndrome using MEDLINE, EMBASE, Cochrane database, and manual search of literature using references of original manuscripts, reviews, and meta-analyses. This is an interesting study and addressing an important area. Major comments: Although the authors showed that there was no heterogeneity between results from different studies (in terms of χ^2 and I^2), it is well acknowledged that the study design, confounding factors included, as well as the definitions of subclinical hypothyroidism and metabolic syndrome vary greatly between studies, for example: - literatures may use TSH alone, TSH + T4, or other possible definitions to define subclinical hypothyroidism; - a number of pharmacological agents are known to affect thyroid hormone metabolism, but not all studies excluded subjects taking medications that affect thyroid function; - In addition to subclinical hypothyroidism, nonthyroidal illness may also have altered thyroid hormone profile but without evidence of thyroid dysfunction, suggesting that the observed association might be confounded by nonthyroidal illness. - Model adjustments are different. Therefore, I would suggest the authors to present the above information in Table 1 and discuss how these issues might affect the findings and interpretation of the current study. P.10, "SCH has been proven to be associated with increased risk of cardiovascular disease and mortality..." the paragraph is too strong. Up-to-date, we are still not sure whether subclinical hypothyroidism is associated with cardiovascular disease and mortality. Since it has been reported that subclinical hypothyroidism is associated with components of