Reviewer's report

Title: Stress levels predict substantial improvement in pain intensity after 10 to 12 years in women with fibromyalgia and chronic widespread pain. A cohort study.

Version: 0 Date: 12 Nov 2018

Reviewer: Reviewer 2

Reviewer's report:

PEER REVIEWER ASSESSMENTS:

OBJECTIVE - Full research articles: is there a clear objective that addresses a testable research question(s) (brief or other article types: is there a clear objective)?

Yes - there is a clear objective

DESIGN - Is the current approach (including controls and analysis protocols) appropriate for the objective?

No - there are major issues

EXECUTION - Are the experiments and analyses performed with technical rigor to allow confidence in the results?

No - there are major issues

INTERPRETATION - Is the current interpretation/discussion of the results reasonable and not overstated?

No - there are major issues

OVERALL MANUSCRIPT POTENTIAL - Could an appropriately REVISED version of this work represent a technically sound contribution?

Maybe - with major revisions
GENERAL COMMENTS: The study quality is moderate. The authors did a great job to perform a 10-12 years follow up. The statistical analyses need to be substantially improved.

REQUESTED REVISIONS:
Design and execution: I strongly suggest that the authors do not present mean change scores, but responder (clinically relevant improvement) of all secondary outcomes. e.g, as suggested by Arnold. Arthritis Rheum. 2012 Mar;64(3):885-94. In addition, I suggest to present data of the FIQ total score. For this score, responder criteria (>=14 % or 20% improvement from baseline are available, too).

I strongly suggest that the authors present data how many patients reported a moderate (>=30%) and substantial (>= 50%) deterioration of their pain scores and of the secondray outcomes. The presentation of the data is biased towards reporting the positive outcomes.

Please add a multivariate logistic regression analysis with all predictors included. Please present data how many patients met the criteria of mild, moderate and severe FM according to the FIQ total score at abseline and at follow-up.

Interpretation: 1. Major limitations of the analyses are not discussed. Other variables than the baseline variables tested might have influenced the results at follow-up. These variables might have changed during the follow-up period. For example: No data are available which drug and non-drug therapies the patients have received during the follow up time (btw: the data on drugs in table 1 need to be presented in a more detailed way, e.g. opioids, antidepressants, anticonvulsants), the level of physical activity, the satisfaction of the patients with their work and family, comorbidities which might have developed (e.g. diabetes). 2. A study with an 11-year follow-up are not included in INTRODUCTION and DISCUSSION (Wolfe Eur J Pain 17 (2013) 581-586). 3. The divergent results of the studies might be due to different study settings (primary or secondary or tertiary care) in which the patients have been recruited.

ADDITIONAL REQUESTS/SUGGESTIONS:
Different definitions of CWP are used in epidemiology studies leading to divergent rates of prevalence. The ACR 1990 criteria used in the study are the least restrictive ones.

Note: This reviewer report can be downloaded - see attached pdf file.
Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

No

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

No

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

No

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

Not relevant to this manuscript

Quality of written English
Please indicate the quality of language in the manuscript:

Acceptable

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