Educational inequalities in mortality associated with rheumatoid arthritis and other musculoskeletal disorders in Sweden

The aim of this research was to quantify educational inequalities in mortality associated with RA and other MSK disorders, using multiple-cause-of-death data, linked to individual-level data on educational level. The conclusions were that education was inversely associated with mortality in people with MSK disorders.

I have no issues with the manuscript which is well written & clearly set out, with a sound methodology and statistical analysis.

The only novel aspect of this research was the use of actual underlying cause of death due to MSK conditions in exploring the association between mortality and educational level in MSK patients. The results were not unexpected.

The issue is whether & how much this report adds anything to the extensive data we already have on this subject. The main weakness of the conclusions of the study is that the educational level variable used as the predictor is almost certainly a surrogate for more tangible & possibly correctable clinical and environmental features known to be associated with mortality, i.e. smoking, obesity, diet, exercise, type of employment, housing etc, none of which were available for this study.
For this reason, therefore I adjudge the suggestions in the conclusions in both the abstract and in the discussion to be misleading: "Education was inversely associated with mortality from RA and other MSK disorders suggesting need for improvement of MSK disorders management in low-educated people". "This has important implications for healthcare resource allocation and disease management, for instance initiating specific interventions to target low educated people."

Surely it is more important that the underlying comorbidities & environmental/social aspects should be targeted, especially as some are correctable, rather than highlighting clinical management of RA. I feel the authors should acknowledge this and expand on the use of aspect of surrogate markers.

Another possible weakness is the well-known variation in the reporting of MSK disorders on death certificates as a contributing cause of death. The authors allude to this but do not discuss this in any detail, given the very small percentages.

The manuscript would be improved if the authors provide robust reasoning for how this work would actually improve clinical care, the use of surrogate markers MSK conditions on death certification.

**Are the methods appropriate and well described?**
If not, please specify what is required in your comments to the authors.

Yes

**Does the work include the necessary controls?**
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Unable to assess

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