Peer Review Report

Review Report on Prevalence, cardiometabolic comorbidities and reporting of chronic kidney disease. A cohort analysis of the CKD-EPI-HUN STUDY.

Original Article, Int J Public Health

Reviewer: Jaroslav Rosenberger Submitted on: 28 Dec 2022

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EVALUATION

Q 1 Please summarize the main findings of the study.

Dear editor and authors!

Manuscript 1605635 "Prevalence, comorbidities and reporting of chronic kidney disease. A cohort analysis of the CKD-EPI-HUN STUDY." is a very concise report of CKD prevalence in one hungarian region. The authors used database of University of Pécs and selected patients with laboratory and/or ICD codes diagnosed chronic kidney disease. Their CKD-EPI-HUN study found a prevalence of CKD to be 16.4% (12.5% when standardized by age and sex). In addition, they found CKD to be under-reported by ICD coding as only 28.6% of CKD patients had their CKD diagnose stated in the database.

Q 2 Please highlight the limitations and strengths.

This is the observational cohort study derriving data from a large clinical database (University of Pécs). The study is well designed and executed. There are some limitations, however all are correctly discusseded by the authors (pages 13–14).

Please provide your detailed review report to the authors. The editors prefer to receive your review structured in major and minor comments. Please consider in your review the methods (statistical methods valid and correctly applied (e.g. sample size, choice of test), is the study replicable based on the method description?), results, data interpretation and references. If there are any objective errors, or if the conclusions are not supported, you should detail your concerns.

Dear authors,

I have read your manuscript 1605635 "Prevalence, comorbidities and reporting of chronic kidney disease. A cohort analysis of the CKD-EPI-HUN STUDY." with a pleasure. It is a well designed and executed study with an important public health message. Thank you.

I have only few minor comments:

- 1. Study population, page 5, line 103. Please, provide a reference to statistical registry (ref 31). Similarly, provide a reference number 33 on page 6, line 110.
- 2. Some very advanced CKD patients (G5) need dialysis care. It would be nice to show their numbers from the area of University of Pécs.
- 3. Substantial proportion (approximately third) of CKD G5 patients crashes to dialysis without a proper nephrology care before dialysis initiation. This is supported by your analysis which shows that only 28.6% of patients is correctly recognised by ICD codes. It is clear, that your data are derrived from clinical database, and patients who are not coming for any assessment are missing in your analysis. Therefore the true prevalence of CKD might be even higher. Please, add a short comment on that in your discussion.
- 4. There is a typo on page 13 line 320 (word kidney).
- 5. Page 21, table 1. CKD stages are referred as increased/decreased, please add words albuminuria or GFR, as appropriate.
- 6. Comorbidities are identified using ICD codes. We may expect similar under-reporting of these codes than CKD codes which should be mentioned in the respective paragraph.

