

PEER REVIEW HISTORY

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ARTICLE DETAILS

TITLE (PROVISIONAL)	Cardiovascular related conditions and risk factors in primary care for deprived communities before and during the COVID-19 pandemic: an observational study in Northern England
AUTHORS	Fu, Yu; Price, Christopher; Haining, Shona; Gaffney, Bob; Julien, David; Whitty, Paula; Newton, Julia L.

VERSION 1 – REVIEW

REVIEWER	Rias, Yohanes Institut Ilmu Kesehatan Bhakti Wiyata Kediri, School of Nursing
REVIEW RETURNED	18-Aug-2022

GENERAL COMMENTS	<p>Thank you for the opportunity to review this interesting study, and my best wishes are extended to the authors in their future endeavors. The comments provided are meant to strengthen the article according to each manuscript section.</p> <ol style="list-style-type: none"> 1. Abstract section line 7-11; Could you please elaborate the brief of GAPs and objective in the objective section. 2. The primary as well as secondary outcome not directly linier with objective data. Please elaborate the linearity between objective and primary outcome measurements. 3. Lines 21-23, page 2. Could you please add detailed information for setting the study? 4. Lines 26, page 2. Please add the number of participants (n =...). 5. Line 32-42, page 2. In the results section, could you please present the result of “cardiovascular disease (CVD) risk management” data in line with your title? 6. Line 44-54, page 2. In abstract section, please make sure your conclusion in line with your title. 7. Introduction; I strongly recommended add the definition of cardiovascular management and CVD-related risk related your strengths statements in the introduction. 8. Introduction; Line 3-10, page 5. Your aim is unclear; it appears to be a redundant word. What are the differences between aims lines 3-7 with aim lines 7-10? 9. Method. Please add and describe the sampling method in your study design or population. 10. Results. No suggested modifications. 11. Discussion; could you please remove or move to limitation section this statement “Due to the limitations of the publicly available datasets, it was not possible to control comparisons for age, gender, deprivation or ethnicity”. 12. Conclusion: The summary of finding is based on the results of the study.
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REVIEWER	Bhaskar, Sonu
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	South Western Sydney Local Health District, Liverpool Hospital, Department of Neurology & Neurophysiology
REVIEW RETURNED	26-Aug-2022

GENERAL COMMENTS	<p>This is an interesting study that provides some insights into the variations in cardiovascular management in primary care in Northern England. Though this study may have some value from a public health perspective, I have some concerns and comments - for the authors to consider.</p> <ol style="list-style-type: none"> 1. It is not clear if ethical approval was sought for this study. Or a waiver was granted? Please clarify. 2. Authors mention that the publicly available dataset was used - could you provide more information on the datasets and the procedure to access them? QOF? 3. One of the major limitations of the study is the retrospective nature of the analyses and also the quality of data. 4. Were there missing data? How was it handled? What methods were used for data quality assurance and cleaning, if applicable? 5. Please clarify what criteria were applied to identify "most deprived practices" 6. Since no regression analyses, or multivariate modelling could be performed, the applicability of these findings needs to be taken with caution. 7. Authors say, Page 13- "Prescribing statins is the next step where lifestyle modification shows no effects in managing hypercholesterolemia." How could this be inferred from the data? How is the effect established when association analyses were not undertaken? 8. It is important that authors should clearly state in the conclusion that the findings of this study should be interpreted with caution due to the quality of data and the limited analyses possible. <p>Overall, this is an interesting study that provides a scoping level understanding of practices - however, this should be not robust enough for wider implementation or evidence generation.</p>
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VERSION 1 – AUTHOR RESPONSE

Reviewer 1 Dr. Yohanes Rias, Institut Ilmu Kesehatan Bhakti Wiyata Kediri Comments to the Author

Comments	Response
Thank you for the opportunity to review this interesting study, and my best wishes are extended to the authors in their future endeavors. The comments provided are meant to strengthen the article according to each manuscript section.	Thank you.

Abstract section line 7-11; Could you please elaborate the brief of GAPS and objective in the objective section.	One sentence has been added for background information due to word limit in the “objectives” section in the Abstract.
The primary as well as secondary outcome not directly linier with objective data. Please elaborate the linearity between objective and primary outcome measurements.	This has been revised under “primary and secondary outcome measures” to mirror the study objectives.
Lines 21-23, page 2. Could you please add detailed information for setting the study?	More information has been provided under “setting” in the Abstract.
Lines 26, page 2. Please add the number of participants (n =...).	This information has been provided under “results” in the Abstract. The Deep End practises have a total of 263,830 registered patients.
Line 32-42, page 2. In the results section, could you please present the result of “cardiovascular disease (CVD) risk management” data in line with your title?	Thanks for raising this point and we have modified the study title to be consistent with the content.
Line 44-54, page 2. In abstract section, please make sure your conclusion in line with your title.	We have modified the study title, so the conclusion is now in line with the title.
Introduction; I strongly recommended add the definition of cardiovascular management and CVD-related risk related your strengths statements in the introduction.	Thank you. We have now provided relevant information in the “introduction” section on page 4.
Introduction; Line 3-10, page 5. Your aim is unclear; it appears to be a redundant word. What are the differences between aims lines 3-7 with aim lines 7-10?	This has been revised and clarified at the end of the “introduction” on page 5.
Method. Please add and describe the sampling method in your study design or population.	All GP practices (n=283) with nearly 2.4 million registered patients in the region were included in this retrospective observational study. All available data that meet the criteria have been downloaded and analysed. To further clarify this, a section on “setting” has been added in the “Methods” section on page 5.
Results. No suggested modifications.	Thank you.
Discussion; could you please remove or move to limitation section this statement “Due to the limitations of the publicly available datasets, it was not possible to control comparisons for age, gender, deprivation or ethnicity”.	This has been moved to the limitation in the “discussion” section on page 14.
Conclusion: The summary of finding is based on the results of the study.	Thank you.

Review 2 Dr. Sonu Bhaskar, South Western Sydney Local Health District, Ingham Institute
Comments to the Author:

Comments	Response
This is an interesting study that provides some insights into the variations in cardiovascular management in primary care in Northern England. Though this study may have some value from a public health perspective, I have some concerns and comments - for the authors to consider.	Thank you.
It is not clear if ethical approval was sought for this study. Or a waiver was granted? Please clarify.	Research ethical approval was not required for this study as all data is publicly available. This has been clarified under “ethics approval” section on page 15.

Authors mention that the publicly available dataset was used - could you provide more information on the datasets and the procedure to access them? QOF?	Relevant information has been provided under data sources section on page 5.
One of the major limitations of the study is the retrospective nature of the analyses and also the quality of data.	We agree with the reviewer, and we have highlighted this in the "limitation" section on page 14.
Were there missing data? How was it handled? What methods were used for data quality assurance and cleaning, if applicable?	There were no missing values in the recorded GP-level data we obtained from the Fingertips platform for analyses in this study. We realised that our analyses based on average values calculated at pre-defined time points can produce biased estimates due to missing data in patient-level data. However, it is not possible to address the average-points bias without accessing patient-level data in this study. This has been clarified in the "data analysis" on page 6 and limitation sections on page 14.
Please clarify what criteria were applied to identify "most deprived practices"	All GP surgeries in England were ranked according to the % of their practice population who lived in the most deprived 15% of Indices of Multiple Deprivation (IMD) datazones. Deep End practices in the North East were those whose practice population meant they were ranked in the lowest IMD decile nationally. This information has been added in the "setting" section on page 5.
Since no regression analyses, or multivariate modelling could be performed, the applicability of these findings needs to be taken with caution.	We agree with the reviewer and have highlighted this in the "limitations" section as well as throughout this study.
Authors say, Page 13- "Prescribing statins is the next step where lifestyle modification shows no effects in managing hypercholesterolemia." How could this be inferred from the data? How is the effect established when association analyses were not undertaken?	This statement has been removed.
It is important that authors should clearly state in the conclusion that the findings of this study should be interpreted with caution due to the quality of data and the limited analyses possible.	This has been acknowledged in the "conclusion" section on page 14.
Overall, this is an interesting study that provides a scoping level understanding of practices - however, this should be not robust enough for wider implementation or evidence generation.	We agree with the reviewer and have highlighted this in the "conclusion" section on page 14.

VERSION 2 – REVIEW

REVIEWER	Rias, Yohanes Institut Ilmu Kesehatan Bhakti Wiyata Kediri, School of Nursing
REVIEW RETURNED	16-Sep-2022
GENERAL COMMENTS	The study objective clearly defined, method and discussion describe well,. accepted.

REVIEWER	Bhaskar, Sonu South Western Sydney Local Health District, Liverpool Hospital, Department of Neurology & Neurophysiology
REVIEW RETURNED	06-Oct-2022
GENERAL COMMENTS	The authors have addressed all the comments made previously. I recommend the revised manuscript be accepted.