PEER REVIEW HISTORY

BMJ Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form (<u>see an example</u>) and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below.

This paper was submitted to the HEART but declined for publication following peer review. The authors addressed the reviewers' comments and submitted the revised paper to BMJ Open. The paper was subsequently accepted for publication at BMJ Open.

ARTICLE DETAILS

TITLE (PROVISIONAL)	Myocardial infarction incidence and survival by ethnic group: Scottish Health and Ethnicity Linkage retrospective cohort Study
AUTHORS	Fischbacher, Colin; Bansal, Narinder; Bhopal, Raj; Brown, Helen; Steiner, Markus; Capewell, Simon

VERSION 1 - REVIEW

REVIEWER	Tillin, Therese Imperial College, International Centre for Circulatory Health
REVIEW RETURNED	01-May-2013

GENERAL COMMENTS	This is a well conducted study addressing the very important topic of
	ethnicity-related variations in incidence of and outcomes of acute myocardial infarction.
	The limitations of the study are clearly described, particularly in
	terms of small numbers in some ethnic minority groups. The
	discussion could be abbreviated and I wonder if you have any
	comments to add on the perhaps surprising finding of similar rates of
	MI in the African group comapred with the white Scottish population-
	given that even relatively recent publications suggest that, at least in
	men in England and Wales, Africans and African Caribbeans
	continue to experience lower rates of CHD compared with the White
	European population. I appreciate that numbers are small, but you
	do go into some discussion of the Chinese group where numbers of
	events are equally small.

• The manuscript received a second review at the HEART but the reviewer did not give permission for their comments to be published

VERSION 1 – AUTHOR RESPONSE

Comments to the Author

This is a well conducted study addressing the very important topic of ethnicity-related variations in incidence of and outcomes of acute myocardial infarction.

Thank you.

The limitations of the study are clearly described, particularly in terms of small numbers in some ethnic minority groups.

Thank you.

7. The discussion could be abbreviated and I wonder if you have any comments to add on the perhaps surprising finding of similar rates of MI in the African group compared with the white Scottish population- given that even relatively recent publications suggest that, at least in men in England and Wales, Africans and African Caribbeans continue to experience lower rates of CHD compared with the White European population. I appreciate that numbers are small, but you do go into some discussion of the Chinese group where numbers of events are equally small.

Thank you. As stated in our manuscript, we focused on findings where the CI did not include 100. The African group is a very heterogeneous one and includes African, Caribbean and Black Scottish, as well as Black other (combined because of small numbers and to prevent disclosure). Our results are too imprecise to offer anything other than preliminary observations and we have noted this as a limitation in our manuscript. This said, it is interesting that whereas African-American populations used to have comparatively low CHD rates but high stroke rates, recently African Americans have lost their advantage in relation to White Americans, and Mensah et al showed they had comparatively high mortality from ischaemic heart disease and stroke in 2001.(1)

Reference List

(1) Mensah GA, Mokdad AH, Ford ES, Greenlund KJ, Croft JB. State of disparities in cardiovascular health in the United States. Circulation 2005 Mar 15;111(10):1233-41.