

## **'Significant' racial disparities in care of heart patients during first pandemic wave**

*BAME patients in England less likely than white patients to receive evidence based care*

There were 'significant' racial disparities in the presentation and care of heart attack patients during the first wave of the pandemic in England, reveals a large national study, published online in the journal **Heart**.

Patients of Black, Asian and Minority Ethnic (BAME) backgrounds were more likely to be admitted to hospital than their white peers; less likely to receive evidence based care, as indicated by guidelines; and more likely to die early than before the pandemic.

The UK has the highest COVID-19 death toll and the most ethnically diverse population in Europe. During the first wave of the pandemic, BAME patients were twice as likely to die of COVID-19 as white patients.

Health systems around the world have observed a substantial decline in hospital admissions for heart attack and a concurrent rise in early death or complications during the COVID-19 pandemic.

The researchers wanted to find out if the recognised differences in the health outcomes of BAME patients with heart disease worsened during wave 1 of the COVID-19 pandemic in England.

They drew on linked healthcare records from nationwide registries for all patients admitted to hospitals with a heart attack in England between 1 February and 27 May 2020 to see if there were any differences in presentation and treatment between BAME and white patients.

These data were then compared with those of heart attack patients admitted during the same period in each of the preceding three years (2017-19; pre-COVID-19), to quantify any changes in death rates among BAME patients both while in hospital and within 7 days of discharge.

In all, 73,746 patients were included in the final analysis. Of 62,578 patients in the pre-COVID-19 era admitted to hospital, 56,270 (90%) were white and 6308 (10%) were of BAME origin. This compares with 1863 (nearly 17%) BAME patients admitted in 2020.

The number of daily hospital admissions for heart attack also significantly increased among BAME patients in 2020.

During the COVID-19 period, the monthly proportion of BAME patients admitted to hospital with a heart attack increased from just over 16% in February 2020 to nearly 18% in May 2020. This monthly rate didn't change in the pre-COVID-19 era.

Admission rates for heart attack were 65% higher among BAME than among white patients during the COVID-19 period, with similar proportional rises observed for each month compared with the same period in the pre-COVID-19 era.

BAME patients were likely to be younger, male, and to weigh less (lower BMI) than white patients. But they also tended to have higher cholesterol levels, and were more likely to have heart failure, angina, chronic kidney disease and diabetes requiring insulin treatment.

Not only were there differences in the presentation between BAME and white patients, but there were also differences in how they were treated.

BAME patients waited longer than white patients for certain types of invasive procedures and treatment both during the pre-COVID-19 and COVID-19 periods.

And coronary angiography was significantly less likely to be used in BAME patients who were also less likely to undergo PCI (a procedure to restore blood flow).

After adjusting for potentially influential factors, BAME patients were 68% more likely to die in hospital and 81% more likely to do so within 7 days of discharge than white patients during the COVID-19 period than they were during the same timeframe in 2017-19.

BAME patients were also 78% more likely to die than white patients after lockdown started (23 March 2020) than before.

“Immediate counter measures are required to increase patient awareness and promote equity in the cardiac care of this underserved population during the ongoing COVID-19 pandemic,” urge the researchers.

In a linked editorial, cardiologist Dr Shrilla Banerjee, of Surrey and Sussex Healthcare NHS Trust, and colleagues, point out that BAME patients tended to be sicker than white patients which might account for some of the differences in death rates.

But there is no excuse for the differences in the care BAME patients received, they say.

“These observations now fully qualify as evident healthcare inequalities and reinforce disconcerting disparities in cardiovascular care affecting BAME populations,” they write.

“A biological premise to explain the observed differences does not exist. There is no genetic component specific to any ethnic group sufficient to explain the increased adverse outcomes seen among BAME populations across the UK (and in the USA),” they add.

“Unlike the USA, the UK, via the National Health Service, has universal healthcare—a resource that many expected would reduce or even eliminate health inequalities,” they write. But it hasn’t.

“We need to deal with barriers to equitable health, including structural racism and social factors—that is, education, housing and poverty,” they urge.

But doctors must take responsibility too, they write. “We must learn to identify and then remove the impact of bias on our patient outcomes...We must be empowered to draw attention to biased behaviour when we see it and be an advocate for all our patients.”