Disparities in ischaemic heart disease care for rural Aboriginal people

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Background/relevance: Aboriginal people are three times more likely to have an ischaemic heart disease (IHD) event compared with other Australians but have lower rates of coronary artery procedures. This may be partly explained by the location of the hospital where Aboriginal people present for treatment, availability of such services, personal preferences and subtle in-hospital discrimination. This study aims to compare transfers to metropolitan hospitals and receipt of coronary artery procedures by Aboriginal and non-Aboriginal people admitted to rural hospitals in Western Australia for IHD.

Methods: Linked data were extracted from the WA Hospital Morbidity Data Collection for acute admissions to rural hospitals between 2005 and 2009 with a principal discharge diagnosis of IHD (ICD 10: I20–I25). Admissions were stratified by age group (25–54 and 55–84 years), Aboriginality and IHD type (myocardial infarction, unstable angina, all IHD). Outcomes within 28 days included all-cause death, transfer to a metropolitan hospital and coronary angiography. Crude proportions of patients with the outcomes and times to coronary angiography by age group are presented.

Results: Aboriginal people were younger (52 versus 66yrs, p<0.01) and more lived in remote than regional areas (60% versus 18%, p<0.01) compared to non-Aboriginal people. Proportions transferred to metro hospitals were similar regardless of diagnosis and age, but fewer Aboriginal people in the 25–54 year age group with MI were transferred to metropolitan hospitals by the second day than in non-Aboriginal people (70% versus 83%, p<0.001). Fewer Aboriginal people in the 55–84 year group received an angiogram than the same group of non-Aboriginal people (51% versus 64%, p<0.01). Among the 25–54 year group, fewer Aboriginal people had a coronary angiogram by the second day compared to non-Aboriginal people (23% versus 39%, p<0.001).

Conclusions: Similar proportions of rural Aboriginal and non-Aboriginal people were transferred to metropolitan hospitals following acute admission for IHD. However, among MI patients, fewer Aboriginal people received coronary angiography and many faced delays in receiving this procedure. These results highlight potential disparities in current practices and signal the need for a change in policy, resourcing and practice to improve the provision of cardiovascular services to rural Aboriginal people.