R037: Acute myocardial infarction rates and management in dementia – QUB

Acute myocardial infarction, commonly known as heart attack, is one of the leading causes of death and is particularly prevalent after 80 years of age (Alexander, Newby, Cannon et al., 2007). Although invasive procedures, such as coronary angiography and percutaneous coronary interventions, expand the life expectancy of people with myocardial infarction; dementia has previously been shown to be associated with lower utilisation of invasive procedures (Cermakova et al., 2017; Chanti-Ketterl, Pathak, Andel, & Mortimer, 2014; Tehrani, Darki, Erande, & Malik, 2013). Therefore, the mortality rates of people with dementia and myocardial infarction are increased compared to people without dementia who receive invasive treatment (Tehrani et al., 2013). Other evidence suggests that dementia does not affect mortality rates in people with myocardial infarction (Kimata et al., 2008). Clinicians face difficult decisions regarding treating myocardial infarction in people with dementia due to lack of evidence, patients' older age, reduced life expectancy and risk of adverse effects (Cermakova et al., 2017). Other factors affecting the decision of clinicians are existing comorbidities of people with dementia, including hypertension and chronic anticoagulation (Chanti-Ketterl et al., 2014).

The present study explores the rates and management of acute myocardial infarction in people with and without dementia, as well as factors associated with clinicians' decision to treat or not acute myocardial infarction (i.e. gender, age, years receiving dementia drugs, comorbidities).

Primary objectives:

- To assess the number of people with dementia and acute myocardial infarction in Northern Ireland.
- To assess the number of people with dementia who are treated with invasive procedures (angiography, angioplasty or stenting) for acute myocardial infarction.

Secondary objectives:

- To assess the mortality rates of people with dementia who did or did not receive invasive and conservative treatments for acute myocardial infarction.
- To explore whether the characteristics of people with dementia are associated with a reduced utilisation of invasive techniques for acute myocardial infarction. According to the literature, such factors may be people's advanced age, gender, years having dementia, or comorbidities.
- To explore whether people with comorbidities are less likely to be treated with invasive procedures for acute myocardial infarction.