

R047: Dental and Ophthalmic Health in Northern Ireland: an examination of disparities in rates between those with severe mental illness (SMI) and the general hospital population – UU

People with severe mental illness die much younger than people in the general population. This is in the context of widespread health disparities there is some evidence to suggest that SMI is associated with suboptimal dental health outcomes (*Kiseley et al., 2011, 2015; Hert et al., 2011; McCreddie et al., 2004*). In a systematic review of dental disease, Kiseley et al (2015) found that people with SMI were 2.8 times more likely to have lost all their teeth than the general population. Some key mechanisms that underpin the link include: avoidance and neglect; anxiety/dental phobia; side effects of medication; and more specific manifestations of particular SMI types. Similarly, but more sparsely evidenced, there is an association between SMI and adverse ophthalmic health: Wang et al (2012) for example found glaucoma to be predictive of depression in a nationally representative study.

Critically, dental and ophthalmic health are associated with other life-limiting conditions (LLCs) (*Chapple 2009; William et al. 2008; Humphrey et al., 2009; Mitchell et al 1997, Hyman et al 2000*) with implications for service use and provision and premature mortality.

Using linked prescription, hospital admissions, dental, ophthalmic and mortality data, this proposed study will examine disparities in dental and ophthalmic health between adults with SMI compared to the general hospital population. Specifically, the following research questions will be addressed:

1. What are the rates of dental registrations, attendances and adverse outcomes/treatments (including decayed, missing, extracted and filled teeth and surfaces) among individuals with SMI compared to those without SMI?
2. What are the rates of ophthalmic service use and eye conditions/diseases among individuals with SMI compared to those without SMI?
3. Is all-cause mortality associated with adverse dental and ophthalmic health outcomes and does this vary between those with and without SMI?