

The association of common mental disorders and oral health outcomes in a representative sample of adults aged 50+

Secondary data analysis of the English Longitudinal Study of Ageing (2006 – 2007)

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Background

Demographic transition: In 2016 adults aged 65+ formed 18% of the population. By 2036 this is expected to rise to 23.8%

Good oral health is a fundamental aspect of health ageing

Older adults are at higher risk of poor oral health



In 2016, across England, Wales and Northern Ireland 1.8 million older adults are suffering with an urgent dental condition: **pain; oral sepsis, untreated tooth decay** (Royal College of Surgeons, 2017)

Mental ill health is a public health problem

Globally amongst those aged 60+ depression and anxiety are the most common mental disorders affecting 7% and 3.8% of older adults respectively (WHO, 2017)

In the UK, prevalence of anxiety and depression amongst older adults

Age range	% feeling anxious or depressed
50–54 years	22%
55–59 years	21%
60–64 years	16%
65–69 years	14%
70–74 years	15%
75–79 years	17%
80 and over	20%

2010-2011 UK National Wellbeing Survey,
Beaumont and Loft
(2013)

Limitations of current research

Limited studies on the oral health of older adults

Limited studies on the oral health of older adults with mental ill health

To date no UK representative studies

Majority of studies on mental health focused on either depression or anxiety

Limitations in study design: Lack of generalizability; small sample size; convenience sampling; unadjusted analysis

Aim

Assess the relationship between common mental disorders and oral health outcomes in a representative sample of older adults in England using the English Longitudinal Survey of Ageing (ELSA)

Common mental disorder defined as a composite term and included those with anxiety and depression

Objectives

To describe the prevalence of common mental disorders amongst the study sample

To assess the relationship between common mental disorder and 3 oral health outcomes: **Oral health related quality of life; self rated oral health and complete tooth loss** (after adjusting for socio-demographic and health factors)

Methodology

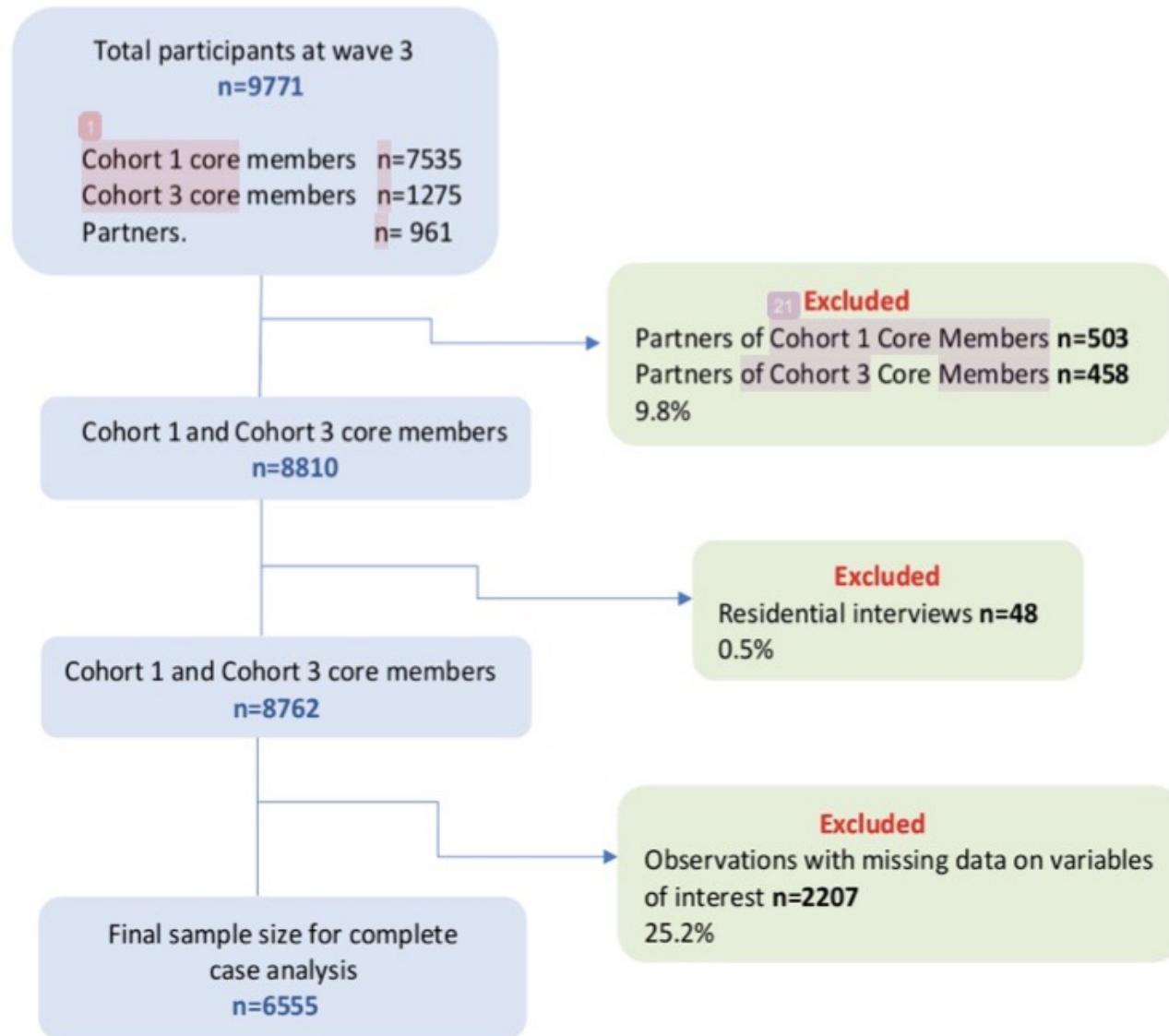
ELSA is a nationally representative cohort study of older adults aged 50+ and their partners in England

Began in 2002 with recruitment of core members from Health Survey England 1998, 1999 and 2001

Participants followed up at 2 year intervals (<https://www.elsa-project.ac.uk>)

ELSA wave 3 (2006-2007) – consisting of core members and a refreshment sample recruited from HSE 2001/02/03/04.

Participant Flow Diagram



Outcome variables

Oral impact on daily performance “In the last 6 months, have any problems with your mouth, teeth or dentures caused the following?...”

Difficulty eating; difficulty speaking clearly; problems with smiling, laughing, showing teeth without embarrassment; problems with emotional stability; problems enjoying the company of others; none

Coded: 0=no impact 1=one or more impacts

Self-rated oral health “In relation to your dental health which of the following applies?....”

Excellent; very good; good; fair; and poor

Coded: 0=excellent; very good; good 1=fair; poor

Teeth present

Coded: 0=1 or more teeth present 1=No teeth present

Exposure variable

Common mental disorder assessed using the 12 Item General Health Questionnaire (GHQ-12)

“Have you recently....”

1. Been able to concentrate on whatever you're doing?
2. Lost much sleep over worry?
3. Felt you were playing a useful part in things?
4. Felt capable making decisions?
5. Felt constantly under strain?
6. Felt you couldn't overcome your difficulties?
7. Been able to enjoy your normal day to day activities?
8. Been able to face up to your problems?
9. Been feeling unhappy or depressed?
10. Been losing confidence in yourself?
11. Been thinking of yourself as a worthless person?
12. Been feeling reasonably happy all things considered?

Results

13.7% of older adults had a common mental disorder

Those with a common mental disorder were more likely to be women; non-White; low socio-economic position; smokers; and have a long standing illness

8.1% of the sample reported at least one oral impact on daily performance

17.5% rated their health as fair/ poor

16.5% of the sample had total tooth loss

Results

After adjusting for demographic; socioeconomic and health factors, older adults with a common mental disorder had a:

1.86 higher odds of reporting at least one oral impact on daily performance (95%CI:1.44-2.40; p <0.001)

1.45 higher odds of reporting fair/poor self rated poor oral health (95%CI:1.22-1.81; p <0.001)

No association between common mental disorder and complete tooth loss

Strengths

Contribution of new knowledge

Representative sample

Large study sample

Weighted analysis

Confounding considered

Limitations

Bidirectional relationship between mental health and oral health

Number of non-white participants low

Residual confounding

Dental anxiety / dental attendance data not available in ELSA

Selection bias

Reporting bias

No clinical data