

## BMJ OPEN

### Less than half of UK prescriptions for antipsychotics issued for main licensed conditions

*Elderly people twice as likely as middle aged to be given these drugs despite greater risk of side effects*

[Prescribing of antipsychotics in UK primary care: a cohort study doi 10.1136/bmjopen-2014-006135]

Less than half of UK prescriptions for antipsychotic drugs are being issued to treat the serious mental illnesses for which they are mainly licensed, reveals research published in the online journal **BMJ Open**.

Instead, they may often be prescribed 'off label' to older people with other conditions, such as anxiety and dementia, despite the greater risk of potentially serious side effects in this age group, the findings indicate.

The researchers analysed family doctors' prescribing patterns for first and second generation antipsychotic drugs across the UK between 2007 and 2011, using data submitted to The Health Improvement Network (THIN) database.

THIN is a medical research database of a representative sample of anonymised electronic patient records.

Antipsychotic drugs are licensed for serious mental illness accompanied by psychotic episodes, such as schizophrenia, delusional disorders, and bipolar disorder. They are sometimes recommended for complex cases of depression or for short term use in mental health crises.

The researchers focused on the three most commonly prescribed first (haloperidol, chlorpromazine, trifluoperazine) and second (olanzapine, quetiapine, risperidone) generation antipsychotics, looking at the average daily dose, as well as the duration of the treatment.

Between 2007 and 2011, almost 48,000 people were prescribed these drugs. Almost 14,000 were prescribed first generation antipsychotics, almost 28,000 second generation antipsychotics, and almost 6000 were prescribed both.

The prescribing rate was significantly higher in women than in men, and people aged 80 and above were more than twice as likely to be treated with an antipsychotic as those aged 40-49.

Those living in areas of deprivation were more than three times as likely to be prescribed one of these drugs as those living in areas of affluence.

These patterns were mostly the same, irrespective of the generation of drug prescribed.

One in three prescriptions was for an older generation antipsychotic, but less than half of those prescribed them had been diagnosed with a psychotic illness/bipolar disorder.

Not everyone prescribed a second generation drug had been diagnosed with a psychotic illness/bipolar disorder either. Only around a third (36%) of those prescribed quetiapine and just over six out of 10 prescribed olanzapine had one of these diagnoses.

Among people without these diagnoses, antipsychotics were often prescribed for anxiety, depression, dementia, sleep and personality disorders.

For example, risperidone was prescribed for anxiety in 14% of cases; depression without psychoses in 22% of cases; dementia in 12% of cases; sleep disorders in 11%; and personality disorder in 4% of cases.

When prescribed for these conditions, doses tended to be lower and of shorter duration—except for those being treated for hyperactivity (ADHD) and dementia, where these drugs tended to be prescribed for relatively long periods.

Second generation antipsychotics are not recommended for dementia, because of the increased risk of stroke and death from all causes associated with them in this age group, point out the researchers.

“Reducing the potential harm associated with antipsychotics in dementia has been emphasised as a priority by organisations such as the Department of Health in England and the US Food and Drug Administration,” they write.

And they go on to say: “Our findings suggest that further effort is required to decrease primary care antipsychotic prescriptions in dementia, and that assessing time trends in antipsychotic prescribing in this group is an important area for future research.