# **Key Information on the use of Antidepressants in Scotland**



#### KEY INFORMATION ON THE USE OF ANTIDEPRESSANTS IN SCOTLAND

The prescription of antidepressant medication in the treatment of depression attracts much public interest and commentary. One reason for this is the reported observation that actual amounts of antidepressant medication prescribed has increased. In the treatment of depressive illness though, antidepressants have a key role with treatment effectiveness similar to that of many treatments in general medicine, and superior to psychological therapies for many individuals.

We are fortunate in that researchers in Scotland have clarified what it is that existing data sources can tell us about the 'quality' of antidepressant prescribing.

## What prescribing datasets tell us

The Information and Statistics Division (ISD) annual report "Prescribing in Mental Health" provides summary information on antidepressant use in Scottish Health Boards. The information is presented in a number of ways, each with its limitations. They include; the total number of dispensed items, the total number of "Defined Daily Doses" (DDDs) per 1000 population, the total number of patients receiving antidepressant medication within a 12 month period, and how much is spent on antidepressants in each Health Board area. Although useful for tracking trends over time and making comparisons between Health Boards this information cannot tell us what actual conditions antidepressants have been prescribed for.<sup>1</sup>

There are 4 types of antidepressant medication, grouped and named according to similarities in their mode of action. Box 1 lists the groups as described by ISD in their annual publication.

# Box 1

There are 4 types of antidepressant drugs, as described in the British National Formulary (BNF) section 4.3, which are used in the treatment of depression: 2

- BNF 4.3.1 Tricyclic antidepressants are used to treat depression, but also have a role to play in the treatment of migraine, panic disorder, obsessive compulsive disorder, recurrent headaches and in the relief of neuropathic pain.
- BNF 4.3.2 MAOIs Monoamine-oxidase inhibitors are used less frequently than
  either the Tricyclics or Selective Serotonin Re-uptake Inhibitors (SSRIs) and
  related antidepressants because of the high risk of dietary and drug interactions.
- BNF 4.3.3 SSRIs Selective Serotonin Re-uptake Inhibitors are a group of drugs used to treat depression and other conditions such as bulimia, panic disorder and obsessive compulsive disorder.
- BNF 4.3.4 Others Drugs that do not fit any of the above categories. For example, Duloxetine inhibits the re-uptake of both serotonin and noradrenaline and is therefore termed a Serotonin and Noradrenaline Re-uptake Inhibitor (SNRI). Other drugs in the group are Flupenthixol (also used in the treatment of psychoses), Mirtazapine, Reboxetine, Tryptophan and Venlafaxine.

1.

<sup>&</sup>lt;sup>1</sup>https://isdscotland.scot.nhs.uk/Health-Topics/Prescribing-and-Medicines/Publications/2013-09-24/2013-09-24-PrescribingMentalHealth-Report.pdf?40206545592

http://www.bnf.org/bnf/index.htm

As well as their use in treating depression, they can be used for other conditions with proven benefit such as chronic pain, (particularly the older tricyclic antidepressants), anxiety, bulimia, panic disorder, obsessive compulsive disorder, incontinence and myalgic encephalitis (ME). This makes it difficult to draw conclusions about the quality of prescribing for people with depression from basic prescribing reports. They are safer than benzodiazepines, are not addictive, and their use in depression and other conditions is supported by recognised clinical guidelines such as those produced by the organisations listed in Box 2.

## Box 2

Guideline sources and Organisations which endorse the use of antidepressants for treatment of depression :

Scottish Intercollegiate Network (SIGN)
National Institute for Health and Care Excellence (NICE)
British Association for Psychopharmacology (BAP)
American Psychiatric Association (APA)
Canadian Network for Mood and Anxiety Treatments (CANMAT)
Royal Australian and New Zealand College of Psychiatrists (RANZCP)
World Federation of Societies of Biological Psychiatry (WFSBP)

In Scotland prescribing of antidepressants to individuals increased by around 4% between 2011/12 and 2012/13. Prescribing to individuals of other drugs for mental health conditions also rose, ranging from an increase of 2.3% for psychosis and related conditions to 12.6% for dementia. Increases in the prescribing of antidepressants has also been seen in the UK and across Europe, the US and Japan prompting consideration that either the incidence of depression, or its recognition (and management) in primary care is increasing.

# What clinical research tells us about the use of antidepressants for the treatment of depressive illness in Scotland

Any change in rates of antidepressant prescribing needs to be considered in terms of the reason for which they are being prescribed, the dose being used (whether patients are getting adequate treatment) and the duration of treatment (whether more patients are getting short courses or the same number of patients are being treated appropriately for longer periods of time).

Scottish researchers have established expertise in the analysis of prescribing data at patient level, yielding information of interest to patients and clinicians with the potential to both inform and provide comment on clinical practice on an ongoing basis. What they have shown is that the quality of anti-depressant prescribing appears to have improved in recent years from being too often used in less than effective dose for too short periods of time, to longer more appropriate durations of treatment at higher average dosages which are more effective and reduce the risk of recurrent bouts of illness in the long term.

In a study of over a million patients in primary care in Scotland, new courses of antidepressants accounted for one sixth of the total antidepressant prescriptions (2.2% of the population in local practices over a 12 month period) and were continued for reasonable periods of time in keeping with established guidelines.<sup>2</sup>

There is no evidence to suggest that the number of people with depression in Scotland is increasing alarmingly, or that GPs are prescribing these drugs without good reason.

# <u>Treating depression in people with other physical health problems</u>

Research from GP practice populations in Scotland has highlighted just how commonplace depression is in people with chronic or multiple physical problems – and the more physical health problems an individual has, the more likely they are to also have depression. It has been shown that treating depression effectively also leads to improved outcomes for people who also have significant physical illnesses such as diabetes and heart disease. Severe depression itself is associated with the development of physical illnesses such as heart disease. In spite of these recognised associations, it is still the case that depression can go unrecognised – and untreated – in people who have physical health problems, with the risk that their outcomes are poorer than should be the case. As 'multimorbidity' increases in an ageing population, it becomes increasingly important that co-existing depression is recognised and treated effectively.

# Antidepressants and psychological treatment for depression

It is important to understand that psychological therapies are not simply an alternative to antidepressants in the treatment of people with depression. Equally the provision of psychological therapies does <u>not</u> directly influence patterns of antidepressant prescribing in primary care.<sup>3</sup>

There is a great deal of evidence to support the use of different forms of psychological therapies for the treatment of depression – both alone and in combination with medication. A useful evidence source is the Matrix of Psychological Therapies produced by NHS Education Scotland.<sup>4</sup>

<sup>3</sup> Quality Watch. Focus On: Antidepressant treatment: Trends in the prescribing of antidepressants in primary care. Spence R et al. 2014.

3.

<sup>&</sup>lt;sup>2</sup> Factors associated with duration of new antidepressant treatment: analysis of a larger primary care database. Burton et al. BJGP 2012; 62: 82-83.

<sup>&</sup>lt;sup>4</sup> The Matrix of Psychological Therapies. http://www.nes.scot.nhs.uk/education-and-training/by-discipline/psychology/matrix/the-psychological-therapies-matrix.aspx

The use of CBT for depressed people who have not responded to antidepressant medication has been the focus of a recent health technologies assessment<sup>5</sup>. This study supports the use of CBT as an add-on to antidepressant treatment for people with chronic or treatment resistant depression. Importantly, psychological therapies should not be seen simply as an 'alternative' to antidepressant medication. The NHS in Scotland makes available both antidepressants and psychological therapies to people who are depressed, in keeping with contemporary treatment of depression. Individuals differ in their preference between psychological treatment and medication, and personal preference has some influence on peoples' adherence to each of these treatments.

<sup>&</sup>lt;sup>5</sup> Clinical effectiveness and cost-effectiveness of cognitive behavioural therapy as an adjunct to pharmacotherapy for treatment-resistant depression in primary care: the CoBalT randomised controlled trial: http://www.ncbi.nlm.nih.gov/pubmed/24824481

#### **SUMMARY POINTS**

- The rise in prescriptions of antidepressants in Scotland is for the most part
  explained by better diagnosis and treatment of depression by GPs. Research
  from within academic centres in Scotland confirms that antidepressants are being
  prescribed in line with currently endorsed clinical guidelines, and improvements in
  this continue.
- 2. As we continue to develop and utilise access to CHI-linked prescribing data, we will be able to further analyse prescribing patterns in order to learn more about what influences prescribing choices.
- 3. There is consistent evidence of under-treatment of depression. And we know that the personal and economic costs of having depression are high. We need to continue to work on ways to improve its recognition and effective treatment.
- 4. The extent to which factors other than the treatment of depression influence antidepressant prescribing rates such as their use in the treatment of a range of other conditions cannot be clearly ascertained from nationally reported data. Further study using both clinical and research databases is required.
- 5. Changes in patterns of prescribing (such as seeing more drugs in use as newer drugs are developed) isn't necessarily a bad thing, for example, the availability of SSRIs and their increased use has occurred in parallel with reduced use of older tricyclic anti-depressants in doses commonly used for the treatment of depression. Tricyclics are drugs which have a more unpleasant side effect profile including greater toxicity in overdose.
- 6. The use of antidepressants by any individual is a dynamic process and varies due to the relapsing and remitting nature of the illness and individual treatment preferences. They don't work for everyone but for those that do respond the evidence for antidepressant treatment reducing relapse is strong.
- 7. The cost of anti-depressant prescribing is falling as drugs come "off-patent" and less expensive versions become available.
- 8. There is no evidence that having greater access to psychological therapies will reduce antidepressant prescribing, rather, access to appropriate and effective treatments which will include antidepressants is improved.

#### ADDITIONAL USEFUL PAPERS AND RESOURCES

Munoz-Arroyo, R., Sutton, M and Morrison, J. Exploring potential explanations for the increase in antidepressant prescribing in Scotland, using secondary analyses of routine data. British Journal of General Practice. 2006; 56: 423-428.

Cameron IM, Lawton K, Reid IC. Recognition and subsequent treatment of patients with sub-threshold symptoms of depression in primary care. Journal of Affective Disorders 2011 130 (1-2), 99-105.

Lockhart P and Guthrie B. Trends in primary care antidepressant prescribing 1995-2007: a longitudinal population database analysis. British Journal of General Practice 2011; DOI: 10.3399/bjgp11X593848.

Clinical diagnosis of depression in primary care: a meta-analysis. Mitchel AJ et al. Lancet 2009; 374:609-19.

Case identification of depression in patients with chronic physical health problems: a diagnostic accuracy meta-analysis of 113 studies. Meader et al. BJGP 2011; DOI:10.3399/bjgp 11X613151.

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