

Annex A

Prescribing Trends for SSRIs and related antidepressants

Primary Care Prescribing Data

This annex provides estimates of the usage of SSRIs and related antidepressants using two different sources of primary care prescribing data – Prescription Pricing Authority Data and data from a primary care database managed by IMS Health

Prescription Pricing Authority Data

The Prescription Pricing Authority (PPA) is an independent special health authority within the NHS. The PPA undertakes:

- the pricing of prescriptions;
- the calculation of reimbursements;
- the provision of information on prescribing costs or trends.

The prescription information is derived from the Prescription Cost Analysis (PCA) database. This database contains an analysis of all NHS prescriptions dispensed in the community, ie by community pharmacists and appliance contractors, dispensing doctors and prescriptions submitted by prescribing doctors for items personally administered in England. Also included are prescriptions written in Wales, Scotland, Northern Ireland and the Isle of Man but dispensed in England. The data do not cover drugs dispensed in hospital or private prescriptions.

Results

Total SSRI and related antidepressant prescribing between 1999 and 2003

There has been an overall increase in the number of prescriptions for SSRIs, venlafaxine and mirtazapine cashed in community pharmacies in England in the last five years, rising from 8.2 million prescriptions in 1999 to over 19 million prescriptions in 2003 (see figure 1). This increase is apparent for all the drugs studied except fluvoxamine, which has remained fairly constant, and paroxetine, which has decreased since 2001.

SSRI and related antidepressant prescribing in children and adolescents between 1999 and 2003 (children)

For exemption from prescription charges, children are defined as persons aged 16 years and under or students aged 16, 17 or 18 years in full-time education. Exemption data is identified from the box checked on the back of the prescription form and relies on the form being completed correctly, which may not always be the case. Information for groups of patients not required to pay a prescription charge (eg children, elderly people) is based on a one-in-20 sample of all exempt prescriptions dispensed in the community, and is therefore approximate.

There is a clear upward trend in the prescribing of SSRIs, venlafaxine and mirtazapine in the children's exemption category for all the drugs studied except fluvoxamine,

which has remained fairly constant, and paroxetine, which has decreased since 2001 (Table 1 and Figure 2).

Table 1
Prescribing in children (thousands of prescriptions) – see figure 2

	Year				
	1999	2000	2001	2002	2003
Citalopram	13	21	32	44	50
Escitalopram	0	0	0	2	8
Fluoxetine Hydrochloride	40	43	54	60	59
Fluvoxamine Maleate Total	1	1	1	0	0
Paroxetine Hydrochloride	32	37	46	43	22
Sertraline Hydrochloride	10	12	15	20	28
Mirtazapine	0	1	2	3	4
Venlafaxine	4	6	9	13	15

IMS Disease Analyzer-Mediplus

This database contains anonymised computerised longitudinal records of patients' GP consultations and treatment. The practices are intended to be representative of the geographical distribution of GPs in the UK and the figures can be projected up to estimate UK numbers. The database contains the records of around 2.1 million patients of which half are currently active. Birth year is recorded rather than date of birth which means that age categories cannot be well defined. Consequently the two age categories used in the following analyses are age 18 years and under for children and adolescents, and adults are defined as those age 19 and over. Whilst this means that some 18 year olds may be included in the prescribing data for children and adolescents, restricting the age to 17 years and under would mean that some 17 year olds would be missed.

The data are projected to cover the whole of the UK and are therefore not comparable with the Prescription Pricing Authority data which are for England only.

IMS Disease Analyzer-Mediplus data are provided by IMS Health and have been analysed by staff at the MHRA

Results

It is important to note that some patients may be prescribed more than one drug in the 12 month period and these patients will appear in each drug category. Therefore the total is slightly less than the totals for the individual drugs. Additionally, some patients may appear in more than one age category, if they changed age category during the 12 months.

Total prescribing

The total number of patients in the Disease Analyzer-Mediplus database prescribed an SSRI, venlafaxine or mirtazapine between 1 October 2003 and 30 September 2004 is shown in table 2, and the prescribing distribution is in figure 3.

Table 2

Total number of patients with at least one prescription between 1/10/03 and 30/9/04 - all indications		
	IMS database	Projected UK figures
FLUOXETINE	21,490	1,141,119
CITALOPRAM	18,379	975,925
VENLAFAXINE	9,098	483,104
PAROXETINE	8,088	429,473
SERTRALINE	7,120	378,072
ESCITALOPRAM	3,964	210,488
MIRTAZAPINE	3,211	170,504
FLUVOXAMINE	101	5,363
Total	64,254	3,411,887

Data derived from Disease – Analyzer Mediplus by the MHRA

Prescribing in those 18 and under

The numbers of patients aged 18 and under with at least one prescription for an SSRI, venlafaxine or mirtazapine are provided in table 3, and the prescribing distribution by drug is provided in figure 4.

Table 3

Patients age 18 and under with at least one prescription between 1/10/03 and 30/9/04 – all indications		
	Total	Projected total
FLUOXETINE	542	28,780
CITALOPRAM	286	1,5187
SERTRALINE	160	8496
VENLAFAXINE	73	3,876
ESCITALOPRAM	63	3,345
PAROXETINE	51	2,708
MIRTAZAPINE	39	2,071
FLUVOXAMINE	2	106
Total	1,088	57772.8

Data derived from Disease – Analyzer Mediplus by the MHRA

Prescribing in over 18s

The numbers of patients aged over 18 with at least one prescription for an SSRI, venlafaxine or mirtazapine are provided in table 4, and the prescribing distribution by drug is provided in figure 5. Where the dose is known, the number of patients with at least one prescription above the maximum licensed dose for depressive disorder is shown in table 5 for specific substances.

Table 4

Patients over 18 years with at least one prescription between 1/10/03 and 30/9/04 – all indications		
	IMS database	Projected UK figures
FLUOXETINE	20,980	1,114,038
CITALOPRAM	18,123	962,331
VENLAFAXINE	9,038	479,918
PAROXETINE	8,046	427,243
SERTRALINE	6,971	370,160
ESCITALOPRAM	3,905	207,356
MIRTAZAPINE	3,175	168,593
FLUVOXAMINE	99	5,257
Total	63,286	3,360,487

Data derived from Disease – Analyzer Mediplus by the MHRA

Table 5

Patients over 18 years with at least one prescription above the maximum licensed dose (all indications) between 1/10/03 and 30/9/04		
	Maximum licensed dose	% of patients in table 4
CITALOPRAM	60mg	0.1%
ESCITALOPRAM	20mg	0.2%
FLUOXETINE	60mg	0.07%
FLUVOXAMINE	300mg	0
MIRTAZAPINE*	45mg	10%
PAROXETINE	60mg	0.06%
SERTRALINE	200mg	0.03%
VENLAFAXINE	375mg	0.1%

Data derived from Disease – Analyzer Mediplus by the MHRA

*Maximum dose not specified

Comments

The data from the PPA and Disease Analyzer-Mediplus both show an overall increase in SSRI prescribing, particularly for fluoxetine, citalopram and sertraline. The number of patients prescribed paroxetine has declined since 2001. These changes have occurred in both the under-18s and in total prescribing figures.

It is important to note that prescriptions initiated by hospital specialists cannot be reliably detected in the primary care database. Therefore it is not possible to identify how many of the children and young people taking antidepressants were started on treatment by a specialist child or adolescent psychiatrist. Whilst depression diagnoses are recorded in the primary care database, it is not possible to extract reliable data on

the severity of depression associated with the prescription of antidepressants from the medical terms used.

Figure 1

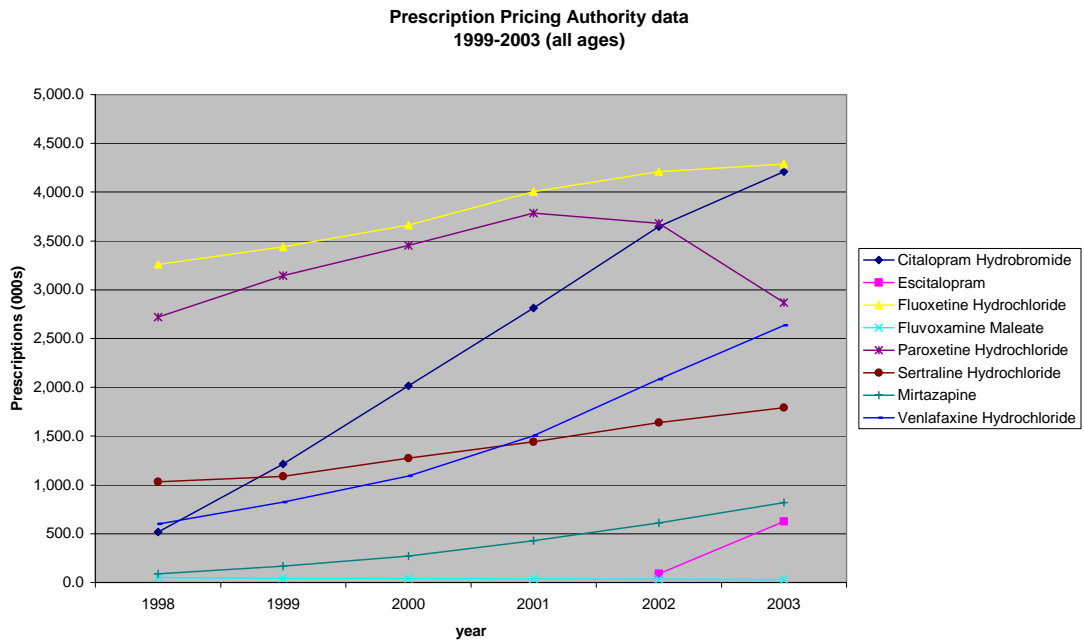


Figure 2

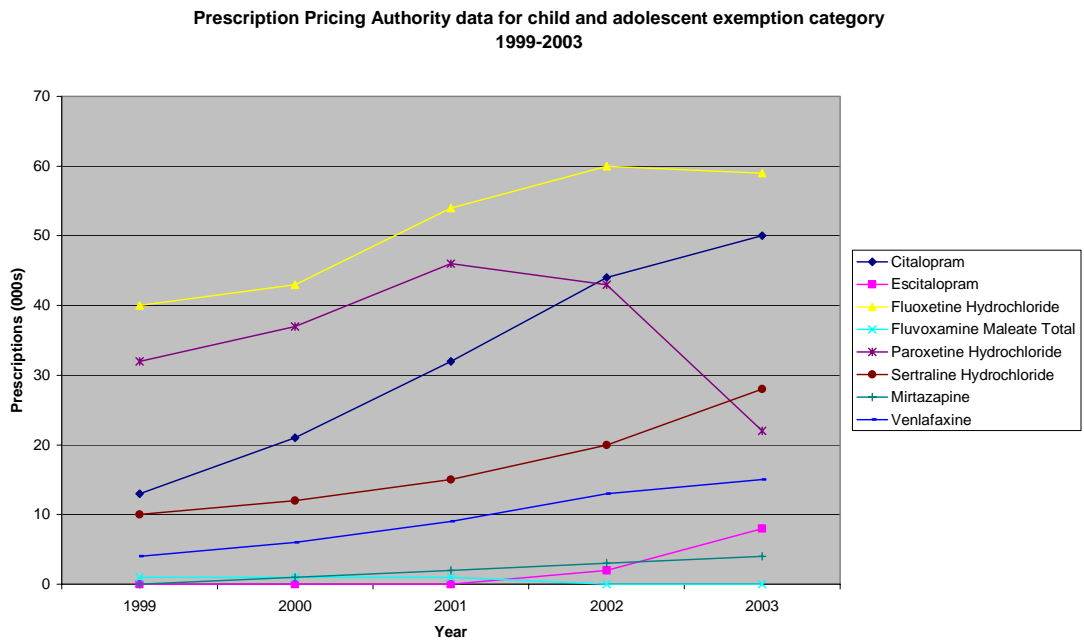
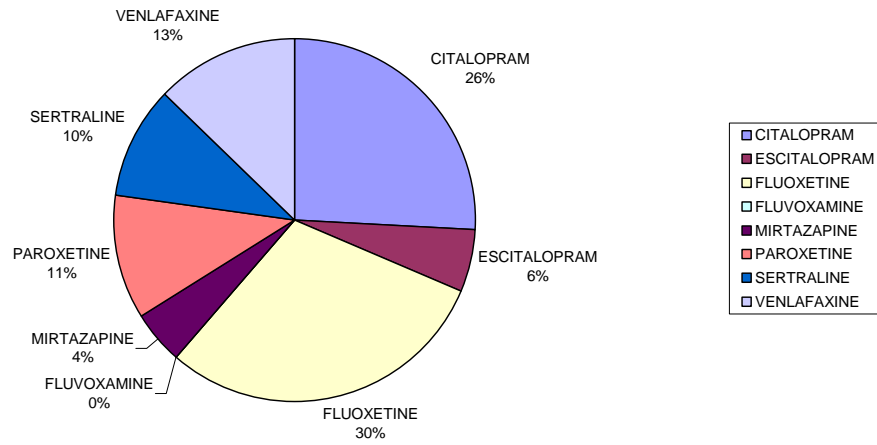


Figure 3

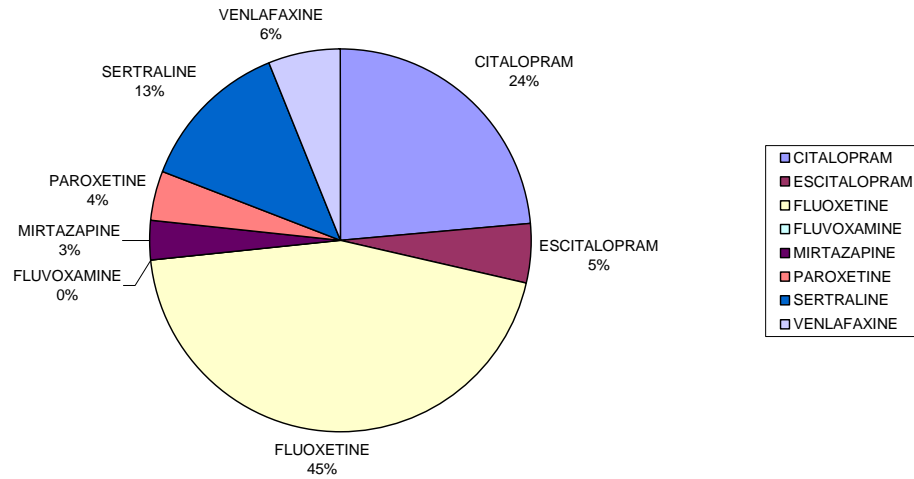
**SSRIs and related antidepressants -
Patients with at least one prescription between 1/10/03 and 30/9/04 (All ages)**



Data derived from IMS Disease – Analyzer Mediplus by the MHRA

Figure 4

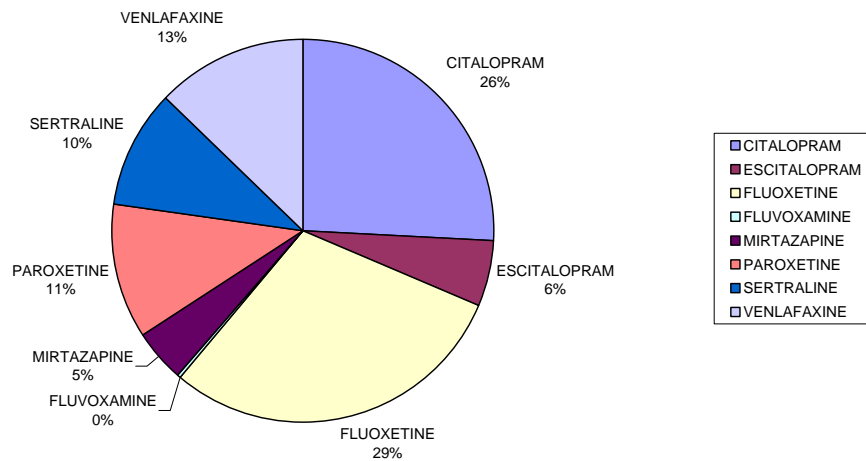
SSRIs and related antidepressants - Patients with at least one prescription between 1/10/03 and 30/9/04 (age 18 and under)



Data derived from IMS Disease – Analyzer Mediplus by the MHRA

Figure 5

SSRI and related antidepressants - Patients with at least one prescription between 1/10/03 and 30/9/04 (over 18s)



Data derived from IMS Disease – Analyzer Mediplus by the MHRA