

## Information from general practice (CMR)

### Introduction

Continuous Morbidity Recording (CMR) is a set of data collected from every face-to-face doctor-patient contact in a set of practices across Scotland. All mainland health boards are represented in the 73 practices participating in CMR. The practices provide an adequate representation of the Scottish population in terms of age, gender, deprivation and urban/rural mix.

The data set includes:

- Patient identifier (this is generated by the GPASS computer system and is practice specific)
- Date of birth
- Sex
- Postcode
- Diagnosis (up to ten per contact)
- Modifier (first, recurrence or persistent - for each diagnosis)
- Date of consultation

As patients often present with multiple problems, up to ten diagnoses can be recorded for each contact. Each diagnosis is given a modifier which describes whether it is either the first time the problem has presented, a recurrence of a previous problem or a persistent problem.

Contacts are recorded by every doctor (including locums) but not contacts seen by other practice staff, e.g. practice nurses; health visitors. All doctor contacts (including contacts with temporary residents) are captured, i.e. surgery consultations; clinics; home visits; out of hours (this includes practice patients seen by other doctors, e.g. co-operative doctors).

Each diagnosis is coded using the Read coding system. The data are then entered onto the practice GPASS computer system. Each month, the data are extracted and passed on to ISD where they are cleaned and analysed. There are a considerable number of Read codes available and, for most analyses, individual Read codes are too detailed. There is also considerable scope for variation in the use of codes between different practices. Because of this, analysts and medical staff within ISD have grouped the codes into clinically meaningful conditions to aid the analysis of CMR data.

Information is fed back to the participating practices in the form of individual monthly and quarterly reports. Data from practices funded by health boards are also forwarded to the relevant board: other CMR practices also share data with their board. An *ad hoc* analysis service is provided by ISD Scotland to the NHSiS in general, from an aggregated, anonymised, central file.

### Analysis

The analysis below utilises data from the 38 practices for which data were available for the calendar years 1998 and 1999. The data comprises consultations with only those individuals attending during these periods.

It is important to note that the figures do not reflect the prevalence of drug misuse in the community. It is known that people who misuse drugs are often not in contact with any service. This is likely to underestimate the true prevalence figure. The figures do, however, give an insight into some characteristics of those who misuse drugs and present to a General Practitioner (GP).

Of all the patients attending this sample of GPs, those with a diagnosis of drug misuse account for a very small figure of all patients attending their GP; in 1999 those patients with a diagnosis of drug misuse accounted for only 0.7 per cent of all patients attending (this figure is derived by aggregating totals in row (a) and row (d) in table 67). However, this will vary from not only area to area but also from one GP to another in the same area.

Table 67 shows that in 1999, a total of 1012 patients received a diagnosis of drug misuse, representing a 23 per cent increase on the 1998 figure. This contrasts with an overall decrease in the number of patients attending their GP in the same period without a diagnosis of drug misuse.

Males accounted for 66 per cent of those individuals with a diagnosis of drug misuse, a similar percentage to that found by the Scottish Drug Misuse Database ( 67 per cent, Table 4, page 23 ). However, in those contacts involving patients without a diagnosis of drug misuse, the picture is very different; 55 per cent of all patients attending their GP were women. Male patients with drug misuse problems accounted for 1 per cent of all male GP patients and for females the figure was 0.4 per cent.

Table 67 also highlights the importance of age in defining patients with a drug misuse diagnosis. In 1999, over half (51 per cent) of male patients consulting with drug misuse problems were aged between 25-44, with over a third (38 per cent) aged between 15-24. Forty nine per cent of females were aged between 25-44 and 35 per cent aged between aged 15-24 years old.

The prevalence and contact rates, per 1 000 population, for those patients with and without a drug misuse diagnosis in 1998 and 1999, are presented in Table 68. These figures confirm that the prevalence rate for male and female patients with a diagnosis of drug misuse are highest amongst those aged 15-24 (21.6 and 10.9 per 1 000 population respectively) and those aged 25-44 (11.9 and 5.9 per 1 000 population respectively). Although the highest prevalence rate for non-drug misuse consultations amongst female patients is in the age band 15-24, prevalence rates for non drug misuse consultations amongst male patients are to be found in those aged 15 and under and those aged 65 and over.

Table 68 also highlights a trend over the last two years in the increasing number of contacts general practitioners have had with male and female patients, with a diagnosis of drug misuse, aged 15-24. In 1998, the contact rate for males in this age group was 91.2 per 1 000 practice population and in 1999 the figure had risen to 160.1 per 1000. The contact rate for non-drug misuse consultations amongst male patients of all age groups, actually decreased over the same period. For women aged 15-24, with a diagnosis of drug misuse, there was also an increase from 33.3 per 1 000 in 1998 to 62.7 in 1999. As with the men, there was a corresponding decrease in the contact rate for non- drug misuse consultations amongst female patients between 1998 and 1999.

### **Diagnoses associated with drug misuse**

Table 69 (illustrated in Chart 22) presents the most commonly reported conditions among those with a drug misuse diagnosis and compares rates, on the same conditions, for those patients without a drug misuse diagnosis. From Table 69, it can be seen that for male drug users, 16.9 per cent have received a diagnosis of depression and 14.4 per cent one of anxiety, compared to only 5 per cent of males without a drug misuse diagnosis. Drug misusing males were also more likely to have been diagnosed for alcohol problems (9.3 per cent) than males attending with no drug misuse diagnosis (1.6 per cent). Male patients with a drug misuse diagnosis are also more than three times more likely than other male patients to consult their GP for sleep disturbance.

For females with a diagnosis of drug misuse, depression and anxiety are the two conditions for which the majority of individuals present (37.4 per cent and 29.4 per cent respectively). These figures are approximately twice the proportion of drug misusing males presenting and over three times the rate for women presenting without a drug misuse diagnosis. Female drug misuse patients are also twice as likely to suffer from lower respiratory tract infection than male drug misuse patients as well as non-drug misuse female patients. Female drug misuse patients are also proportionately more likely to suffer from skin infections and back problems than both male drug misuse patients and female patients without a drug misuse problem.

### **Tracking patients with a first diagnosis of drug misuse**

Table 70 presents data about patient contacts made with the GP after a first diagnosis of drug misuse (with this first contact made between 1 January and 31 December 1998) and tracks their subsequent contacts with their GP during the following 12 months. This allows for some examination of the workload characteristics of GPs in dealing with those patients with a first diagnosis of drug misuse.

In total there were 373 patients with a first diagnosis in 1998; 65 per cent were male and 35 per cent were female. The largest proportions of male patients were aged between 25-44 years (48 per cent) and 15-24 years (43 per cent). The age profile for female patients is slightly different with the majority of female patient's aged between

15-44 years (79 per cent) compared to the male figure of 90 per cent. Approximately one in five (19 per cent) of female patients were aged 45 years and over compared to 9 per cent amongst males in the same age group.

As well as differences in the age profile, the nature and extent of a patient's contact with their GP after the first diagnosis of drug misuse also differed by gender. Over the year, male patient consultations for their drug misuse accounted for 74 per cent of all contacts with the GP and for female patient consultations this figure was 48 per cent. Male patients had a mean 8.1 contacts with their GP concerning their drug misuse whilst female patients had a mean 6.2 contacts. Female patients, on the other hand, have a greater number of overall contacts with their GP through the year with a mean 13 contacts, compared to male patients who had a mean 10.9 contacts with their GP.

Female patients were also more likely than male patients to consult their GP over mental health matters: 18.8 and 14 per cent respectively of contacts concerned mental health issues. Consultations with the GP concerning mental health issues tend to increase, as the patient gets older and this is particularly pronounced among female patients. However, 8.8 per cent of male contacts and 15.2 per cent of female contacts on mental health issues came from those aged 25 years and under.

Male patients will therefore be the majority of a GP's workload when dealing with drug misuse patients. Male patients are also more likely to consult their GP more frequently on their drug misuse than female patients. The female drug misusing patient population tends to be slightly older than the male population and is more likely to consult their GP on drug and non-drug issues equally compared to male patients.

## 67 | Number of patients diagnosed (total and first diagnosis only) and number of contacts : 1998 and 1999

		Males						Females					
		Total	Under 15 years	15-24 years	25-44 years	45-64 years	65 and over	Total	Under 15 years	15-24 years	25-44 years	45-64 years	65 and over
Patients with a diagnosis of drugs misuse <sup>1</sup> (a)	1998	<b>538</b>	4	198	284	42	10	<b>283</b>	3	104	124	39	13
	1999	<b>670</b>	6	254	345	51	14	<b>342</b>	3	121	168	36	14
Patients with a first diagnosis of drugs misuse (b)	1998	<b>242</b>	3	103	115	16	5	<b>131</b>	3	44	59	16	9
	1999	<b>209</b>	4	94	85	18	8	<b>112</b>	1	46	45	11	9
Drugs misuse contacts (c)	1998	<b>2 881</b>	6	1 075	1 716	66	18	<b>1 244</b>	4	375	754	94	17
	1999	<b>4 163</b>	8	1 879	2 117	131	28	<b>1 613</b>	3	696	814	86	14
Patients attending in the period, excluding those with a diagnosis of drugs misuse (d)	1998	<b>65 174</b>	14 359	7 574	18 131	15 927	9 183	<b>82 807</b>	14 253	10 586	25 318	18 985	13 665
	1999	<b>65 149</b>	13 732	7 666	18 031	16 335	9 385	<b>81 173</b>	13 313	10 443	24 488	19 198	13 731
Contacts in the period, excluding drug misuse contacts (e)	1998	<b>224 514</b>	44 241	19 035	52 901	62 173	46 164	<b>359 493</b>	43 573	40 322	111 317	91 315	72 966
	1999	<b>223 628</b>	40 414	19 218	52 277	63 552	48 167	<b>351 194</b>	38 948	39 583	106 696	90 912	75 055
Percentage of drug misuse patients <sup>2</sup>	1998	<b>0.8</b>	-	2.5	1.5	0.3	0.1	<b>0.3</b>	-	1.0	0.5	0.2	0.1
	1999	<b>1.0</b>	-	3.2	1.9	0.3	0.1	<b>0.4</b>	-	1.1	0.7	0.2	0.1
Percentage of drug misuse contacts <sup>3</sup>	1998	<b>1.3</b>	-	5.3	3.1	0.1	-	<b>0.3</b>	-	0.9	0.7	0.1	-
	1999	<b>1.8</b>	-	8.9	3.9	0.2	0.1	<b>0.5</b>	-	1.7	0.8	0.1	-

1 Number of patients with at least one diagnosis of drug misuse during the period

2 This row is calculated using the formula:  $100 \times (a) / [(a)+(d)]$

3 This row is calculated using the formula:  $100 \times (c) / [(c)+(e)]$

Note: Population source - ISD Scotland, General Medical Practitioner database (as at 1 October 1999).

Source : ISD Scotland, Continuous Morbidity Recording (CMR)

## 68 | Prevalence<sup>1</sup> and contact rates : 1998 and 1999

	Males						Females						
	Total	Under 15 years	15-24 years	25-44 years	45-64 years	65 and over	Total	Under 15 years	15-24 years	25-44 years	45-64 years	65 and over	
	Number						Number						
Population <sup>1</sup>	1998	<b>92 706</b>	17 969	11 787	29 374	22 779	10 797	<b>94 717</b>	17 226	11 253	28 613	22 161	15 464
	1999	<b>92 724</b>	17 667	11 737	29 016	23 335	10 969	<b>94 211</b>	16 803	11 109	28 271	22 562	15 466
	Prevalence rate per 1000 population						Prevalence rate per 1000 population						
Drug misuse <sup>2</sup>	1998	<b>5.8</b>	0.2	16.8	9.7	1.8	0.9	<b>3.0</b>	0.2	9.2	4.3	1.8	0.8
	1999	<b>7.2</b>	0.3	21.6	11.9	2.2	1.3	<b>3.6</b>	0.2	10.9	5.9	1.6	0.9
Non-Drug misuse <sup>3</sup>	1998	<b>703.0</b>	799.1	642.6	617.2	699.2	850.5	<b>874.3</b>	827.4	940.7	884.8	856.7	883.7
	1999	<b>702.6</b>	777.3	653.1	621.4	700.0	855.6	<b>861.6</b>	792.3	940.0	866.2	850.9	887.8
	Contact rate per 1000 population						Contact rate per 1000 population						
Drug misuse <sup>2</sup>	1998	<b>31.1</b>	0.3	91.2	58.4	2.9	1.7	<b>13.1</b>	0.2	33.3	26.4	4.2	1.1
	1999	<b>44.9</b>	0.5	160.1	73.0	5.6	2.6	<b>17.1</b>	0.2	62.7	28.8	3.8	0.9
Non-Drug misuse <sup>3</sup>	1998	<b>2 421.8</b>	2 462.1	1 614.9	1 800.9	2 729.4	4 275.6	<b>3 795.4</b>	2 529.5	3 583.2	3 890.4	4 120.5	4 718.4
	1999	<b>2 411.8</b>	2 287.5	1 637.4	1 801.7	2 723.5	4 391.2	<b>3 727.7</b>	2 317.9	3 563.1	3 774.0	4 029.4	4 852.9

1 Prevalence rates based on practice population (not on general population).

2 Rates are calculated using number of patients with at least one diagnosis of drug misuse during the period 1998.

3 Excludes drug misuse patients.

Note: Population source - ISD Scotland, General Medical Practitioner database (as at 1 October 1999).

Source : ISD Scotland, Continuous Morbidity Recording (CMR)

## 69 | Proportion of patients seen with specified condition/illness<sup>1</sup> : 1999 patients aged 15-44

	Drug misuse patients		Non-drug misuse patients	
	Number	Percentage	Number	Percentage
<b>Males</b>	<b>(n=599)</b>		<b>(n=25 697)</b>	
Depression	101	16.9	1 401	5.5
Anxiety	86	14.4	1 421	5.5
Alcohol problems	56	9.3	424	1.6
Back problems	53	8.8	2 561	10.0
Trauma (miscellaneous)	47	7.8	1 869	7.3
Upper respiratory tract infection (excl. sore throat)	45	7.5	2 790	10.9
Miscellaneous	31	5.2	818	3.2
Skin infections	29	4.8	1 308	5.1
Lower respiratory tract infection	26	4.3	1 254	4.9
Sleep disturbance	22	3.7	181	0.7
<b>Females</b>	<b>(n=289)</b>		<b>(n=34 931)</b>	
Depression	108	37.4	3 766	10.8
Anxiety	85	29.4	3 101	8.9
Back problems	36	12.5	3 028	8.7
Upper respiratory tract infection (excl. sore throat)	31	10.7	4 752	13.6
Family planning (miscellaneous)	28	9.7	3 642	10.4
Urinary tract infection	27	9.3	2 451	7.0
Lower respiratory tract infection	27	9.3	1 774	5.1
Abdominal pain	25	8.7	2 268	6.5
Miscellaneous	24	8.3	1 539	4.4
Skin infections	23	8.0	1 587	4.5

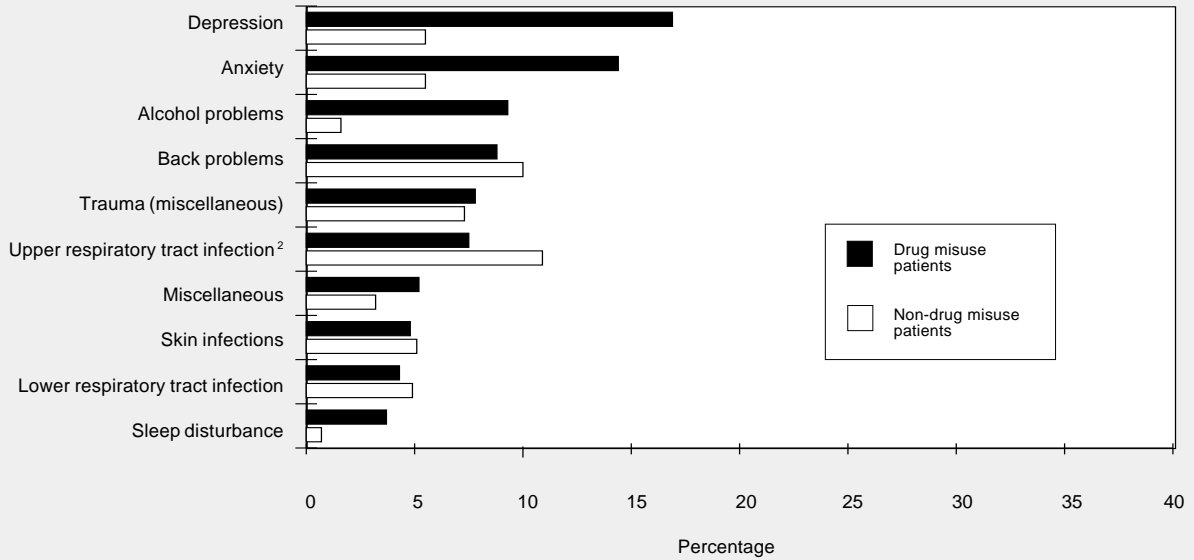
1 Ten most commonly seen conditions among drug misuse patients.

Source : ISD Scotland, Continuous Morbidity Recording (CMR)

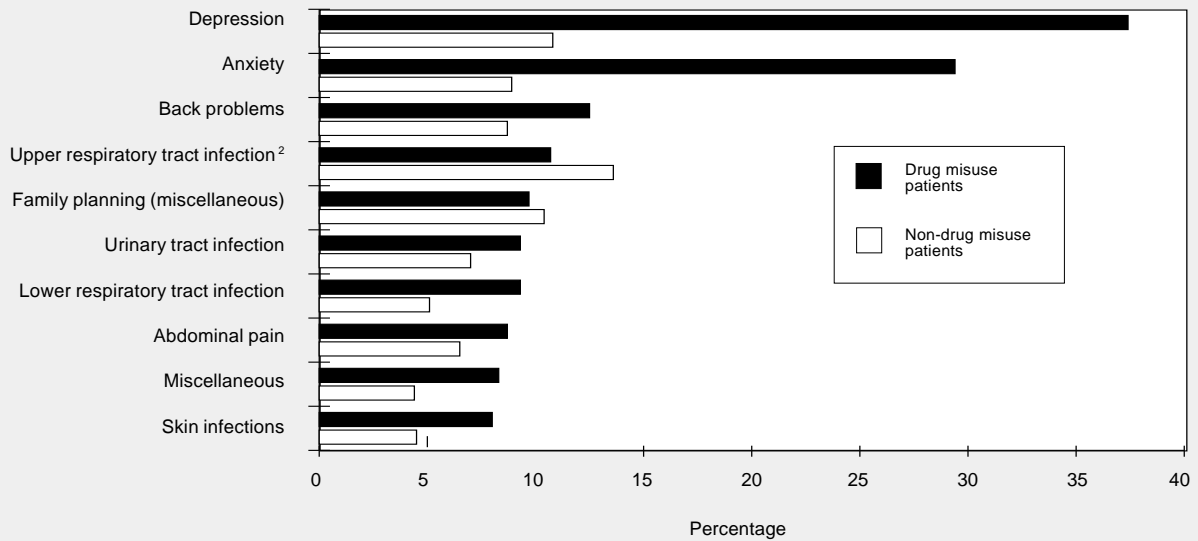
chart **22**

**Proportion of patients (with and without a diagnosis of drug misuse) seen with specified condition/illness<sup>1</sup> : 1999**  
patients aged 15-44

**Males**



**Females**



1 The ten most commonly seen conditions among drug misuse patients.  
2 Excludes sore throat.

Source : ISD Scotland, Continuous Morbidity Recording (CMR)

## 70 Tracking patients with a first diagnosis of drug misuse for 12 months : 1998 and 1999

	Males						Females					
	Total	Under 15 years	15-24 years	25-44 years	45-64 years	65 and over	Total	Under 15 years	15-24 years	25-44 years	45-64 years	65 and over
Patients seen with a first diagnosis of drugs misuse: 1/1/98 - 31/12/98 (a)	<b>242</b>	3	103	115	16	5	<b>131</b>	3	44	59	16	9
Total contacts within 12 months of first diagnosis of drug misuse <sup>1</sup> (b)	<b>2 642</b>	5	941	1 554	94	48	<b>1 703</b>	7	421	790	339	146
Drugs misuse contacts within 12 months <sup>1</sup> (c)	<b>1 961</b>	5	713	1 209	29	5	<b>817</b>	4	259	496	48	10
Mental health contacts within 12 months <sup>1</sup> (d)	<b>369</b>	-	83	270	16	-	<b>321</b>	-	64	150	71	36
Ave. no. of contacts per patient <sup>2</sup>	<b>10.9</b>	1.7	9.1	13.5	5.9	9.6	<b>13.0</b>	2.3	9.6	13.4	21.2	16.2
Ave. no. of drugs misuse contacts per patient <sup>3</sup>	<b>8.1</b>	1.7	6.9	10.5	1.8	1.0	<b>6.2</b>	1.3	5.9	8.4	3.0	1.1
Ave. no. of mental health contacts per patient <sup>4</sup>	<b>1.5</b>	-	0.8	2.3	1.0	-	<b>2.5</b>	-	1.5	2.5	4.4	4.0
Drug misuse contacts as a % of all contacts <sup>5</sup>	<b>74.2</b>	100.0	75.8	77.8	30.9	10.4	<b>48.0</b>	57.1	61.5	62.8	14.2	6.8
Mental health contacts as a % of all contacts <sup>6</sup>	<b>14.0</b>	-	8.8	17.4	17.0	-	<b>18.8</b>	-	15.2	19.0	20.9	24.7

1 Includes contact at which drugs misuse is first diagnosed.

2 This row is calculated using the formula: (b) / (a).

3 This row is calculated using the formula: (c) / (a).

4 This row is calculated using the formula: (d) / (a).

5 This row is calculated using the formula:  $100 \times (c) / (b)$ .

6 This row is calculated using the formula:  $100 \times (d) / (b)$ .

Source : ISD Scotland, Continuous Morbidity Recording (CMR)

### In summary

- The proportion of male and females in the drug misuse group is similar to that found in other treatment populations, despite the fact that many non-drug misusing females are, in general, more common attenders at general practice.
- Patients with a drug misuse diagnosis are more likely to be aged between 15-44 than those without such a diagnosis.
- Depression, anxiety, alcohol and back problems are common reasons for consultation among male patients with a diagnosis of drug misuse. For non-drug misusing male patients respiratory infections, back problems and trauma are the most common reasons for consultation.
- In general, women attend more commonly at their GP, and tend to consult more frequently for specific conditions, particularly anxiety and depression. Previous studies have shown that this is true for both those with a diagnosis of drug misuse and those without.