

Scottish Needs Assessment Programme



THE BURDEN OF MENTAL HEALTH PROBLEMS (UPDATED)

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Priority Services Network

The Burden of Mental Health Problems

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THE BURDEN OF MENTAL HEALTH PROBLEMS

Introduction

There is a wide spectrum of mental health problems - with a variety of adverse consequences and length of effect from distress to disease. Measuring their extent in the community is difficult due to:

a. Problems with classification

Defining the presence of a mental health problem depends on patients reporting symptoms or manifesting certain behaviours. Almost always there are no laboratory or other diagnostic tests available to validate these for epidemiological purposes. Diagnosis therefore depends on categorising constellations of symptoms and can therefore overlap or be subject to redefinition.

Traditionally mental disorders have been broadly divided into:

- *neuroses*, mainly characterised by chronic or recurrent symptoms related to anxiety, and
- *psychoses*, mainly characterised by an impairment of mental functioning (e.g. delusions or hallucinations) and gross impairment of reality testing (for example, schizophrenia, manic depressive illness).

The definitions of these overlap and have in recent years come to be used with less precision.

There are two major diagnostic systems for categorising mental health problems:

i) The International Classification of Disease

Currently the ninth revision (ICD 9), although soon to be replaced by the tenth. The major diagnostic chapters are presented in the Appendix. The new revision - Chapter V of which covers mental and behavioural disorders - introduces the possibility of relating the classification of clinical disorders to disablements and to the social and environmental context in which they occur. This recognises how understanding the nature and extent of mental disorders can only be achieved through the study of the interplay between these three sets of factors.

ii) The Diagnostic and Statistical Manual of Mental Disorders

The fourth edition (DSM IV) is used in the USA and again is based on a classification system consisting of five axes: clinical disorders, personality disorders and mental retardation, physical disorders, psycho-social and environmental problems and a global assessment of functioning.

b. Case Identification Methods

For population based surveys there must be explicit criteria for use in defining a case of a certain condition. This is particularly important in psychiatric epidemiology because of the need to assess whether the characteristics of a case presenting in a clinical setting are similar to those who do not. Because of this a wide variety of standardised interview schedules have been developed. These mainly fall into four types:

- quality of life measures
- symptom questionnaires and scales
- needs assessment schedules
- social functioning and behavioural assessments.

These differences in concepts and classification systems lead to constraints in defining the prevalence and incidence of mental health problems in communities and interpreting studies which have attempted to do so. The following text presents a brief summary of information relevant to defining the burden of mental health problems in Scotland.

Deaths Related to Mental Health Problems

Suicide is increasingly being recognised as a major public health problem in Scotland. In 1990, 6% of years of life lost before the age of 65 years were the result of suicide, the third most important contributing cause after ischaemic heart disease and perinatal disorders.

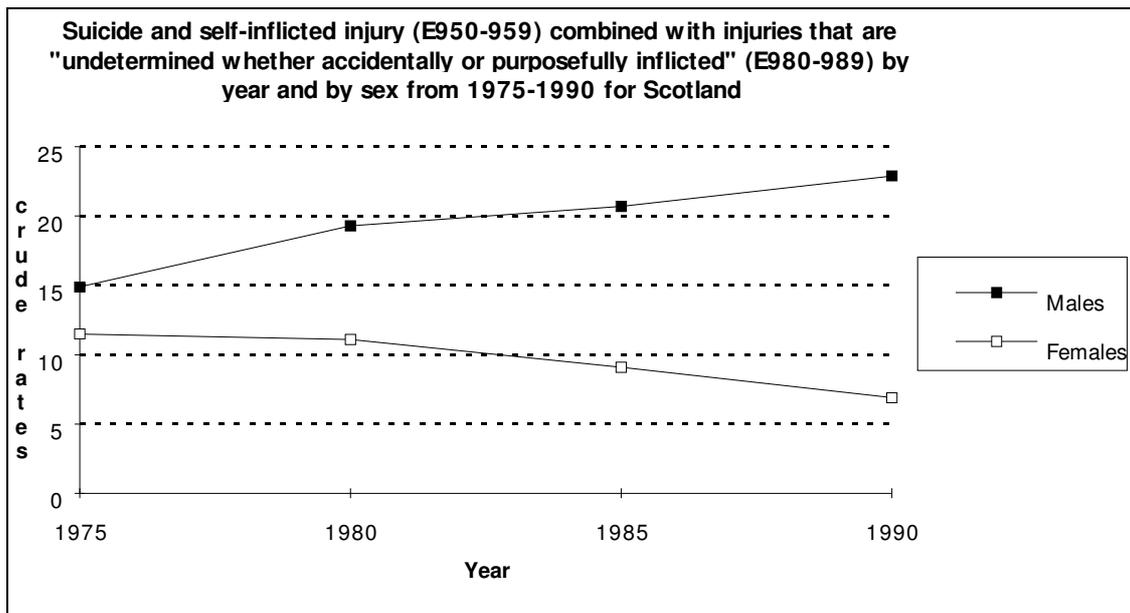
The rate of suicide is increasing in men while decreasing in women (Figure 1). In males the number of annual deaths has risen from 375 to 576 in the period 1975-92. Suicide is most common in men over 75 years old although the increase is occurring in men aged less than 45 years old and particularly in the 15-24 year olds. Suicide in both males and females in Scotland is higher than in any other nation in the United Kingdom (Table 1).

Table 1
Age adjusted mortality rates (per 100 000) by country and sex for 1991 for suicide and open verdicts within the UK (using the UK as the standard population)

	UK	England	Wales	Scotland	N Ireland
Males	18	17	19	21	13
Females	6	6	5	7	6

In addition mental health problems are associated with homicides and deaths from alcohol and drugs.

Figure 1



The risk of suicide is greater in social classes I and V, the unmarried, those who are dependent on drugs and those with chronic mental or physical illness. The estimated suicide rate of 1.7 per 1000 psychiatric in-patient discharges in England and Wales¹ and the fact that up to 40% of those who commit suicide have attended their General Practitioner in the week before the event, have led to calls for health services to "identify people at risk and initiate appropriate treatment and supervision".²

Those suffering from schizophrenia have higher than average national mortality rates especially from suicide, heart and respiratory diseases. With regard to the two last causes, it has been postulated that smoking, poor nutrition and adverse environmental conditions all contributed to the elevated rates. Concern was expressed by carers about the physical health of their relatives during the SNAP group's consultation which is discussed later in the report.

Psychiatric Morbidity

Information on morbidity is presented according to the relevant data collection method.

i Community Surveys - the OPCS Survey of Psychiatric Morbidity

It is acknowledged that the most useful data on prevalence and trends in mental health problems for public health purposes will come from large, methodologically sound, community based surveys.

The largest and most complete survey of mental ill health in Great Britain is the OPCS Survey of Psychiatric Morbidity in Great Britain (1996) which focused on the prevalence of mental illnesses in adults aged 16 to 64 years old. This involved a household survey (the initial sample being composed of 18,000 addresses) augmented by surveys of residents in institutions.

Assessment tools were used to detect the prevalence of relatively minor disorders (neurotic psychopathology) and major disorders (psychotic psychopathology). With regard to the former, fourteen neurotic symptoms were defined and their severity assessed. Scores for each symptom were summed and those scoring over a defined threshold classified as having significant psychiatric morbidity. The study defined subjects as suffering from psychotic psychopathology through a two stage process: identifying the possibility of psychosis through detecting possible psychotic experiences in the standard interview and for those with a possibility, a diagnostic interview by a psychiatrist. Alcohol and drug dependence were also assessed although the results are not referred to here as they are not within the remit of this report.

Based on the presence, frequency, severity and duration of various symptoms and utilising a set hierarchy, relevant subjects were assigned to six neurotic diagnostic categories which could be related to the ICD 10 classification of disorders. Following clinical follow-up or on the basis of other evidence, subjects were classified as having a functional psychosis, a category which includes schizophrenia, other schizotypal and mood disorders and unspecified psychoses.

The proportion of the adult population assessed as having had *significant psychiatric morbidity* due to all categories of mental disorder in the past week in Scotland was 14%, the same as the overall UK rate. Rates were:

- higher in women (18% compared to 11% for men);
- lowest in the 55-64 years old;
- in women, highest in those of Asian or Oriental origin; in men highest in those of West Indian or Caribbean origin;
- in women, highest in those divorced and lowest in the married; in men highest in those separated and lowest in the single;
- highest in those who finish full time education at 16 or less years and those with no educational qualifications;
- over twice as high in the unemployed compared to those in full time work and also significantly higher in the economically inactive;
- highest in social class V: for men 13% compared to 6% in Social class I; in women 24% compared to 16%;
- in both sexes, highest in lone parents with children (27% compared to 14% for a couple with children) although the lowest category is an adult living with his/her parents (9%);
- higher in those living in urban compared to rural localities.

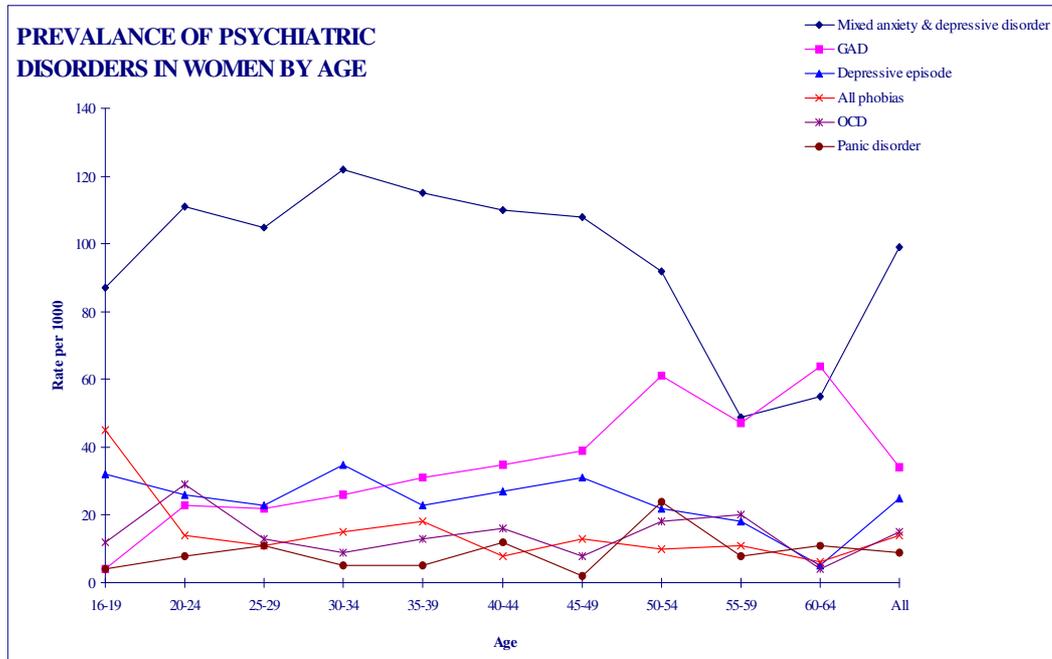
Table 4 presents the significantly odds ratios of the socio-demographic correlates for significant psychiatric morbidity.

The prevalence of neurotic disorders in women and men in Scotland is presented in Table 3. In a given week almost one in five women and one in eight men will suffer

from a neurotic disorder, the most common being mixed anxiety/depressive disorder (8.9% of women and 5.5% of men).

Figures 2a & 2b and show the distribution of the prevalence of neurotic disorders by age for men and women in Great Britain.

Figure 2a



GAD ..General Anxiety Disorder
 OCD.. Obsessive Compulsion Disorder

Figure 2b

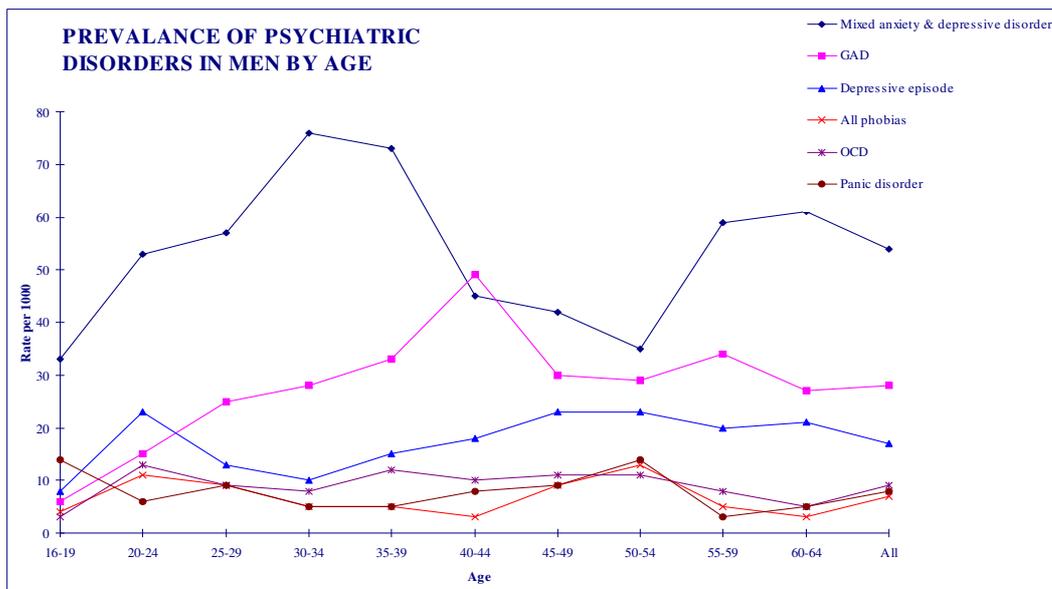


Table 3
Prevalence of psychiatric disorders in Scotland and Great Britain by sex
(rate per thousand population aged 16-64 years old in past week (standard error))

Disorder	Women (Scotland)	Women (Great Britain)	Men (Scotland)	Men (Great Britain)
Mixed Anxiety/ Depression	89(22)	99(5)	55(12)	54(4)
Generalised Anxiety	23(8)	34(3)	27(11)	28(2)
Depression	25(9)	25(2)	16(5)	17(2)
All phobias	11(5)	14(2)	9(5)	7(1)
Obsessive-compulsive disorder	14(7)	15(2)	12(9)	9(2)
Panic disorder	15(7)	9(1)	5(3)	8(2)
All Neuroses	178(27)	195(7)	123(17)	123(17)

Table 4 shows the statistically significant odds ratios for socio economic correlates for each neurotic disorder for Great Britain.

Table 4

Disorder	Statistically significant odds ratio
Mixed Anxiety/ Depression	<p><u>Higher in:</u></p> <ul style="list-style-type: none"> • Females ** • Lone Parents & child(ren)** • Single persons living on their own ** • unemployed ** • those with renting tenure <p><u>Lower in:</u></p> <ul style="list-style-type: none"> • Ages 55-64 y.o.**
Generalised Anxiety	<p><u>Higher in:</u></p> <ul style="list-style-type: none"> • Females * • Unemployed ** • Economically Inactive * • renting tenure** • those living in urban locality * <p><u>Lower in :</u></p> <ul style="list-style-type: none"> • ages 16-24 y.o.*
Depression	<p><u>Higher in:</u></p> <ul style="list-style-type: none"> • those with no educational qualifications ** • Lone parents & child(ren)** • Single persons living on their own ** • Unemployed ** • Economically inactive ** • those living in urban locality *
All phobias	<p><u>Higher in:</u></p> <ul style="list-style-type: none"> • Asian or Orientals* • Those working part time * • Unemployed ** • Economically inactive **
Obsessive-compulsive disorder	<p><u>Higher in:</u></p> <ul style="list-style-type: none"> • Unemployed ** • Economically Inactive ** <p><u>Lower in :</u></p> <ul style="list-style-type: none"> • Ages 25-34 yrs.* and 55-64 yrs.**
Panic disorder	<p><u>Higher in :</u></p> <ul style="list-style-type: none"> • Owner occupiers **

* Significance p<0.05

** Significance p<0.01

Co-morbidity is not uncommon with psychiatric disorders. Obsessive compulsive disorder was found to be significantly associated with depression, phobias and generalised anxiety disorder. Generalised anxiety disorder is also significantly associated with depression.

The prevalence of functional psychosis in Scotland was 8 per thousand adults aged 16 to 64 years old in the past twelve months (standard error 3) compared to 4 per thousand for Great Britain. The rate for men was 11 (standard error of 6) and for women 2 (standard error of 2). However, low numbers in the different categories with correspondingly relatively large standard errors make it difficult to draw firm conclusions from the rates. In the sample as a whole for Great Britain, there were no major differences in rates at different ages or between the sexes.

The statistically significant odds ratios for socio-economic correlates for functional psychosis in Great Britain were :

- higher in those:
 - * working part-time
 - * unemployed
 - * economically inactive
 - * living in rented accommodation
- lower in those:
 - * with no educational qualifications

Compared to adults without neurotic health problems, those suffering from functional psychosis were found:

- to be five times more likely to be permanently unable to work;
- to be twice as likely to be living on income support;
- to be living with a median weekly gross income of £90 compared to £150 for the general population;
- to have a higher probability of having difficulties with daily living, in particular managing money and dealing with paperwork - 19% of those with one neurotic disorder compared to 35% of those with two and 8% in those with none;
- to have experienced a stressful life event in the previous six months (71% compared to 48% of those with no disorder) - the most stressful events were problems with the police; serious problems with a close friend and a financial crisis;
- to be twice as likely to have a severe lack of social support;
- to be twice as likely to have used drugs (including the misuse of prescribed medicines) - 10% compared to 4%;
- to be twice as likely in men to drink over the safe maximum limit.

In many areas the profile of those with a psychotic disorder was similar to that of those with neurotic disorders, e.g. in the proportion with difficulties with daily living,

the exposure to stressful life events and the median weekly gross income. Important differences were found in:

- lower level of those working (39% of those with a psychotic disorder compared to 56% of those with neurotic disorder and 71% of those with no disorder);
- the higher proportion receiving welfare benefits;
- the higher proportion of those with severe lack of social support.

ii Other Community Surveys

Another relevant survey of overall psychiatric morbidity with data applicable to Scotland was the Health and Lifestyle Survey carried out between 1984 and 1985³ which used the General Health Questionnaire (GHQ). The general findings showed that morbidity levels were higher in women than men and highest in the 18-24 and 75 years and over age bands. Subsequent analysis⁴ of regional differences showed that:

- the prevalence of psychiatric morbidity in Scottish residents aged 18 years or over was 28.2% compared to 31% for the United Kingdom as a whole;
- after controlling for age and sex, the standard prevalence ratio was 90 (100 for England and Wales);
- the most important variables influencing differences in regional prevalence ratios were living environment and social class.

The investigators commented on the disparity between the lower Scottish psychiatric prevalence ratio and its higher overall standardised mortality ratio without offering any reasons for this.

The only recorded UK data on trends available from community surveys was through comparison of a 1977 survey using the GHQ in West London with the sample of the 1985 Health and Lifestyle Survey resident in that area⁵. This showed an increase of 8.8%, from 22.4% to 31.2%, in the prevalence of psychiatric morbidity. The investigators did not identify causes for this increase although they noted that other studies have found that unemployment in men, adverse life events and poor social support have been associated with psychiatric morbidity.

In 1982/83 Goldberg and Huxley⁷ conducted a large and detailed study of mental illness in hospitals and community settings in England. This showed an "iceberg of psychiatric morbidity" with only a very small percentage of the overall number of cases being seen by specialist mental health services. It also highlighted the key role of the general practitioner in mental health in the community (Table 5).

Table 5
Iceberg of psychiatric morbidity

	Prevalence in Greater Manchester in 1982/83 (expressed as % of total population)
Those with mental health problems in the community	25-31.5
Those attending their general practitioner with mental health problem	23.0
Those attending general practitioner whose mental health problem is recognised	10.2
Those referred to specialist mental health services	2.1
Those admitted to psychiatric hospital	0.3

iii General Practitioner consultations

The importance of primary care services in looking after the great majority of those with mental health problems has already been noted. No Scottish-wide data are available on the incidence and prevalence of mental health problems in those seen by general practitioners although work is taking place on the development of the Continuous Morbidity Scheme (see "Public Health and Mental Health Gain" report).

The fourth National Morbidity Study of morbidity statistics in General Practice in England and Wales in 1991-92 found evidence of the high level of psychiatric morbidity seen in primary care. Mental illness was the second most common reason for consulting with a general practitioner after respiratory disease.

Over seven percent of people (728 per 10,000 person years) consulted their general practitioner with a diagnosis of mental illness. 16% of attenders were classified as having a serious disorder, 71% intermediate and 22% minor. 85% of those consulting had a non-psychotic condition, although the authors advise a degree of caution in interpreting the statistics due to the difficulties of precision when reaching a diagnosis.

Prevalence data based on the number of patients who consulted at least once during the year for selected conditions is presented in Table 6.

Table 6
General Practitioner Consulting Rates for mental health problems

Condition	Prevalence	
	patient consulting rate per 10,000 person years at risk	
	Males	Females
Anxiety states	135	290
Neurotic Depression and depressive disorder NEC	124	383
Non organic psychoses	54	99
All	503	944

For all neurotic disorders the rate was 344 per 10,000 people, for all non organic psychoses 77. Of the latter, 58 per 10,000 people consulted for affective psychoses, 11 per 10,000 for schizophrenia.

Between 1981-82 and 1991-92, the consulting rates fell by 9% in males and 16% in females. The decline took place mainly in conditions categorised as intermediate and in these, mainly in depressive disorders. The consultation rate for serious disease actually rose from 72 to 113 per 10,000 people, the authors attributing this to the increasing numbers of patients with chronic psychiatric disease living in the community.

Consultation rates for mental disorders showed a marked gradient across the social classes. Multi-variate analysis shows that although in women the odds ratio in social classes IV and V compared to I and II was 1.6 this was reduced to 1.2 because of the impact of the significantly raised odds ratios in the unemployed, permanently sick, widowed, separated or divorced and smokers and in those who were renting accommodation.

Studies have shown that of those who consult a general practitioner and are diagnosed as having a mental health disorder, 50% are still symptomatic at one year and 20-25% at three years.⁹

iv Case Registers

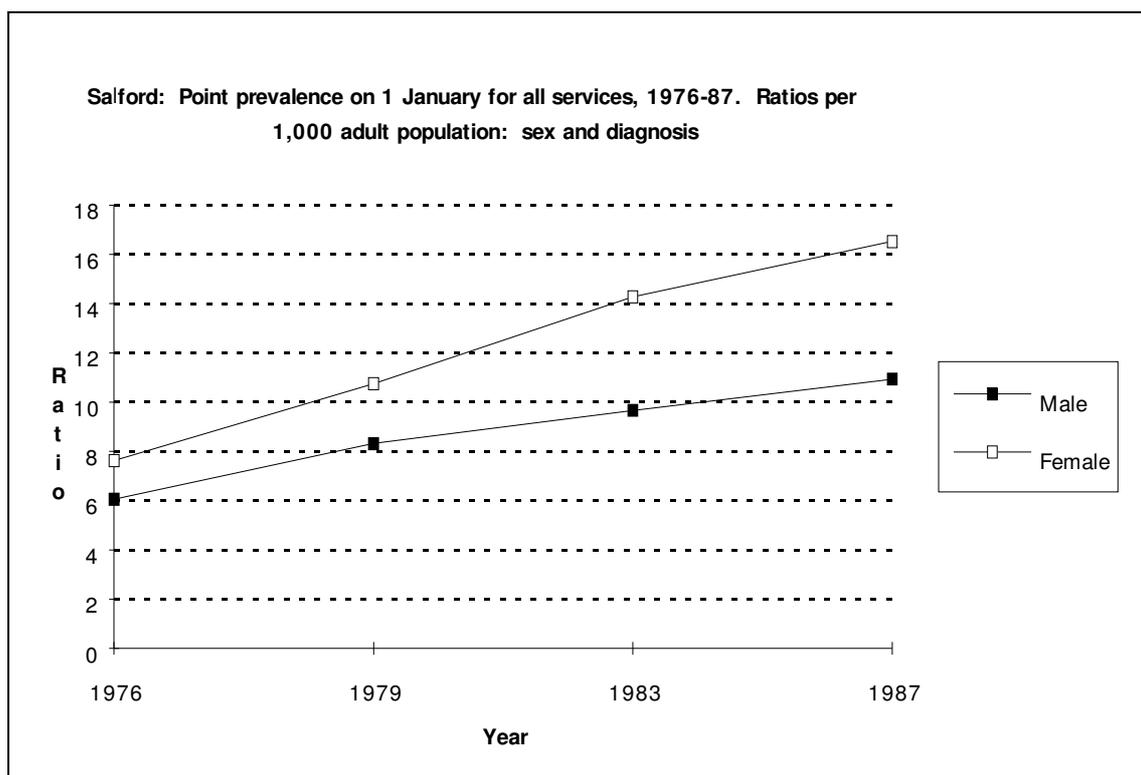
Case registers record details of those contacting specialist mental health services. A number have been functioning for many years in England. Findings from these are presented in the "Epidemiologically based Mental Health Needs Assessment" report.¹⁰

Data from the Salford Case Register¹¹ give annual prevalence rates per 1000 total population of:

Dementia	1.6
Schizophrenia	3.0
All depressions and bi-polar	6.7
All other mental health problems	7.7

Age specific prevalence ratios were highest in the over 65s, and in contrast to the Health and Lifestyle Survey, lowest in the under 25s. Figure 3 presents point prevalence rates for male and females in the period 1976-87. The total female point prevalence rate increased by 117% and the male by 81% in the period. The major rises in both males and females were in depressions, dementias and other psychiatric illness.

Figure 3



The total annual prevalence ratio was 1.9%, very close to the Goldberg statistic of 2.1% of the total population using specialist mental health services.

v Hospital admission statistics

Data on those admitted to and discharged from psychiatric hospitals and mental health units in Scotland are recorded on the Scottish Morbidity Record Scheme form 4 (SMR 4). The pattern of use of hospital services, particularly in-patient, is changing as more community based alternatives to admission are utilised. However, the scheme remains the most complete database available on mental health in Scotland.

The data presented relate to the period 1970-90. It is planned to update the tables with SMR data for the years 1991- 1995.

The crude total admission rate has risen by 39.8% in the period 1970-90. First admission rates however have shown a smaller increment. Both rates have fallen in the period 1990-92 (see Table 7).

Table 7
Total and first Scottish admission rates 1970, 1990, 1992

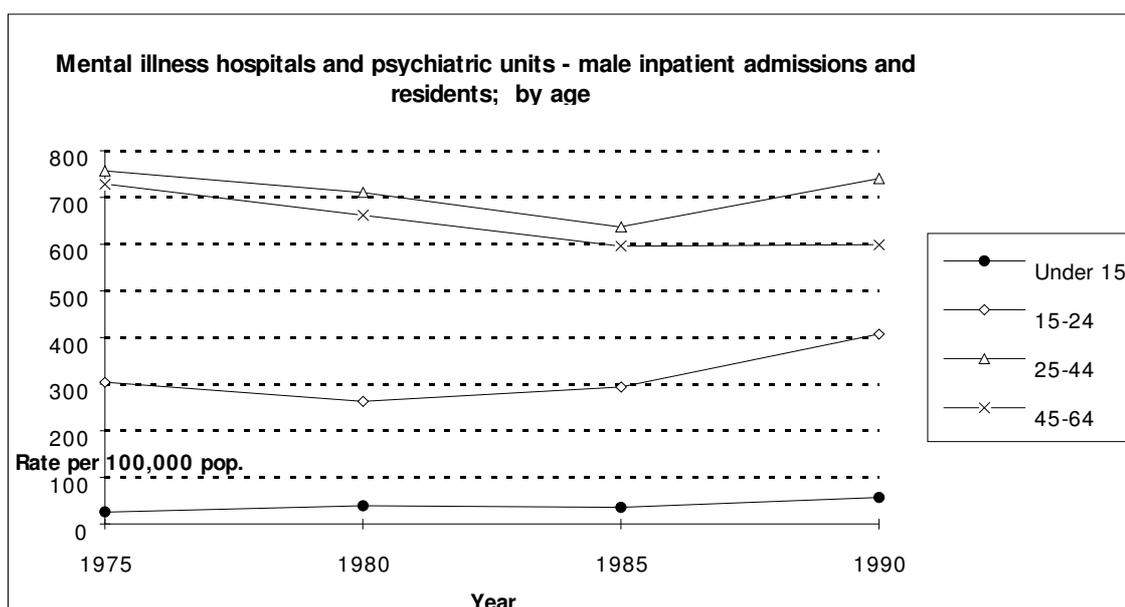
Year	Scottish total admission rate per 100 000 population	Scottish first admission rate per 1 000 000
1970	427	188
1990	597	197
1992	570	181

As can be appreciated, the major factor in the 1970-90 increase was rising numbers of re-admissions. Transfers between psychiatric hospitals also were a major factor, rising from 9 per 100 000 in 1970 to 41 in 1990.

Male admissions are more common than female in under 65 year olds with the reverse occurring after that age.

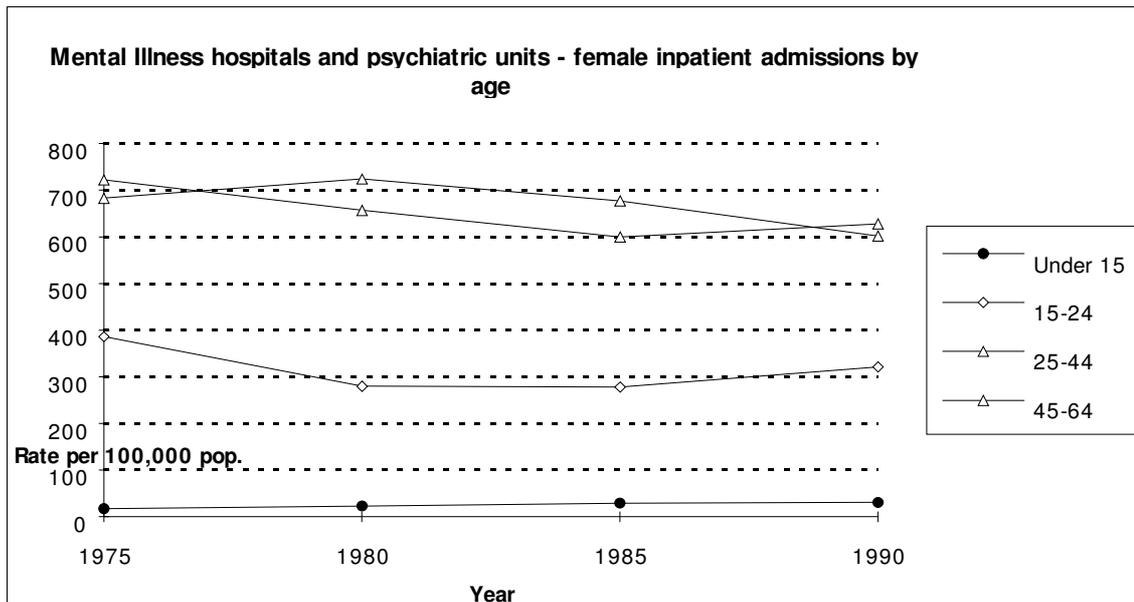
In the period 1975-90, Scottish admission rates in males aged less than 15 years and 15-24 years rose while in the 25-44 and 45-64 year bands they fell (see Figure 4). At all ages under 65 years there have been significant decreases in rates since 1990.

Figure 4



In females in the same period, admission rates fell at all ages below 65 years except for those aged less than 15 (Figure 4). Paradoxically there has been a rise in the first admission rate in Scottish women aged 15-24 years since 1990. All other age groups have seen considerable decreases.

Figure 5



First admission rates by ICD diagnostic groupings show that in the period 1975-90 trends varied. Most marked were:

- a 35% decrease in the number of male first admissions due to alcohol abuse and dependency despite the fact that total admission rates for all alcohol related diseases increased substantially in the period.¹² Female first admission rates were more variable with no clear trend apparent;
- a 600% rise in male first admission rates for drug misuse and dependency and a 300% increase in females;
- an increasing rate for non-psychotic depressions in males but a more stable trend in females since 1980;
- a major decrease in the rate for females with affective psychoses;
- major falls in the first admission rates with diagnoses of neuroses in both sexes.

The situation is summarised in figures 6 and 7. Since 1990 there has been a decrease in first admission rates in most diagnostic groups.

Figure 6

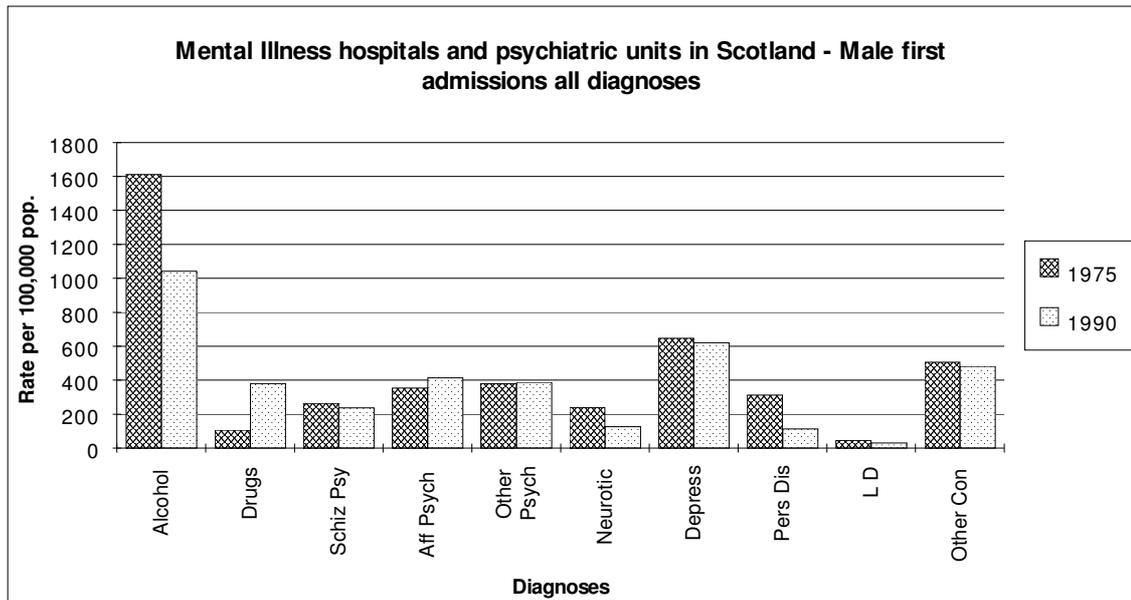
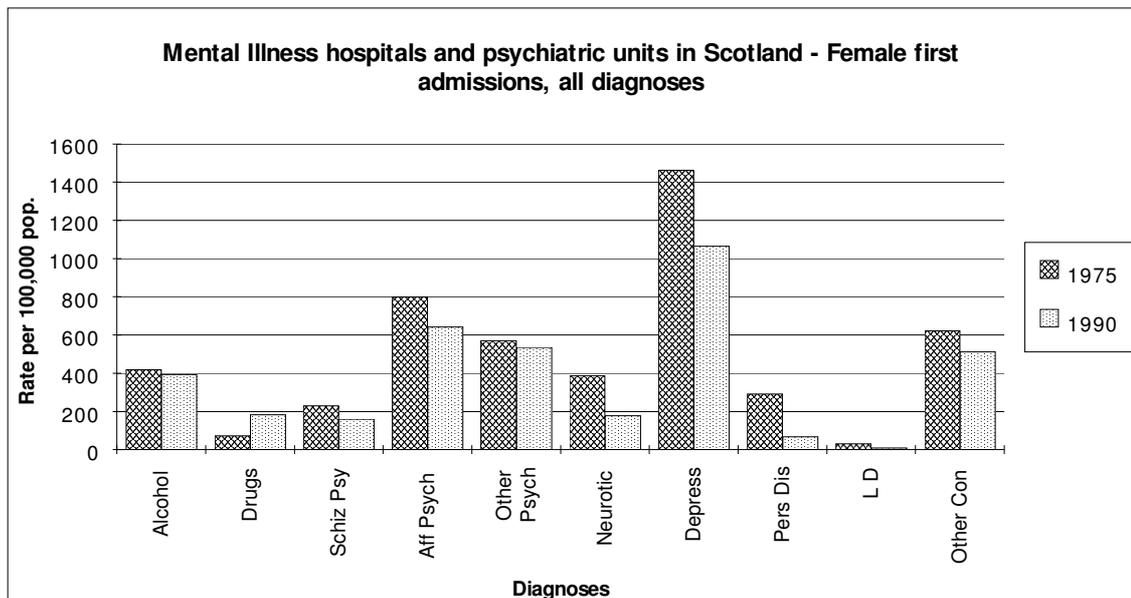


Figure 7



Key

Alcohol = Alcoholic psychoses; alcohol dependence syndrome	Neurotic = Neurotic disorders
Drugs = Drug abuse	Depress = Depressions - non psychotic
Schiz Psy = Schizophrenic psychoses	Pers dis = Personality disorders
Aff Psych = Affective psychoses	LD = Learning Disability
Other Psych = Other psychoses	Other Con = Other conditions

To what extent these trends are the result of changing morbidity or clinical practice or coding practice is unclear. A study in Edinburgh¹³ noted that the apparent decline in first admission rates for schizophrenia could be due partly to changes in diagnostic criteria or the miscoding of admissions. However, the noted national trends since 1990 of falling admission rates to hospital accord well with local observations on the increasing application of community based psychiatric interventions either by general practitioners or specialist mental health teams.

Psychiatric hospitals and mental health units are not the only in-patient facilities to which patients with mental health problems are admitted. Discharge rates from general hospitals recorded on the SMR 1 scheme as being due to a mental illness diagnosis, show an increase from 82 per 100 000 total population in 1970 to 172 per 100 000 population in 1991.

Mental Health Related Disability

The effects of mental health on the ability to function is a key to estimating its importance to an individual and by extension to communities and populations. A constant feature in debates about mental health is the priority which should be given to the care of those with severe disabilities compared to the far greater number who have mild to moderately severe disabilities.

The largest and most exhaustive survey on disability in the United Kingdom was carried out by the Office of Population Census and Surveys. Data extracted from two of the survey reports are presented below^{14,15}. The survey used the World Health Organisation definition of disability as, "any restriction or lack of ability to perform an activity in the manner or within the range considered normal for a human being". Ten main areas of disability were defined. The level of disability in each area was scored and the overall severity graded on a scale of 1-10.

The prevalence of disability among adults aged over 16 years was 14.2%. The prevalence of disability wholly or partially due to mental illness (as defined in chapter 1 of ICD 10) was 2.2%. Excluding senile dementia and learning disability, the prevalence was 1.6%.

Of all those with disability wholly or partially as a result of mental illness, 82% lived in private households. However this level varied with only 60% of those with disability wholly or partially due to schizophrenia and 61% of those with senile dementia living in private households compared to 95% of those with anxiety and phobias and 94% of those with depression.

At all ages, except for 50-64 year olds, disability as a result of mental illness was markedly more common in women. Of those with disability as a result of mental illness, 11.3% were very severely disabled overall (OPCS score 9-10) of whom 48% were aged more than 75 years old. Of those with disability as a result of mental illness, 46.6% were aged 16-49 years old.

Table 8 presents the principal areas of disability caused for those living in private households with a disability partially or wholly as a result of mental illness.

Table 8

Principal area of disability of those in private households with disability totally or partially as a result of mental illness

Principal area of disability	%
Locomotion	15.9
Continenence	10.1
Communication	19.0
Behaviour	96.4
Intellectual functioning	90.9

Of those with continence or communication disabilities, the majority (over 70% in each case) suffered from senile dementia or learning disability.

A profile of the mental health conditions giving rise to behavioural (motivation, problems with relationships, aggression, injury to self and others) and intellectual functioning (concentration or memory loss, confusion) disabilities in those living in private households is presented in Table 9.

Table 9

Type of mental health condition giving rise to problems of behaviour or intellectual functioning in those in private households

Type of condition	% of those in private households with behavioural disability as a result of mental illness by type of condition	% of those in private households with intellectual functioning disability as a result of mental illness by type of condition
Senile dementia	12.2	15.5
Schizophrenia	3.2	2.9
Anxiety and phobias	16.0	13.5
Depression	38.0	34.2
Learning disability	13.8	18.1
Other	23.3	22.5

Depressive illness is the most common cause of both areas of disability in those living in private households. No comparable information is presented by the OPCS on those in communal establishments.

With regard to severe behavioural difficulties (OPCS score 7.5-10.5: damage to self, others and property) as a result of mental illness, data derived from the OPCS data indicate an estimated prevalence of 1.03 cases per 1000 adults aged over 16 years old, of whom 21.4% will live in communal establishments. Excluding those due to senile dementia and learning disability, the rate falls to 0.61 per 1000 adults aged over 16 years of whom only 9.8% will live in communal establishments.

The data presented in this section highlight the importance of depression as the major cause of mental illness related disability in the community.

SPECIAL NEEDS CATEGORIES

In addition to "mainstream" mental health conditions, there is a range of less frequently occurring conditions which because of their complexity create a need for more specialist intervention. These are:

Mental disturbance in offenders

Different studies have reported varying levels of prevalence partly dependent upon the nature of the offender population and the method of case finding. A summary of UK data indicated that the overall rate varied between 9% to 66% of the total prison population with the most common forms of disturbance were personality disorder (incidence rate of between 14 and 33%), learning disability (1-45%), alcohol abuse (11-55%) and neurosis (3-12%). Psychoses are relatively uncommon and in total may be no greater than 3%¹⁶.

Those with learning disability and mental health problems

In up to 2% of admissions to psychiatric units and mental health hospitals, the diagnosis recorded was learning disability. In addition, a small but significant proportion of those with a primary diagnosis of another mental health condition will have a learning disability. The management of challenging behaviour in such individuals presents many problems and may require a different array of specialist interventions and support services from those with other conditions.

Those with mental health problems as a result of severe head injury

The psycho-social consequences of traumatic brain dysfunction are often severe. The combination of physical and mental disabilities mean that marital and family breakdown are not uncommon. Early psychological and other inputs at an early stage of rehabilitation can aid in learning or re-learning of appropriate behaviours.

Those with pre-senile dementia

Up to 10% of admissions in males aged between 45-64 years to Scottish psychiatric units and mental health hospitals are due to early onset dementia. As with those with head injuries the social impact of this is usually severe with the wife usually having to cope with considerable stress. Often these patients must use inappropriate mental health services for the elderly.

The Cost of Mental Health Problems

Those suffering from mental health problems are major users of specialist and primary care services. With regard to hospitals in Scotland in 1990¹⁷:

- patients with mental illness conditions (excluding senile dementia and learning disability) accounted for 18% of NHS in-patient bed days;
- of the twenty top diagnostic categories contributing to bed usage, 6 were mental illnesses (excluding senile dementia and learning disability);
- psychoses (schizophrenia, affective psychoses) account for 8.3% of NHS in-patient costs.

The costs of schizophrenia to the health and social services in the United Kingdom have been estimated to be £310 million per year, drug costs accounting for 9% of the total. Indirect costs (premature mortality, early retirement, unemployment) were estimated to be £1606 million¹⁸.

The estimated costs to the health service of neuroses treated in primary care were £119.5 million. The estimated total of indirect and direct service costs in 1989 were £5600 million¹⁹. 30-40% of absences from work are caused by mental illness. In addition to the huge economic implications of this, the adverse effects on performance and quality are likely to be great although more difficult to quantify.

The enormous cost of mental health conditions reinforces their importance as public health issues.

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