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Atlas of Mental Health

STATISTICS FROM FINLAND

STAKES

National Research and Development Centre for Welfare and Health

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ISBN 951-33-1807-9 on-line publication
STAKES, Helsinki 2005

Mental health, a growing theme

As a phenomenon mental health is comparable to a renewable natural resource. In our everyday lives, mental health is constantly on the move, prone to wear but renewable. Mental health is infectious and good mood spreads. Crises and difficulties are an integral part of our daily life and tax our mental health resources. Childhood and the childhood family give their own colour to mental health. It is said that there is a second chance in adolescence, it enables people to repair earlier problems. In working life mental health becomes more and more important as a resource. Marital or other partnerships may strengthen or try our mental health. It is also the foundation for a good old age.

Mental health has its communal and individual dimensions, as well as its biological, social and psychological characteristics. In other words, there is no need for determinism: bad genes, accidents, illnesses or losses do not automatically endanger mental health. The diverse complexity of mental health phenomena makes positive mental health difficult to describe. The promotion of mental health as a public effort is still in its infancy, whilst its problems and disorders are much better defined and easier to identify and there are long traditions in their care.

The importance of mental health concerns is growing globally. The development of today's information society is a mental process. Mental health problems are an obstruction to the development of individuals and for the economic and social blossoming of communities. Therefore, the description of all the different dimensions of mental health problems is important.

This Mental Health Atlas provides a summary of all the available statistical information on mental health in Finland. For the present, the data focuses on disorders and care. We hope that this Mental Health Atlas will prove useful for a whole range of needs.

Vappu Taipale
Director General
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1 Introduction

1.1 Statistics on mental health and mental health services

Information on mental health and mental health services is available in many mental health publications, on the Internet and in statistical compilations, such as the Stakes and Statistics Finland periodicals or separately published statistical summaries and the Internet addresses referred to below. Up to now, mental health statistics have from the point of view of ordinary users been spread out in a variety of subject-specific publications or been available only for the statisticians' own use. In addition, the data has been amassed into large databases and registers from which the selection and extraction of individual and sufficiently illustrative figures has required special expertise.

This Mental Health Atlas is intended to be an easily approachable statistical compilation of data on mental health and mental health services. Its aim is to provide help for all those involved in mental health work, relevant decision-makers and information providers. Access to reliable and carefully reflected information in easy-to-use form is important for social and health policy decision making concerning mental health. Access to up-to-date information is also necessary for general opinion forming and as a backdrop to public debate on the subject.

This Mental Health Atlas is the first in a series. The aim is to update the atlas regularly in both its printed and electronic form. There are also other excellent sources of information in the fields of health and mental health available on the Internet. These include a comprehensive collection of demographic, economic and health indicators on the Statistics Finland website <http://www.tilastokeskus.fi/tk/aiheet.html> or in the Statistic Finland yearbook tables (Statistics Finland 2002). The Social Insurance Institution also publishes statistical data both online (<http://193.209.217.5/in/internet/suomi.nsf/NET/240402121842TL?openDocument>) and in its annual yearbook (Kela 2002). Also Stakes publishes extensive statistical data on its website: <http://www.stakes.info/> and in its annually published statistical yearbooks. Other sources of information are mentioned separately in the context of the relevant subject matter.

1.2 Legislation related to the provision of mental health services

The provision of mental health services is the responsibility of local authorities and has been laid down in the law. The local authorities can provide mental health services as part of their basic health care services or as part of their psychiatric care, or they can outsource the mental health services to their regional hospital district or other service providers. The most common forms of service include out-patient visits to health centres or mental health offices, psychiatric inpatient treatments and a varied range of housing, coping and rehabilitation support services, such as community care, home nursing, day centres, services provided by various organizations or private bodies. Under the Mental Health

Act (1116/1990), joint municipal boards for hospital districts and the health centres operating in the districts shall cooperate with the municipal social welfare department and those joint municipal boards which provide special services to ensure that the mental health services organized by them form a functional entity. The content and extent of the mental health services must be organized so that they correspond with the needs of the local authority concerned. In addition, the Mental Health Act specifies the conditions under which a person can and must be admitted to care against his or her will, and the type of involuntary treatment that can be used.

The key acts providing for the arrangement of mental health services include the Primary Health Care Act (66/1972), the Mental Health Act (1116/1990) and the Act on Specialized Medical Care (1062/1989):

Under the Primary Health Care Act (66/1972)

it is the responsibility of local authorities to see to primary health care. This means health care addressing individuals and their living environment, medical care for individuals, and related activities aimed at maintaining and promoting the state of health of the population. Mental health services are included in primary health care. "In view of what is provided in the Mental Health Act, local authorities will organize as part of their primary health care such mental health services needed by their residents as it is expedient to provide at a health center (2a)." Also the Primary Health Care Decree (802/1992) contains provisions related to mental health services.

The Mental Health Act (1116/1990)

is an outline law which defines the concepts, content, supervision, provision obligation and principles of provision of mental health work. In addition it contains special provisions concerning state mental hospitals, involuntary treatment in a mental hospital and mental examinations. The Mental Health Act was amended in 2001 (1423/2001) when two new subparagraphs were added to the Act: Discharge from hospital under the supervision of a care unit of the hospital district (18a) and Limitations on patients' fundamental rights during involuntary treatment and examination (4a). The Mental Health Decree (1247/1990) provides for the more detailed content and organization of mental health work. The Mental Health Decree was amended (1282/2000) with regard to mental health services for children and young persons (2a). The amended act defines the maximum times for the evaluation of referrals and provision of care, coordination of care units, out-patient support services and regional cooperation.

The Act on Specialized Medical Care (1062/1989)

lays down provisions on the organization of specialized medical care and related operations. In order to organize specialized medical care in accordance with this obligation, each local authority must belong to a hospital district joint municipal board. Hospital district joint municipal boards shall see to it that specialized medical care services within their area are integrated, and shall plan and develop specialized medical care in cooperation with the health centres with a view to integrating primary health care and specialized medical care into a functional whole. In the

pursuit of their functions, the hospital district joint municipal boards shall also engage in such cooperation with the social welfare boards in their area. Each hospital district shall also provide for research, development and training within its purview in its own area.

Other important acts and decrees:

- Act on the planning of and State subsidies for social welfare and health care services (733/1992)
- Act on Welfare for Substance Abusers (41/1986) and Decree on Welfare for Substance Abusers (653/1986)
- Child Welfare Act (683/1983)
- Act on the Status and Rights of Patients (785/1992)
- Personal Data File Act (523/1999)
- Decree on Medical Rehabilitation (1015/1991)
- Services and Assistance for the Disabled Decree (759/1987)
- Act on Cooperation between Rehabilitation Organizations (604/1991)
- Act on Rehabilitative Work (189/2001)
- Social Welfare Act (710/1982)
- Local Government Act (365/1995)

The legislation is available on the Internet at: <http://www.finlex.fi>

2 Mental health indicators

2.1 Mental disorders

Of all illnesses mental disorders and their consequences are very common. They inflict a great deal of suffering, and a need for services and costs extending beyond the health sector. Their significance to public health is significant and the burden of illness that they cause seems to be increasing. The most common and most important mental disorders from the public health point of view include mood disorders, anxiety disorders, substance use disorders, personality disorders and psychotic disorders (Lönnqvist et al. 2001).

Mood disorders

The most common mood disorders include different types of depression (depressive disorders) on one hand and on the other bipolar mood disorders which are characterized by mood swings from depression to mania. Probably some 4–9 per cent suffered from depression over the past year and some 10–20 per cent of people will suffer from the same condition at some point in their life time, while the bipolar mood disorder is prevalent in some 1–2 per cent of the population. Depressive conditions are about twice as common in western women than in men.

Effective treatments available today include drug therapies, certain forms of psychotherapy or interactive therapies, and in special cases certain biological methods, such as electroconvulsive (ECT) therapy or light therapy.

Anxiety disorders

Anxiety disorders are characterized by excessive, unrealistic worries, fears and experiences of internal tension which, when repeated disrupt the person's psychological and social functional capacity. The most common anxiety disorders include panic disorder, social phobia, general anxiety disorder and specific phobias, such as claustrophobia or agoraphobia.

Estimates of the prevalence of anxiety disorders vary, but between one and a few per cent of people are believed to suffer from each of these specific phobias at some point, although the milder experiences of anxiety are probably much more common. These disorders appear typically in adolescence or young adulthood. Anxiety disorders can be treated both by drugs and different psychotherapies, i.e. interactive therapies.

Alcohol and other substance use disorders

In disorders related to alcohol or other substance use, the issue is one of the use becoming harmful, obsessive and generally excessive and uncontrollable. Alcohol dependence is known to be at least twice as common with men than with women. According to different estimates, the disorder is prevalent in 4–8 per cent of the population at any time point and in 8–15 per cent a lifetime problem. Alcohol dependence advances from mildly to severely impaired functional capacity. There are few estimates on the prevalence of other substance dependencies. They vary from less than one per cent to a few per cent.

The treatment of alcohol and other substance dependencies is both demanding and long-term with varying results. Traditional treatments include psychosocial community care, peer group or motivation boosting methods. More recently certain medicinal treatments, which have proved effective in certain types of dependency, have also been used.

Personality disorders

The term ‘personality disorders’ is used to refer to cases in which a person’s pattern of behaviour has become permanently and pervasively deviate and obstructs his or her social life and well-being. The symptoms may include longstanding and harmful impulsivity, instability, inhibitions, perfectionism or antisocial behaviour. 5–15 per cent of the population is estimated to suffer from some type of personality disorder. The diagnosis and treatment of these disorders is demanding. The treatment aims to alleviate symptoms or minimize adverse affects. Long-term intensive psychotherapy may help sufferers of certain personality disorders, whilst some medicinal therapies can help symptoms of such disorders, i.e. mood changes or impulsivity.

Psychotic disorders

A psychotic disorder is a mental disturbance that involves a break with reality, sometimes accompanied with delusions or actual hallucinations. Studies indicate that these disorders derive from various abnormalities in brain structure and function. They may affect a person’s ability to assimilate information from several directions. In addition to schizophrenia, which is considered to be a chronic disease, the most common psychotic disorders include many other short-term mental disturbances. Increased substance use also increases the risk of psychotic symptoms. Schizophrenia is estimated to occur in 0.5–1.5 per cent of the population, but the amount of all psychotic disorders is many times that figure. In most cases medication is required to treat psychotic disorders and, when the symptoms are at their worst, hospitalization.

2.2 Prevalence of mental disorders

The recent Health 2000 study to assess the prevalence of mental disorders among the over 29-year-olds in Finland was based on the internationally well-established Composite International Diagnostic Interview (CIDI) method. The interviews were conducted between September 2000 and July 2001. Interviewees were asked questions about the symptoms of mental disorders that they had experienced during the year preceding the interview and gave them a diagnosis when possible under established diagnosis criteria.

This and earlier studies show that about one quarter of Finns suffer from psychological symptoms with adverse effects at some point in their lives (Pirkola et al. 2002). An estimated 15–20 per cent had over the past year suffered from a diagnosable mental disorder (Lehtinen et al. 1990, Pirkola et al. 2002, 2005). The most common included depressions, anxiety disorders and alcohol-related disorders (Table 1). The study shows that the number of mental disorders has not increased over the past decades contrary to what the public has at times been led to believe (Lehtinen et al. 1990, Pirkola et al. 2005).

Table 1. Prevalence of the most common types of mental disorder among Finnish people over 29 years of age Health 2000 survey, winter 2000–2001 (Pirkola et al. 2005)

	Men (n = 2 748) %	Women (n = 3 257) %	All (n = 6 005) %
Depressive disorders			
Major depressive disorder	3.4	6.3	4.9
Chronic depression	1.6	2.2	1.9
Some type of depression	4.5	8.2	6.5
Anxiety disorders			
Panic disorder	1.4	2.4	1.9
Social phobia	1.1	0.9	1.0
Agoraphobia	1.2	1.4	1.3
General anxiety disorder	1.3	1.3	1.3
Some type of anxiety disorder	3.7	4.8	4.2
Alcohol-related disorders			
Alcohol dependence	6.5	1.4	3.9
Alcohol abuse	0.7	0.0	0.3
Some type of alcohol use disorder	7.3	1.4	4.3

On the other hand, neither has their number declined, as opposed to many physical illnesses. Corresponding studies show that the prevalence of mental disorders in the Finnish population seems to be about the same as in the populations of other western countries (WHO 2000). It is also worth pointing out that the recent Mental Health Status of the European Population (Eurobarometer) survey assessed the mental health status of the Finns as relatively good in terms of psychological symptoms and well-being. (http://europa.eu.int/comm/health/ph_determinants/life_style/mental_eurobaro.pdf)

2.3 Suicide mortality

A suicide decision is a process which is influenced by many factors. It is affected both by long and short-term factors, which either expose individuals to or protect them from suicide. Many mental health disorders increase the risk of suicide. Over 90 per cent of all people who have committed suicide have suffered from mental disorders. In addition, a number of unfavourable factors in a person's life, such as difficult human relationships or adversities at work, may increase the risk. The annual fluctuation in national suicide statistics is also known to reflect significant changes in alcohol consumption or unemployment, although the mechanism of this phenomenon is not known (Lönnqvist et al. 1993).

Statistical records of suicides have been kept in Finland since the 19th century. They are generally thought to be fairly reliable. In relation to the population, the number of suicides continued to grow steadily from the 19th century until the end of the 1990s, after which mortality from suicides seems to have declined in ten years by about one third (Figure 1). The most significant reduction has taken place in the number of suicides committed by men.

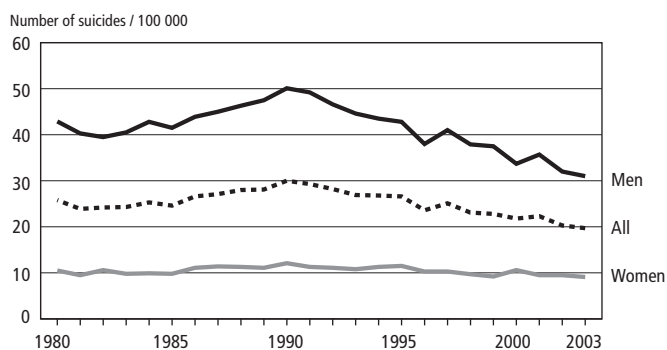


FIGURE 1. Suicide mortality among men and women 1980–2003 (Source: Statistic Finland)

Suicide mortality is calculated per hundred thousand of the population per year, which in western countries typically varies between 10 and 30 (0.01–0.03%). Traditionally the suicide rate in Finland has been high, but due to a marked improvement in the trend over the past ten years the situation has slightly improved. Towards the end of the 1980s, a Finnish but also internationally significant research project, *Itsemurhat Suomessa 1987* (Suicides in Finland 1987) (Lönnqvist et al. 1993) and a simultaneous suicide prevention programme (Upanne et al. 1999) were carried out in Finland.

2.4 Substance use

Alcohol and other substance use is of major importance for both the public economy and health. From the perspective of mental health it is important to note that substance use, substance problems and dependency often accompany mental health disorders. It is also useful to remember that dependence deriving from alcohol and other substance use and related consequences are considered to be a medical condition and a mental health disorder. The most common mental disorders related to substance use in addition to dependence include mood disorders, anxiety disorders, psychotic disorders and personality disorders. With psychiatric patients substance abuse causes and worsens many psychological symptoms and impedes access to the right place of treatment and the right care.

Information on the consumption, use or abuse of alcohol and drugs plus the adverse effects of such use is available in the statistics and registers kept by the authorities and in separate studies. Stakes edits and publishes an annual Yearbook of Alcohol and Drug Statistics, which comprises key statistical and research data presented as a time series. (Figure 2).

Information on substance-related diseases, e.g. alcohol psychosis diagnosed during hospital or specialized out-patient care is available from the Finnish Care Register (HIL-MO) maintained by Stakes. The Care Register enables the study of the lengths of hospitalization periods given on the basis of drug-related diagnoses and other concurrent mental health disorders in time series (Figure 3).

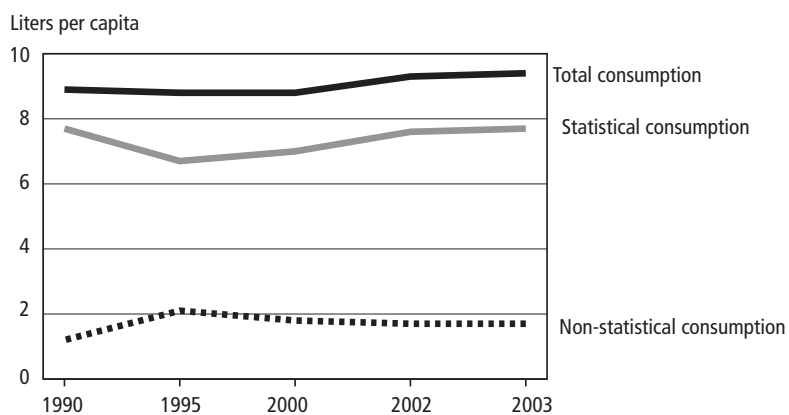


FIGURE 2. Total consumption of absolute alcohol in 1990–2003 (Source: STAKES)

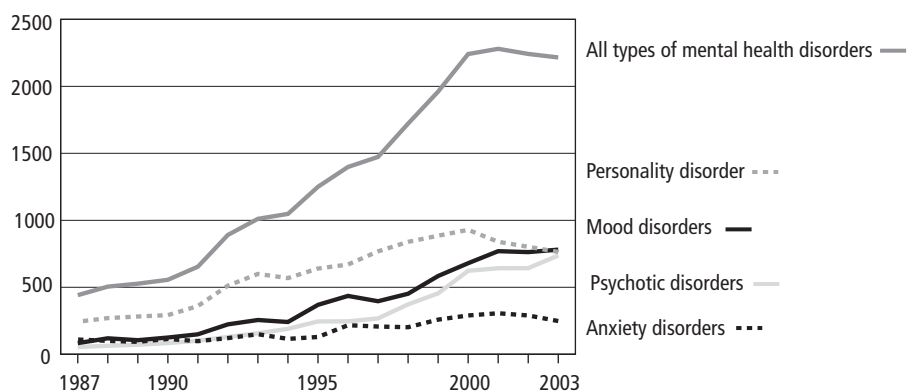


FIGURE 3. Hospitalization periods related to drug abuse and other simultaneous, diagnosed mental disorders from 1987–2003 (Source: Hilmo, STAKES)

3 Indicators for mental health services and psychiatric care

In Finland, local authorities carry the responsibility for the provision of various mental health services for their residents. The main services related to mental health problems or disorders include out-patient visits to health centres or specialized medical care, different types of inpatient care, and support in housing and coping for those requiring long-term and multiple psychiatric care. In addition to the public service system, the Third Sector, i.e. a network of different types of skilled organizations provides a whole range of support services for daily life, crises and other special situations. Typically they offer a low threshold for services and a good knowledge of the needs of special groups, such as migrants, substance abusers and the next-of-kin of mental health patients. Information on these services is available in varying degree on many of the Third Sector service points, although they have not been systematically collated in any single point. At least the following websites are a good source of information: <http://www.stakes.fi/tietovep/linkit.htm> and <http://www.mtkl.fi/tietopankki/linkit/>

It is important to remember that the spectrum of mental health services is very extensive. They vary from support and counselling services related to various life situations to intensive and demanding treatments for people who are seriously ill. The interdependence between service supply and demand is extremely complex. It is difficult to draw conclusions on the needs and particularly on the prevalence of problems or disorders they may be derived from on the basis of changes occurring in the supply of services. Service needs are the sum of many factors and not a direct consequence of, for example, the prevalence of disorders. It has been estimated that there are significant regional differences in service availability particularly as Finland is geographically large and has an uneven population distribution. To date, there is no reliable information on how these differences affect people's well-being.

International indicators related to mental health services have been collected in the WHO maintained Mental Health Atlas whose statistics have also been available online at: <http://www.cvdinfobase.ca/mh-atlas/>

3.1 Statistics on mental health services and their use

3.1.1 Out-patient visits related to mental disorders and psychiatric out-patient care

The compilation of statistics on visits related to mental disorders still requires major improvements. The problem of present statistical data is that visits to mental health or other services at health centres on account of mental health are not systematically recorded. This is due to lack of standardized practices and ATT systems, plus the mixed attitudes to statistics and unresolved issues related to information protection. At present, the statistical comparison of community care is adversely affected particularly by the fact that the organization of psychiatric out-patient care varies from one local authority to another.

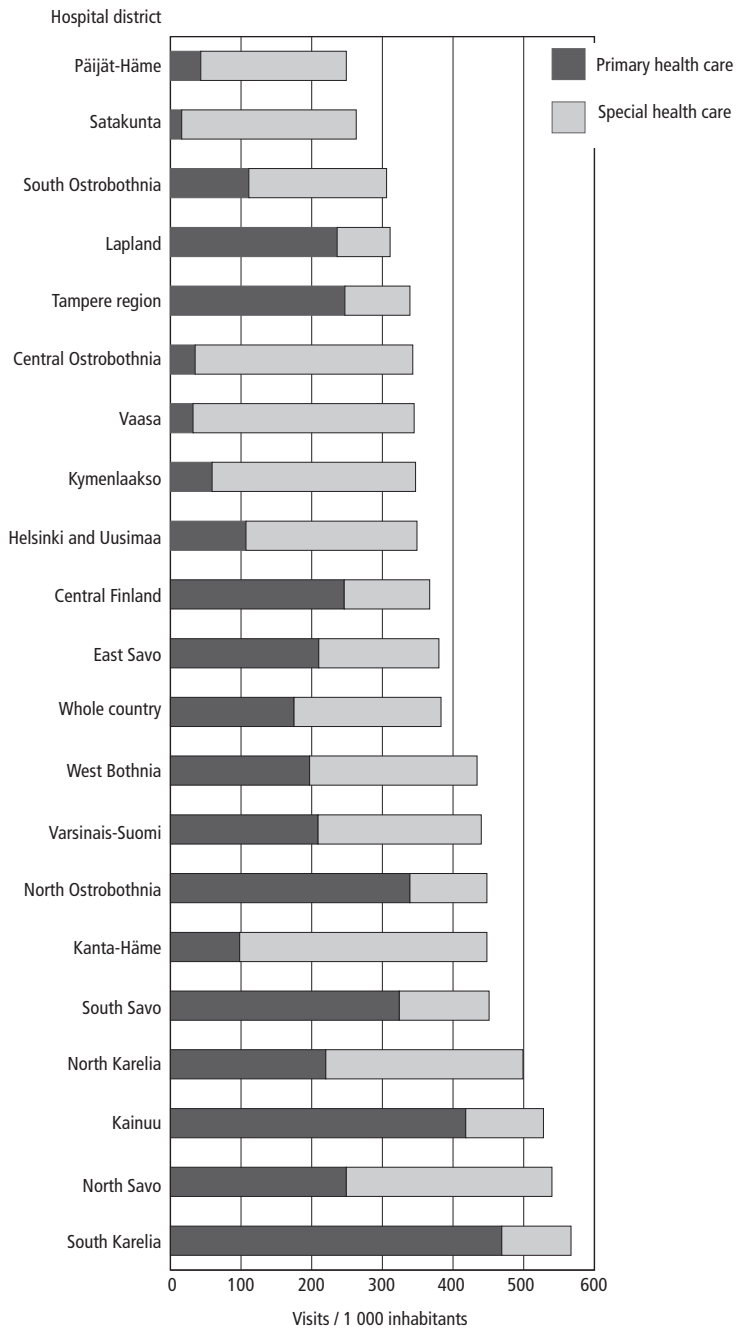


FIGURE 4. Out-patient treatment of mental disorders by hospital district in 2002 broken down into municipal health care services and services provided by hospital districts (The treatment defined by some health centres as specialized medical care is shown in this diagram as primary health care/public health care. Source: STAKES)

In some local authorities, services related to the care of mental health disorders, i.e. psychiatric services, are provided by the local authorities themselves, whilst in others services continue to be part of specialized medical care provided by the hospital district. The Stakes Benchmarking database comprises information on the psychiatric out-patient visits produced by hospital districts since 1996. These figures do not show the mental health visits and other out-patient services produced by the local authorities themselves. In 2002, Stakes conducted a complementary count of individual local authorities on the number of mental health visits produced by their health care services in order to provide a fuller picture of psychiatric community-based care (Figure 4).

There are clear regional differences in the provision and resources of out-patient care. The future challenge of compiling statistics and research lies in mapping the regional needs and estimating the volume of out-patient services and the appropriateness of the service selection.

3.1.2 Psychiatric hospital care

Psychiatric hospital and inpatient care is usually required in situations where community-based care alone is not sufficient to control problems caused by a mental disorder. Depending on the group of patients and the disorder to be treated, there are various alternative types of psychiatric hospital care ranging from short-term crisis and out-patient support to long rehabilitative treatment periods. In western countries the trend in the amount of hospital care has been declining since the 1950s. In Finland, this trend is believed to have started in the 1970s. The aim is to move from separate psychiatric units towards psychiatric departments that function in connection with other hospital departments. Psychiatric hospital care is given at university central hospitals, central hospitals, regional hospitals and in smaller specialist psychiatric units. Specialist groups include children and adolescents, difficult-to-treat acute psychiatric patients and patients requiring long-term rehabilitation.

Mental health services for the elderly are generally provided as part of other care services for the elderly or as part of other mental health services. Mental health problems are less prevalent in the older age groups than in the younger. In older persons, however, the high percentage of physical illnesses and symptoms in the emergence and diagnosis of a mental disorder, and the importance of loneliness for psychological well-being are typical features. In addition, with the population ageing the general need for care and practical help for people suffering from mental disorders will probably increase. Therefore, the development of mental health services for the elderly presents a continuous challenge.

The Finnish hospital discharge register (1969–1993) and HILMO, the Finnish Care Register (1994–) include information on how long patients stay in Finnish hospitals as of 1969. They can be used to obtain data on psychiatric hospital stays on the basis of the specialty or diagnosis. The most important and used information includes the number of stays, their lengths, diagnoses, and information on the means of admittance and involuntary care decisions and treatments. Data is available at the hospital, municipal or hospital district level and figures can be used to create time series and regional comparisons.

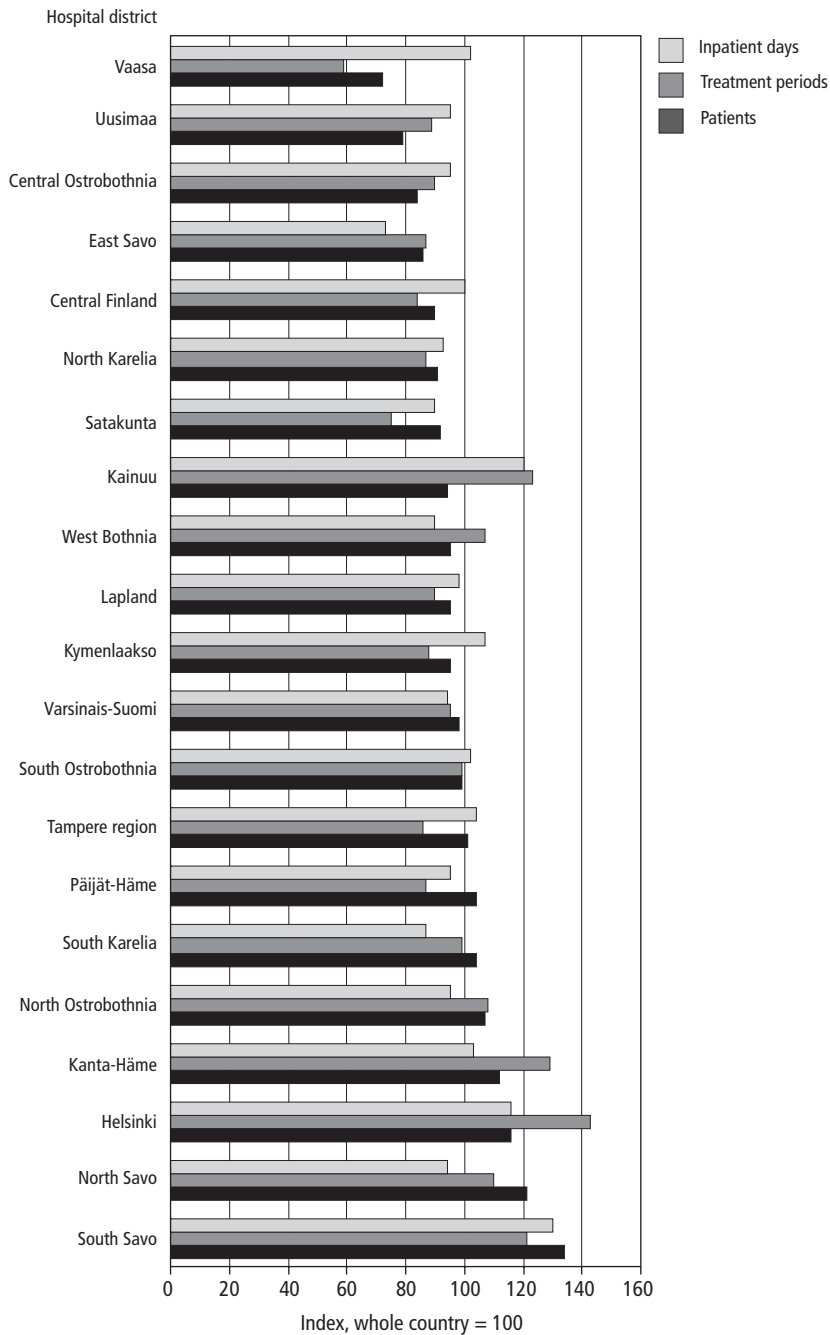
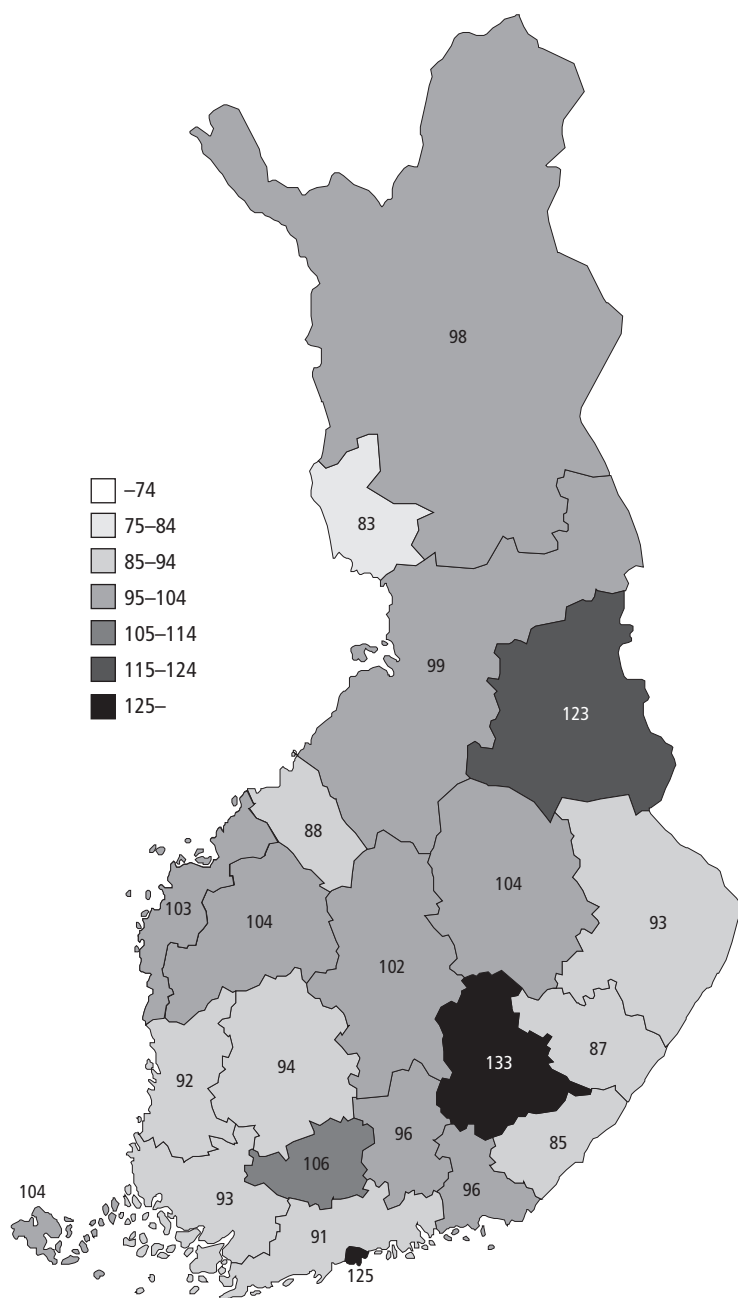
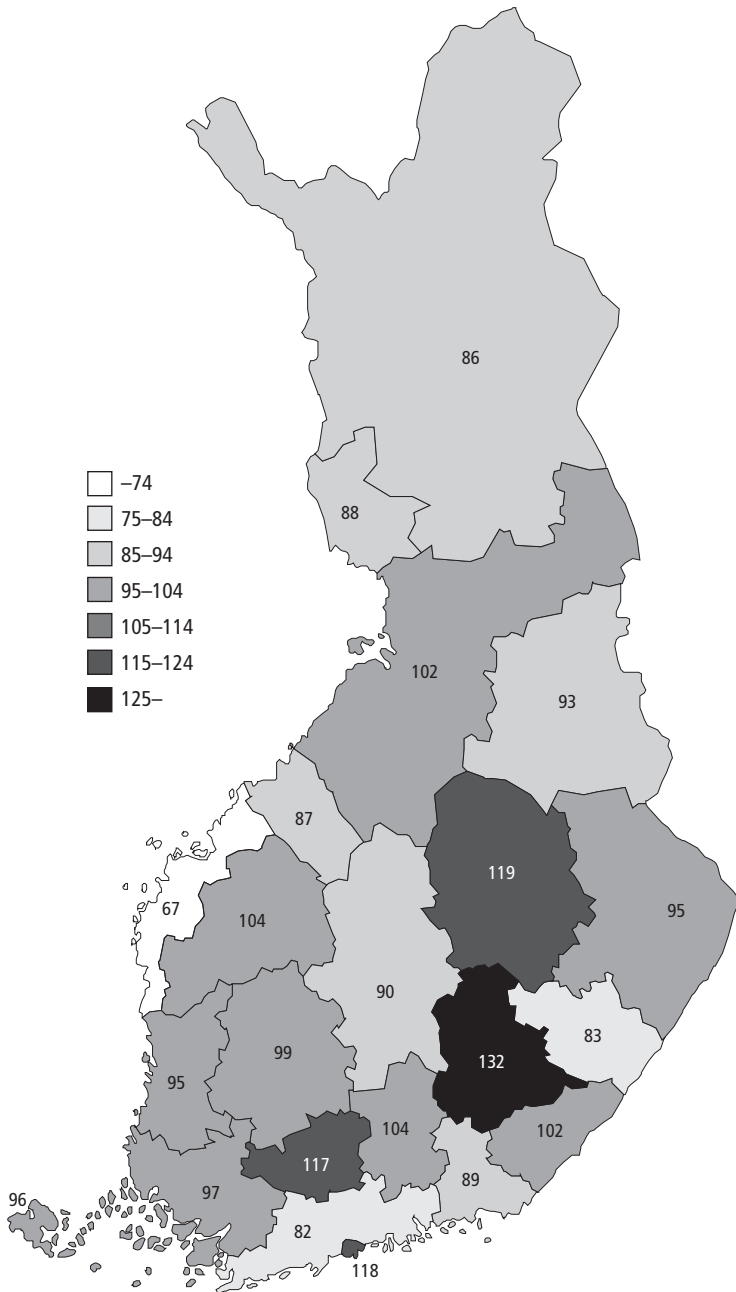


FIGURE 5. Psychiatric hospital treatment: scaled and indexed in relation to the whole population, inpatient days, treatment periods and patients in 2003, standardized by age and gender (Source: Sotka, STAKES)



MAP 1. Psychiatric inpatient days in 2003 by hospital district (whole country = 100), indirect standardization by age and gender (Source: Hilmo, STAKES).



MAP 2. Psychiatric inpatients in 2003 by hospital district (whole country = 100), indirect standardization by age and gender (Source: Hilmo, Stakes).

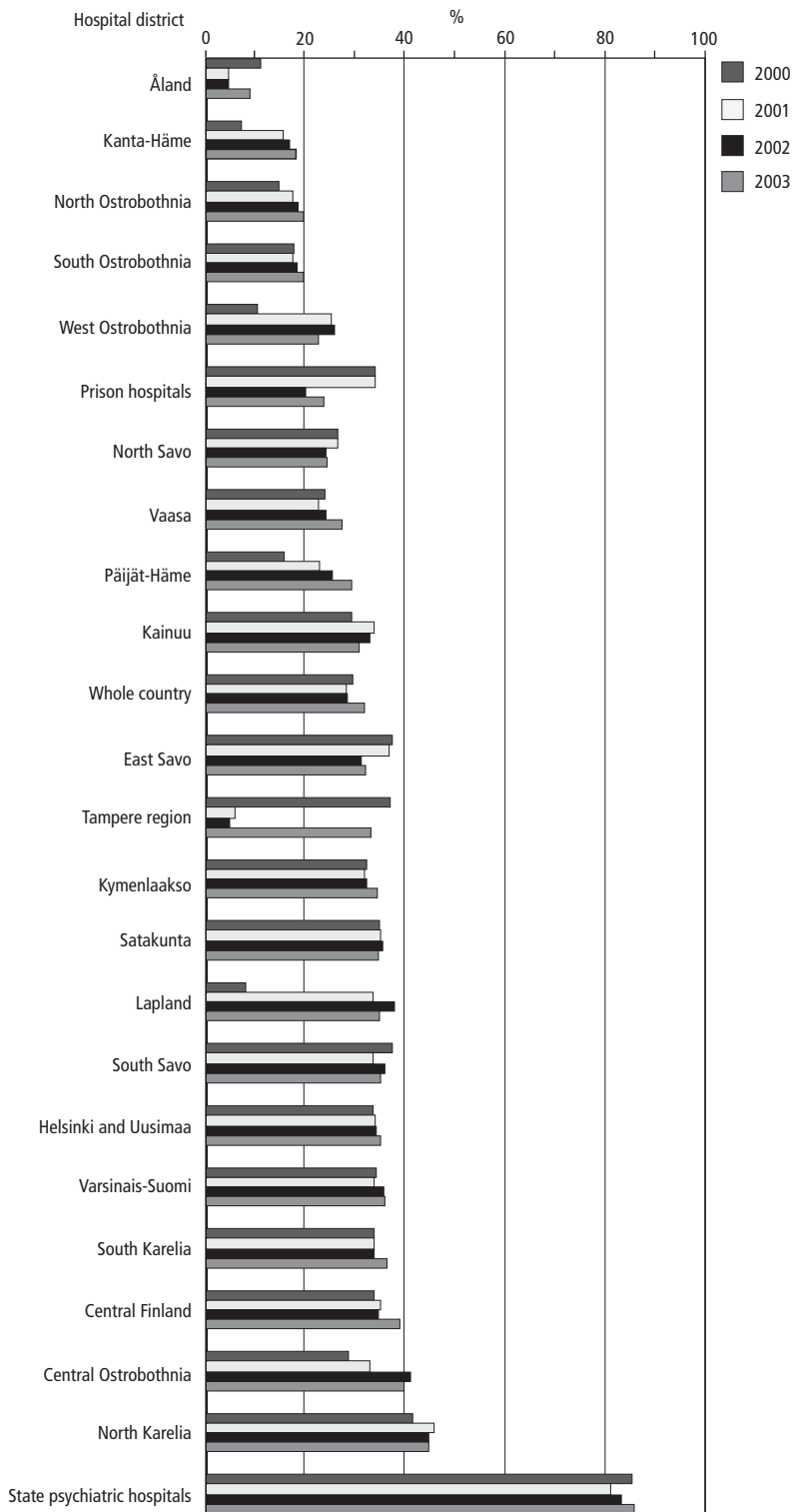


FIGURE 6. Percentage of involuntary psychiatric care patients (%) of all patients in psychiatric hospitals by hospital district, 1999–2002 (Source: Hilmo, STAKES)

The data on psychiatric hospital treatments clearly show the international trend, i.e. the reduction of psychiatric inpatient care as of the 1970s, which in Finland has been exceptionally steep. The reduction is due to long-standing inpatients' (e.g. elderly and mentally disabled persons) transfer elsewhere (Figure 7 and 8), shorter treatment periods and the switch from institutional housing to community care-based service housing.

While discharge and care registers were kept, the diagnostic system of classifying diseases has changed twice: in 1987 (ICD-9) and 1996 (ICD-10). This may have affected the entries of certain events and data. In addition, the query form used by hospitals has also changed several times, which makes the compilation of certain time series difficult. When studying the numbers of hospital stays, one should remember that practices to register department and hospital transfers as new treatment periods vary.

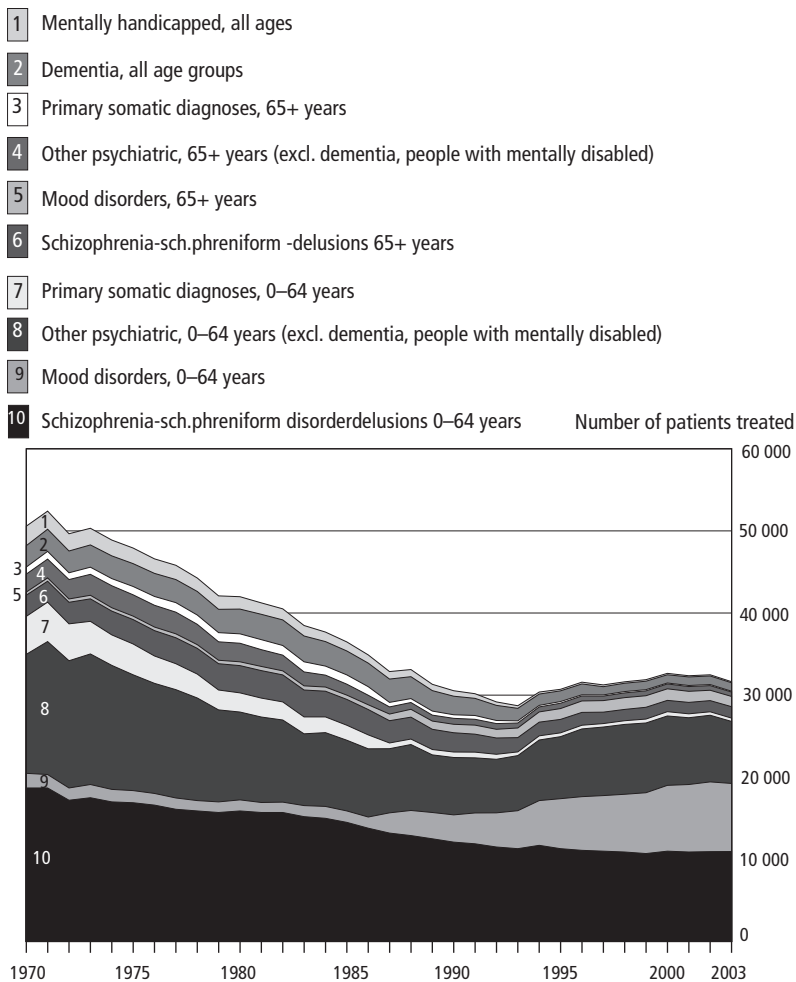


FIGURE 7. Number of patients treated in psychiatric hospitals for mental and behavioural disorders based on data from hospital discharge registers and care registers from 1970–2003 (Source: STAKES)

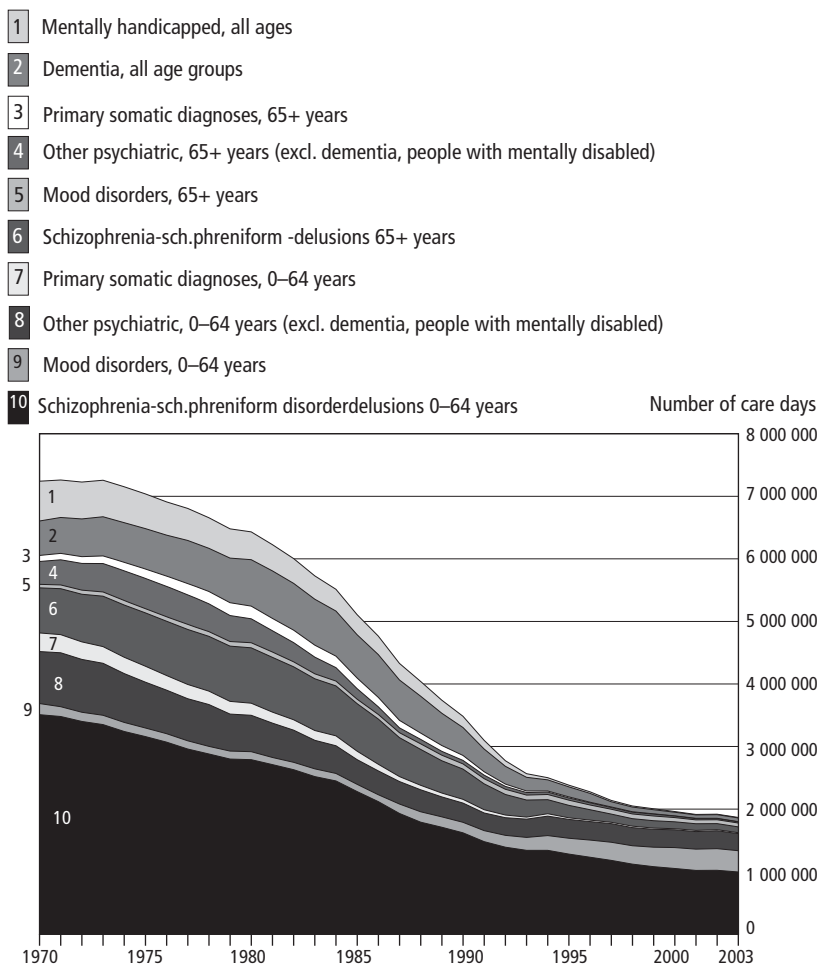


FIGURE 8. Number of hospital care days for mental and behavioural disorders from 1970–2003 (Source: STAKES)

3.1.3 Intermediate services

With the aim of supporting out-patient care and rehabilitation a number of intermediate services, such as housing, rehabilitative work and day nursing, were developed for mental health customers in the middle ground of inpatient care and community-based care. The services are organized by hospital districts, local authorities and private service providers. The public-sector services are provided as part of specialized medical care, primary health care or social welfare.

Private housing services today hold a key position in the rehabilitative and service chain for persons with severe mental disorders. Their rise is believed to have compensated at least partly for the cuts in the volume of hospital care. They offer controlled or subsidized housing services and have enabled patients to live outside psychiatric institutions proper. Both regional (Helsinki) and national quality criteria (Ministry of Social Affairs and Health 2001) have been created for the quality control of these services.

Since 1995, customers of psychiatric housing services have been counted annually at the end of each year. The data have been collected as part of the social welfare care register and on social welfare forms but also include the services provided by the health care organizations. The count also includes the housing services provided by private companies and organizations. The data for the social welfare care register have been collected uniformly from all service providers. The register data seem comprehensive, particularly from 1998 onwards.

Customer numbers for psychiatric services have gone up by a factor of more than two and a half from 1995 to 2003 (Table 2). During this period customers of private service providers have more than quadrupled, while the services provided by the local authorities and hospital districts have declined slightly. Companies and organizations today produce 86 per cent of all psychiatric housing services.

TABLE 2. Patients in psychiatric housing services by year end 1994–2003

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Provided by social affairs	569	523	577	631	188	231	354	356	449	384
Provided by health care	404	468	522	530	202	214	169	152	163	261
Provided by the private sector	863	889	1 075	1 172	1 701	2 512	2 567	3 131	3 567	4 090
Total	1 836	1 880	2 174	2 333	2 091	2 957	3 090	3 639	4 179	4 735

Sources: 1994–1997 Statistics on Municipal Activities (Statistics Finland), Health Care Activity Statistics (Association of Finnish Local and Regional Authorities) and the Care Register for Social Welfare from 1998 (STAKES)

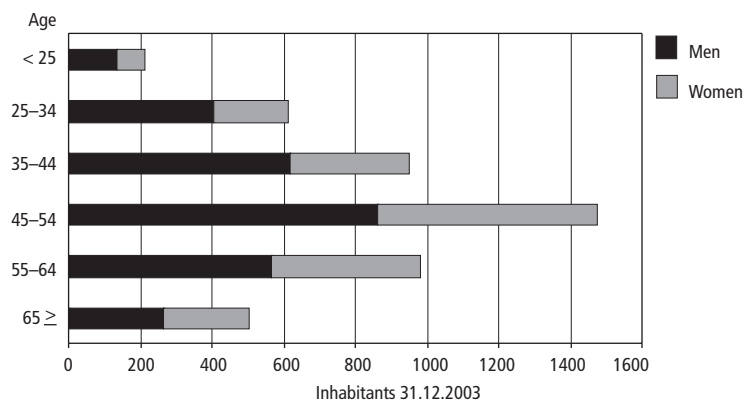


FIGURE 9. Age and gender of people in psychiatric housing services 31.12.2003 (Source: STAKES)

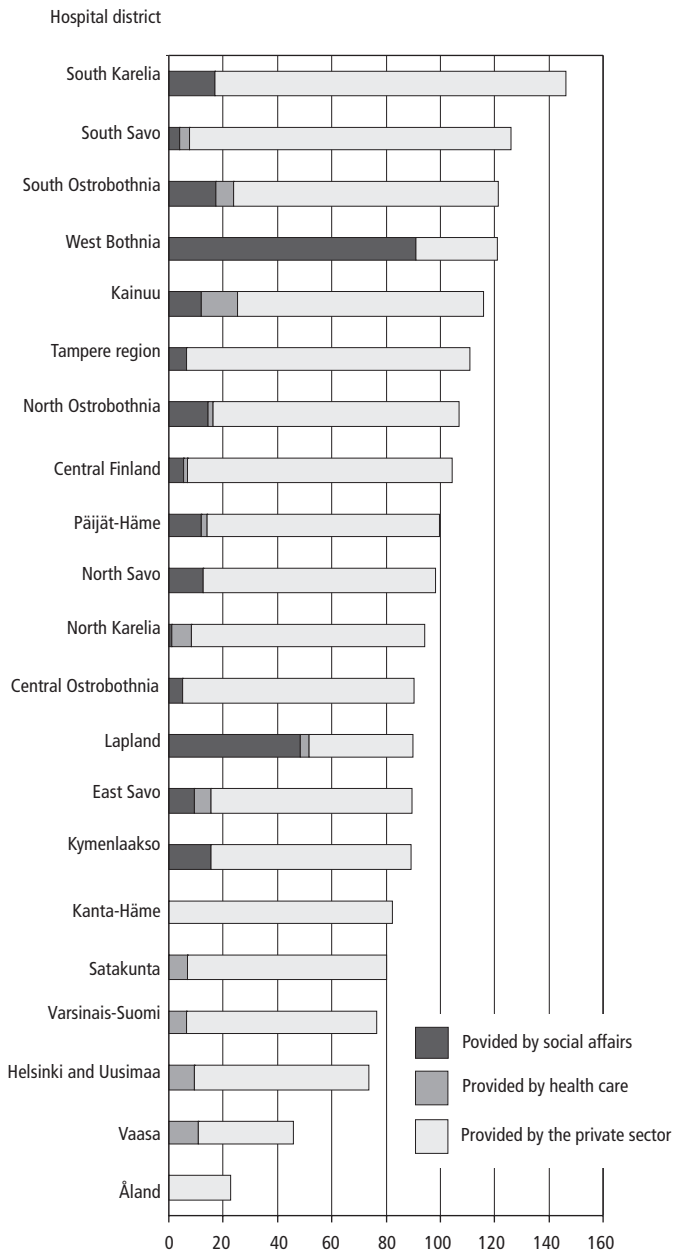


FIGURE 10. Psychiatric housing services by hospital district in 2003 (Source: Care Registers for Social Welfare, STAKES)

3.1.4 Psychiatric services for children and adolescents

Our present service system comprises numerous services which are aimed at supporting the development and psychological well-being of children and adolescents. The administrative sectors, which have the main responsibility for mental health services for children and adolescents, include social affairs and health, and education, but also youth affairs and labour administration. In addition to local authorities, there are several other parties providing services. The psychosocial services aimed at children, young persons and families with children form a multidimensional and at times disconnected entity. For example, both the child welfare services and the pupil personnel services of the education department are an important part of the network of expert organizations that provide mental health services for children and adolescents.

Psychiatric services for children and adolescents are part of specialized medical care and primarily the responsibility of hospital districts. Some local authorities do, however, have their own child or adolescent psychiatric out-patient units. It should be noted that the use of these services is not shown in Table 3.

The indicators describing the use of out-patient and inpatient psychiatric services for children and adolescents highlight the rise in the use of services that took place at the turn of the present century. Attention was then focused nationwide on mental health services for children and adolescents, and the State granted an extra supplement (nearly EUR 12 million) to the municipalities for services for children and adolescents. This allocation paid for 380 new posts (Ministry of Social Affairs and Health 2001) in the hospital districts, which should be taken account of in time series evaluation of services.

Other indicators related to child and adolescent mental health services include the statistics compiled by the child guidance and family counselling clinics, which are available online at: http://www.stakes.info/files/pdf/tilastotiedotteet/Tt15_03.pdf

TABLE 3. Specialized medical care: out-patient visits for mental health services by 0–19-year-olds, 1995–2003

	1995	1997	1998	2000	2002	2003
Child psychiatry	56 314	76 326	81 104	79 241	91 869	102 827
Adolescent psychiatry	58 615	66 655	67 324	91 982	81 993	104 215
Total	114 929	142 981	148 428	171 223	173 862	207 042

Source: Health Care Activity Statistics, SOTKA

TABLE 4. Institutional mental health care for 0–19-year-olds, 1999–2003

	1999	2000	2001	2002	2003
Treatment periods	9 917	10 890	10 316	10 739	10 337
Mean length of stay	25.6	26.5	25.1	26.2	27.5
Inpatient days	218 942	243 584	225 731	249 637	249 772
Patients	4 529	5 016	4 989	4 944	4 774

Source: STAKES

3.2 Professional groups involved in mental health work

A number of professional groups are involved in providing mental health services. They include general practitioners, psychiatrists, psychiatric nurses, psychologists, social workers, public health nurses, occupational health nurses and also occupational therapists and other experts. In addition, there are several other professional groups who engage in customer service or teaching, such as teachers or employment authorities, and have an important role in identifying mental health problems or referring patients to care. In Finland, psychotherapy has traditionally been provided by self-employed persons in the private sector, whose customers or patients have been reimbursed for their treatment by the Social Insurance Institution or in some cases by a private insurance institution against a justifiable application.

The proportion of professional people in the whole population of Finland who work in mental health services is of good western standard (WHO 2001). Their distribution, however, in the employment market has been clearly problematical and has been reflected in the concern expressed by the public about the insufficiency of professional help. It is possible that the structural change that has occurred in the mental health service system has contributed to the unrest in the labour market. It would appear that at least regionally the concern over the insufficiency of out-patient resources has weakened the enthusiasm of trained mental health staff to look for employment in the sector.

The National Board of Medicolegal Affairs (TEO) grants the licences for health care professionals and keeps a register of licence holders in Finland. Stakes publishes these statistics. Thus the register provides data on the numbers of persons who have been granted a licence to practice a profession in health care, but no information on where they work, if they work. Statistical information on the employment and workplace of physicians who have specialized in psychiatry is also available on Finnish Medical Association regular surveys which are online at: <http://www.laakariliitto.fi>

TABLE 5. Mental health professionals (mental health of adults of working-age) in Finland in 1990, 1995, 2000 and 2003

	1990		1995		2000		2003	
	no.	professional /10 000 people	no.	professional /10 000 people	no.	professional /10 000 people	no.	professional /10 000 people
medical practitioner	12 091	24.2	14 282	27.9	15 905	30.7	16 443	31.5
- psychiatry	535	1.1	728	1.4	882	1.7	976	1.9
- adolescent psychiatry	32	0.1	59	0.1	93	0.2	120	0.2
- geriatric psychiatry	14	0.0	16	0.0	14	0.0	18	0.0
- forensic psychiatry	17	0.0	18	0.0	26	0.1	35	0.1
- child psychiatry	131	0.3	161	0.3	188	0.4	205	0.4
registered psychologist*	..	..	3 249	6.3	4 111	7.9	4 635	8.9
psychiatric nurse**	..	..	7 352	14.4	9 031	17.4	8 622	16.5
psychotherapist*	..	..	1 485	2.9	2 441	4.7	3 112	6.0

*The Act on Health Care Professionals (559/1994) states that all psychologists and psychotherapists must be registered

**areas of specialization for nurses can no longer be differentiated after the beginning of 1999 when the educational system for nurses gradually became the polytechnic degree

Source: National Board of Medicolegal Affairs (TEO), STAKES

TABLE 6. Mental health professionals and medical specialists who graduate each year 1990–2003

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Doctors	463	470	524	591	707	712	621	642	631	508	414	495	467	448
- psychiatry	50	44	66	69	45	43	48	34	45	48	58	46	64	36
- adolescent psychiatry	2	6	5	5	7	7	8	6	3	6	12	8	12	8
- geriatric psychiatry - psykatri: geriatri	2	-	3	-	-	1	-	2	1	-	-	2	-	2
- forensic psychiatry	1	-	-	1	4	-	1	2	3	1	2	5	4	3
- child psychiatry	11	11	2	8	8	12	8	7	6	10	8	12	12	8
Psychology	..	..	..	..	..	..	202	177	194	193	196	181	237	208
Speech therapist*	..	..	..	..	..	..	47	28	37	44	46	35	43	97
Psychotherapist*	..	..	..	..	..	..	458	174	201	180	146	279	223	296

*The Act on Health Care Professionals (559/1994) states that all psychologists and psychotherapists must be registered

Source: National Board of Medicolegal Affairs (TEO), STAKES

TABLE 7. Placement of psychiatrists of working age in work from 1989 to 2002, data from the Finnish Medical Association Medical Questionnaire (Korkeila et al. 2003)

	Hospital	Health centre	Education/ research	Community care	Occupational health	Private practice	Other work	Total
1989	193	2	27	113	1	79	29	444
1990	213	3	30	121	14	84	30	482
1991	216	5	37	133	1	98	25	515
1992	220	5	38	147	3	101	24	538
1993	245	8	40	164	2	108	29	596
1994	278	9	37	177	2	113	28	644
1995	274	9	40	201	2	119	21	666
1996	315	12	43	209	2	119	20	720
1997	356	17	43	227	3	118	27	791
1998	330	20	40	214	3	128	26	761
1999	349	23	38	215	0	133	33	791
2000	387	34	42	197	3	138	35	836
2001	422	33	48	171	4	146	44	868
2002	390	28	50	191	4	153	48	864

TABLE 8. Respondents (n = 997 / 1075) to the psychiatrist questionnaire from each hospital district (Korkeila et al. 2003)

Hospital district	Men		Women		Total	
	N	%	N	%	N	%
Åland	2	0.5	1	0.2	3	0.3
South Karelia	4	0.9	13	2.3	17	1.7
South Ostrobothnia	13	3.1	11	1.9	24	2.4
South Savo	5	1.2	5	0.9	10	1.0
Helsinki and Uusimaa	166	39.2	221	38.6	387	38.8
East Savo	5	1.2	5	0.9	10	1.0
Kainuu	5	1.2	3	0.5	8	0.8
Kanta-Häme	10	2.4	18	3.1	28	2.8
Central Ostrobothnia	2	0.5	3	0.5	5	0.5
Central Finland	13	3.1	22	3.8	35	3.5
Kymenlaakso	7	1.7	15	2.6	22	2.2
Lapland	5	1.2	2	0.3	7	0.7
West Bothnia	1	0.2	3	0.5	4	0.4
Tampere region	38	9.0	57	9.9	95	9.5
North Bothnia	11	2.6	9	1.6	20	2.0
North Karelia	37	8.7	46	8.0	83	8.3
North Savo	27	6.4	45	7.9	72	7.2
Päijät-Häme	10	2.4	17	3.0	27	2.7
Satakunta	13	3.1	13	2.3	26	2.6
Vaasa	7	1.7	10	1.7	17	1.7
Varsinais-Suomi	43	10.1	54	9.4	97	9.7
Whole country	424	100	573	100	997	100

3.3 Psychiatric care

3.3.1 Pharmacotherapy

Pharmacotherapy is a treatment option for psychiatric illnesses where practices change in accordance with new research and development work. Over the last few decades, new medicinal products have been developed for the treatment of many psychiatric conditions, which have a growing role at least in the treatment of depressive and anxiety disorders. One aim of clinical trials and development has been to produce medicinal products whose effect mechanisms are known and effective and have a minimum of adverse effects. Over time, what has become a problem is the high cost of research and development, which means that the price of new medicinal products tends to rise beyond what is reasonable for both users and society.

Data on the use of psychopharmaceuticals can be collected by different means: through the Social Insurance Institution decisions on medicines in the Special Refund Category, through pharmacies' prescription data and the data collected from the wholesale trade in medicinal products. Psychopharmaceuticals are reimbursed by the Social Insurance Institution either under the Basic Refund Category or the Higher Special Refund Category. All medicines, for which a reasonable price has been approved by the Pharmaceuticals Pricing Board are entitled to a basic refund. The right to a special refund is granted on the basis of a diagnosis and description of the disease in accordance with separately agreed criteria. The consumption data produced by the National Agency for Medicines are based on pharmaceutical wholesalers' sales to pharmacies and hospitals. The prescription data and the statistical data provided by the Social Insurance Institution (Kela) are based on the data that the pharmacies supply to Kela. Thus, the Kela and Pharmaceutical Information Centre data are both related to the sale of medicinal products.

A trend revealed by the statistics is that consumption measured as defined daily doses has multiplied over the past ten years or more. Key factors in this trend have included the arrival of new, easy-to-use, multipurpose anti-depressants (particularly selective serotonin re-uptake inhibitors, cf. Figure 12) to the market, the expansion of their purpose of use to other disorders than depressive conditions, and clearly longer treatment periods.

As regards the increase in the consumption of psychopharmaceuticals by the elderly, concern has been expressed about whether the increase merely supplies an existing demand or whether it is a consequence of the lack of other therapeutic services.

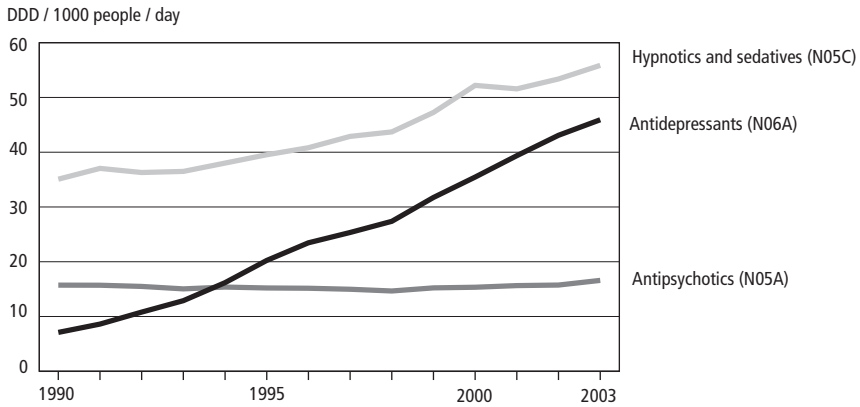


FIGURE 11. Consumption of psychopharmaceuticals based on pharmacy sales 1990–2003 (Source: National Agency for Medicines 2002, National Agency for Medicines 2004)

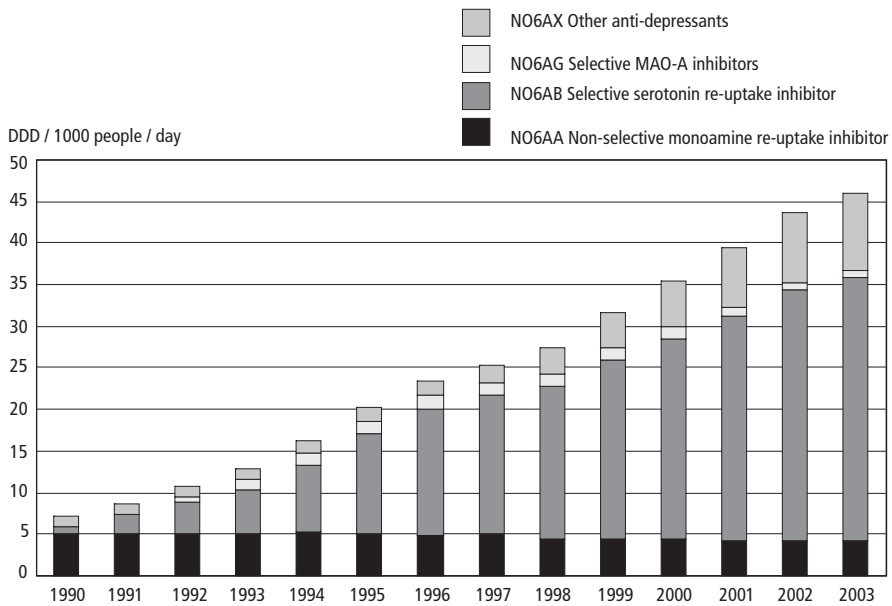


FIGURE 12. Consumption of anti-depressants based on pharmacy sales 1990–2003 (Source: National Agency for medicines)

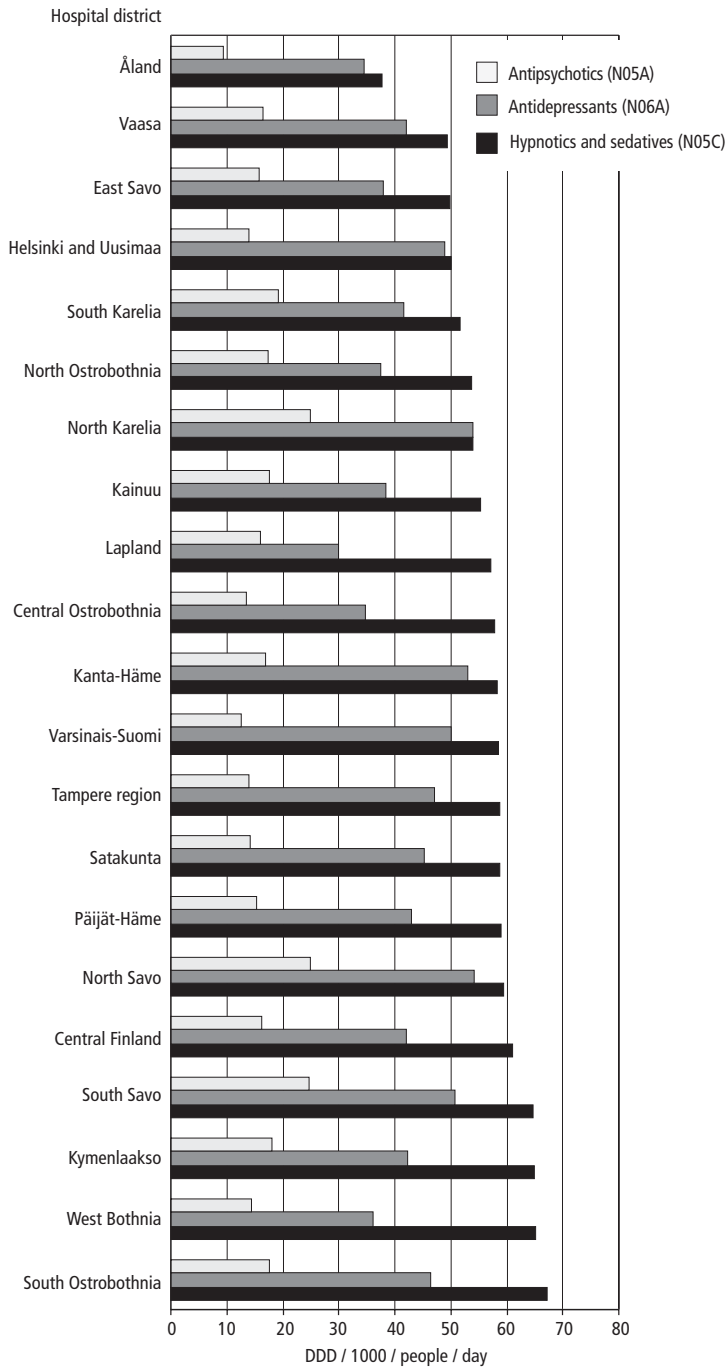


FIGURE 13. Use of medication by type of drug in hospital districts in 2003 (Source: National Agency of Medicines)

3.3.2 Psychotherapy

Psychotherapy is professional and systematic treatment based on theory and interaction, conducted primarily by private, specially trained therapists. Psychotherapy as a form of treatment is characterized by the fact that it requires special abilities from the person conducting the therapy and the patient, and that it is not suited for all patients or for the treatment of all disorders. On the basis of research and clinical practice, its key uses include various types of depressive conditions, anxiety disorders, some personality disorders and possibly select developmental and other crises. Today, there are many different forms of psychotherapy, which vary substantially, for example, as regards the frequency of visits, total length and the techniques used. Current problems include shortage of different forms of psychotherapy and trained therapists, which is why reports have been compiled about systematic ways of increasing training for therapists. On the other hand, the funding system for psychotherapy and referral of patients to treatment face pressures to change. In practice, the provision of psychotherapy is poor in the public sector and available mainly for special groups, such as young people and students.

The Social Insurance Institution (Kela) has been supporting discretionary, rehabilitative psychotherapies, if they are believed to maintain a person's working ability or promote the completion of vocational or professional qualifications. Since Kela has been the single most important financer of private psychotherapy, the most extensive data on the total volume of psychotherapies in process is available on Kela's rehabilitation decisions. Up to now, Kela's rehabilitation allowance has been granted primarily to support traditional long-standing psychotherapies given once or twice a week. It is possible that the data available on the rehabilitation decision does not provide an absolutely truthful picture of the current and particularly not of the future situation concerning the entire psychotherapy field. It may be that the number of shorter term and less frequent therapies will increase because many treatment recommendations emphasize the efficacy of such forms of therapy and also because their availability is improving.

TABLE 9. Numbers of patients receiving discretionary psychotherapy provided by the Social Insurance Institution and cost of therapy, 1992–2003 (Source: Social Insurance Institution)

	Those who have had psychotherapy		EURm		
	Total	Children and the young	Rehabilitation	Psychotherapy	%
1992	4 264	–	49.7	8.4	16.8
1993	4 860	–	52.2	8.8	16.8
1994	5 490	–	56.6	9.5	16.8
1995	5 407	–	60.0	10.1	16.8
1996	5 437	–	58.2	7.3	12.6
1997	5 046	–	60.1	7.2	12.0
1998	5 607	–	67.8	8.1	12.0
1999	6 206	–	78.1	9.0	11.5
2000	7 030	265	80.6	10.7	13.2
2001	8 265	1 390	81.6	12.3	15.1
2002	10 625	3 658	90.6	17.2	19.0
2003	10 309	4 669	94.1	20.5	21.8

NB. Therapy was provided for 16–64-year-olds in 1996–1999 and for 5–64-year-olds from the beginning of 2000

TABLE 10. Percentage of the population aged 0–64 by hospital district receiving discretionary psychotherapy provided by the Social Insurance Institution in 1992, 1996 and 2003 (Source: Social Insurance Institution)

	1992		1996		2003	
	No. of cases	Per mille of those age 0–64	No. of cases	Per mille of those age 0–64	No. of cases	Per mille of those age 0–64
Helsinki and Uusimaa	1 951	1.7	2 600	2.2	4 121	3.3
Varsinais-Suomi	536	1.5	686	1.8	1 097	2.9
Satakunta	77	0.4	96	0.5	226	1.2
Kanta-Häme	93	0.7	148	1.1	209	1.5
Tampere region	333	0.9	351	0.9	985	2.6
Päijät-Häme	107	0.6	116	0.7	301	1.7
Kymenlaakso	38	0.2	58	0.4	156	1.1
South Karelia	55	0.5	66	0.6	256	2.4
South Savo	43	0.5	28	0.3	160	1.9
East Savo	17	0.3	25	0.4	65	1.3
North Karelia	132	0.9	112	0.7	170	1.2
North Savo	290	1.3	392	1.8	585	2.8
Central Finland	136	0.6	189	0.8	372	1.7
South Ostrobothnia	31	0.2	49	0.3	252	1.6
Vaasa	63	0.5	79	0.6	193	1.4
Central Ostrobothnia	26	0.4	30	0.4	77	1.2
North Ostrobothnia	264	0.8	300	0.9	730	2.2
Kainuu	12	0.1	30	0.4	119	1.8
West Bothnia	20	0.3	28	0.5	55	1.0
Lapland	36	0.3	23	0.2	137	1.4
TOTAL	4 264	1.0	5 437	1.2	10 309	2.3

3.4 Unemployment and pensions

Psychiatric or mental health disorders are today the most common diagnostic group for granting disability pensions. The most drastic change in this direction did not take place until the 1990s, which has from time to time aroused vigorous public debate on the reasons for such a development. Since the prevalence of mental disorders has not increased over the same period of time, it would seem to indicate that the significance of mental disorders for people's functional capacity has somehow changed. This may in some way be linked with the changing role of the care and service system on the one hand and on the other, with the changes affecting working life. Thus it remains to be seen, whether early recognition and treatment of mental disorders should be improved and whether working life and its demands today contain features which make it difficult for those suffering from mental disorders to cope.

The Social Insurance Institution and private employment pension providers grant disability pensions and the periods of rehabilitation that often precede them and keep statistics on them, which the Central Pension Security Institute then collates. The current practice is that Kela and employment pension providers first make a separate ruling on a pension application which is then harmonized through a process of negotiations. If pension recipients have not accrued enough employment years, Kela will pay their pension in full. As of 1996, however, if the amount of pension paid by the employment pension institution exceeds a certain threshold, Kela no longer pays its contribution.

TABLE 11. Breakdown of groups who receive employment pension by illness and pension scheme 31.12.2003
Source: Statistical yearbook of the Social Insurance Institution 2003

Diagnostic category	Employment pension		Basic pension		Total	
	no.	%	no.	%	no.	%
F00-F99: Mental and behavioural disorders	75 302	35.9	31 833	72.4	107 135	42.2
M00-M99: Diseases of the musculo-skeletal system and connective tissue	61 661	29.4	1 096	2.5	62 757	24.7
I00-I99: Diseases of the circulatory system	20 449	9.7	365	0.8	20 814	8.2

TABLE 12. People who were awarded disability pension in 2003 according to illness
Source: Statistical yearbook of the Social Insurance Institution 2003

Diagnostic category	Employment pension		Basic pension		Total	
	no.	%	no.	%	no.	%
F00-F99: Mental and behavioural disorders	7 686	30.5	5 967	42.3	8 905	33.3
M00-M99: Diseases of the musculo-skeletal system and connective tissue	7 835	31.1	3 454	24.5	7 933	29.7
I00-I99: Diseases of the circulatory system	2 331	9.3	959	6.8	2 328	8.7

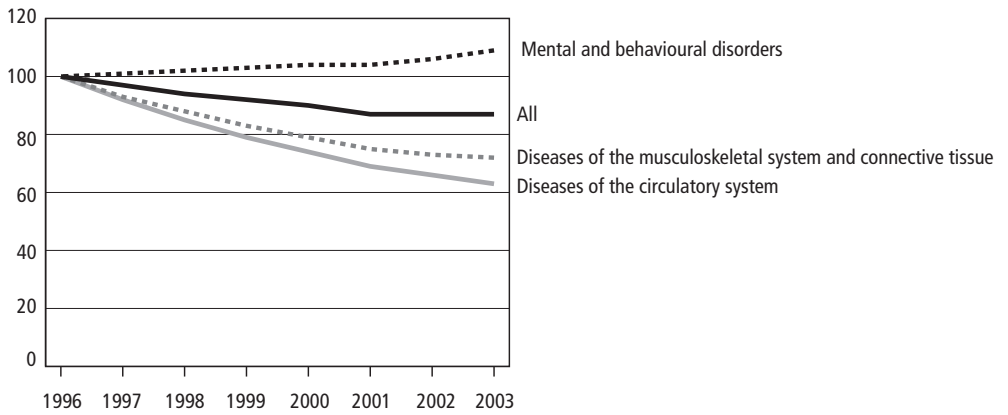


FIGURE 14. All pension schemes: change in the number of disability pensions in selected diagnostic categories 1996–2003 (Source: Social Insurance Institution)

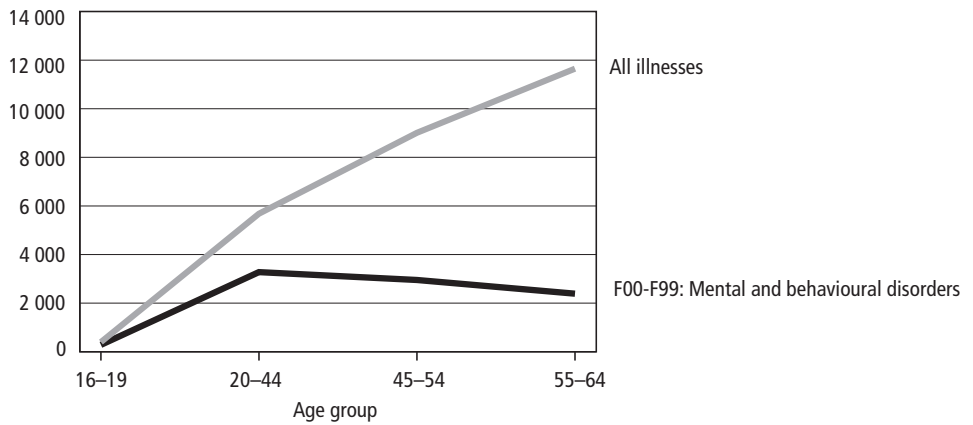


FIGURE 15. New disability pensions awarded in 2003 by age group (Source: Social Insurance Institution)

3.5 Funding and costs

The funding of social welfare and health care services has experienced significant changes since the 1990s. Unresolved questions that still need changes include the implementation of the local authorities' obligation to provide services, outsourcing and its management, cost accountability between central and local government and the various sectors of social welfare and health services. Other issues include changes in central government forms of funding and the relationship between psychiatric services and other specialist fields of medicine.

Mental health services are funded by the local authorities, the Social Insurance Institution, employment pension providers and the customers themselves. Central government funds are channelled to the local authorities through a system of transfers, allocation of project funds and upkeep of State mental hospitals. The Finnish Slot Machine Association funds mental health services by granting discretionary support to investment and development projects by private companies and foundations.

Creation of time series on the funding and costs of mental health services is problematical. No cost data are available for the whole country, because different local authorities arrange their mental health services very differently and their cost data are insufficient. The mixed service system also obstructs the compilation and comparison of cost data at local level. Service costs should be known, because the percentage of the care of mental health problems of all social welfare and health service costs is substantial. Cost comparisons of different service systems would be important for the targeting of services, as efficient use of mental health resources increases the effectiveness of the system as a whole and improves allocation of funds in accordance with the demand.

Large (11) and medium-sized towns (18) have together reviewed their public health care costs over the past few years. The model is based on the development work carried out by the Helsinki Public Health Department. The material collected by the two types of town together is processed and reported annually by the Association of Finnish Local and Regional Authorities (Lahtinen & Palomäki 2003). The aim of the cooperation is to achieve uniform and reliable data, compare costs between the towns and monitor cost development of individual towns. Health care in this context is used to refer to extended health care, which covers psychiatric and somatic specialized medical care, out-patient and inpatient primary health care, and the social welfare office's community care for the over 65 year olds and 24-hour care for the elderly.

In the comparison of large towns, psychiatric inpatient and out-patient care accounted for 11 per cent and medium-sized towns 10 per cent of all costs of extended public health care costs in 2002. In both groups of urban centres the cost of psychiatric services has risen annually, as have health care costs in general. Figure 17 presents the development of psychiatric inpatient and out-patient care and of other public health care costs per inhabitant in large towns at the 2002 price level. The real per capita costs of psychiatric out-patient care were EUR 17 (28%) higher in 2002 than in 1998. Correspondingly, the per capita costs of psychiatric out-patient care were EUR 7 (8 %) higher than in 1998. At the same time, the per capita out-patient costs of somatic care increased EUR 23 (13 %), the costs of out-patient care EUR 17 (5 %) and other extended primary health care costs EUR 90 (13 %).

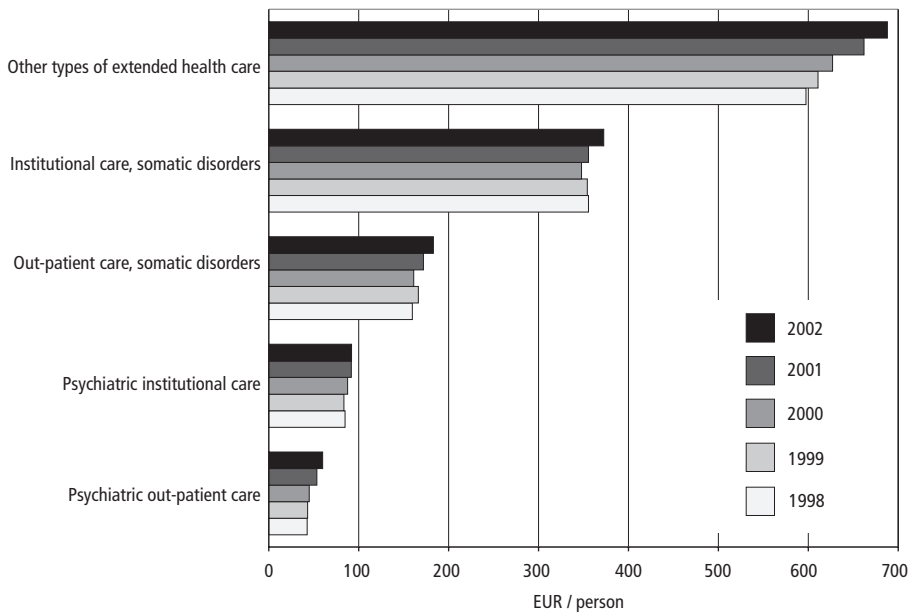


FIGURE 16. Costs of institutional and out-patient treatment of psychiatric disorders in large towns in 1998–2002, at 2002 prices (Source: Lahtinen, Palomäki 2003)

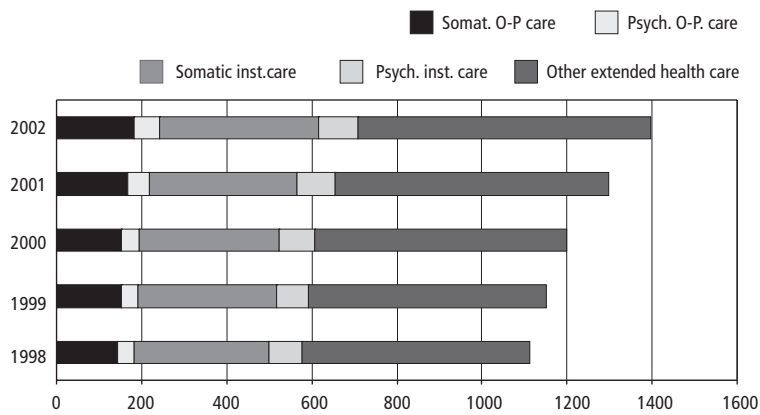


FIGURE 17. Age-related costs of institutional and out-patient treatment of psychiatric disorders in large towns, 1998–2002 (Source: Lahtinen, Palomäki 2003)

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