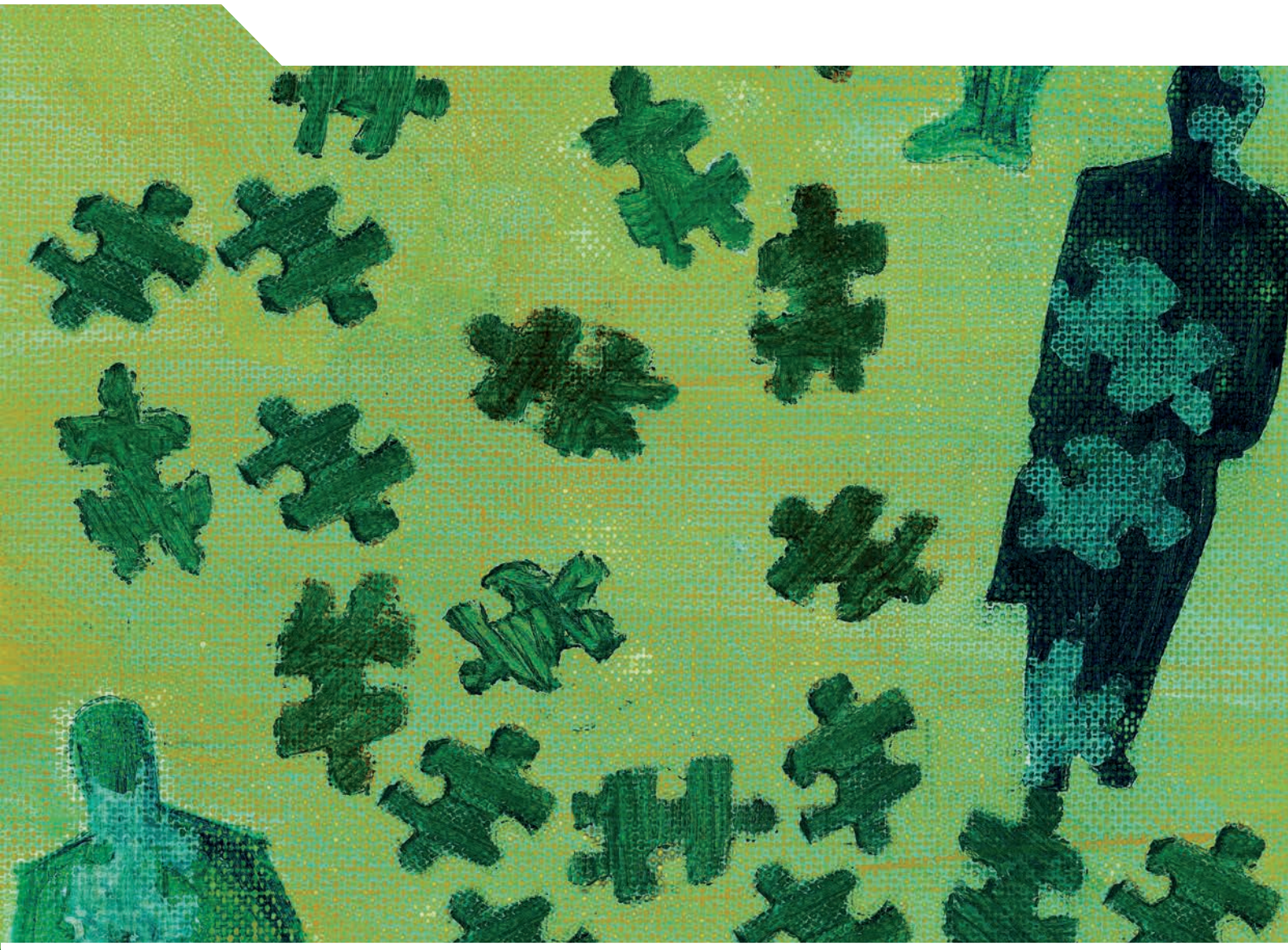
Sick on the Job? Myths and Realities about Mental Health and Work



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Mental Health and Work

Sick on the Job? Myths and Realities about Mental Health and Work

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Foreword

Tackling mental ill-health among the working-age population is becoming a key issue for labour market and social policies in OECD countries. It is an issue that has been neglected for too long, reflecting widespread stigma, fears and taboos. Employment opportunities for people with mental ill-health are low, many of those who are employed struggle in their jobs, and disability caused by mental ill-health is frequent and rising. OECD governments increasingly recognise that this situation is not sustainable and that policy has a major role to play in improving it.

Although mental ill-health poses one of the greatest new social and labour market policy challenges in OECD countries, relatively little is known about the connection between mental health, disability and employment. How much does mental ill-health affect employment opportunities and how does this vary by severity of illness? Is the changing workplace environment contributing to trends in mental health-related disability? To what extent is the increasing share of mental health-related disability a result of policy and system design? What is the role of the health care system with reference to the working situation of the patients? Why are youth in OECD countries increasingly moving into the disability benefit system without ever entering the workforce? Available evidence to address these questions is partial or incomplete; many important elements are still unknown or not understood fully; and misconceptions are widespread.

This report aims to identify the major knowledge gaps; to broaden the evidence base and thereby question some myths; and to provide a fuller picture of the underlying policy challenges. It is the first in a series of reports on the issue of mental ill-health and work. Forthcoming reports will look in depth into the policy options in selected OECD countries, with the aim to identify good practises and reform needs. A final report will bring the main lessons together. The overall aim of OECD's Mental Health and Work *review is to identify policies that ensure better labour market inclusion of people with mental ill-health and help workplaces prevent stress and job strain which, if untreated, could likely lead to adverse effects on workers' mental health.*

The review is also very timely, with policymakers across the OECD currently trying to promote job creation in the recovery from the Great Recession in the context of often limited fiscal resources. If anything, the deep crisis has increased job insecurity and the pressure on workers, thereby possibly contributing to additional psychological distress and further increasing the need to address the issue. Governments will have to continue pushing forward with structural reforms to promote an effective use of the labour supply and, in this regard, ensuring workers' mental health and improved labour market participation for people with mental ill-health will be essential. This is crucial to achieve both higher economic growth and greater social cohesion given the relation between (mental) health, employment, productivity and poverty.

The report consists of six chapters. Chapter 1 reviews methodological and measurement issues and lays out the key policy questions to be addressed. Chapter 2 investigates in depth the connection between mental health and work, with particular emphasis on job quality and working conditions on the one hand, and worker productivity on the other. Chapter 3 looks at the health aspect of the issue, including the effects of mental ill-health on work capacity and functioning, various aspects

related to treatment and broader mental health system challenges. Chapter 4 analyses the role of, and implications for, benefit systems and labour market services, with particular emphasis on trends and determinants of disability benefit receipt. Chapter 5 addresses a number of key issues concerning the mental health of youth, the role of the education system and the transitions from adolescence to adulthood and into the labour market. Chapter 6 summarises and concludes.

Work on this review was a collaborative effort carried out jointly by the Employment Analysis and Policy Division and the Social Policy Division of the OECD in the Directorate for Employment, Labour and Social Affairs. The report was prepared by Veerle Miranda, Christopher Prinz (project leader) and Shruti Singh from the OECD and Niklas Baer from the Psychiatric Services of the Canton Basel-Landschaft in Switzerland. Statistical work was provided by Dana Blumin and Maxime Ladaique. Special thanks for their contributions to the report go to Anna D'Addio, Sylvie Cimper, Ryo Kambayashi and Liviu Stirbat. Valuable comments were provided by Mark Keese, John Martin and Stefano Scarpetta. The report also includes comments received from the reviewed countries.

If not stated otherwise, the results presented and discussed in the report refer to the ten countries participating in the review: Australia, Austria, Belgium, Denmark, the Netherlands, Norway, Sweden, Switzerland, the United Kingdom and the United States. The OECD Secretariat would like to thank the national administrations in these countries for providing the data and policy information underlying the report. More precisely, administrative data were provided by the Department of Education, Employment and Workplace Relations/the Department of Families, Housing, Community Services and Indigenous Affairs of Australia; the Ministry of Labour, Social Affairs and Consumer Protection of Austria; the Belgian Health Insurance Agency; the Danish Pensions Agency; the Ministry of Social Affairs and Employment of the Netherlands; the Ministry of Labour of Norway; the Ministry of Health and Social Affairs of Sweden; the Swiss Federal Social Insurance Office; the Department for Work and Pensions of the United Kingdom; and the US Social Security Administration. Survey data were in most cases provided by the national statistical offices.

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Acronyms and abbreviations

ALMPs	Active Labour Market Programmes
CBI	Cognitive-Behavioural Interventions
CGI	Clinical Global Impression Scale
CMD	Common Mental Disorders
DDD	Defined Daily Dose
DWP	Department of Work and Pensions
EULFS	European Labour Force Survey
EWCS	European Working Conditions Survey
FAS	Family Affluence Scale
GHQ	General Health Questionnaire
GP	General Practitioner
HBSC	Health Behaviour in School-aged Children
HR	Human Resources
HSCL	Hopkins Symptom Checklist
ICD	International Classification of Diseases
ICF	International Classification of Functioning, Disability and Health
ISCED	International Standard Classification of Education
JCA	Job Capacity Assessment
JSCI	Job Seeker Classification Instrument
NGO	Non-governmental Organisation
NLSY	National Longitudinal Survey of Youth
NLTS	National Longitudinal Transition Study
OLS	Ordinary Least Squares
PES	Public Employment Service
RED	Research and Evaluation Dataset
RTW	Return to Work
SE	Supported Employment
SHARE	Survey of Health, Ageing and Retirement
SMD	Severe Mental Disorders
SSDI	Social Security Disability Insurance
SSI	Supplemental Security Income
TRtW	Therapeutic Return to Work
WHO	World Health Organization
YIF	Youth in Focus

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Executive Summary

Mental health is becoming a priority challenge for the labour market because of the high costs arising from mental ill-health

The costs of mental ill-health for the individuals concerned, employers and society at large are very large. A conservative estimate from the International Labour Organisation put them at 3-4% of gross domestic product in the European Union. Most of these costs do not occur within the health sector. Mental illness is responsible for a very significant loss of potential labour supply, high rates of unemployment, and a high incidence of sickness absence and reduced productivity at work.

The high costs of mental ill-health are a direct consequence of its high prevalence. At any one moment, around 20% of the working-age population in the average OECD country is suffering from a mental disorder in a clinical sense.* Lifetime prevalence has been shown to reach levels up to 50%. This implies that the risk of experiencing mental ill-health at any moment during working life is high for everyone.

Concerns about the adverse effects of mental ill-health are rising in all OECD countries. This is despite the fact that the prevalence of mental disorder has not increased. But because of the gradually reduced stigma and discrimination and greater public awareness, more cases of mental disorders are being identified and disclosed. It appears that this increased perception of mental health problems has gone hand-in-hand with a changed view on the work capacity of people with mental disorders, *i.e.* a more work-limiting evaluation of these problems. This would imply that better awareness has so far mostly led to more exclusion from the workforce. However, at the same time the job requirements in the workplace have increased, making it increasingly difficult for workers with mental ill-health to perform adequately.

The characteristics of mental ill-health are critical to address labour market challenges adequately

To prevent people with mental ill-health from dropping out of the labour market, characteristics and the diversity of mental illness need to be better understood. Severe mental disorders (SMD) are relatively rare. Most mental disorders are mild or moderate,

* Mental disorder in this report is defined as mental illness reaching the clinical threshold of a diagnosis according to psychiatric classification systems. The broader terms "mental ill-health", "mental illness" and "mental health problems" are used interchangeably and refer to mental disorders defined in this way but also include *psychological distress*, *i.e.* symptoms or conditions that do not reach the clinical threshold of a diagnosis within the classification systems (so-called "sub-threshold conditions").

frequently referred to as "common mental disorders" (CMD). Typically, three quarters of those affected by mental disorder have a CMD.

Mental disorders are characterised by an *early onset*, with the median age at onset across all types of mental disorders being around 14 years of age and 75% of all illnesses having developed by age 24. Anxiety disorders start particularly early in life and substance-use disorders typically in youth, whereas the first appearance of mood disorders shows a broader distribution across age, with more frequent onset in the thirties and forties.

Many mental disorders are *persistent* and show high rates of recurrence. The more chronic a mental disorder, the more disabling it is and the larger are the challenges for labour market inclusion. Similarly, several mental disorders often *co-exist*, sometimes also with physical health conditions, adding to both their disabling effects and the complexity of an adequate policy response.

Labour market outcomes of people suffering from mental ill-health tell a complex story

The available evidence on mental illness and its connection with employment is partial or incomplete, and many important elements are still unknown. Misconceptions are widespread due to the significant stigma attached to mental illness and a range of fears about people with mental illness in society and at workplaces.

Employment rates of people with mental disorders are higher than is generally thought. Based on population surveys, the employment rate of people with CMD is around 60-70%, or 10-15 percentage points lower than for people with no mental disorder. This seems a high rate but, given the large size of this group, this gap reflects a large output loss to the economy, and for the individuals concerned and their families. The corresponding employment rate of people with SMD is around 45-55%.

Many other people with mental disorders want to work but cannot find jobs. Unemployment is a key issue as people with SMD are typically 6-7 times more likely to be unemployed than people with no such disorder, and those with CMD 2-3 times. Moreover, there is a high share of long-term unemployment (as a percentage of total unemployment) among people with SMD, leading to a high risk of discouragement and labour market withdrawal.

At the same time, unemployment itself is very detrimental to mental health, whereas people with mental disorders who find a job see significant improvements in mental health. However, poor-quality jobs can be detrimental for mental health. This is of concern because workers with mental disorders are more likely than workers without mental illness to work in jobs which do not match well with their skills. They are also more likely than others to work in low-skilled jobs which tend to combine high psychological demand with low decision latitude – a combination likely to lead to *job strain*, *i.e.* unhealthy work-related stress, which indeed is a driver of poor mental health.

While many people with mental illness have a job, productivity losses are large

Workers with mental disorder are absent from work for health reasons more often than other workers, and if they are, they are away for longer. However, many workers with mental disorders do not take sick leave but instead may be underperforming in their jobs.

Productivity losses while at work are potentially large, with four in five of all workers with SMD reporting reduced productivity at work in the past four weeks. The figure for workers without a mental disorder is only one-fourth, whereas people with CMD report productivity losses almost as often as those with SMD. Due to the large number of workers with CMD, these large productivity losses are a key policy challenge.

Such high losses in productivity suggest that policies directed at sickness monitoring and sickness management are essential. But this approach is not enough because it implies that intervention and support is in many cases coming too late, if it is coming at all. Good-quality jobs, better working conditions and above all well-supported managers are needed to tackle the resulting higher likelihood of *involuntary* job loss, as well as *voluntary* job quits, of workers with mental ill-health.

When dropping out of the labour market, people with mental ill-health often rely on unemployment or disability benefits for a considerable period

Among people with SMD who rely on public benefits roughly half receive a disability benefit and the other half other working-age benefits. Due to their closer connection to the labour market, people with CMD receive other benefits more often than disability benefits, the ratio being roughly 2 to 1. Consequently, unemployment, social assistance and lone-parent benefits are as important in designing better policies for people with a mental disorder as disability benefits. The biggest challenge for these benefit systems is the identification of the mental health problems of their clients and the needs arising. There is a considerable lack of awareness of the importance of this issue.

The lack of action for the unemployed also creates big challenges for the disability benefit system to which people will often turn to at a later stage. Among new entrants to the disability benefit rolls those with mental disorders typically have been at a greater distance from the labour market at the time of their claim. This might also explain why employment measures offered to claimants with a mental disorder at this stage tend to be less successful than for other claimants.

Benefit claimants with a mental disorder are too easily classified as being unable to work. They are more often granted a *full* benefit immediately; when they are granted a *temporary* benefit initially, this is not *reassessed* properly but turned into a permanent payment later; their claims are less often *rejected*; and they are less likely to *exit* disability benefit for reasons of recovery or employment.

Young adults with a mental disorder are often granted disability benefit when they should be helped into employment

In many countries, young people with a mental disorder are granted a disability benefit too early and too easily, steering them away from the labour market on a permanent basis. Youth with a mental disorder struggle in the education system. Poor performance at school tends to lead to earlier school leaving, with negative repercussions in working life.

The challenges in helping youth with mental disorder are broad and include the education system, the transition into higher education and employment, and the mental health system. For instance, there is considerable lack of awareness, non-disclosure and under-treatment among adolescents and young adults, with a long gap of typically more than ten years between the onset of the mental disorder and the first contact with the treatment system, and more than 15 years until the first contact with the rehabilitative system.

One of the biggest challenges for the mental health system is the high rate of under-treatment…

Irrespective of age, people unaware that they have a mental disorder or unwilling to disclose it are unlikely to seek professional advice and treatment. The result is that among those with a CMD, some 80% do not receive any treatment. Even among those with a SMD, as many as one in two do not seek or receive treatment.

The low treatment rate is of concern because with treatment most mental disorders can get better. There is also evidence that "adequate" treatment improves work outcomes. This is another challenge for the mental health system: not only are treatment rates low, but among those who are treated only about 50% receive minimally adequate treatment, according to clinical studies. Moreover, even such clinically adequate treatments mostly do not focus on the employment situation of the patient.

If seeking support, people predominantly seek support from a general practitioner (GP). GPs, however, are generally not sufficiently trained and qualified to deal with the complexities of mental illness, in spite of the high prevalence of mental disorders in patients in a general practice. Moreover, mechanisms for referral to specialist health care are underdeveloped. This partly explains why so many patients do not receive treatment and, if they do, treatment is not adequate.

… but the mental health care system itself is also a barrier to higher employment

The mental health care system faces two important system-related challenges. First, it is directed predominantly towards people with SMD. It is often not well equipped for dealing adequately and comprehensively with the needs of people with CMD, or does not reach those people sufficiently. This is not an efficient use of resources.

Related to this, employers and companies so far are not a real partner for the mental health care system. A systematic approach towards employers does not exist. In line with this and despite the knowledge that employment is an important element in recovery, the mental health care system takes little responsibility for the employment outcomes of their patients.

Policies need to be redirected in a variety of ways

Policy can and must respond more effectively to the challenges for labour market inclusion of people with mental illness. A three-fold policy shift will be required thereby giving more attention to: *i)* common mental disorders and also sub-threshold conditions; *ii)* disorders concerning the employed as well as the unemployed; and *iii)* preventing instead of reacting to problems.

Two elements stand out as particularly important for policymakers: first, to intervene at the right time; and second, to co-ordinate interventions in a better way. The early onset of most mental disorders implies a need for a different way of looking at prevention and early intervention. Intervening when people claim a disability benefit will be far too late in most cases. The system complexity implies that progress can only be made by thinking beyond silos and developing inter-sectoral financial mechanisms and incentives.

Strong intervention is needed at various points in the lifecycle…

First, adverse effects of mental disorders among the young should be addressed at an age when adolescents attend school or undergo an apprenticeship, with early intervention and referral to services as appropriate, and by helping youth with mental disorders in their transition from adolescence to adulthood and from mandatory to higher education and into sustainable employment.

Second, with the relatively high rate of employment among people with mental disorders and the high productivity losses of those workers, workplaces are another key target for mental health policy. Essential factors include good working conditions which avoid job strain; sound management practices so as to minimise productivity losses; systematic monitoring of sick-leave behaviour; and help to employers to reduce workplace conflicts and avoid unnecessary dismissal caused by mental health problems.

Third, once unemployed, more needs to be done to prevent long-term unemployment and permanent labour market withdrawal of workers with mental illness, and to address the development of mental health problems among the long-term unemployed. Caseworkers in the employment service have yet to deal with this issue adequately, including by identifying systematically those suffering from mental ill-health, and assessing their work capacity and support needs.

Eventually, new disability benefit claims of people with mental disorder should also be prevented to the extent possible, and those on such benefits who are able to work be helped in their return to employment. Again, this requires a fuller assessment of problems which are complex and often involving co-existing and chronic illnesses, and better identification of the resulting work capacity and support needs. In this context, a stronger activation and compliance framework will be needed for both benefit applicants and benefit authorities. Success in return-to-work policies in turn also requires that workplaces receive more intense and appropriate support than is currently the case.

… and supports need to be co-ordinated in a much better way

At all stages of the lifecycle, interventions will have to involve better integrated services with the participation of a range of key actors and systems to work together, to share client information and to refer clients to each other. This will require co-operation and co-ordination of employment services, health services, education institutions, and benefit authorities. Health services in particular tend to be isolated and disconnected from other systems, with little or no emphasis on employment despite strong evidence that work is good for mental health and an important tool in a broader treatment strategy. In the longer

run, all stakeholders would benefit from the provision of integrated and effective supports and minimising system failures that hinder the provision of appropriate services.

The high prevalence of mental disorders among children, workers and the unemployed also means that several stakeholders outside of the specialised mental health sphere have a very critical role to play. Teachers, managers, public employment service caseworkers and general practitioners are key players in tackling mental health and work challenges in a new way; they have to be included in any successful policy strategy, and informed, trained and rewarded accordingly.

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Chapter 1

Measuring Mental Health and its Links with Employment

This chapter reviews methodological and measurement issues and lays out the key policy questions to be addressed. Mental ill-health is measured from national health surveys which use a reliable mental health instrument. A transparent methodology is used to make results comparable across different instruments, taking advantage of findings from epidemiological studies on the prevalence of mental disorders. These suggest that at any one moment around 5% of the working-age population have a severe and another 15% a common mental disorder. Both groups should be targeted by policy makers. The chapter discusses the characteristics of mental ill-health, including e.g. *the very early onset, and their implications for policy making. The key challenge to be addressed is the rising labour market exclusion attributable to mental ill-health despite no indication of an increase in the prevalence of such disorders. A framework for policy development is proposed, based on two dimensions, the severity of the mental disorder and the person's labour force status.*

1.1. Introduction

Psychological problems and emotional well-being are very high on the agenda of OECD governments, in the business world and among society at large. This is a reflection of the increasing attention being paid toward a hitherto neglected area. Indeed, mental ill-health[1] is becoming a key issue for the well-functioning of OECD's labour markets and social policies. This calls for a stronger focus on policies addressing mental health and work issues.

The economic burden of mental ill-health is large and multifaceted. This includes the direct costs to the health care system as well as the much larger indirect costs borne mainly by the social security system and the labour market. According to the American Psychiatric Association, the direct cost of treating and supporting mental illness in the United States is 17% of the total costs, the remainder being accounted for by decreased productivity, accidents and social welfare programmes (Bayer, 2005). Likewise for the United States, it was estimated that 31% of the costs of depression were direct medical costs and 62% workplace-related costs (Greenberg *et al.*, 2003). For Germany, it was estimated that one quarter of the costs of depression is for health care, some 30% for sickness and disability benefits and over 40% for reduced productivity while at work of those concerned (Allianz Deutschland/RWI, 2008).[2] For England, Thomas and Morris (2003) estimated the costs of lost employment using a human capital approach; they found the indirect costs of depression on employment and productivity to be 23 times larger than the direct costs falling to the health system. Several authors (*e.g.* Knapp, 2003) refer to the "hidden cost" of mental illness because of the widespread lack of knowledge about these indirect costs.

Despite this evidence pointing to the large indirect costs to the economy, there is only little awareness about the connection between mental health and work, and the drivers behind the labour market outcomes and the level of inactivity of people with mental ill-health. Understanding these drivers is critical for the development of more effective policies. This report aims to identify the knowledge gaps and begin to narrow them by reviewing evidence on the main challenges and barriers to better integrating people with mental illness in the world of work.

The purpose of this first chapter is to set the scene for the reader to be able to follow the remainder of the report. It discusses the definition and measurement of mental ill-health used in this report, summarises some key characteristics which distinguish mental ill-health from other illnesses, and lays out the key labour market and social issues that need to be addressed.

1.2. Defining and measuring mental health and ill-health

The definition of good and poor mental health

Mental health has been defined by the World Health Organization as "a state of well-being in which the individual realises his or her own abilities, can cope with the normal

stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community" (WHO, 2007). Good mental health relates to wellbeing and the ability to cope with adversity and to further develop one's own abilities. Mental ill-health falls into two categories:

- *Psychological distress* or symptoms that do not reach the clinical threshold of a diagnosis within psychiatric classification systems. Psychological distress is a phenomenon that can concern everybody from time to time.
- *Mental disorders* which do reach the clinical threshold of a diagnosis according to the classification systems. Mental disorders are on average more disabling and affect only a fraction of the adult population.

The predominant focus in this study is on mental disorders, *i.e.* people with a mental illness in a clinical sense.[3] The somewhat broader terms of "mental ill-health", "mental illness" and "mental health problems" are used interchangeably in this report and usually refer to mental disorders as defined above but occasionally include psychological distress, or sub-threshold conditions. Whenever reference is made to the prevalence of mental ill-health this refers to the mental-disorder definition.

Diagnosis versus *other characteristics*

Mental disorders are quite diverse in terms of their underlying diagnosis, ranging from major psychiatric impairments such as schizophrenia and other psychotic disorders, bipolar disorders and severe depression, severe personality disorders and severe substance abuse, to less severe disorders such as anxiety disorders or episodic depression, and lastly to symptoms such as anxiety and depression which are often a secondary condition in addition to a physical disability.

The focus of this report is not on the act of diagnosis itself but on the consequences of psychiatric diagnosis. The diagnosis gives important indications about possible work-related problems, but the extent of disability can vary significantly across individuals with the same diagnosis. Hence, diagnosis alone is insufficient to understand the consequences of a mental illness and the way it will develop but it gives essential information about possible work incapacities and the specific support needs.

Beyond the diagnosis, the severity of the disorder, its duration and its chronicity are the most important determinants of current and future disability, and therefore most important to understand the relationship between mental health and work. The more severe, enduring and chronic a mental disorder is, the larger is the impact on disability and work capacity.

Even so, "milder" forms of mental disorders are responsible for a high degree of losses of potential output, productivity and work days (Chapter 3). Probably, the detrimental effects of milder – and often not recognised or not diagnosed – forms of mental ill-health outweigh the effect of the most severe disorders in terms of the overall disability burden for society (see Chapter 3 and Kessler *et al.*, 2005). This is to do with the greater prevalence of mild and moderate relative to severe mental illness.

The focus in this report is therefore on people with severe, moderate and mild mental disorders (the latter two occasionally also referred to as "common mental disorders"), with occasional mention of sub-threshold mental illness in so far as it is important to prevent the latter from developing into mental disorders in a clinical sense.

Identifying the population affected by mental ill-health

Ideally, in-depth clinical interviews would be used to distinguish people with a mental disorder as defined above from those without such a disorder. Representative population surveys including clinical interviews are rare and where they exist, generally do not include the detail on social and economic variables needed to assess labour market outcomes.

Population surveys with sufficient labour market detail, conversely, rarely include information to measure the prevalence of mental ill-health. Clinical-epidemiological research suggests that asking people about the existence of a mental illness *directly* does not give reliable outcomes. However, as an alternative to direct questions, there are various mental health instruments – consisting of a set of questions on *e.g.* irritability, nervousness, sleeplessness, etc. – many of which have been validated in medical research as providing a very good proxy for a more in-depth clinical interview, *i.e.* as measuring the prevalence of a mental disorder.

Many of the results in this report are based on population household surveys which combine labour market information with a mental health instrument.[4] These instruments can also identify the severity of mental illness, allowing a better understanding of the sensitivity of outcomes to the severity of the illness.[5] Even so, cross-country comparability is restricted by the use of different mental health instruments in different countries (see Box 1.1), using overlapping but not necessarily identical questions. It will also be affected by cultural differences in responses even to the same questions.

However, the principal aim of this report is to measure and compare across countries the social and labour market *outcomes* of people with mental disorders. The purpose is not to estimate the prevalence of mental disorders as such. Numerous psychiatric epidemiological studies in many different countries over the past thirty years all find very similar proportions of the working-age population affected by mental disorders, *i.e.* very similar prevalence rates. There are some differences by countries and by type of illness but the overall prevalence found is very robust. This report takes advantage of this established fact and takes the prevalence rate as a starting point for the analysis.

Thus, in line with epidemiological studies, it is assumed that in every country 5% of the working-age population have a severe mental disorder and another 15% a moderate mental disorder. The report then compares labour market outcomes of the first 5% and the next 15% with the poorest mental health, as measured by the mental health instrument used in each country's population survey, with the outcomes of the 80% with the best mental health.

Under this assumption, first, the most adequate survey in each country (and also a number of international surveys) with the most reliable mental health instrument is identified. Then, the same method is applied in all cases: the questions of the instrument are used to build one indicator, with the 5% and 20% percentiles of the responses (roughly reflecting the assumed true average prevalence in the population) determining the prevalence and severity of mental ill-health: the respondents with the highest 5% are classified as having a severe mental disorder; the next 15% as having a moderate (or common) mental disorder; and the remaining 80% as having no mental disorder.

Figure 1.1 shows the result of this methodology on the basis of the 2010 Eurobarometer survey, for the six countries reviewed in this report which are included in this survey and for the total of all 21 countries covered in the survey (noting that the procedure is implemented

Box 1.1. **The main features of countries' population surveys used for this report**

Outcome measures and modeling results in this report are derived from ten national health surveys and three international surveys (Eurobarometer; Survey of Health, Ageing and Retirement [SHARE]; and European Working Conditions Survey [EWCS]).

Australian National Health Survey (2001 and 2007/08) and ***Australian Survey of Mental Health and Wellbeing*** (1997): the mental-disorder variable is based on the K-10 Kessler Psychological Distress Scale. The scale uses ten items on feelings in the past 30 days, including on tiredness, nervousness, hopelessness, restlessness, depression, and worthlessness. Each question has five answer categories (1 = none of the time, 2 = a little of the time, 3 = some of the time, 4 = most of the time, and 5 = all of the time); hence, the total score goes from 10 (no mental health problem) to 50 (very severe mental health problems).

Austrian Health Interview Survey (2006/07): the mental-disorder variable is based on the mental health and vitality items of the SF-36 scale, developed to measure quality of life and health. This subset uses nine items, including on tiredness, nervousness, happiness, peacefulness, energy, exhaustion and depression. Each question has five answer categories (1 = all of the time, 2 = most of the time, 3 = pretty often, 4 = some of the time, and 5 = never); hence, the total score goes from 9 (severe mental health problem) to 45 (no mental health problems).

Belgian Health Interview Survey (1997, 2001 and 2008): the mental-disorder variable is based on the GHQ-12 General Health Questionnaire, a screening tool for non-psychotic psychiatric disorders and a shorter version of the full GHQ-60 scale. Each item has four answer categories (less than usual, no more than usual, rather more than usual, much more than usual); hence, the total score goes from 12 (no mental health problem) to 48 (severe mental health problems).

Danish National Health Interview Survey (1994, 2000 and 2005): the mental-disorder variable is based on the mental health and vitality items of the SF-12 scale, developed to measure quality of life and health. Like in the case of Austria, this subset uses nine items, including on tiredness, nervousness, happiness, peacefulness, energy, exhaustion and depression. Each question has five answer categories (1 = all of the time, 2 = most of the time, 3 = pretty often, 4 = some of the time, and 5 = never); hence, the total score goes from 9 (severe mental health problem) to 45 (no mental health problems).

Dutch POLS Health Survey (2001-03 and 2007-09): the mental-disorder variable is based on the MHI-5 Mental Health Inventory, a scale with five questions aimed at identifying the absence of psychological distress; the items relate to depression and anxiety mainly. Each item has six answer categories, ranging from 1 (always/all of the time) to 6 (never/none of the time); hence, the total score goes from 6 (severe anxiety and depression) to 30 (no mental health problem).

Norwegian Level of Living and Health Surveys (1998, 2002 and 2008): the mental-disorder variable is based on the HSCL-25 Hopkins Symptom Checklist, a self-rating scale with 25 questions on the presence and intensity of anxiety and depression symptoms over the previous week. Some of the symptoms might also be interpreted as somatic. Each item has four answer categories, ranging from 1 (not bothered) to 4 (extremely bothered); hence, the total score goes from 25 (no mental health problem) to 100 (severe anxiety and depression).

Swedish Survey on Living Conditions (1994/95, 1999/2000 and 2004/05): The survey does not include a proper mental health instrument; instead, respondents are asked whether they "suffer from nervousness, uneasiness or anxiety". Three answer categories are given: yes serious; yes minor; No. The first two are used to estimate severe and moderate mental disorder, respectively. While such direct questions tend to underestimate the true number of people suffering from mental disorder, the number of people identified through this approach (3.6% and 15.2%, respectively) is very close to the assumed prevalence distribution of 5% and 15%.

Box 1.1. **The main features of countries' population surveys used for this report** *(cont.)*

Swiss Health Survey (2002 and 2007): the mental-disorder variable is based on a set of ten depression-related items: sadness, interest, fatigue, appetite, sleep, speed of actions, sexual desire, confidence, concentration, suicidality. Each question has three answer categories (1 = most of the days, 2 = sometimes, 3 = never); hence, the total score goes from 10 (very severe mental health problems) to 30 (no mental health problems).

Health Survey of England (1995, 2001 and 2006): the mental-disorder variable is based on the GHQ-12 General Health Questionnaire, a shorter version of the full GHQ-60 scale. Each item has four answer categories (less than usual, no more than usual, rather more than usual, much more than usual); hence, the total score goes from 12 (no mental health problem) to 48 (severe mental health problems).

US National Health Interview Survey (1997, 2002 and 2008): the mental-disorder variable is based on the abridged K-6 Kessler Psychological Distress Scale. The scale uses six items on feelings in the past 30 days, including on tiredness, nervousness, hopelessness, restlessness, depression, and worthlessness. Each item has five answer categories (0 = none of the time, 1 = a little of the time, 2 = some of the time, 3 = most of the time, 4 = all of the time); hence, the total score goes from 0 (no mental health problem) to 24 (very severe mental health problems).

Eurobarometer (2005 and 2010): the mental-disorder variable is based on a set of nine items: feeling full of life, feeling tense, feeling down, feeling calm and peaceful, having lots of energy, feeling downhearted and depressed, feeling worn out, feeling happy, feeling tired. Each item has five answer categories (1 = all the time, 2 = most of the time, 3 = sometimes, 4 = rarely, 5 = never); hence, the total score goes from 9 (no mental health problems) to 45 (very severe mental health problems). This survey covers all EU countries, including Austria, Belgium, Denmark, Netherlands, Sweden and the United Kingdom, as well as Norway and (for 2005 only) Switzerland.

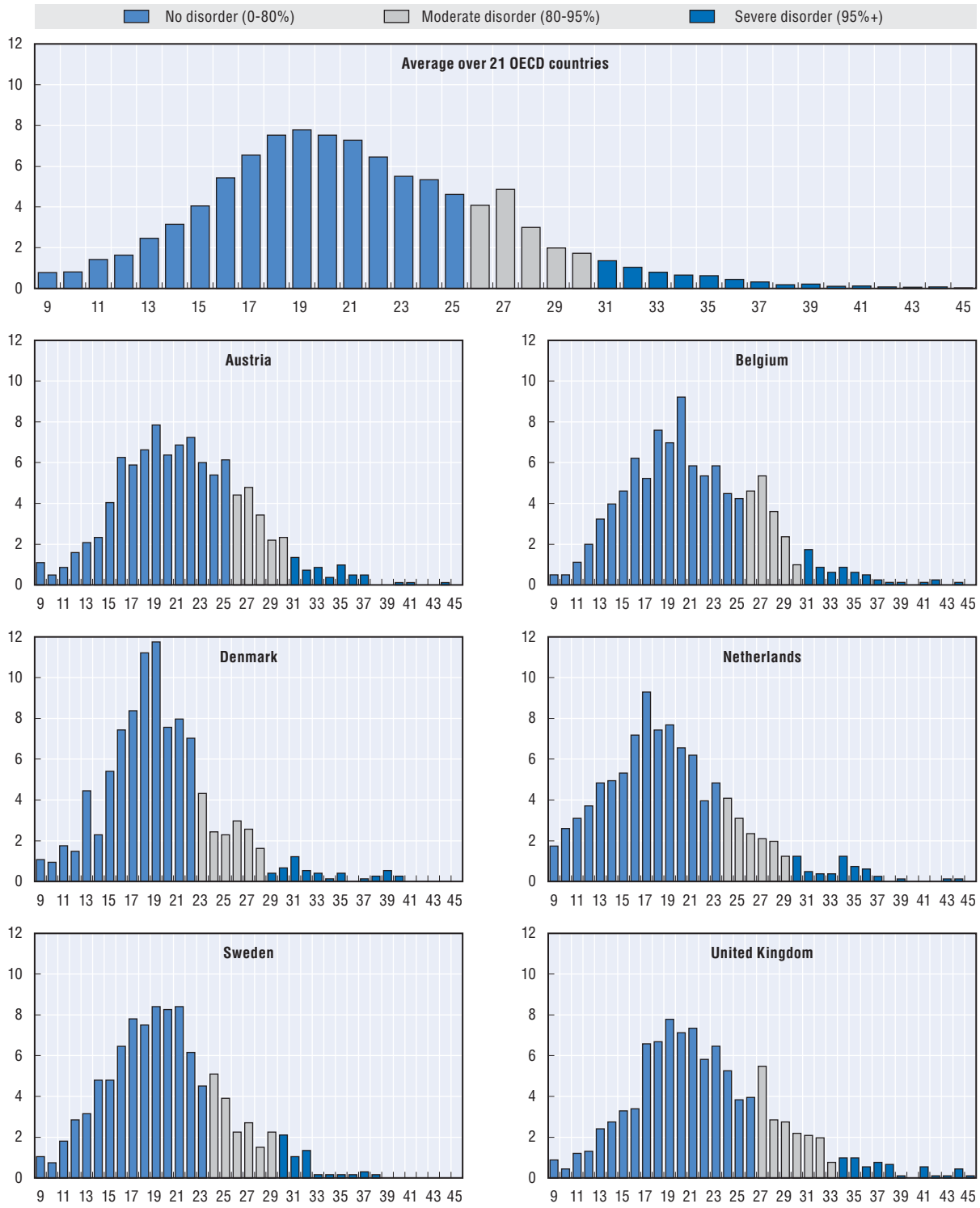
Survey of Health, Ageing and Retirement in Europe (SHARE, waves 1-3): the mental-disorder variable is based on the EURO-D depression scale, which was developed to allow comparisons of prevalence and risk associations between European countries. The depression scale is built on 12 items: depression, pessimism, suicidality, guilt, sleep, interest, irritability, appetite, fatigue, concentration, enjoyment, and tearfulness. Each item has two answer categories (0 = no, 1 = yes); hence, the total score goes from 0 (not depressed) to 12 (very depressed). This survey covers some 14 European countries, including Austria, Belgium, Denmark, Netherlands, Sweden and Switzerland.

European Working Conditions Survey (EWCS, 2010): the mental-disorder variable is based on a set of five items: feeling cheerful; feeling calm; feeling active; waking up fresh and rested; life fulfilling. Each item has six answer categories (1 = all of the time, 2 = most of the time, 3 = more than half of the time, 4 = less than half of the time, 5 = some of the time, 6 = at no time); hence, the total score goes from 5 (severe mental health problems) to 30 (no mental health problems). This survey covers all EU countries, including Austria, Belgium, Denmark, Netherlands, Sweden and the United Kingdom.

The construction of the groups with "severe", "moderate" and "no" mental disorder is the same in all countries, with an assumed prevalence of 5%, 15% and 80%, respectively. For international surveys, the severity distribution was carried out on a country-by-country basis. For surveys with more than one data point, the severity thresholds were calculated for the latest available year and then kept constant for all previous years. For surveys using a mix of positive and negative responses (like for example Austria and Denmark) answer categories were reordered to allow an accumulation of all responses.

Figure 1.1. **Mental health scores generally follow a left-skewed normal distribution**

Distribution of aggregate mental health scores, from 9 to 45, based on nine questions (1-5), in percentage of the sample



Source: OECD compilation based on Eurobarometer 2010.

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on a country-by-country basis). The distribution of mental health scores, *i.e.* the distribution of good and poor mental health in the sample population, follows a left-skewed normal distribution, with relatively few people reporting excellent mental health and very few people extremely bad mental health. The cut-off for severe mental disorder varies from a score of 29 (out of 45) in Denmark to 34 in the United Kingdom (average is 31), and for a moderate mental disorder from 23 in Denmark to 27 in the United Kingdom (average is 26 in this case).[6] The modal score for all 21 countries is 18, a score reported by around 8% of the sample population. Overall, the histograms suggest a stronger concentration in Denmark of mental health status around the mode compared with the other countries, and also a slightly better mental health status overall in Denmark and a slightly poorer status in the United Kingdom, with the other four countries all showing distributions which are similar and also similar to that of the average of all 21 countries.

What is the advantage and what are the implications of this approach? First, this allows comparisons to be made of labour market outcomes across a wide range of countries which use similar but not identical instruments to measure the prevalence of mental disorders. Given that some of these instruments are validated and others not, this approach – which implies using a predefined imposed mathematical threshold for all instruments – permits a meaningful cross-country comparison of otherwise not necessarily comparable measurements, or study populations. Again, this is because the aim is not to measure the prevalence of mental disorders but to compare labour market outcomes of similar groups of the population.

The robustness of this approach can be checked using data from the Swiss Health Survey which contains two different instruments; a depression scale with ten items and three answer categories each, and a general mental health scale with five items and five answer categories each. The two scales show significant overlap but they are not identifying the same people as severely, moderately and not mentally ill: three-quarters of all respondents are found in the same severity group with both instruments, with the best fit for those with no mental disorder and the worst fit – not surprisingly – for the middle group. However, and this is what matters most for the reliability of the estimation procedure, resulting outcomes are very robust. For instance, on both instruments people with no mental disorder have an employment rate of 80-81%, those with a moderate disorder around 76% and those with a severe disorder of 63-67%. In other words, both instruments although not identifying exactly the same people as severely or moderately mentally ill, are able to provide a good estimate of the employment gap or disadvantage by the severity of mental disorder.

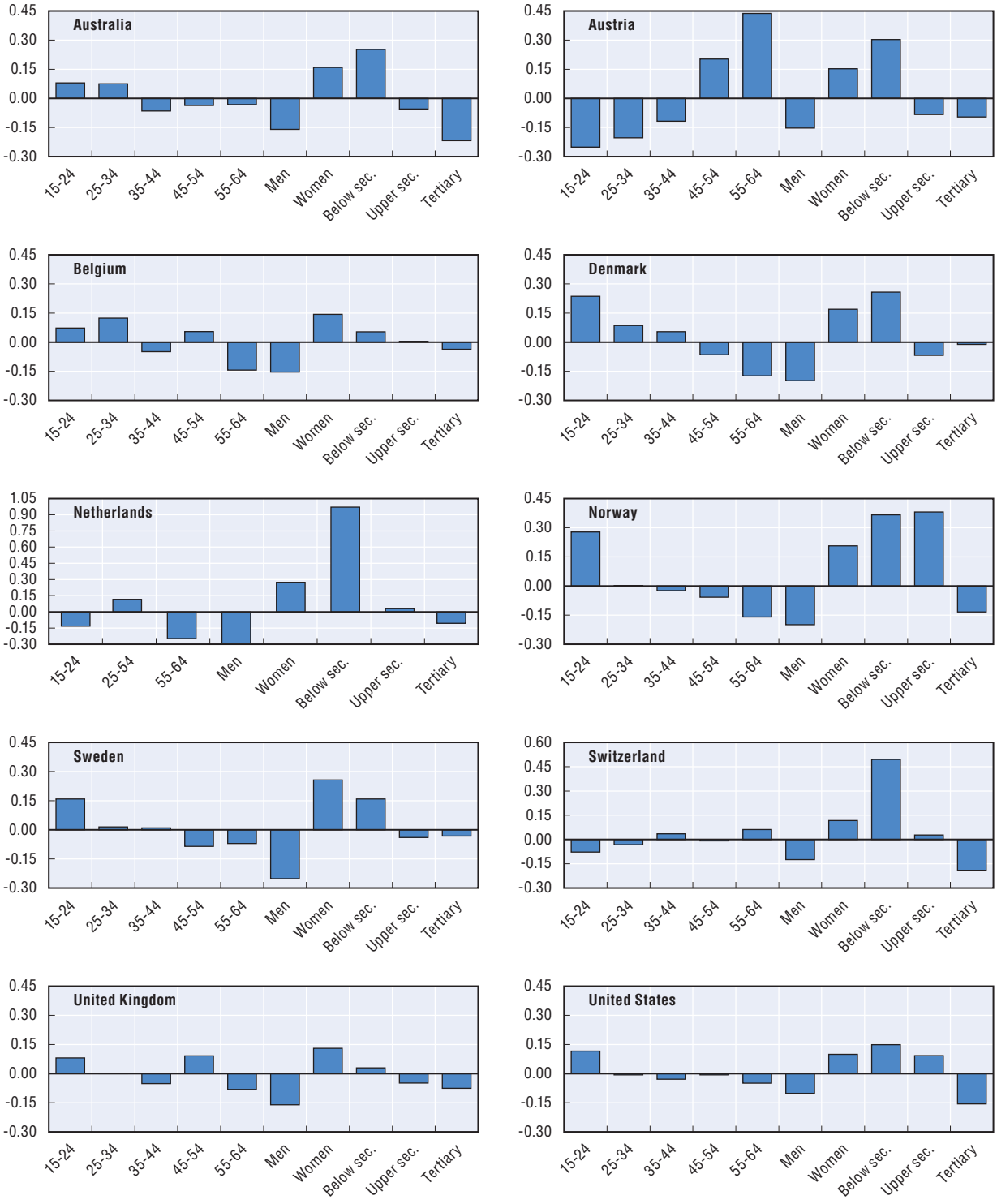
To conclude, the chosen approach allows an assessment of the impact of mental disorder on social and labour market outcomes, and a comparison of the relative disadvantage of people with severe and moderate mental disorder in different national contexts. Results in the substantive chapters (Chapters 2 to 5) demonstrate the usefulness of this approach. However, it is based on an assumption and by construction cannot be used to draw any conclusions about differences in the prevalence of mental disorders across countries and over time. This type of information is widely available from epidemiological studies.

Socio-demographic characteristics of people with mental disorders

Following this approach, Figure 1.2 shows the resulting distribution of the 20% of the population with the poorest mental health status in each country (based on national health surveys) along a number of socio-demographic characteristics. Women and people

Figure 1.2. **The prevalence of mental disorders varies with age, gender and level of education**

People with a mental disorder (either severe or moderate) by age group, gender and educational attainment, relative to the overall prevalence in the working-age population, selected OECD countries, late 2000s



Note: Below secondary education refers to ISCED 0-2, upper secondary to ISCED 3-4 and tertiary to ISCED 5-6 (International Standard Classification of Education).

Source: National health surveys (see Figure 1.3).

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with low educational attainment are highly over-represented in the group of people with a mental disorder in all countries. Differences across age are small in most cases, with some over-representation of young adults and some under-representation of older workers. Austria and to a lesser extent also Switzerland seem to be outliers in this regard, with an older average age of those with a mental disorder.

1.3. Towards a better understanding of the characteristics of mental ill-health

Mental health problems often pose particular challenges for labour market policies and institutions because of the nature of these problems and the way they are perceived and responded to by society. For instance, mental ill-health is often hidden, be it because people themselves are not fully aware of their illness, because the illness is not disclosed, or because the environment is not willing or capable of taking note of the problem. Understanding better the peculiarities and features of mental illness is an important prerequisite for policy makers to be able to adjust systems in the right way.

Early onset and disclosure

While mental illness just as any other illness can develop at any age, most mental health problems start early in life. Evidence suggests that around 50% of all mental disorders have their onset during childhood and adolescence (Kessler *et al.*, 2005). This is because the origins of most mental disorders are a mix of specific genetic predispositions, the personality, upbringing, and (traumatic) life events. The early onset of these illnesses does not imply that problems and risks are always identified at this early age. On the contrary, often problems are only discovered and consequently treated – provided they are treated – years if not decades after their initial commencement.

Another important aspect is the late disclosure of mental health problems. Initially and possibly for quite a while, people will often not be aware of their problems themselves. Once they are, the problem has yet to be discerned by others. In the early years during childhood and adolescence, the issue often is one of identification, while during adulthood and especially at the workplace the main issue is disclosure.[7] Despite the existence of good evidence-based treatment for most mental illnesses, it is not so clear whether or not identification and disclosure is always a good thing in view of the stigma coming with it. Early identification among children can also lead to medicalisation and an illness career and make it difficult for the person to get into the open labour market. Similarly, disclosure at the workplace might lead to people losing their jobs because their employers and co-workers are unable to manage the situation.

Mental disorder and disability

An important question for policy makers is the extent to which mental disorders are disabling (see definition further below). Many even severe illnesses are not, or not necessarily, disabling. Data from the Survey of Health, Ageing and Retirement (SHARE), a survey that covers a large range of OECD and non-OECD countries mostly in Europe, for example show that only a minority of those people with a reported mental disorder also have a disability (Table 1.1): just over one-third of those with a severe mental disorder, and less than one-fifth of those with a moderate disorder.[8]

In the latter group, it is those with co-morbidity – people with a mental disorder and a physical health problem – who report disability while those having a moderate mental disorder only are *not* more likely than those without a mental disorder to report a

Table 1.1. **The majority of mental disorders do not lead to disability**

Proportion of people with a mental disorder, by severity and co-morbidity, who also report a disability

	Disability status		
Mental health status	No disability	Disability	*Total*
Severe disorder	65.1	34.9	*100.0*
Moderate disorder	82.3	17.7	*100.0*
Co-morbid disorder	73.6	26.4	*100.0*
Mental disorder only	96.0	4.0	*100.0*
No disorder	94.3	5.7	*100.0*
Total	90.9	9.1	*100.0*
Severe disorder	3.6	19.6	5.1
Moderate disorder	14.1	30.4	15.6
Co-morbid disorder	13.4	48.2	16.5
Mental disorder only	4.4	1.8	4.2
No disorder	82.2	50.0	79.3
Total	*100.0*	*100.0*	*100.0*

Note: Results are based on all countries covered in the SHARE survey.
Source: OECD calculations based on the Survey of Health, Ageing and Retirement (SHARE) covering the population aged 50-64.

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disability.[9] SHARE data only cover the population aged 50-64; given the age gradient of disability, the proportions with disability will be significantly lower for prime-aged and young adults.

What is the difference between a disorder and a disability? A mental disorder is a psychological or behavioural pattern, possibly but not necessarily associated with disability. It is an illness that can often be treated with good prospects for recovery. Disability, according to the WHO's ICF classification, is an umbrella term covering impairments, activity limitations and participation restrictions: An *impairment* is a problem in body function or structure; an *activity limitation* is a difficulty encountered by an individual in executing a task or action; while a *participation restriction* is a problem experienced by an individual in involvement in life situations. Thus, disability is a complex phenomenon, reflecting an interaction between features of a person's body and features of the society in which the person lives.

Contrasting disorder and disability, two complementary messages can be derived. First, even among those with severe mental disorder, a large segment is not necessarily suffering from disability; many of them have substantial or even full ability and work capacity. At the same time, many of those with far more widespread common mental disorders do report disability; many of those people will face significant difficulties in accessing the labour market. Policy challenges for people with disability caused by a mental disorder are likely to differ from those for people with a mental disorder without a disability.

Co-morbidity and diagnosis

Mental illnesses often co-occur with physical health problems as well as other mental health problems, such as substance abuse in particular (Chapter 3). For instance, around half of the patients with depression also have a somatic disease (Kessler, 2007). Conversely, the prevalence of affective disorders is very high in patients with somatic diseases (Härter *et al.*, 2007). At the same time, many physical illnesses such as pain disorders with a

physical expression are influenced, exacerbated or even brought on by psychological factors. Similarly, mental disorders are a high risk factor for a much poorer prognosis in many prevalent physical illnesses.

Again exploiting SHARE data, it appears that, among 50-64 year-olds with either moderate or severe mental disorder, around 4 in 5 also suffer from some physical condition. While this finding holds across countries, this proportion increases sharply with age – from around 70% at age 50-54 to almost 90% at age 60-64 – with little gender differences (Table 1.2). Country-level data for the total working-age population for Sweden and the United States confirm the frequent co-existence of mental and physical health problems. In both countries, the share of those with a mental health problem who also have a physical health problem is around 50% overall, increasing from 25-35% among young adults to 65-75% among those aged 55-64.

Table 1.2. **Co-morbidity is very frequent**

Proportion of people with a mental disorder also reporting a physical health condition, by age group

		Status in 2007				
		Co-morbid disorder	Mental disorder only	No mental disorder	*Total*	Co-morbid in total mental disorder
SHARE data (several countries)	Age 50-54	15.8	6.3	77.9	100.0	71.5
	Age 55-59	16.5	3.8	79.7	100.0	81.3
	Age 60-64	17.1	2.5	80.3	100.0	87.1
	Age 50-64	*16.5*	*4.2*	*79.3*	*100.0*	*79.9*
Sweden	Age < 25	4.2	7.8	88.0	100.0	35.3
	Age 25-34	7.1	8.9	84.0	100.0	44.3
	Age 35-44	7.7	9.6	82.7	100.0	44.7
	Age 45-54	11.5	6.2	82.3	100.0	65.0
	Age 55-64	14.0	4.8	81.2	100.0	74.3
	All ages	*8.8*	*7.6*	*83.6*	*100.0*	*53.6*
United States	Age < 25	6.9	21.2	71.9	100.0	24.6
	Age 25-34	7.3	17.7	75.0	100.0	29.4
	Age 35-44	10.2	14.3	75.5	100.0	41.6
	Age 45-54	14.5	10.5	75.0	100.0	58.0
	Age 55-64	15.8	8.1	76.1	100.0	66.1
	All ages	*11.1*	*14.1*	*74.8*	*100.0*	*44.0*

Note: Results are based on all countries covered in the SHARE survey.
Source: OECD calculations based on the Survey of Health, Ageing and Retirement (SHARE) covering the population aged 50-64, for Sweden and the United States, see Figure 1.3.

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Dynamics and chronicity

Manifestations of mental illness can be very dynamic, even more so than many physical health problems. This is at variance with the widespread but false belief that a mental illness is necessarily a lifetime problem. Many mental illnesses are enduring, but most of them can be treated, symptoms reduced and conditions stabilised. Even for schizophrenia, one of the most severe mental illnesses, evidence suggests that roughly one-quarter to one-third of all patients recover and another third recovers sufficiently for them to be able to work (Gaebel and Wölwer, 2010).

Longitudinal SHARE data[10] confirm the dynamics of the status of mental ill-health. Of those with a severe mental disorder in 2004, 38% are found in the group with good mental health three years later, and another 34% in the group with a moderate mental disorder (Table 1.3). Hence, only a minority stays in the severe disorder group. Of those with moderate disorder in 2004, 55% report no disorder in 2007, while one in ten experienced a worsening of their mental health status. Of those in good mental health in 2004, as many as 13% report a severe or moderate mental disorder three years later; this is a rather high proportion reflecting the high lifetime prevalence of mental illness.

Table 1.3. **Mental ill-health status is very dynamic**

Percentage distribution of the sample population by mental health status in 2004 and 2007

	Status in 2007			
Status in 2004	Severe	Moderate	No disorder	*Total*
Severe	28.3	34.2	37.5	*100.0*
Moderate	10.9	34.0	55.2	*100.0*
No disorder	2.6	10.6	86.8	*100.0*
Total	5.3	15.7	79.0	*100.0*
Severe	27.2	11.1	2.4	5.1
Moderate	34.3	36.1	11.6	16.7
No disorder	38.5	52.9	86.0	78.3
Total	*100.0*	*100.0*	*100.0*	*100.0*

Note: Results are based on all countries covered in the SHARE survey.
Source: OECD calculations based on the Survey of Health, Ageing and Retirement (SHARE) covering the population aged 50-64.

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Mental disorders tend to be quite chronic. Although symptoms of most mental illnesses can be treated and the condition may stabilise after some weeks or months, most mental disorders cannot be cured in the sense that the cause of the disorder is eliminated. This is because the cause of the illness is often not known or multidimensional (see Chapter 3). As a consequence, some mental health conditions entail the necessity to take psychotropic medication over a long time, even when people do not suffer from symptoms (any longer). Because the disorder is often still prevalent, people may feel uncertain and vulnerable. This uncertainty often reinforces the typical fears of individuals with mental disorders of seeking employment in an active way. Chronicity, be it in the form of an ongoing presence of symptoms or recurrent illness episodes, is not restricted to severe mental disorders, but can also affect mild and moderate disorders. Furthermore, some illnesses are partly defined by their chronicity, for example, personality disorders.

1.4. The rising mental ill-health challenge for the labour market

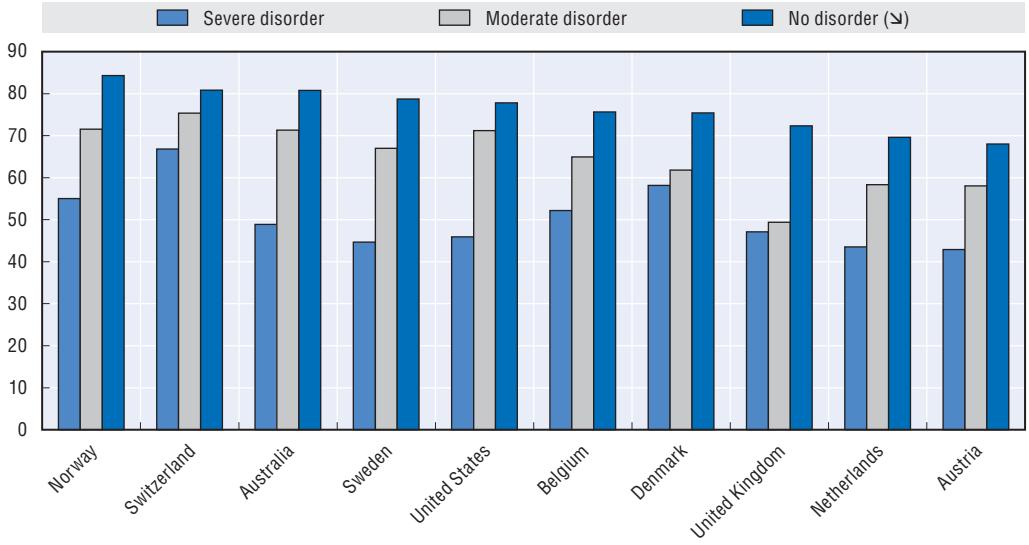
What the evidence suggests

Mental illness is a major and rapidly growing cause of inactivity and labour market exclusion. People with health problems and disability are among the most disadvantaged in today's modern labour markets (OECD, 2010), and those with mental-ill health face particularly large barriers. Individuals with a mental disorder are much less likely to be employed and the employment gap increases sharply with the severity of the person's mental illness (Figure 1.3). The employment gap is around 30 percentage points for those with a severe mental disorder and 10-15 percentage points for those with a moderate disorder (see Chapter 2 for more details). The latter might seem

A corrigendum has been issued for this page. See http://www.oecd.org/dataoecd/62/61/50030581.pdf

Figure 1.3. **People with a mental disorder face a considerable employment disadvantage**

Employment/population ratio (employed people[a] as a proportion of the working-age population), by severity of mental disorder, ten OECD countries, latest available year



Note: Data for the United Kingdom shown in this chart and all other charts and tables using the same survey refer to England only.

a) Employment is generally defined as paid or self-employed work of at least one hour per week (ILO definition).

Source: National health surveys. Australia: National Health Survey 2001 and 2007/08; Austria: Health Interview Survey 2006/07; Belgium: Health Interview Survey 1997, 2001 and 2008; Denmark: National Health Interview Survey 1994, 2000 and 2005; Netherlands: POLS Health Survey 2001-03 and 2007-09; Norway: Level of Living and Health Survey 1998, 2002 and 2008; Sweden: Survey on Living Conditions 1994/95, 1999/2000 and 2004/05; Switzerland: Health Survey 2002 and 2007; United Kingdom: Health Survey of England 1995, 2001 and 2006; United States: National Health Interview Survey 1997, 2002 and 2008.

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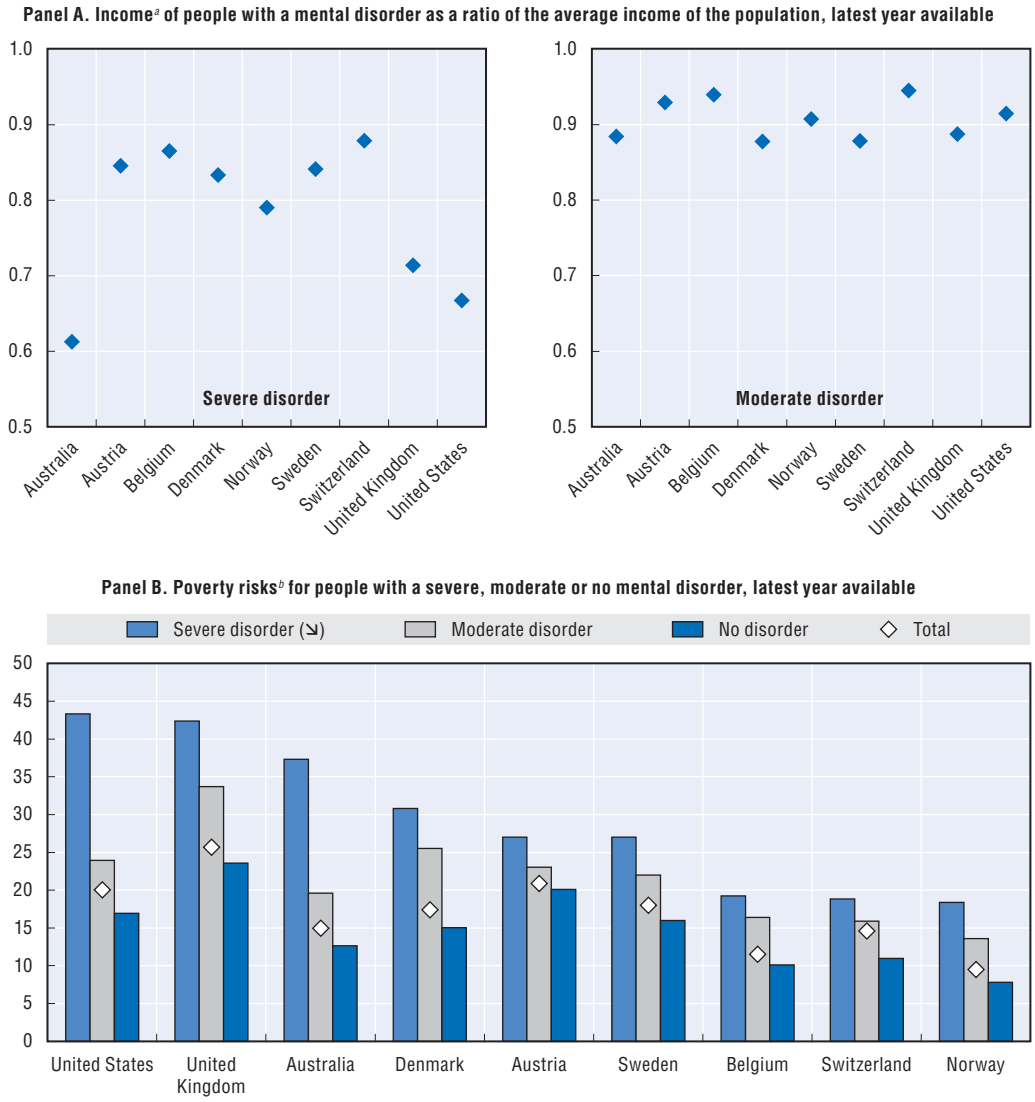
a relatively small difference but it concerns a very large number of people. In view of the underlying longer-term labour market challenges caused by population ageing, including a shortage of skilled labour, it will be important to keep people with mental ill-health in employment and to bring back into the labour market as many as possible of those who are unemployed or inactive.

Reflecting the degree of labour market integration as well as the coverage and level of social benefits, incomes of people with mental ill-health lag behind those of their peers with no mental disorder. The average income of people with a moderate mental disorder is around 90% of that for the total working-age population, and it is 80% or less (60% in Australia, 70% in the United Kingdom and the United States) for those with a severe mental disorder (Figure 1.4, Panel A). Accordingly, these people face a much larger poverty risk: in Australia, the United Kingdom and the United States, about four in ten of those with a severe mental disorder live in households with incomes below the low-income threshold (defined as 60% of the median income), and around one-quarter in most other countries (Figure 1.4, Panel B).

Most strikingly, *disability* due to mental ill-health has increased in the past two decades in virtually all OECD countries, sometimes substantially, as reflected in large increases in the share of disability benefit claims caused by mental disorders (Figure 1.5). Today, about one in three new disability benefit claims, and in some countries as many as

Figure 1.4. **People with a mental disorder have lower incomes and a much larger poverty risk**



a) Per person net income adjusted for household size. For Australia and Denmark, data refer to gross income.
b) The low-income threshold determining poverty risk is 60% of median income.

Source: National health surveys (see Figure 1.3).

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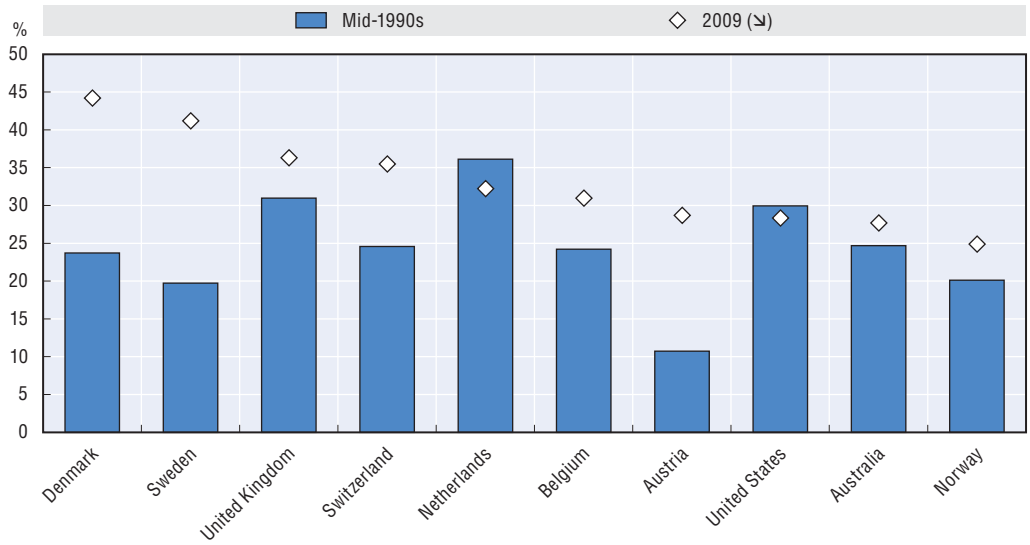
one in two claims, are attributed to mental ill-health. This reflects a big shift over the past twenty years or so in the profile of the "typical" disability benefit recipient, who used to be an older, male worker, often working in arduous industries, with a diagnosis of a physical health problem (see Chapter 4). Mental illness is a particularly frequently diagnosed cause for disability benefit claims among young adults, who in many countries increasingly enter the disability benefit system without any significant time spent in the workforce (see Chapter 5). Hence, as a consequence of the trend towards mental ill-health as the main cause of disability, the population claiming disability benefits is getting younger in most countries[11] and – because people rarely ever leave such benefit – the average duration a claimant stays in the system is getting longer.

Figure 1.5. **Fast increases in disability benefit claims caused by mental ill-health**

Newly granted disability benefits for people with a mental health condition[a] as a proportion of all disability benefit grants, selected OECD countries, mid-1990s and latest available year



a) Data include mental retardation/intellectual disability, organic mental disorders and unspecified mental disorders for: Austria, Belgium, Sweden and the United States (of which mental retardation/intellectual disability, accounts for 4.6% of the total inflow in 2006). Data for Australia include organic disorders and Switzerland mental retardation.

Source: OECD questionnaire on mental health.

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The prevalence of mental ill-health has not changed

Although mental disorders pose one of the greatest new social and labour market policy challenges in OECD countries, little is known about the underlying causes of this phenomenon. The most straightforward explanation would be an increase in the prevalence of mental ill-health. Despite the much larger and increasing attention given to the issue in recent years, however, the overall conclusion from the available literature is to the contrary. Citing a systematic review of the evidence, covering many studies on trends in the past fifty years, Richter *et al.* (2008) concluded:[12]

> "*Neither general mental disorders nor specific disorders such as depression, anxiety, addictions or eating disorders showed a clearly increasing trend. Child and adolescent psychiatric disorders also failed to show an increasing trend.*"

This finding is surprising also in view of some other social and health behaviour trends documented in more detail later in this report which, at first sight, would seem to be the result of an increase in mental ill-health prevalence. For instance, in line with disability benefit claims, the number of work days lost because of mental ill-health has also increased (Chapter 2). Similarly, the use of medication for psychological problems, especially antidepressants, the number of psychiatric hospital admissions and mental health care visits and the number of psychiatrists has increased (Chapter 3). This apparent paradox needs to be resolved.

Policy makers are apparently not confronted with a rising prevalence of mental ill-health but they face two big problems: first, prevalence levels have always been very high – with lifetime prevalence rates in the order of 40-50% and 12-month prevalence rates of over

25%,[13] for example; and second, today mental ill-health is associated with greater problems of integration into the labour market for the people concerned than ever before.

The perception of mental health problems has changed

One of the biggest explanatory factors behind the perceived increase in problems caused by mental ill-health are changes in awareness of such problems – among people themselves; among employers; among doctors; and among other relevant actors and society at large. However, this change or cultural transformation in the perception of mental health problems also came along with a changed view on the work capacity of people facing such problems. It appears that while society has become more aware of problems that have always been there but not identified properly, it has also developed a more work-limiting evaluation of these problems.

This might have to do with changes in the perception of work capacity driven by better knowledge about mental illness but also with the tolerance of workplaces towards difference and varying and/or reduced productivity. It is often claimed that the demands on workers have risen and that people with poorer mental health cannot keep pace with this development. Even though it may be questionable whether workplace requirements have increased in general, some specific requirements like for example social skills and flexibility might have – in turn having an impact on workers with mental ill-health and workers' state of mental health more generally (Chapter 2).

The increased awareness also presents an opportunity to overcome widespread stigma and fears concerning mental ill-health. Stigma and self-stigma is still widespread across OECD countries. In 2005, four in ten people thought that people with a psychiatric problem constitute a danger to others, especially so when not having such a problem themselves (Table 1.4). In 2010, one in five people in Europe found it difficult just to talk to a person with a significant mental health problem, and more so when having a severe problem themselves, partly reflecting communication problems of people with mental disorders and partly the high level of self-stigma. Hence, stigma continues to be widespread. On a positive note, the large majority of people are aware that recovery from mental illness is possible. This is promising.

Table 1.4. **Stigma is still widespread but people know mental illness can be treated**

Proportion of people who totally agree or tend to agree to a number of attitudinal questions, according to the level of mental health of the respondent (severe/moderate/no mental disorder)

Mental health status of the respondent	People with mental health problems constitute a danger to others (2005)				It is difficult to talk to someone with a significant mental health problem (2010)				People with mental health problems never recover (2006)			
	Severe	Moderate	None	Total	Severe	Moderate	None	Total	Severe	Moderate	None	Total
Austria	15.8	23.6	34.6	32.4	34.1	29.8	25.8	27.0	25.8	19.8	24.5	23.9
Belgium	35.3	26.7	30.9	30.9	37.0	29.5	21.7	23.8	24.0	28.1	18.1	19.1
Denmark	33.3	38.4	46.3	44.5	30.6	22.0	20.5	21.3	16.7	15.3	17.0	16.8
Netherlands	18.9	20.0	26.6	25.4	13.0	25.0	15.8	17.0	13.5	12.9	13.4	13.3
Sweden	55.3	51.0	56.7	55.9	18.9	18.8	13.1	14.4	18.8	18.4	13.7	14.7
United Kingdom	36.1	30.2	43.3	41.7	23.9	17.6	21.3	20.8	19.5	11.1	16.1	15.8
Average (21)	**32.5**	**31.7**	**39.7**	**38.5**	**26.2**	**23.8**	**19.7**	**20.7**	**19.7**	**17.6**	**17.1**	**17.3**
Standard deviation	*(14.2)*	*(11.4)*	*(11.1)*	*(11.1)*	*(9.3)*	*(5.2)*	*(4.5)*	*(4.5)*	*(4.6)*	*(6.1)*	*(4.0)*	*(3.8)*

Note: The average refers to all 21 countries covered in the Eurobarometer.
Source: OECD compilation based on Eurobarometer 2005 and 2010.

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The workplace and working conditions

Stigma and fears are particularly critical for the workplace which plays a crucial role in the mental health of employees both as a source of stress and a source of support. On the one hand, changes in labour market and working conditions could have led to less stable employment with increased workloads over time, thereby contributing to increased workplace stress with potential adverse effects on mental health (Chapter 2). On the other hand, there is ample evidence on a general worsening in mental health with the loss of employment, and the betterment in mental health for those returning to the labour market successfully (OECD, 2008).

For employers, there are substantial costs associated with mental health problems arising from absenteeism, reduced productivity while at work, the impact on the productivity of co-workers, and the training and recruitment of new staff. However, employers often have a poor understanding of what they can do to promote good mental health in the workplace and how they can intervene when mental illness arises. Employees with mental health problems, in turn, face particular challenges, including the consequences of disclosing or not disclosing their condition.

Policies and institutions are not addressing mental ill-health sufficiently

Changes in the perception of problems alone, however, cannot fully explain the increasing labour market exclusion of people with mental illness. There are additional explanations related to various critical policy areas, which fail to address adequately and effectively the problems of people with mental illness. Systems responsible for supporting individuals with mental disorders are often failing to provide adequate services and supports, and also incentives that make it beneficial for those people to find work, remain at work, or return to their jobs after an episode of illness. Several countries (*e.g.* Australia, Norway and the United Kingdom) have started to recognise this problem and to implement mental health strategies, sometimes also involving employment aspects, but there is still a long way to go.

The health system

One of the policy fields failing to address mental ill-health challenges sufficiently is the health system, which can potentially play an important role in supporting individuals with a mental disorder to obtain or retain employment, by providing the mental health services and supports necessary for individuals to manage their symptoms and engage successfully in the workforce. Moreover the mental health care system need effective strategies to support all professionals concerned, including employers, teachers and general practitioners.

The mental health care systems in many OECD countries have not, however, made sufficient progress to meet the needs of individuals with mental health problems, and in particular to provide adequate support for achieving their employment goals. Although effective treatments are available for many mental health conditions, problems with access and utilisation are pervasive (Chapter 3). When individuals do access mental health services, employment typically is not one of the explicit objectives of health care providers in treating mental health problems.

The social security system

A second key policy field is the social security system and the disability benefit system in particular. Disability benefits when introduced long ago were not designed for mental

ill-health and, overall, do not appear to be working well for the characteristics of these problems. For instance, work-capacity assessments (MacDonald-Wilson *et al.*, 2001) and benefit rules in most OECD countries do not seem adequate for the often fluctuating nature of mental disorders. Similarly, there seem to be problems with the take-up of vocational rehabilitation and support services among individuals with a mental disorder (*e.g.* Cook, 2006).

It seems questionable whether mental illness should necessarily lead to a disability benefit grant as often as has been the case in the past 15 years. At the same time, many people with a (moderate) mental disorder will not be entitled to a disability benefit, as a consequence of which the functioning of *other* benefit systems – unemployment benefits and social assistance schemes in particular – is equally important. A critical issue for those schemes is to identify people with mental ill-health and their support needs to prevent them from circulating across various systems (Chapter 4).

The education system

A third important policy field is the education system which is critical for youth in their preparation for their working life in multiple ways. With so many mental disorders having their onset during adolescence schools and apprenticeships are the most natural setting for delivering services early on and developing coping mechanisms, but also for promoting mental health and preventing mental ill-health.

Again, schools and education systems in OECD countries are generally not (yet) responding well to these challenges (Chapter 5). Children with emotional and behavioural problems or with mental disorders are at a higher risk of dropping out of the education system, translating into lower rates of secondary school completion and poorer chances of finding stable employment. Transition services and supports to assist youth in their transition from mandatory education to tertiary education and work – a key tool to tackle those challenges – do not appear to be developed to the degree needed.

Overall, education, health, labour market and social security institutions and systems in place tend to work better to support employment and avoid inactivity of individuals with physical health problems; they have not been adequately adapted to face the often more complex challenges of mental illness and mental disability. Among the reasons for these system failures is the limited available evidence on issues around mental ill-health upon which to base policy decisions, as well as an apparent lack of collaboration between different systems which continue to operate in silos.

1.5. Conclusion: a framework for analysis and policy development

There are a number of commonalities in policies, settings and interventions affecting all people with mental ill-health. To a certain degree, however, the policy package needed for different groups will differ. Two dimensions distinguish the groups in question: *i)* the severity of a mental disorder; and *ii)* the person's labour force status.

Within the first dimension, the severity of a mental disorder, there are three basic groups for intervention: *i)* people with a severe mental disorder and/or a severely disabling mental health condition; *ii)* people with a moderate or common mental disorder and/or a less disabling mental health condition; and *iii)* people with a mental health problem – in most cases unrecognised and undiagnosed – which has not yet reached the clinical level but could reach this level with further deterioration or without preventive action,

potentially a very large group. The main criteria distinguishing a severe from a milder disorder include the age at onset of the illness, its duration and chronicity, the existence of co-morbidity and the illness-related consequences on basic psychological functioning.

Within each level of mental illness severity, the policy package needed will, to a certain degree, depend on the second main dimension, the person's labour force status. Four groups can be identified: *i)* youth and young adults who were never or hardly ever employed; *ii)* people currently in employment but at risk of losing their job; *iii)* people who have lost their job but are still in the labour force, yet often long-term unemployed; and *iv)* beneficiaries of long-term sickness and disability benefits who are outside the labour force.

The reality is more complex because of the dynamics on both dimensions, especially in labour force status. At any one point in time, each individual will be in one particular category and for each group, potentially a different set of policies, or combination of health, vocational and other services, and involvement of employers will be needed. For instance, even at the same level of severity of mental illness the policy package needed to help long-term beneficiaries back into employment will differ from the package of interventions needed to keep workers in employment. The support and incentives employers need to retain a worker can be very different from those needed to hire a person with a mental health problem. Policies needed for vulnerable young adults with recognised or unrecognised mental illness will look yet again differently.

Across countries, the package needed for each category will be similar but the importance of the categories may differ. For some countries, disability beneficiaries are the key concern, while in others ways to prevent labour market exit of those still employed are considered more important. Similarly, while for a majority of countries building up adequate policies for people with moderate mental illness has priority, policies for those with more severe problems are also on the agenda in several cases, and especially for the youth group, non-recognised mental illness is a key concern.

The barriers to work for people with mental health problems are complex and diverse. Barriers relate to employers, individuals with mental health problems themselves, and professionals; and they range from stigma and discrimination to the fear of failure and of losing benefits, and from poor access to services to a changing workplace that is increasingly intolerant of variations in the employee's productivity. There is ample evidence that employment can improve social integration and reduce the likelihood of impoverishment (*e.g.* Waddel and Burton, 2006; Harnois and Gabriel, 2000) and that most individuals with mental illness want to work (*e.g.* Grove *et al.*, 2005). The high recurrence, the chronicity, the frequent co-morbidity, the early onset and other unique features of mental ill-health pose particularly great system and policy challenges. Understanding the barriers and drivers of current poor outcomes is central to increasing labour market inclusion for individuals with a mental disorder. The aim of the subsequent chapters is to improve this understanding.

Notes

1. Definitions of the terms mental ill-health (interchangeably used with the expressions mental illness and mental health problem) and mental disorder are given in Section 1.2.
2. These costs do not include the potential costs of reduced productivity of co-workers.

3. Intellectual disabilities are not the scope of this project and are therefore not included in our definition of mental ill-health and, where possible, excluded from the data. Intellectual disability encompasses various intellectual deficits, including mental retardation, various specific conditions (such as specific learning disability), and problems acquired later in life through brain injuries or neurodegenerative diseases like dementia. Organic mental illnesses are also outside the scope of this project.
4. Information on the diagnosis underlying a mental health problem is usually lacking in such surveys.
5. People with the most severe mental disorders and disability will generally not be covered in such surveys, be it because these people are living in institutions and therefore *by definition* excluded from the sample population, or because they are *effectively* excluded as people with very severe mental disorder are significantly less likely to respond to such surveys.
6. With the chosen methodology, differences between countries in average scores and cut-off points are *de facto* interpreted as cultural biases rather than true differences.
7. According to SANE (2011), for example, only six in ten Australians disclose their mental illness at the workplace, reflecting widespread stigmatising experiences.
8. Disability is measured on a subjective basis: survey respondents are asked *i)* whether they have a chronic illness, injury or disability; and *ii)* whether this chronic condition hampers their ability to perform activities of daily life. Only if they say yes to both questions are they classified as having a disability.
9. SHARE data also imply that of all those who report having a disability, some 20% have a severe mental disorder, 30% a moderate mental disorder and roughly 50% no such disorder.
10. SHARE has a longitudinal design. At this stage, two waves are available (the first one in 2004 and the second in 2007). The third wave contains life history information which will be exploited in some of the later chapters of this report. The fourth wave is currently being prepared.
11. Australia is an exception in this regard; new disability claims as well as the caseload is older today on average than ten years ago, due to both demographic and policy changes.
12. Richter *et al.* (2008) also note that the question whether mental ill-health prevalence has increased is not new. Maudsley (1872) looked at the same question around 140 years ago and concluded that the increase in discharges to psychiatric institutions back then was *not* the result of increasing prevalence among the general population.
13. Wittchen and Jacobi (2005) find a 12-month prevalence rate across European countries of around 27%. A recent update of their study with improved data comes up with even 38% (Wittchen, Jacobi *et al.*, 2011). The difference is not reflecting an increase in prevalence but is entirely due to the inclusion of 14 new disorders, including for example personality disorders and sleep disorders. They conclude that the true size of mental health prevalence was significantly underestimated in the past but that there is no indication of any change in prevalence levels since their 2005 study.

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Chapter 2

Work, Working Conditions and Worker Productivity

This chapter investigates the connection between mental health and work and presents new evidence on the position of persons with mental health problems in the labour market in a number of OECD countries. The findings show that, despite the positive effects of employment on mental health, too many persons with a mental disorder are out of work. Persons with a severe mental disorder are 6-7 times more likely to be unemployed than people with no such disorder, and those with a common mental disorder 2-3 times. At the same time, however, the findings also suggest that more persons with a mental disorder are employed than is generally thought. This confirms the urgent need to address mental health issues at the workplace since many jobs or particular tasks can cause job strain and exacerbate mental illness. To ensure that workers with poor mental health can retain their jobs and work productively is therefore a key objective calling for policies to improve job quality, working conditions and management practices to prevent unnecessary exclusion from the labour market.

2.1. Introduction: employment and the workplace are critical

Employment has evident positive effects on people's mental health by providing social status, income security, a time structure, a sense of identity and achievement and a source of self-esteem, while also enabling social contact. As such, work is a key factor for social inclusion and it is not surprising that most inactive people with a mental disorder also express a desire to obtain employment.

Having a job is associated with better mental health outcomes than being unemployed. But the quality of work is also important. Poor quality jobs or a psychologically unhealthy work climate can erode mental health, and in turn influence the position of individuals in the labour market. Workers across the OECD have been exposed to changes in working conditions as a result of structural adjustments in the past decades, raising the question whether these developments might worsen the mental health of workers.

In addition to the negative consequences for individuals, mental ill-health also imposes major costs to employers in terms of lower productivity of workers with mental illness and reduced economic output further raising the costs to the society at large.

This chapter is organised in three parts aimed at identifying the links between work, working conditions, work-related stress, worker productivity and mental disorders. The first section gives an overview of the relationship between employment status and mental health and recent trends in labour market performance of people with mental illness. The second section investigates how job quality affects mental health of workers by looking at changes in working conditions, while also looking at workplace policies to monitor work-related stress and tackle stigma. The third section highlights the frequent consequences of poor-quality jobs and poor mental health on reduced performance and productivity at the workplace. The chapter concludes that working conditions and workplace policies are critical for breaking the negative bi-directional link between mental health and underperformance as well as unemployment.

2.2. Employment, unemployment and the economic cycle

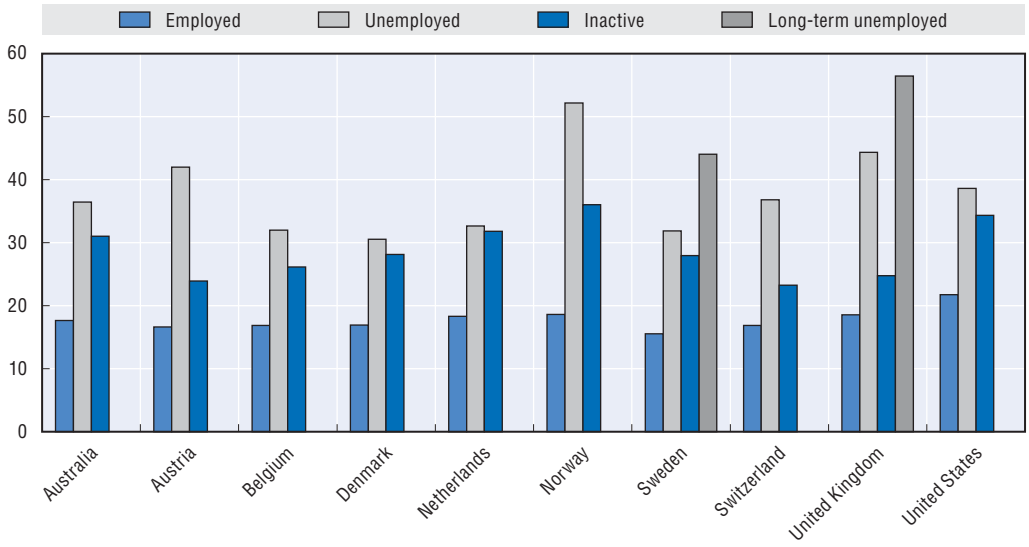
The relationship between employment status and mental health

On average, people who are unemployed have almost twice the prevalence of mental health problems than those who are employed and a somewhat higher prevalence than the economically inactive (Figure 2.1) These findings are consistent with various studies that have established the presence of a higher incidence of mental health problems, and lower levels of "well-being" among the unemployed (Clark, 2003; Alonso *et al.*, 2004; Shields and Wheatly Price, 2005; Baumeister and Härter, 2007).[1]

Data from Sweden and the United Kingdom in Figure 2.1 also suggest that the duration of unemployment is linked with the risk of poor mental health: the prevalence of mental disorders among long-term unemployed is even higher than it is among the whole

Figure 2.1. **Mental disorders are influenced by labour force activity and especially unemployment**

Prevalence of a severe or moderate mental disorder (in percentage), by labour force status,[a] latest available year



a) Long-term unemployment refers to people unemployed for more than one year.

Source: National health surveys (see Figure 1.3).

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unemployed group. Although one would expect the impact of unemployment on mental health to increase with duration, for example *via* more and more discouraging failures in job-seeking and increased financial pressure, a number of studies indicate that there is no simple, linear relationship with duration (*e.g.* Dockery, 2004; OECD, 2008). These studies have found that there is adjustment by unemployed people to unemployment, with some evidence that mental health declines during the first six months of unemployment and stabilises thereafter. For the United Kingdom, Ford *et al.* (2010) found an increased prevalence risk for those unemployed for less than one year and equally for those unemployed for three years and more; this suggests that unemployment initially has a detrimental effect before people adjust, but also that long-term unemployment worsens mental health.

Several studies investigating the mental health effects of unemployment and the mechanisms through which unemployment causes adverse health outcomes reveal a complex relationship. In general, it is shown that the impact of job loss can have a direct effect on mental health through lower life satisfaction, social stigma, loss of self-esteem and loss of social contacts and an indirect effect through lower income with negative consequences on mental health. Indeed, unemployment may lead not only to initial lower income but job losers may also experience long-lasting declines in earnings and earnings instability. It is difficult to sort out the relative size of these effects since they may occur at the same time. Several studies investigating this suggest that the non-financial mechanisms may be more important than the financial loss (Winkelman and Winkelman, 1998; Dollard and Winefield, 2002).

Not all unemployed individuals are affected in the same way

The negative effect of unemployment on mental health differs for different individuals and varies according to age, gender and education. In general, evidence suggests that the highest rates of mental disorders are found among prime-aged unemployed workers but in a few countries, *e.g.* Austria, Norway and Switzerland, the older unemployed are more likely to have mental disorders (Figure 2.2, Panel A). In Austria, almost three out of four unemployed aged 55-64 experience mental health problems (severe and common). Many studies suggest that people of prime age are among the most distressed groups of unemployed due to higher family responsibilities, while younger and older people may have to cope with fewer financial pressures.[2]

Despite the relatively lower incidence of mental disorders among the younger and older unemployed individuals, there are a number of serious policy concerns relating to these two groups. For instance, evidence shows that disadvantaged youth may face "scarring-effects" meaning the mere experience of unemployment is likely to increase future unemployment risks (Scarpetta *et al.*, 2010). Young unemployed individuals with mental disorders are even more susceptible to these effects and may drift away from the labour market at an early age (see Chapter 5). Older workers with mental health problems, on the other hand, are more likely to exit the labour market *via* either early retirement[3] or disability benefits (see Chapter 4).

Furthermore, data suggest that unemployed women have a similar risk of having a mental disorder as their male counterparts (Figure 2.2, Panel B). This result is not in line with the hypothesis that men are likely to suffer more from unemployment due to their role as prime-wage earners.[4] Perhaps, these recent data reflect the increase in labour market participation rates of women over the past decade(s). The level of education also appears to be a determining factor. For example, almost half of all unemployed with a low level of educational attainment in the United Kingdom and the United States have mental disorders, and almost two-thirds in Norway (Panel C).

The above descriptive analyses show a strong degree of correlation between unemployment and poor mental health. However, it is difficult to make claims over the direction of causality. The poor outcomes observed for unemployed relative to employed people may be due to two factors. First, those with poorer mental health may find it more difficult to secure employment, and thus find themselves with higher unemployment rates relative to the wider population. In this respect, mental health problems cause unemployment. Alternatively, being unemployed may result in a deterioration in individuals' mental health – that is, the direction of causation runs from labour force to mental health status. A large body of literature has investigated the causal relationship between employment and mental health status (Box 2.1)

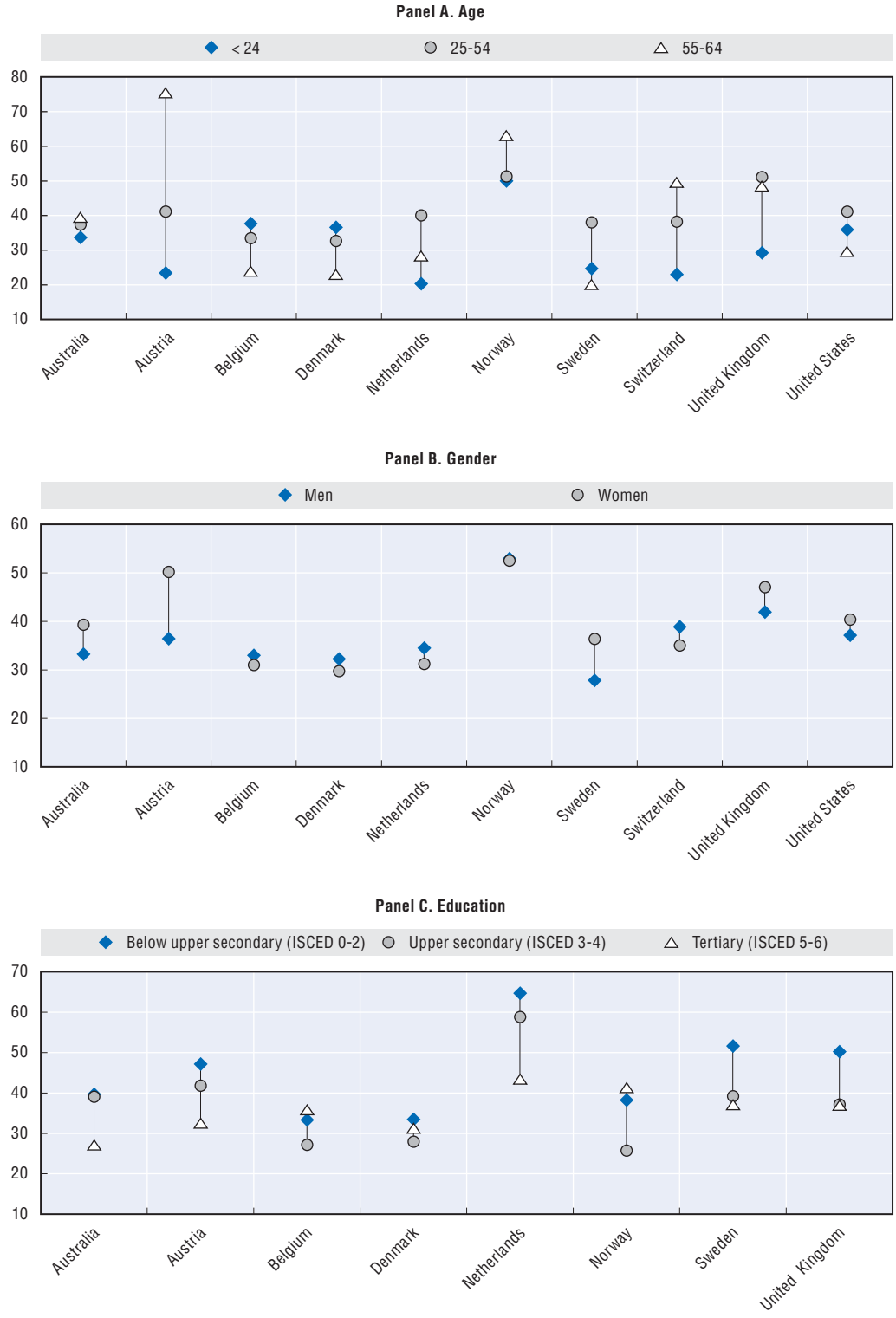
Mental health suffers when individuals move from employment to non-employment

Earlier literature on the relation between unemployment status and mental health only compared two specific conditions – employment *versus* unemployment rather than the effects on health of transitions to and from these states. But in recent years, increasingly scholars have explored the effect of moving between employment and non-employment (including unemployment and inactivity) and *vice versa*. Transition analysis can also help to distinguish the direction of causality discussed above. Overall, evidence from transition studies shows that mental health deteriorates when individuals move from

A corrigendum has been issued for this page. See http://www.oecd.org/dataoecd/62/61/50030581.pdf

Figure 2.2. **Not every unemployed person faces the same risk of poor mental health**

Prevalence of mental disorders among unemployed (in percentage), by age, gender, and education, latest year



Source: National health surveys (see Figure 1.3).

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Box 2.1. **Does unemployment causally affect individuals' mental health?**

A vast majority of cross-sectional studies have shown that persons in unemployment have worse mental health than either the employed or those who are not participating in the labour force. However, there is considerable discussion about the direction of causality in this association. Does unemployment cause poor mental health or does a pre-existing difference in psychological well-being influence the ability to obtain and retain employment (known as selection bias)? Extensive research has been carried out to disentangle these effects.

A number of recent studies have overcome these limitations by the use of longitudinal, individual or panel approaches and can avoid issues of reverse causation by controlling for mental health status of people before they experience joblessness. At least three different subtypes of studies can be identified using this approach. First, a set of studies have used prior knowledge of plant-closure to compare workers that continued to work with their counterparts who lose their job (in a quasi-controlled experiment). Second, a strand of studies looks at young people still in high school and follows them into the workforce to contrast those who gain employment with those that fail to do so. A third approach is based on population survey data with follow-up interviews to compare those who remain employed with those who lose their jobs.

One particularly useful publication is Murphy and Athanasou (1999) in which they reviewed 16 longitudinal studies published between 1986 and 1996. Overall, evidence from these studies shows that job loss on average has a strong negative impact on psychological well-being of the unemployed even after controlling for previous mental health status and other various factors such as socio-economic status, education and income or where only involuntary job losses were taken into account (see also Burgard *et al.*, 2007).

employment to unemployment or inactivity, and that gaining or regaining employment is beneficial for mental health (*e.g.* Thomas *et al.*, 2005; Dockery, 2006).

Recent OECD findings, using panel data for individual workers in several OECD countries have attempted to sort out the possibility of a cause-and-effect relationship between mental health and *changes* in employment status (OECD, 2008). The results show that moving from employment to unemployment or inactivity has a large, negative impact on mental health, with a larger impact on men than women (see Figure 2.3). Both situations increase distress by more than any other life changes such as accidents or loss of partner. In Australia, the United Kingdom and Switzerland, a change from employment to sickness-related inactivity results in the worst effect on psychological distress; with the second largest negative change being a transition from employment to unemployment. Finally, results generally show that when people's status changes from non-employment to employment, their mental health improves.

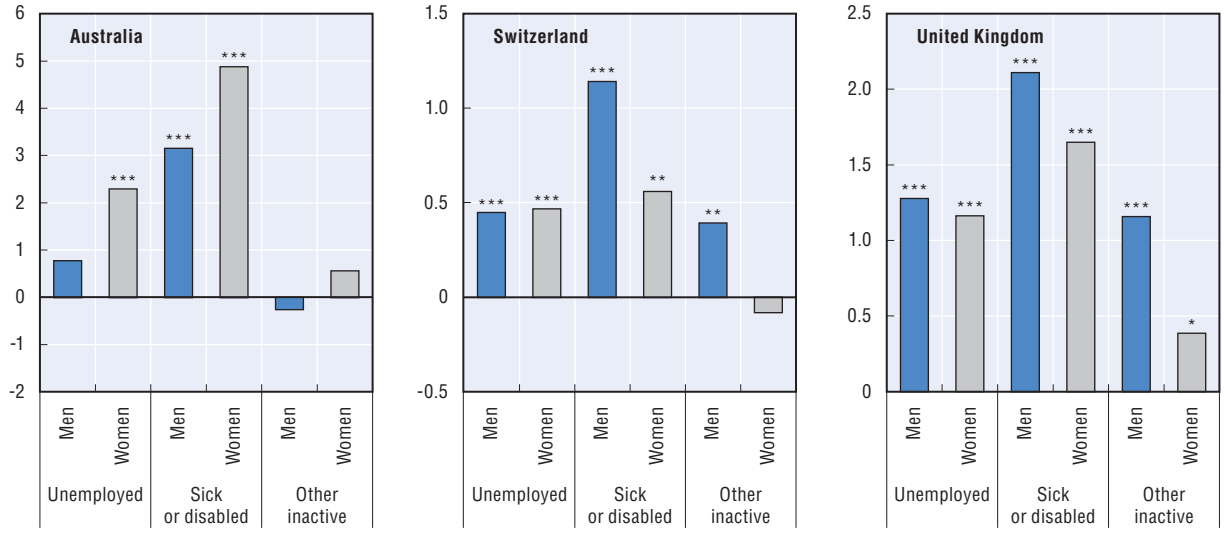
Labour market performance of people with a mental disorder

Unemployment rates for people with mental illness remain high

Figure 2.4 sheds light on the unemployment rates of people with and without mental health problems. There are substantial differences in unemployment rates between those with severe mental disorders and those without mental disorders (Panel A). The difference in some countries is striking. In Norway and Austria, unemployment rates of people with severe mental disorders are nine times and six times bigger than those with no mental

Figure 2.3. **When leaving employment, mental health tends to worsen**

Fixed-effects regressions: estimated impact on mental health when leaving employment, by type of non-employment



*, **, *** statistically significant at the 10%, 5%, and 1% level, respectively.

Source: OECD (2008), *OECD Employment Outlook*, Figure 4.9.

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disorders, respectively. In other countries, these rates are three to four times bigger. The level of unemployment for people with severe mental disorders is around 15% in most countries, but over 25% in Austria and Belgium.[5]

The labour market disadvantage of people with moderate disorders is much smaller but even their unemployment rate is on average two and sometimes up to three times the rate for people with no mental disorder. The average level of unemployment of people with a moderate mental disorder is around or even below 10% (prior to the crisis), with Switzerland having the lowest rate, and over 15% in Belgium.

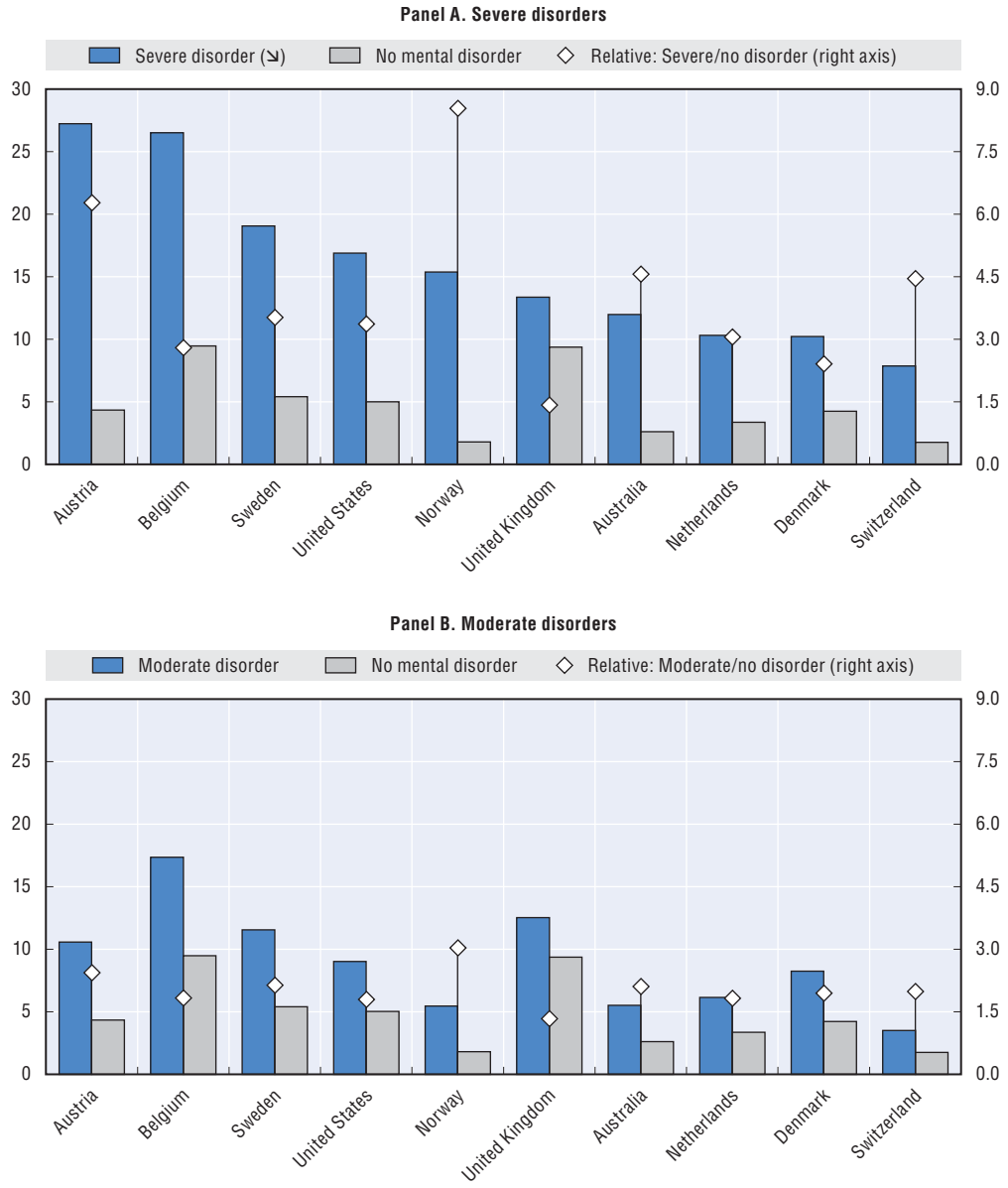
In summary, people with a mental disorder – either moderate or severe – face much higher unemployment rates. The much larger unemployment disadvantage for people with a severe mental disorder compared to those with a moderate disorder is partly a reflection of the much higher likelihood of this group of having co-occurring physical (or other mental) health problems. People with co-morbid conditions are confronted with a much larger downward impact on functional disability, with consequences for employability and employment (see also Chapters 1 and 3).

And employment rates remain relatively low

As discussed in Chapter 1 (Figure 1.3), relative to their peers without mental disorders, on average across the ten countries the employment rates of people with moderate mental disorders are falling behind by some 15 percentage points and the rates for those with severe mental disorders by some 30 percentage points. This is a considerable employment gap, which varies both between and within countries. The most pronounced difference between countries is that in some cases people with a moderate mental disorder are doing comparatively well while those with a severe mental disorder are falling far behind (*e.g.* Australia, Sweden, United States), whereas in other countries the gap between

Figure 2.4. **Unemployment rates are much higher for people with a mental disorder**

Unemployment rates by mental health status (percentages; left axis) and relative unemployment ratios (people *with* a mental disorder over those without such a disorder; right axis) in the late 2000s



Source: National health surveys (see Figure 1.3).

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moderate and no mental disorders is larger and the gap between severe and moderate disorders smaller (*e.g.* Denmark, Switzerland).

Table 2.1 illustrates *within-country differences* in the employment gap – measured by relative employment rates – by gender, age and educational level attained. In most countries, men with a mental disorder are facing a larger employment disadvantage than women, especially men with severe mental health problems. Denmark and Norway – with a larger employment gap for women – are the only exceptions to this pattern. Moreover, in

all countries the relative employment rates decline by age, and sometimes (*e.g.* Austria, United States) very sharply; hence, there is a strong negative relationship between age and employment. This effect is much smaller, however, for people with a moderate mental disorder who tend to have rather high employment rates at prime age. Finally, regardless of the severity of the mental disorder, the poorly educated (*i.e.* less than upper secondary education) have much lower chances of being employed – with relative employment rates typically around 0.5 for those with a severe mental disorder (only 0.3 in Sweden) and around 0.7-0.8 for those with a moderate mental disorder (lower than this in Belgium and the United States, and higher in Austria and Sweden).

Table 2.1. **Employment gaps for people with a severe mental disorder are large for men, low-skilled and older workers**

Relative employment rates by mental health status, by age, gender and educational attainment, latest available year

	Australia		Austria		Belgium		Denmark		Norway	
	Severe	Moderate	Severe	Moderate	Severe	Moderate	Severe	Moderate	Severe	Moderate
Gender										
Total	0.60	0.88	0.63	0.85	0.69	0.86	0.77	0.82	0.65	0.85
Men	0.49	0.85	0.60	0.84	0.67	0.81	0.82	0.86	0.73	0.88
Women	0.71	0.94	0.69	0.91	0.73	0.92	0.76	0.80	0.61	0.83
Age										
15-24	0.76	0.98	1.27	1.07	0.31	0.80	0.79	0.72	0.78	1.10
25-34	0.75	0.92	0.77	0.93	0.88	0.89	0.72	0.85	0.73	0.83
35-44	0.58	0.89	0.66	0.90	0.61	0.86	0.78	0.89	0.55	0.87
45-54	0.57	0.87	0.60	0.81	0.64	0.85	0.83	0.82	0.64	0.87
55-64	0.39	0.69	0.48	0.68	0.75	0.71	0.76	0.78	0.65	0.69
Education level										
Less than upper secondary	0.50	0.79	0.52	0.89	0.55	0.61	0.61	0.72	0.58	0.85
Upper secondary	0.66	0.93	0.70	0.84	0.62	0.90	0.75	0.89	0.79	0.87
Tertiary	0.87	0.97	0.75	0.94	0.87	0.94	0.89	0.83	0.71	0.92

	Netherlands		Sweden		Switzerland		United Kingdom		United States	
	Severe	Moderate	Severe	Moderate	Severe	Moderate	Severe	Moderate	Severe	Moderate
Gender										
Total	0.68	0.88	0.57	0.85	0.83	0.93	0.65	0.82	0.59	0.91
Men	0.68	0.89	0.52	0.86	0.79	0.92	0.55	0.81	0.56	0.88
Women	0.69	0.89	0.60	0.85	0.87	0.97	0.75	0.86	0.63	0.97
Age										
15-24	0.83	0.96	0.89	0.96	0.97	0.81	0.75	0.82	0.72	1.07
25-34	0.77	0.89	0.61	0.83	0.82	0.96	0.73	0.88	0.73	0.94
35-44	0.73	0.94	0.59	0.88	0.86	0.95	0.72	0.91	0.56	0.91
45-54	0.59	0.82	0.46	0.84	0.76	0.95	0.58	0.79	0.54	0.89
55-64	0.51	0.73	0.53	0.86	0.77	0.93	0.50	0.66	0.43	0.79
Education level										
Less than upper secondary	0.58	0.84	0.29	0.84	. .	. .	0.51	0.74	0.42	0.66
Upper secondary	0.76	0.89	0.64	0.88	. .	. .	0.83	0.90	0.60	0.91
Tertiary	0.91	0.94	0.70	0.84	. .	. .	0.82	0.97	0.71	0.96

. .: Data not available.

Source: National health surveys (see Figure 1.3).

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Labour market performance of people with mental disorders worsened over the past decade

Before the onset of the recent economic crisis, most OECD countries enjoyed a long period of strong economic growth. Despite the general increase in employment rates during this period for a number of other disadvantaged groups, employment rates at large did not improve much among people with mental disorders compared with those without mental disorders, perhaps with the exception of Australia (Figure 2.5, Panel A). In some countries (Norway, Sweden, United States), employment rates even declined over the past ten years, and in Sweden this happened in parallel to an increase for those without mental health problems. At the same time, unemployment rates for people with mental disorders fell less compared with their counterparts, except in the United States where unemployment increased for everyone (Panel B).

How can these disappointing trends in labour market outcomes for this group be explained? One plausible explanation for these differences can be attributed to the prejudice among key actors in the labour market: employers, co-workers, and workers themselves. Stigmatising attitudes have highly adverse impacts on the probability of obtaining and keeping good jobs. Baldwin and Marcus (2011) argue that studies which rank health conditions by the degree of stigma "consistently find that mental disorders generate some of the strongest stigma, with little changes in attitudes over the last three decades". Therefore, poor labour market outcomes among people with mental disorders not only reflect the state of the business cycle but also the discriminatory actions that accompany stigma. In addition, the nature of work in OECD countries over the last two decades has changed substantially with greater intensification of work in many sectors and a rise in cognitive demands of many jobs. This may also explain the poor integration of some workers with mental health problems during this time.

High risk of long-term unemployment raises risk of increase in disability benefit claims

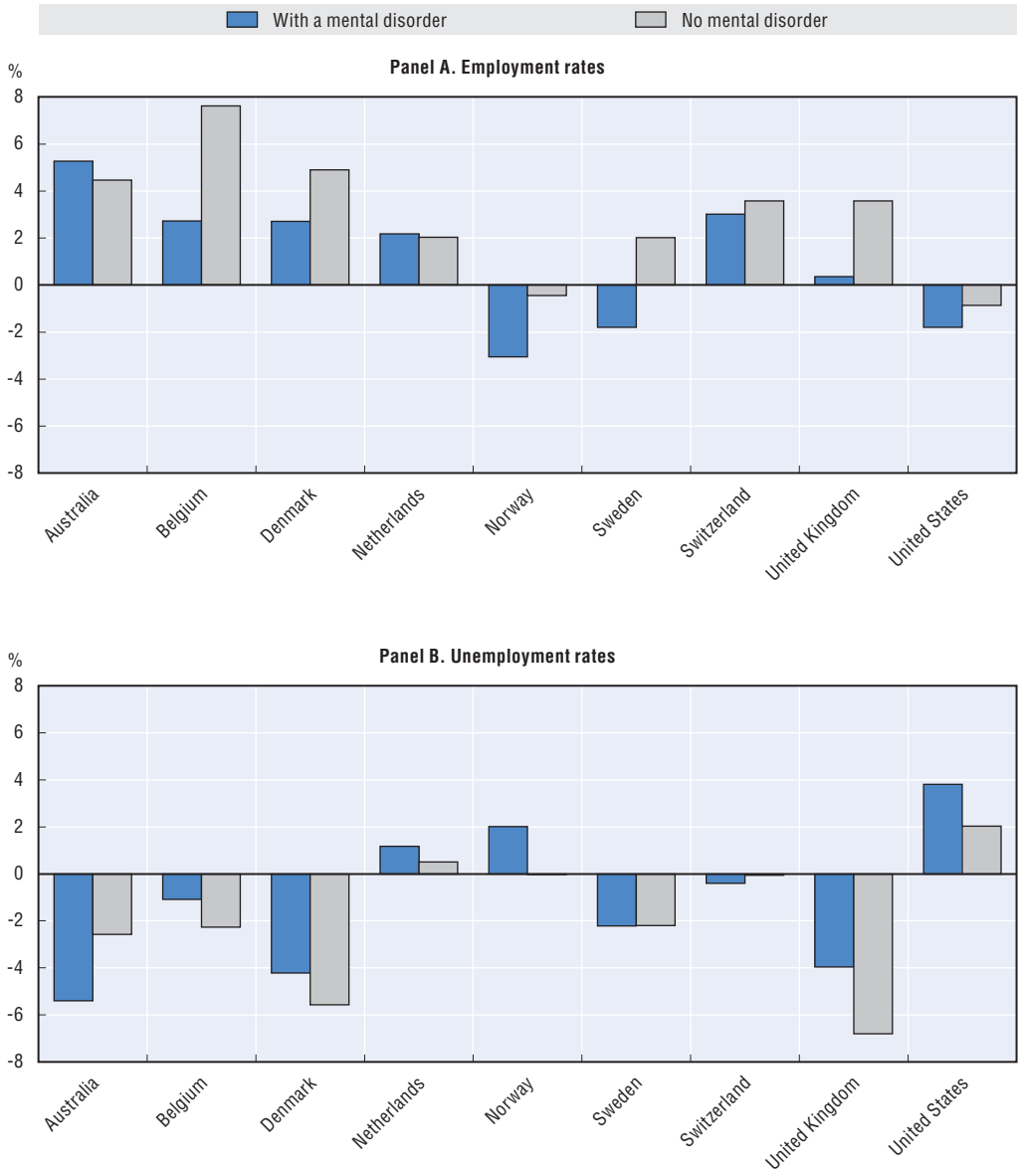
Not only are people who experience severe mental health problems more likely to be unemployed, they also remain unemployed for a longer period. In all countries for which data are available, those with severe mental disorders have roughly double the share of long-term unemployed as those without mental health problems (Table 2.2). Individuals with severe mental disorders facing long spells without a job are likely to see a depletion of their skills which thereby reduces their chances of reintegration into the labour market. This puts them at a high risk of becoming discouraged and withdrawing from the labour market – and possibly applying for disability benefits. Table 2.2 also shows very big differences in this regard between people with severe and moderate mental disorder. The latter group does not face higher shares of long-term unemployment than the group without a mental disorder. This, in combination with significantly higher unemployment rates, suggests that people with moderate mental disorders are more likely than those with severe disorders to find a job but also less likely than those with no disorder to retain their job, *i.e.* more likely to have frequent job changes.

People with mental health problems are more likely to have low incomes

In most countries for which data are available, people with mental disorders have less financial resources. As shown in Chapter 1 (Figure 1.4), equivalised incomes of people with a moderate mental disorder are around 90% of those of the total working-age population,

Figure 2.5. **The employment and unemployment gap of people with a mental disorder has increased**

Percentage-point change in employment and unemployment rates for people *with* and *without* a mental disorder between the mid-1990s and the mid- to late 2000s



Source: National health surveys (see Figure 1.3).

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and incomes of people with a severe disorder around 80% or less (60-70% in the English-speaking countries). But there are noticeable differences across the different labour force categories. Regardless of the severity of the mental disorder, *employed* people have higher incomes than the non-employed. Employed people with a moderate mental disorder have incomes around the average of the total working-age population (Figure 2.6). In the United Kingdom, employment is even associated with an income 20% higher than the country-specific average.

Table 2.2. **People with a severe mental disorder stay in unemployment for much longer**

Share of people unemployed for more than 12 months in total unemployment, by mental health status, late 2000s

	Severe disorder	Moderate disorder	No disorder
Australia	41	16	20
Sweden	53	41	34
United Kingdom	78	45	42

Source: National health surveys (see Figure 1.3).

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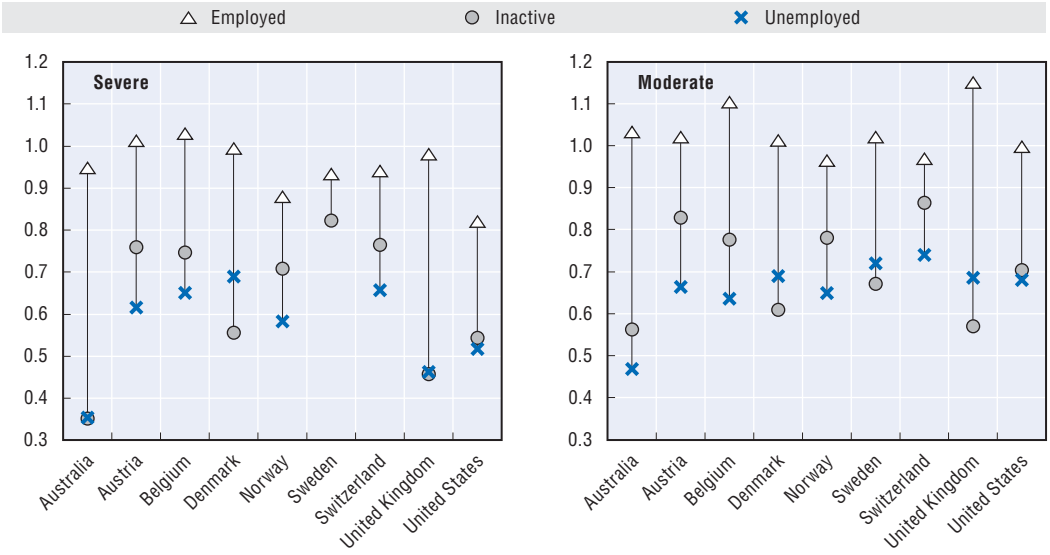
Figure 2.6. **Unemployed and inactive people with a mental disorder have much lower incomes**

Income[a] levels of people with a severe and moderate mental disorder as a ratio of the average income of the total working-age population, by labour force status, late 2000s



a) Income refers to equivalised disposable household income per person. Data for Australia and Denmark refer to gross household income, for all other countries to net household income.

Source: National health surveys (see Figure 1.3).

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Employees with severe mental disorders in most countries (with the exception of the United States and to a lesser degree Norway) also have incomes similar to the average of the working-age population. In contrast, the relative income of unemployed or inactive individuals with severe and moderate mental health problems is much lower than for any other group. In countries such as Australia, the United Kingdom and the United States, these can be as low as 35-50% of the average income of the entire working-age population. This finding is in line with a recent analysis of WHO World Mental Health Surveys according to which mental illness has a strong negative impact on earnings (Levinson *et al.*, 2010): employees with serious mental disorders in ten high-income countries – including Belgium, the Netherlands and the United States – were strongly over-represented in the lowest income quartile (at over 40%) and highly under-represented in the highest income quartile (at just over 10%).

Effect of the economic downturn on mental health problems

The recent economic crisis has had a strong effect on the key determinants of poor mental health: unemployment and lower incomes. In July 2009, the average OECD unemployment rate reached 8.5%, the highest level in the post-war period. In May 2011, the average rate had declined slightly to 8.1%, still well above its pre-crises level of under 6%. In turn, perceived job insecurity has also risen across all OECD countries. In addition, fewer job opportunities may force people to stay in or move to unsatisfying and insecure jobs or those with too heavy of a work load. What are the likely effects of these changes on mental well-being of workers in OECD countries?

As noted earlier, unemployed people are two to three times more at risk of suffering from mental illness than employed people. Therefore, it is reasonable to expect that the crisis is likely to exacerbate the level and extent of mental distress in the population. It is possible and likely that some of the effects of the crisis on the well-being of the population may only show up in the long run. However, some countries have noticed adverse effects already. According to statistics from the UK's National Health Service, the crisis has worsened the mental well-being of workers. Latest statistics show the biggest yearly rise in the use of antidepressant prescriptions on record, with 39.1 million issued in 2009, up from 35.9 million in the previous year (MIND, 2010).

What does the evidence from previous economic downturns show? Empirical literature on the effects of downturns on mental health confirms that increased unemployment invariably results in adverse impacts on the mental health of workers and newly unemployed. Barnes *et al.* (2009), using the British Household Panel Survey, investigate the effect of two recession years (1991 and 2008) on negative social outcomes such as depression. The results show that in both recessionary periods people who lost their jobs were more likely to suffer from depression in the shorter-term than people who remained employed. Moreover, females are found to be more vulnerable to longer-term risks of depression as a result of job loss in an economic recession. Uutela (2010), based on a comprehensive review of studies examining the effect of previous economic downturns, concludes that mental disorders are strongly "pro-cyclical".

The socio-economic crisis will not only have implications for the mental health of the workforce, but it also has serious repercussions on social security systems across OECD countries. During the crisis, in many countries (*e.g.* Canada, Denmark, Hungary, Ireland, New Zealand, Norway, Portugal, Spain, the United Kingdom and the United States) the share of long-term unemployment has risen significantly – sometimes by more than 20 percentage points (*e.g.* in Ireland, Spain and the United States), but typically by some 10 percentage points (OECD, 2010). In some countries (*e.g.* Austria, the Netherlands), the unemployment rate has started to fall again but in parallel to a continued increase in the share of long-term unemployment. A particular concern in countries with high and persistent unemployment is that labour force withdrawal takes the form of an increased take-up of disability benefits. Evidence from past episodes of recession has shown that inflows into disability schemes usually peak after hikes in unemployment and have typically been very difficult to reverse once the economy recovers (OECD, 2010).

People with higher job insecurity have a higher risk of a mental disorder

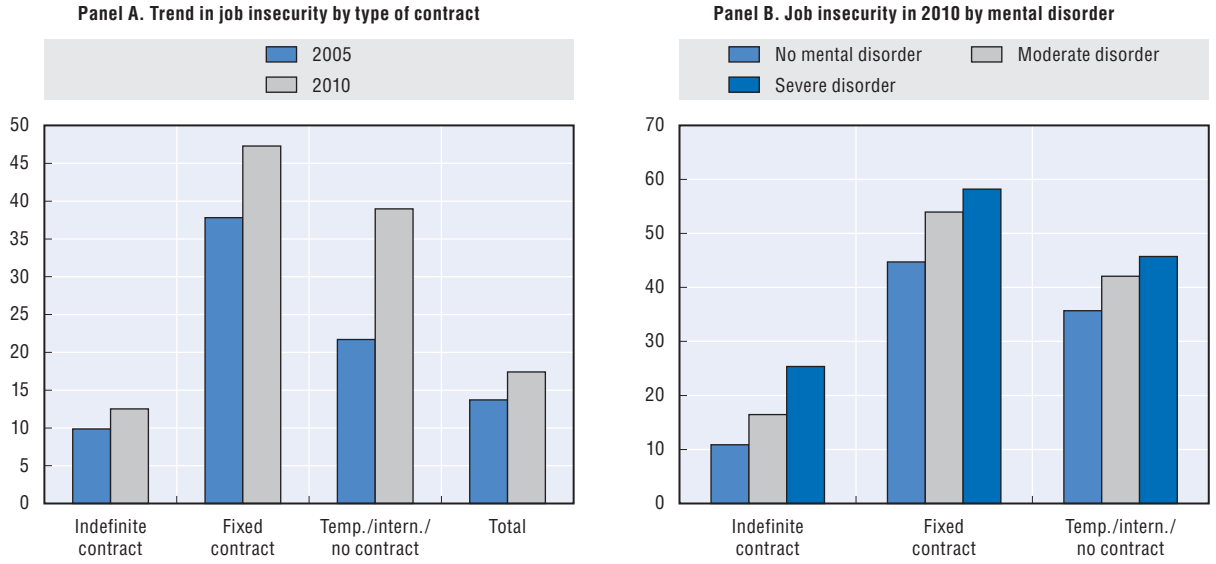
Job loss is not the only stress during economic crises. Recessions can be equally stressful for those still in the workplace. Melnychuk (2010), for example, using 1994-2008 British Household Panel Survey data, shows that a 1 percentage-point increase in the regional unemployment rate is associated with a 0.25 percentage-point increase in the probability of anxiety among men and a 1 percentage-point increase among single women. How can this higher risk of anxiety be explained? It has been shown that the anticipation of job loss has an even more detrimental effect on mental health than the incident of job loss itself (Kasl *et al*., 1975). Job insecurity is associated with a 33% increase in the risk of common mental disorders (Stansfeld and Candy, 2006).

Job insecurity – measured as the risk of losing a job in the next six months – in recent years has risen among all workers across OECD countries: overall, from 14% in 2005 to 17% in 2010 (Figure 2.7, Panel A). The share of workers on temporary contracts concerned about their job security increased substantially from 21% in 2005 to almost 40% in 2010. Moreover, in 2010 almost half of all employees on fixed-term contracts felt they could lose their job within six months. This rise in "perceived unemployment" largely reflects the impact of the recent deteriorating economic climate.

On the other hand, job insecurity is strongly associated with mental health: the poorer the mental health of a worker, the more likely he/she is to feel the job is insecure (Figure 2.7, Panel B). This association is even stronger for individuals on temporary and fixed-term contracts who are more likely to experience mental disorders than those on indefinite contracts. Of course, no causal inferences can be drawn from this cross-sectional result. However, research suggests a clear causal link between job insecurity and reduced psychological well-being in the form of anxiety, depression and stress. For example,

Figure 2.7. **Job insecurity is likely to worsen mental health, particularly for those in insecure employment**

Share of people (in percentage) who feel they could lose their job in the next six months (perceived job insecurity)



Note: Results are based on all countries covered in the EWCS survey.

Source: OECD calculations based on European Working Conditions Survey (EWCS) 2005 and 2010.

StatLink http://dx.doi.org/10.1787/888932533342

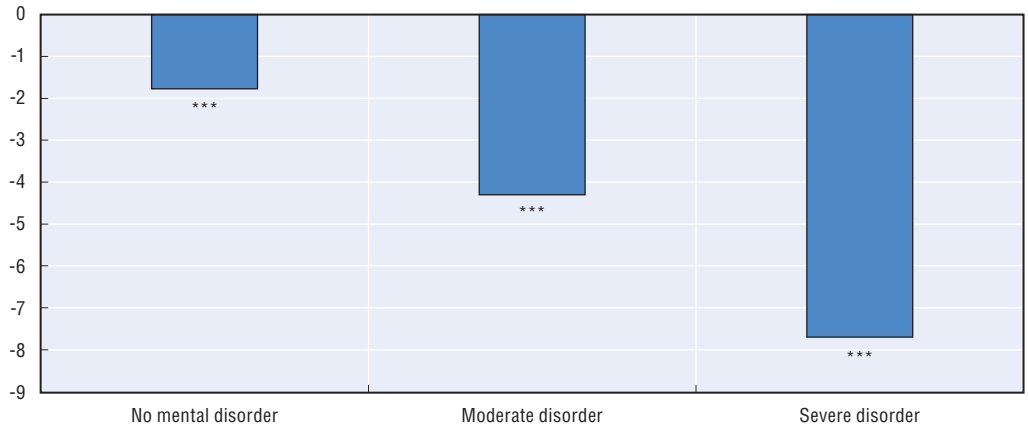
Hellgren and Sverke (2003) show in a longitudinal study that the cross lagged effect of job insecurity on mental health problems was significant whereas the reverse effect of mental health complaints on subsequent insecurity was not. Overall, this association with greater job insecurity could well produce more mental illness among both the unemployed and those that are already in work during the present situation of high and persistent unemployment in many countries.

Work and workplace organisation is also related to poor mental health

In addition, an economic downturn may lead to restructured job routines that possibly lead to work-related stress and job dissatisfaction. This in turn can decrease the person's commitment to work and lower his/her marginal productivity. Figure 2.8 looks at the impact on job satisfaction of having undergone a restructuring at work. Overall, people who have experienced such restructuring are less satisfied with their work, the difference being large and statistically significant for all three mental health categories. Workers suffering from severe mental disorder experience a much larger drop in job satisfaction: 8 percentage points, four times the drop for workers with no mental disorder and twice as much as for those with moderate disorders (all differences being significant at the 1% level). This is yet another example of the increased sensitivity and vulnerability of people with (severe) mental disorder.

Figure 2.8. **People experiencing restructuring have lower job satisfaction**

Difference (in percentage points)[a] in job satisfaction between those with and without restructuring experience, by severity of mental health disorder



*** statistically significant at the 1% level.

Note: Results are based on all countries covered in the EWCS survey.

a) All differences are significant at the 1% level, with those having undergone restructuring consistently reporting a lower level of job satisfaction, and this difference is increasing with poorer mental health.

Source: OECD calculations based on European Working Conditions Survey (EWCS) 2010.

StatLink http://dx.doi.org/10.1787/888932533361

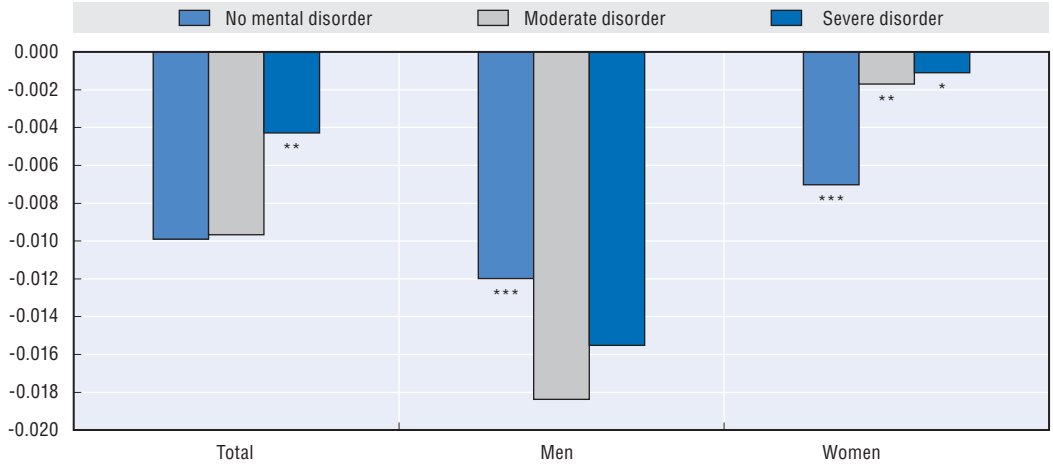
Are labour market opportunities of people with a mental disorder affected by the business cycle?

People with mental disorders have significantly poorer labour market outcomes compared with their mentally healthy peers. The recent economic crisis has lead to widespread job loss across the OECD increasing the pool of jobseekers in the labour market. This section presents results on the impact of the business cycle on the employment prospects of working-age people with mental disorders.

Figure 2.9 shows the estimated effect of a 1 percentage-point increase in the unemployment rate on employment probabilities of men and women with and without mental disorders.[6] In general, the changes in the aggregate unemployment rate have a significant impact on the employment probabilities of both men and women without mental disorders. Of particular interest is the surprising result that men with moderate or severe mental disorders are *not* affected more in an economic downturn than men without a mental disorder. On the other hand, the results show that employment probabilities of women with moderate disorders are less responsive to the fluctuations in the economic cycle compared to women with no mental disorder. The responsiveness is even less in the case of women with severe conditions. For example, a 1 percentage-point increase in unemployment reduces the employment probability of people with severe mental disorders by less than 1%. Other studies investigating the relationship between labour market outcome and macroeconomic conditions have also shown a weak relationship between employment outcomes for people with severe mental illness and economic conditions (Waghorn *et al.*, 2009; Catalano *et al.*, 1999). For example, Waghorn *et al.* (2009) used a five-yearly population survey in Australia to conclude that labour market participation between 1998 and 2003 improved for people with moderate mental health problems. However, labour force activity did not change significantly for people with severe mental health problems in spite of improved labour market conditions during this period.

Figure 2.9. **Sensitivity of labour market performance of men and women with mental disorders to the business cycle**

Estimated effect of a 1 percentage-point increase in the unemployment rate on the probability of being employed, by gender, 2005-10



*, **, *** statistically significant at the 10%, 5%, and 1% level, respectively.

Note: Results are based on all countries covered in the Eurobarometer survey.

Source: OECD calculations based on Eurobarometer 2005 and 2010.

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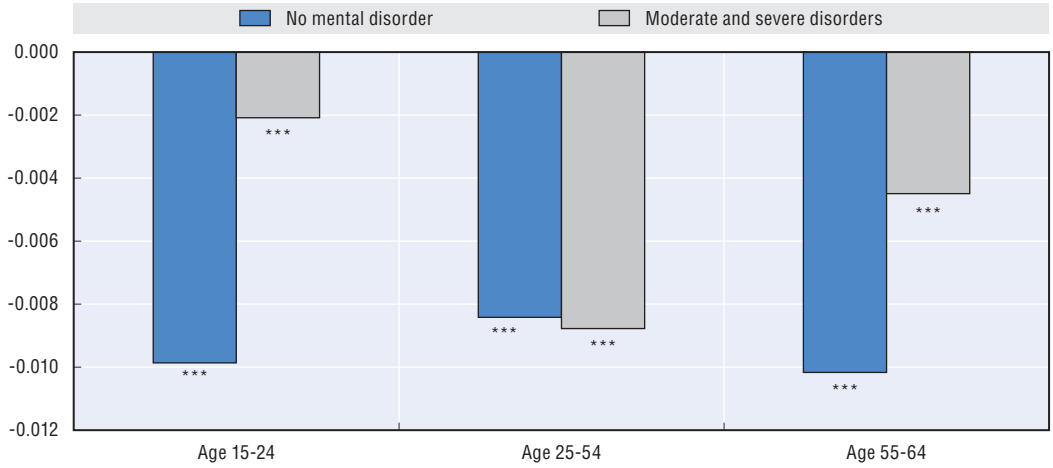
This contradicts widespread beliefs that people with mental health problems are the first to be excluded. The better outcomes of people with severe mental disorders might be partly explained by a "selection effect" – the already reduced group with severe disorders in the labour force has possibly found a niche or are largely in subsidised employment, where people can "survive" an economic crisis. Although this is a positive finding, the

lower sensitivity of this group to the economic conditions also indicates the poor potential in improving labour market outcomes for this group in good economic times.

Further results by age suggest that young adults and older workers with mental disorders are less affected by the business cycle compared with their peers without mental disorders (Figure 2.10). Labour supply of prime-age workers with mental disorders is more responsive to the cycle which presumably can be attributed to their greater financial responsibilities as main providers of household resources.

Figure 2.10. **Employment probabilities of youth and older workers with mental health problems are less sensitive to fluctuations in the business cycle**

Estimated effect of a 1 percentage-point increase in the unemployment rate on the probability of being employed, by broad age group, 2005-10



*** statistically significant at the 1% level.

Note: Results are based on all countries covered in the Eurobarometer survey.

Source: OECD calculations based on Eurobarometer 2005 and 2010.

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The evidence discussed in this section all points to the central importance of employment as a means to ensure adequate incomes and good mental health. Unemployment and perceived job insecurity on the other hand are key determinants for poor mental health. Therefore, avoiding long-term unemployment and the risk of long-term inactivity is crucial. This, in turn, requires policies to stimulate labour demand for disadvantaged groups of workers since the good economic climate of much of the past two decades by itself has not helped people with mental ill-health get into the labour market to a sufficient extent. Furthermore, improved supports, be it in the form of co-ordinated health services and/or additional job-search assistance, are particularly important for the unemployed with moderate mental health problems whose chances of finding employment can be significantly improved in a booming economy.

2.3. The impact of working conditions

Unemployment is generally detrimental, and having a job beneficial to one's quality of life, income status and mental health. This conclusion holds for people with and without mental disorder. That said, almost 70% of the population with moderate mental disorders and also some 50% of those with severe mental disorders are employed. This section focuses

on the mental health of employees and, in particular, on the impact of working conditions and job-related stress, and on measures taken at the workplace to address these issues.

The quality and structure of employment for workers with mental disorders

Although it is evident that being in employment is better for mental health, there is now plenty of evidence showing that the benefit of moving from unemployment to employment will depend upon the quality and the characteristics of the job in question. Job satisfaction is an important moderating variable for the mental health effects of employment; jobs in which workers have high job satisfaction enhance personal growth, self-esteem and mental health, but jobs with low satisfaction can be detrimental to mental health and as bad as being unemployed (Winefield *et al.*, 2002). A more recent study by Buttersworth *et al.* (2011) shows that the health benefits of becoming employed depend on the quality of the job. Moving from unemployment into a high-quality job led to improved mental health (mean change score of +3.3) while the transition from unemployment to a poor-quality job was detrimental to mental health (score –5.6) and in fact more detrimental than remaining unemployed (score –1.0).

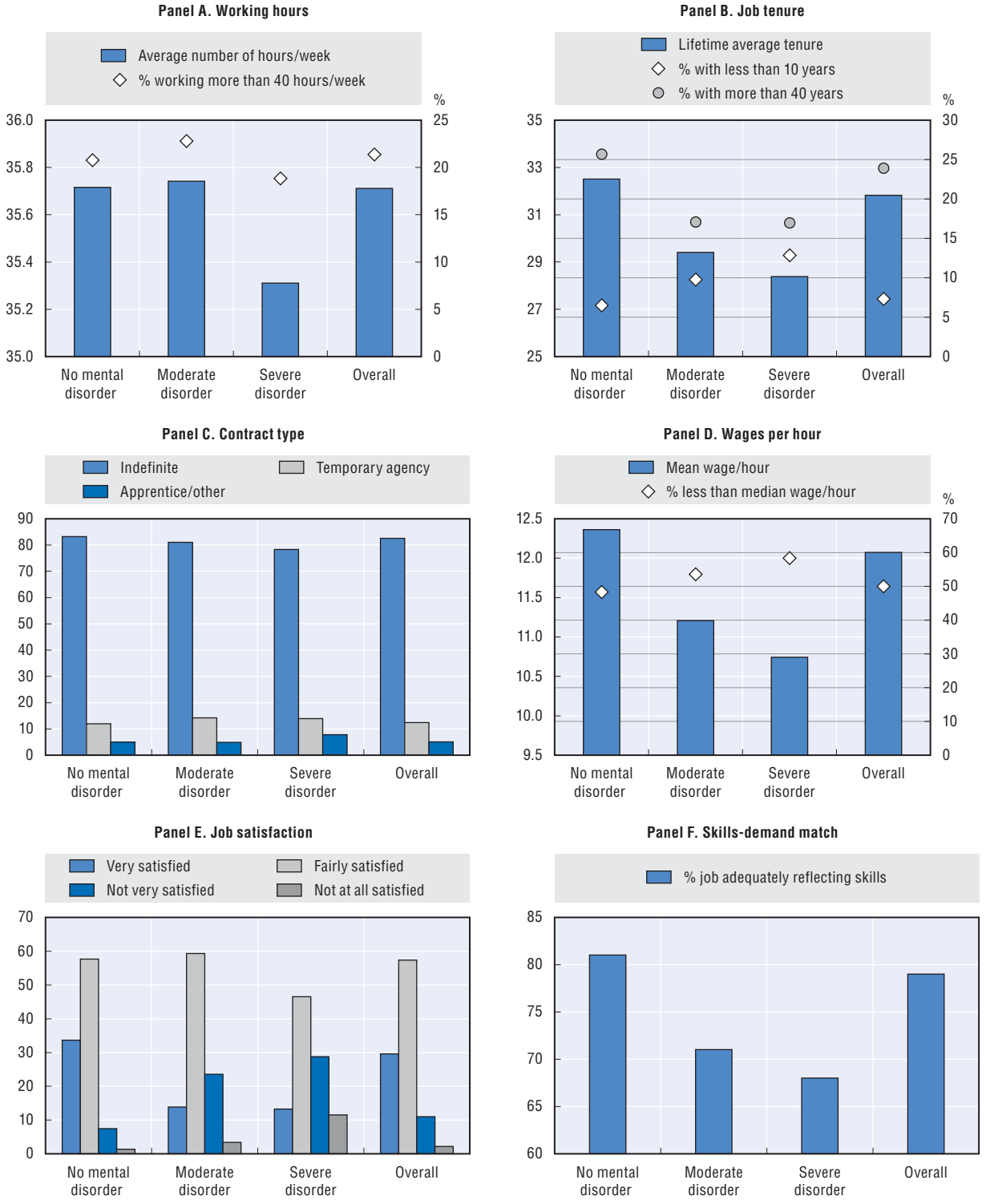
What do we know about the quality of the jobs held by people with severe or moderate mental disorders in comparison to the quality of the jobs of their peers without mental disorder? Figure 2.11 summaries selected job-quality indicators. By and large these indicators suggest that job-quality differences are significant but in many cases these differences are relatively small – in turn confirming that workers with mental disorders (especially those with moderate disorders) are in many ways not so different from other workers but face larger risks and greater challenges:

- Relatively small differences are found in average weekly hours worked, as well as lifetime average job tenure (accumulated over all jobs during working life). More people with severe or moderate mental disorder have a lifetime work record of less than ten years and fewer of them a record of 40 years or more, compared with people with no mental disorder. The high lifetime tenure suggests that for many of those workers mental illness is transitory.
- Workers with a mental disorder generally tend to hold less stable and less well-paid jobs than other workers. They more frequently have temporary or fixed-term contracts, even though the differences are not large. Wage differences (corrected for differences in working hours) are larger; in particular, far more workers with mental disorder earn less than the median wage.
- Very big differences, on the other hand, are found in perceived job quality: far more people with a mental disorder are not satisfied with their jobs and, related to this, far more of them report that their job does not match their skills. This is very critical for employment stability; worker productivity (Section 2.3) and the risk of premature labour market exit (Chapter 4). However, these results should be interpreted with caution since the higher incidence of people with mental disorders in poor quality jobs can partly be attributed to those with poorer mental health being more likely to enter these jobs and report worse working conditions than healthier individuals.

Workers with a mental disorder are also not working in the same jobs or occupations. Related to both their lower level of educational attainment and the much greater skills mismatch, they are highly over-represented in the medium to low-skilled occupations such as elementary occupations, clerks and service workers, and under-represented in high-skilled occupation such as professionals, legislators and lawyers (Figure 2.12). For

Figure 2.11. **Workers with mental disorders tend to work in jobs of slightly poorer quality**

Selected job-quality indicators for workers with a severe, moderate or no mental disorder, 2010



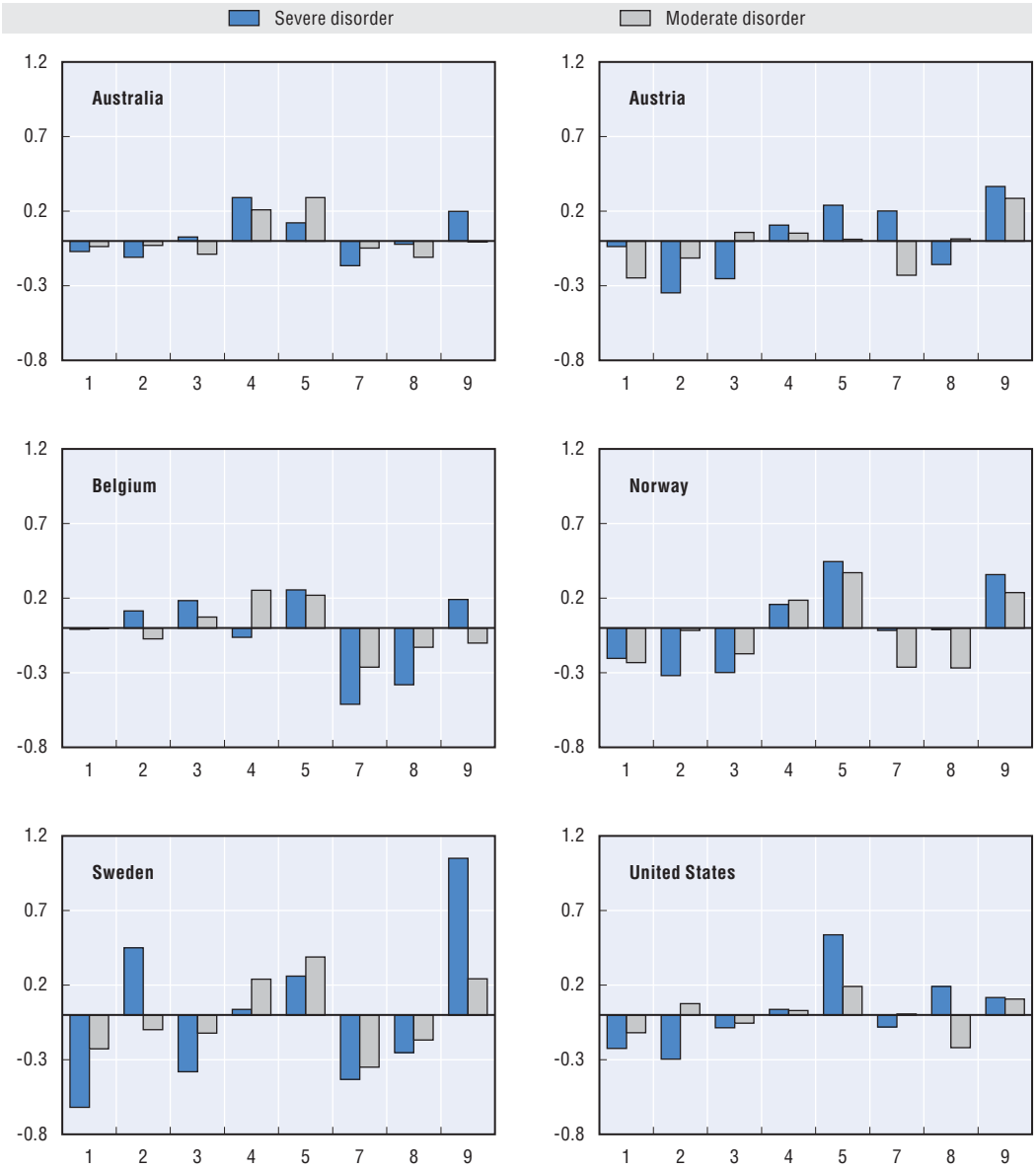
Note: Results are based on all countries covered in the respective surveys.

Source: OECD calculations based on Eurobarometer 2010 (Panels A, C and F), Survey of Health, Ageing and Retirement (SHARE) (Panel B) and European Working Conditions Survey (EWCS) 2010 (Panels D and E).

StatLink http://dx.doi.org/10.1787/888932533418

Figure 2.12. **Prevalence of mental disorders varies with different occupations**

Prevalence of mental disorders of employed people relative to the overall employed population (in percentage), by occupation and severity of mental disorder, latest available year



Note: Occupation based on ISCO-88, one-digit occupations: 1: Legislators, senior officials and managers; 2: Professionals; 3: Technicians and associate professionals; 4: Clerks; 5: Service workers and shop and market sales workers; 7: Craft and related trades workers; 8: Plant and machine operators and assemblers; 9: Elementary occupations.

Source: National health surveys (see Figure 1.3).

StatLink http://dx.doi.org/10.1787/888932533437

example, in Norway and Sweden, the likelihood of having a mental disorder is some 30-40% higher for service and sales workers compared with the employed population whereas over-representation is around 20% in most countries for all the low-skill occupations. Differences are in the same direction and at the same magnitude for severe and moderate mental disorders, though typically slightly larger for severe disorders. These differences are important in view of different working conditions in different occupations and different mechanisms between the work environment, work-related stress and mental health.

The current work context

Greater competition and technological change driven by globalisation have had a significant influence on shaping the current state of the world economy. While the impact of these forces can be observed quantitatively (in terms of the number of jobs created and destroyed), these forces have led to major changes, in terms of job content, job organisation and job requirements.

This section briefly examines how the nature of work has changed in OECD countries during the past two decades in respect to work patterns and psychosocial risk factors.

Some working conditions have improved over time

Although employment and labour force participation rates have increased over the past two decades, unemployment rates have also increased very significantly (Figure 2.13, Panel A). This rise in unemployment is mainly associated with the recent recession experienced in all OECD countries. As discussed above, the recent rise in unemployment is likely to have detrimental effects on the mental health of many of the individuals who have lost their jobs during this period. At the same time, the mental health of those at work is also likely to suffer as a result of an increase in job insecurity and economic restructuring.

The pattern of employment continues to change across OECD countries, with an ongoing shift from agriculture and manufacturing into services. The share of workers employed in manufacturing and other good-producing industries has fallen substantially while the share of workers employed in professional and technical occupations has grown strongly (Panel B). The share of people working in less-skilled white-collar occupations shows a mixed picture; the percentage of workers in clerical occupations has fallen while the proportion of sales workers has increased. This may suggest that that employment in the types of jobs typically related to stress (*i.e.* low-skilled occupations) has increased over time.

The proportion of workers with a temporary contract has, overall, been rising while the average job tenure has changed little in the OECD area (Panel C). The growth of temporary and short-term employment shows that the labour market has become more dynamic. This is likely to lead to higher job insecurity among workers. The number of hours worked per week continues to drift downwards – on average. This is attributed to the increase in the incidence of part-time work and the decrease in the number of workers who work long hours.[7] The proportion of workers with atypical working hours (night, evening and weekend work) has fallen substantially (Panel D). The share of people reporting that they can reconcile work and family lives has increased. This might be attributed to the fall in overall hours worked and atypical working hours. Overall, the association of mental health with working hours is not necessarily straightforward. For example, although prolonged working hours are associated with psychological problems, long working hours may also be associated with increased satisfaction at work, especially when it is related to improving career prospects, and to broader autonomy in working life.

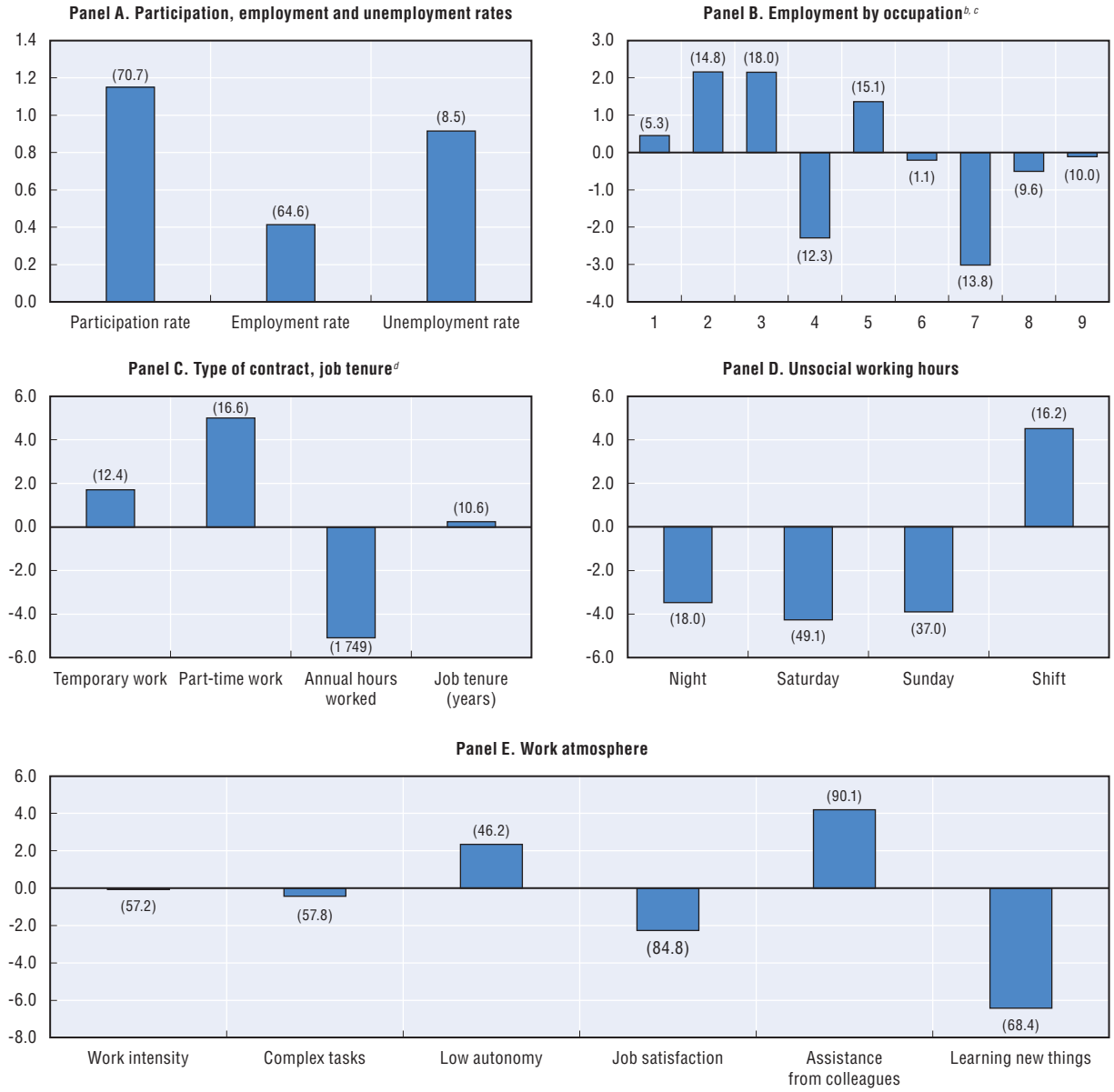
But psychosocial risk factors have also increased

The self-reported exposure of OECD workers to a number of stressful working conditions suggests a trend increase in psychological demands or effort for workers (Panel E). Although there has been almost no change in the number of workers reporting that they have to work at high intensity (*i.e.* at high speed and to tight deadlines), at 57% the share remains at a very high level in 2010. The share of workers having low autonomy

Figure 2.13. **Labour markets and working conditions continue to change across the OECD**

Percentage-point change in selected labour market outcomes and working condition indicators in the period 1990-2010

Weighted averages of OECD countries[a] (Panels A and C) and unweighted averages (Panels B, D and E)



Note: Results are based on all countries covered in the respective surveys.

a) Values within parenthesis are the OECD average in the last year.

b) Data for Panel B refer to the change in the period 1995-2005.

c) Occupation based on ISCO-88, one-digit occupations: 1: Legislators, senior officials and managers; 2: Professionals; 3: Technicians and associate professionals; 4: Clerks; 5: Service workers and shop and market sales workers; 6: Skilled agricultural and fishery workers; 7: Craft and related trades workers; 8: Plant and machine operators and assemblers; 9: Elementary occupations.

d) Data for annual hours refers to the percentage change in the period 1994-2010. Job tenure covers the period 1995-2009.

Source: OECD calculations based on the *OECD Labour Force Statistics Database* for Panels A and C; the European Union Labour Force Survey (EULFS) for Panel B, and the European Working Conditions Survey (EWCS) for Panels D and E.

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at work has increased somewhat. In 2010, 68% of workers said that they learned new things in their job – representing a fall of 6% since 1990 while the proportion of workers reporting that they have less skills compared to what the job requires has gone up. Overall, the percentage of workers reporting low job satisfaction has increased during this period.

There is consistent evidence that certain aspects of workplace stress, such as high psychological demands, low control over work tasks, and high job insecurity are predictors for common mental disorders. The evidence presented in this section suggests that certain working conditions likely to have a detrimental impact on mental health have become more common in recent years in many OECD countries. This fact combined with the recent increase in unemployment and job insecurity could well be a source of worsening average mental health of workers in OECD countries.

Work-related stress, job strain and mental health

The association between work-related stress and mental health is complex. Stress is a normal part of life as long as people can manage it, and the same holds for work-related stress which is typically highest in high-skilled managerial and professional occupations (*e.g.* Calnan *et al.*, 2004), but not the most destructive for those workers. Hence, what matters are the mechanisms by which normal stress turns into "bad" stress, *i.e.* stress that leads to a mental illness.

Poor organisation of work plays a significant role in the development of mental health problems

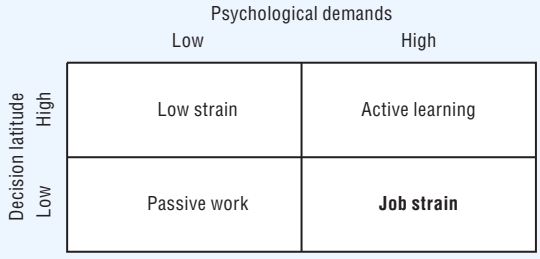
Several theories have been developed that predict negative consequences for the mental health of workers when exposed to certain psychosocial risk factors at work. The "*job-strain*" model (also known as the *demand-control* model) and the *effort-reward-imbalance* model are the two most influential work-stress models that help to identify particular job characteristics important for employee well-being and mental health. In the demand-control model, it is assumed that work-related stress and *job strain* primarily arise from structural/organisational aspects of the work environment (Karasek, 1979). More specifically, it is argued that different kinds of jobs introduce different levels of work stress due to three main factors: *i)* the amount of work needed to be done (known as *job demands*); *ii)* the degree of decision-making authority an individual has; and *iii)* the extent to which an individual can choose to employ his or her skills (the sum of the latter two are known as *decision latitude*). The negative health and psychological outcomes of stress occur most often when the worker has to face high levels of psychological demands coupled with low levels of autonomy at work. According to the effort-reward-imbalance model, the most stressful condition is when the reward does not match the effort made. Reward includes financial rewards, esteem rewards, promotion prospects, and job security (Siegrist, 1996).

There is considerable evidence linking high psychological strain and work-related stress with mental disorders. For example, a comprehensive meta-analysis by Stansfeld and Candy (2006) provides robust evidence that the combinations of high demands and low decision-latitude (*i.e.* job strain) and of low effort and low reward (*i.e.* effort-reward-imbalance) are major risks for common mental disorders. Even if the prevalence of mental disorders in the population has not changed, is the changed nature of work affecting the mental health of more and more employees?

Following the work of Karasek (1979), in this section the job-strain indicator is used as a measure of work-related stress. It provides a useful conceptual framework for linking

work organisation and working conditions to evaluate stress at work. By looking simultaneously at job demands and job control, it is possible to divide the different forms of work organisation into four quadrants which are characterised either by high or low decision latitude or by high or low psychological demands (see Box 2.2). A job combining a high level of decision latitude with high psychological demands is considered to be "Active Learning", whereas the opposite is referred to as "Passive Work". Of particular interest here, is the quadrant labelled "Job Strain" characterised by a high degree of psychological demands and low decision latitude. According to the theory behind this model, people in strained jobs bear the highest risk for developing stress-related mental disorders, and those in the "Low Strain" category the lowest risk.[8]

Box 2.2. **Psychological demands and decision latitude**



Job strain has increased for all occupations

Figure 2.14 shows that the proportion of workers exposed to job strain has increased over time across all OECD countries, sometimes significantly. An interesting picture emerges when comparing the levels and trends of job strain among workers in different countries. Workers in the Nordic countries face systematically lower job-strain levels (typically around 20%) than workers in Anglo-Saxon countries and the Mediterranean (around 30-40%), and the increase was larger in the latter group.

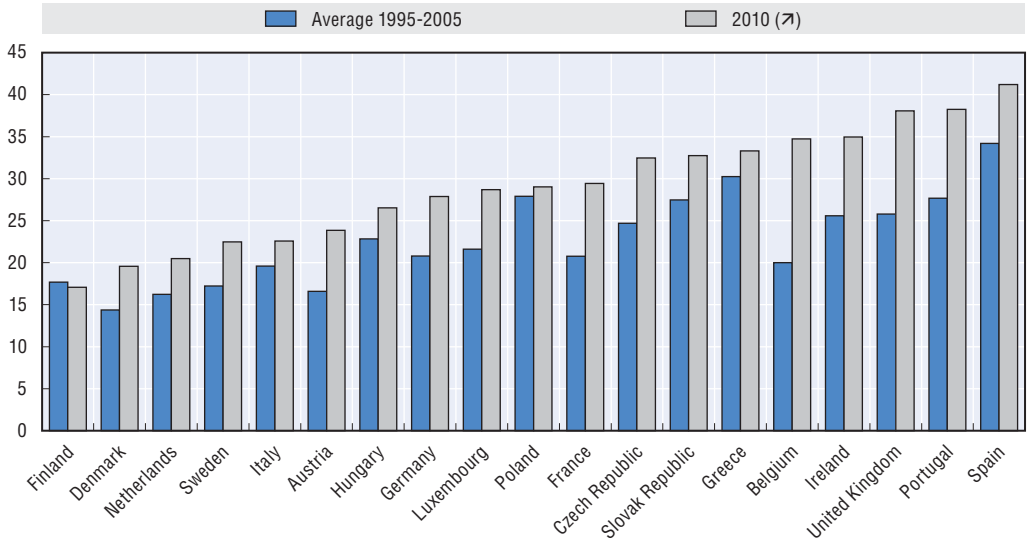
Psychological stressors in the work environment are highly varied and can be very different depending on the type of job. Figure 2.15 shows the share of workers experiencing job strain in different occupations. Job strain has increased substantially in all occupations and most so among clerks and service workers; workers in low-skilled occupations are much more likely to suffer from job strain than those in high-skilled occupations. This finding is in line with the theory of the demand-control model which hypothesises that workers such as those in machine-paced jobs and service workers such as waiters have the highest levels of stress because they are in jobs which are high in demands and low in control. On the other hand, job strain is less prevalent in high-skilled occupations such as lawyers, university professors, consultants or account managers as these jobs combine high levels of demands with high levels of autonomy.

What is the impact of job strain on mental health?

Figure 2.16 illustrates the effect of *job strain*, *active learning* and *passive work* – relative to *low strain* – on the simulated probabilities of having a moderate (severe) relative to no mental disorder.[9] Results show that higher psychological demands that occur in conjunction with high control (*i.e.* active learning) and high job demands with lower

Figure 2.14. **Job strain has increased over the past decade in all European OECD countries**

Trends in the proportion of workers in the job-strain quadrant, by country, based on the 2010 threshold



Note: Model results are based on all countries covered in the survey.

Source: OECD calculations based on European Working Conditions Survey (EWCS) 1990-2010.

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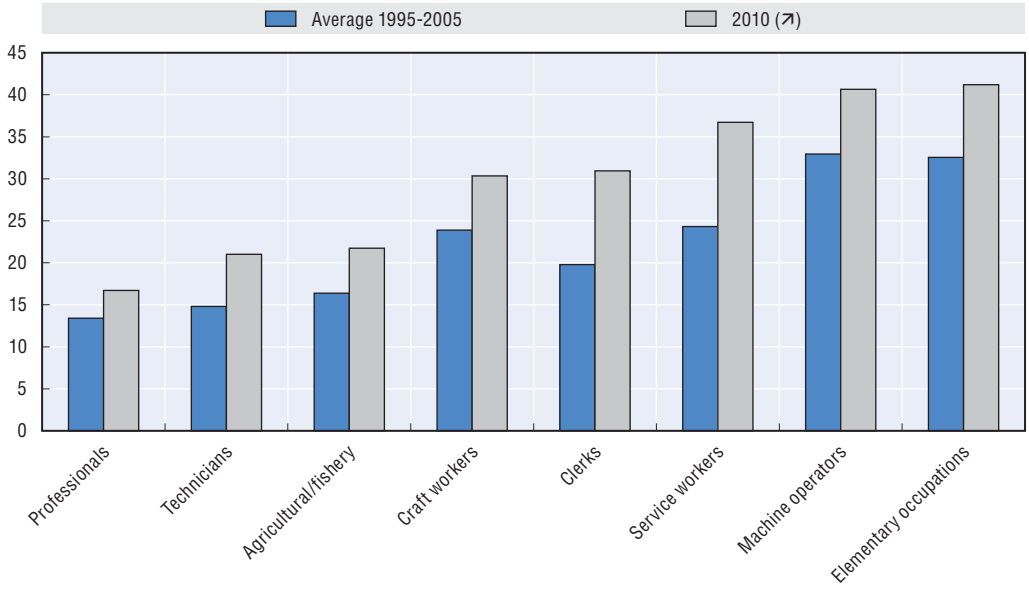
Figure 2.15. **Workers in low-skilled occupations are much more likely to experience job strain**

Trends in the proportion of workers in the job-strain quadrant, by occupation, based on the 2010 threshold



Note: Results are based on all countries covered in the EWCS survey.

Source: OECD calculations based on European Working Conditions Survey (EWCS) 1990-2010.

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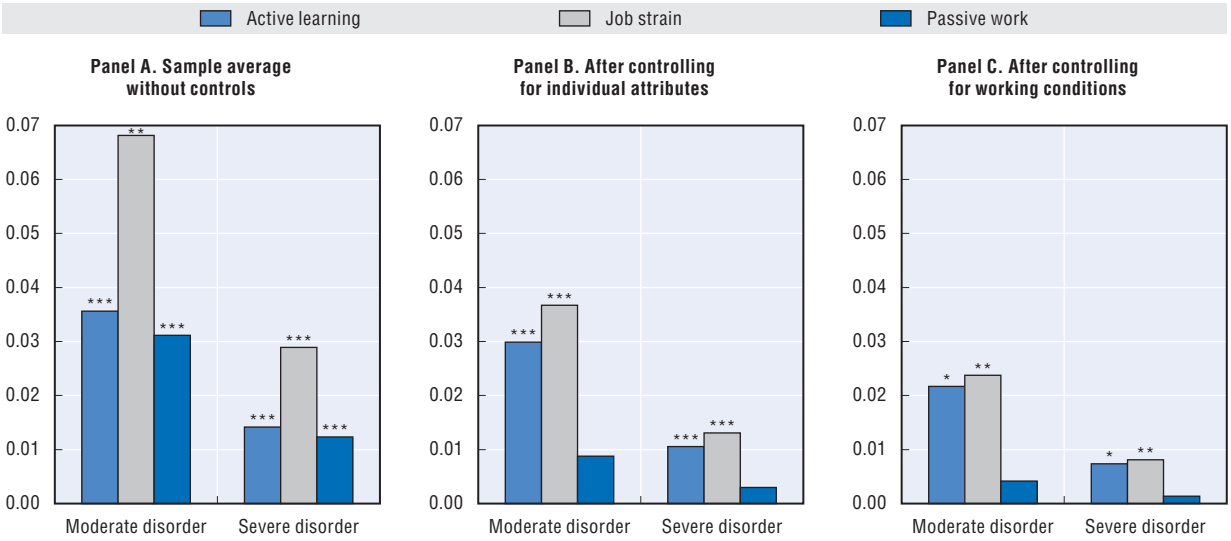
control over one's work (*i.e.* passive work) both increase significantly the likelihood to have a mental disorder, be it moderate or severe. Whilst a person experiencing both high demands and low control (*i.e.* job strain) faces a double-sized effect (Panel A).

Figure 2.16. **Job strain increases significantly the chances of having a mental disorder**

Marginal effects of working conditions in the demand-control model on the likelihood of having a mental disorder



*, **, *** statistically significant at the 10%, 5%, and 1% level, respectively.

Note: Model results are based on all countries covered in the EWCS survey.

Source: OECD model calculations based on European Working Conditions Survey (EWCS) 1990-2010.

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When controlling for individual attributes, the effect of passive work disappears while the effect of high psychological job demands remains significant at 1%, with little change in the size of the coefficient (Panel B). Further controlling for additional individual working conditions not covered in the job-demand framework, reduces both the significance levels and the size of the coefficients, but the effect of job strain remains significant at 5% (Panel C). There is no statistically significant difference in the results for severe and moderate mental disorder: jobs with high job strain seem to be a significant factor in contributing to moderate as well as severe mental ill-health. This is critical knowing that common mental disorders which are very prevalent can easily develop into more severe problems. In turn, this confirms the importance of working conditions in people's mental health.[10]

More detailed results show that other working conditions also have a strong impact on mental health (Table 2.3). This is especially the case for flexible working hours but also for temporary work and, only for those with severe mental disorders, also for Sunday work. Mental health also deteriorates if workers do not receive assistance from colleagues and if their job requirements are too high relative to their own skill level. Of all the working conditions included in the model, the manager's attitude towards the employee[11] is the single most important factor that has a substantial impact on workers' mental health. A "positive" attitude of the manager towards their staff reduces the probability of having a moderate or a severe mental disorder by 6% and 2%, respectively (Table 2.3, Model 1).

When comparing the effect of job strain on mental health across occupations, a decreased level of statistical significance of the coefficient can be observed (with the exception of professionals and plant machine operators). This might be attributed to the reduced sample sizes when looking at occupational groups. Manager's attitude, the factor which has the highest impact overall, continues to be very significant even at the level of individual occupations. Hence, irrespective of the level of job demands and job control and

Table 2.3. **Effect of job strain (demands/controls) on mental health**

Marginal effects from an ordered logit model[a]

Dependent variable = Index of mental ill-health (0 = none, 1 = modest, 2 = severe)	Total (Model 1)		Occupation (Model 2)							
			Legislators, senior officials and managers	Professionals	Technicians and associate professionals	Clerks	Service workers and shop and market sales workers	Craft and related trade workers	Plant and machine operators and assemblers	Elementary occupations
	To be moderate	To be severe	To be moderate							
Active learning (*vs.* low strain)	0.022*	0.008*	0.014	0.010	0.018	0.009	0.035	0.032	0.076	0.045
Job strain	0.024**	0.008**	0.009	0.033*	0.025	0.027	0.011	–0.004	0.108*	0.062
Passive work	0.004*	0.001	0.009	–0.011	0.001	–0.006	0.028	0.001	0.062	0.034
Manager's attitude towards employees	–0.059***	–0.021***	–0.102***	–0.043***	–0.042***	–0.035**	–0.037**	–0.105***	–0.065***	–0.064***
Flexible hours	0.012***	0.004***	0.021	0.007	–0.005	0.017	0.010	–0.002	0.042***	–0.003
Sunday work	0.004	0.002*	0.003	0.015***	0.008	0.008	0.010*	–0.008	–0.016*	0.006
No assistance from colleagues	0.024***	0.008***	–0.028	–0.010	0.012	0.037*	0.044*	–0.001	0.025	0.042*
Skill requirement relative to your own	0.009**	0.003**	0.005	0.014*	0.004	0.019*	0.001	0.014	–0.024	0.016
Female (*vs.*male)	0.032***	0.011***	0.063**	0.054***	0.008	0.035***	0.027*	0.002	0.023	0.038
Temporary work (*vs.* regular)	0.014*	0.005*	0.038	0.011	0.014	0.006	0.015	0.040*	0.007	0.017

*, **, *** statistically significant at the 10%, 5%, and 1% level, respectively.

Note: Model results are based on all countries covered in the EWCS survey.

a) Ordered logit model estimated with clustered standard error within each country. Other controls are one-digit industry dummies, firm size dummies, public sector dummies, country dummies, and other working conditions variables.

Source: OECD model calculations based on European Working Conditions Survey (EWCS) 1990-2010.

StatLink http://dx.doi.org/10.1787/888932534558

irrespective of the occupation, the manager's behaviour is critical. The gender differential is strongest for the high-skilled jobs, whereas other factors such as assistance from colleagues or temporary work status do not show large differences[12] (Table 2.3, Model 2).

The role of manager is critical in mitigating the adverse effects of work-related stress

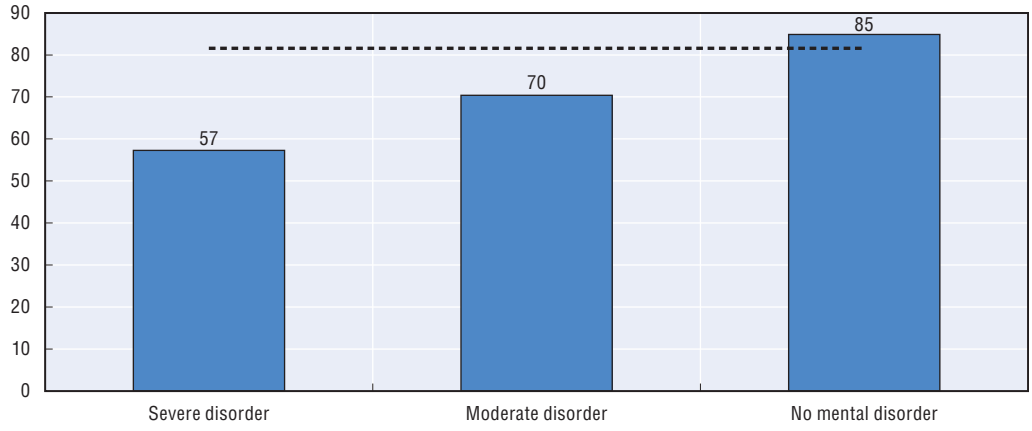
The strong finding that the manager's attitude has a significant impact on the chances of having a mental disorder has important implications in respect to actions and policies required at the workplace. Good leadership and appropriate management styles have been recognised as one of the most critical factors in promoting a good working environment (Kelloway and Barling, 2010). Having a good manager can help employees to cope better with work-related stress. The role of the manager is even more critical for people with mental disorders since they are more likely to feel that they receive little respect and recognition at work: only just over half (57%) of people with a severe mental disorder report that their work efforts are adequately recognised at work – compared with 70% of those with a moderate mental disorder and 85% of those with no mental disorder (Figure 2.17).

Policies at the workplace

In view of the important role of the manager, workplace policies and practices are critical. This is even more critical because of the very large number of workers with common mental health problems and the particularly strong influence of management

Figure 2.17. **Respect and recognition at work decrease with severity of a mental disorder**

Percentage of people receiving at work the respect and recognition that their efforts and achievements deserve, by severity of a mental disorder, 2010



Note: Results are based on all countries covered in the Eurobarometer survey. The average is represented by the dashed line.

Source: OECD calculations based on Eurobarometer 2010.

StatLink http://dx.doi.org/10.1787/888932533532

practices on these workers' health and productivity. Importantly, many of those workers would need earlier support, even *before* problems become visible *e.g.* through repeated and/or extended work absences. As Baer *et al.* (2011) have shown, as many as half of what they call "difficult" employees – workers with all kinds of common mental health problems – never take any sick leave, while in fact urgently needing support.

Prevention and monitoring of work-related stress and mental illness at workplaces

Table 2.4 outlines the way countries deal with the prevention of work-related stress and job strain so as to avoid a worsening of workers' mental health. Several general conclusions can be drawn:

- There appears to be an across-the-board legal requirement or legal duty to take appropriate measures to protect the health of workers. Some countries require risk assessments, whereas others refer to more general workplace evaluations.
- In most countries, regulations, risk assessments and workplace evaluations include some specific requirements related to psychological hazards and/or stress at work.
- Few of the countries give explicit instructions on how to deal with the health requirements mandated by law. Belgium requires risk assessments that include several areas such as stress and harassment, others provide tools to assist managers with their risk evaluations (*e.g.* the United Kingdom).

In practice psychosocial risks seem to receive less attention than physical hazards, suggesting that the necessity of the issue is not yet fully understood. Very few countries have put specific requirements in place, leaving open the question of accountability and minimum standards. There is also little mention of actual recommended measures to deal with the risks once they are identified in the employers' workplace assessments, an area where co-ordination and best-practice sharing would be most beneficial.

Table 2.4. **Work-related stress does not receive sufficient attention in workplace risk assessments**

Prevention requirements and instructions with regard to psychological risks and work-related stress

	Prevention requirement	Explicit instructions
Australia	Legal duty of care for workplace safety, with requirements for identification, assessment and management of risks, including stress. Psychosocial hazards inconsistently defined by state and federal jurisdictions, and receive less attention than physical hazards.	No prescribed method of monitoring, but suggested methods include consultations and industry-specific measures.
Austria	Employers are legally obligated to evaluate all risks, including psychosocial, on an on-going basis. Employers have special responsibilities for their employees with disabilities.	The risk assessment is not laid down in detail by the regulation, although there are guidelines and an online tool available for this purpose.
Belgium	Employers must take all necessary measures to ensure a prevention policy to protect the well-being of employees, as found through risk analysis and then outlined in a five-year plan.	Risks evaluated must include stress, violence, harassment, effort and conflict.
Denmark	Workplaces legally obligated to evaluate working conditions. The scope of the evaluations accounts for the complexity of the work and the size of the enterprise.	There is official material meant to help with the preparation of workplace assessments; sickness absence is an explicit criterion in workplace evaluation.
Netherlands	Employers are legally obliged to perform a risk assessment in the entire field of occupational safety and health (including stress at work) and do this on an ongoing basis.	Left at the interpretation of employers and employees how to identify and evaluate working conditions and stress at work.
Norway	Enterprises legally required to systematically ensure safety, including working conditions and stress. Internal control regulations require them to carry out risk analysis and plans of action.	Regulation does not include specific guidelines for how the risk analysis and assessment are to be carried out.
Sweden	There is a written risk-assessment procedure and scheduled evaluations of the work environment required by law (with penalties).	Managers' competences in the field are regulated.
Switzerland	Employers are required to take all appropriate measures necessary to protect the health of employees (and explicitly mental health).	No explicit provision on how to identify and evaluate.
United Kingdom	Employers have legal duty to secure the health (including mental) of employees and carry out an assessment of health risks.	There are management standards (with six areas of work identified as stress-prone), and a free staff questionnaire to assess risk factors in the organisation.
United States	No overarching federal law that requires employers to evaluate stress, but many workplaces conduct voluntary annual or bi-annual assessments.	No explicit instructions are provided.

Source: OECD mental health policy questionnaires.

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Too often "difficult" employees are dismissed

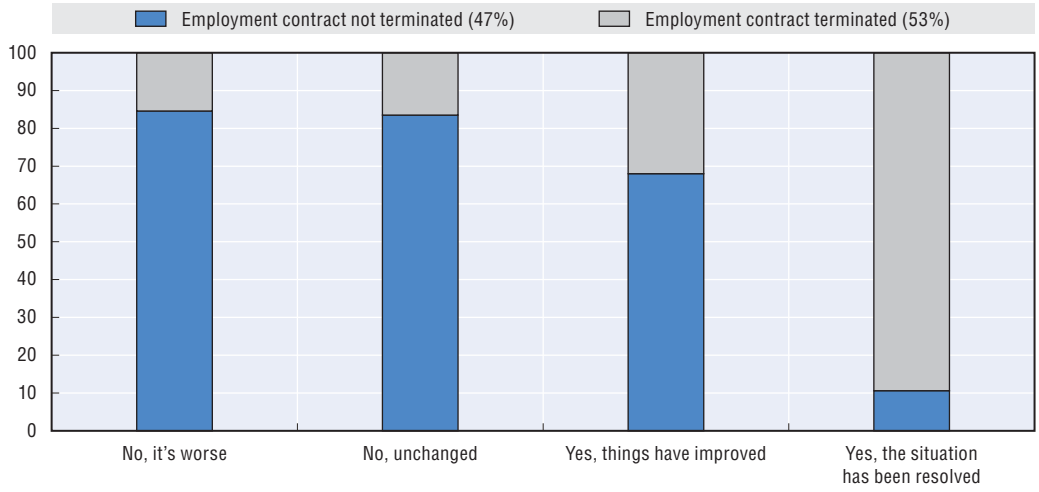
One of the purposes of risk assessments and monitoring procedures is to retain employment and prevent the termination of the employment contract. Very few studies are available on the link between mental health and contract terminations, but available findings are telling. A recent US study finds that workers with mental illness have a 56% increased risk of involuntary job loss and a 32% higher risk of voluntary job loss (Nelson and Kim, 2011). Hence, they are more likely to be dismissed but also more likely to be discouraged and leave their job. No difference is made in this study between moderate and severe mental illness, but evidence provided earlier in this report suggests that involuntary dismissal is likely to be especially high for workers with a severe mental disorder, and voluntary quits more so for those with a moderate mental disorder in the hope to find better employment elsewhere.

Similarly, a recent Swiss study reflects the different attitudes of managers dealing with mental-illness cases in their companies (Baer *et al.*, 2011): in almost all cases in which an employer considers a mental health-related problem as "solved", this is because the

worker in question has been dismissed; at the same time, most of those employers who have *not* dismissed the worker say that the problem is still as bad as it always was or even worse (Figure 2.18). This suggests that the typical solution – at least in a country like Switzerland with a flexible labour market and relatively low employment protection – is to dismiss difficult workers with mental health problems. This leaves ample room for policy improvement in regard to job retention.

Figure 2.18. **Solving mental health problems in the workplace often leads to dismissing the worker**

Percentage of employers in two Swiss regions who think the problem with a difficult employee was solved, improved, stayed the same, or became worse, by whether or not the worker in question has been dismissed, 2010



Source: Adapted from Baer *et al.* (2011), "'Schwierige' Mitarbeiter: Wahrnehmung und Bewältigung psychisch bedingter Problemsituationen durch Vorgesetzte und Personalverantwortliche – eine Pilotstudie in Basel-Stadt und Basel-Landschaft".

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Table 2.5 brings together the relevant policies applied by countries on issues of dismissal on mental health grounds. Some of the key findings are as follows:

- The majority of countries require employers to make some "good faith effort" before dismissals can be made on health-related grounds. Importantly, while in some countries illness is seen as a justifiable reason for a contract termination (*e.g.* Austria if not chronically ill, Denmark), in others employment protection is much stronger for sick workers than for other workers (*e.g.* Norway, Netherlands). Some countries are more specific than others in what would form a good faith effort. The United Kingdom, for example, has outlined some of the measures that have to be exhausted before termination and also requires that such measures be reasonable. The Dutch regulation says that every possible effort needs to be made, including rehabilitation of all sorts, to retain the worker.
- The minimum absence period that is allowed as legitimate grounds for termination ranges from 1 month (Denmark, Switzerland) to 6 months (Belgium), 12 months (Norway) or even 2 years (Netherlands). Notifications of termination also vary by country and tenure.
- There is also considerable variation in the requirement to inform authorities about terminations and the way they can be approved or contested. Generally speaking, there is no such requirement except for special cases dealing with workers' benefits (in Austria and Switzerland).

Table 2.5. **Dismissal regulations in regard to sick workers vary considerably across countries**

Legal requirements on employment contract terminations for sick workers

	Termination policy	Informing authorities
Australia	Notice periods, whether for health or other reasons, are between 1-4 weeks, depending on tenure. For compensable conditions, most workers compensation jurisdictions require employers to provide suitable duties, with some schemes requiring a prescribed absence period before health-related dismissals are allowed.	No requirement to inform employment offices, but employees have access to the "Jobs in Jeopardy" programme of assistance, meant to help with maintaining current employment through advice and workplace modifications.
Austria	Protection against discriminating termination of the contract if the employee is a "benefited disabled person" or has a chronic disease expected to last for more than six months which causes physical or mental impairment apt to hamper the persons participation in the labour market. Otherwise, illness is a valid reason for dismissal.	In the case of "benefited disabled persons", a special committee has to hear the case and judge whether the dismissal is justified or not.
Belgium	Illness is a justifiable reason for contract termination. Employer can be exempted from the legally required notice period and severance payment if the employee is declared permanently incapable to work by the occupational doctor.	No requirement to inform the local employment office.
Denmark	Termination policy is regulated by the contract agreed upon. One month's notice is required in the case of long-term illness.	Employers not required to inform.
Netherlands	Employers must do everything possible to retain the sick worker, including rehabilitation if necessary. Dismissal not possible for two years unless employee refuses co-operation.	Employers must inform the social insurance authority regularly about reintegration plans and progress, including a full report after two years. Employers who failed to do their utmost might be sanctioned with a third year of employer-paid sick pay.
Norway	Absence due to sickness is not a reason for dismissal during the first 12 months after illness and termination is regulated. The decision must account for the extent to which the employer has made adaptations in the working situation of the employee and how reasonable the inconveniences are for the enterprise.	
Sweden	Every possibility of redeployment has to be explored before health-related dismissal is legal, with notice of at least 3 months (no minimum absence required for justification).	Dismissals can be contested in a special court.
Switzerland	Employer cannot dismiss employee if fully or partially unable to work due to illness for a specific period (from 30 to 90 days, depending on tenure).	No obligation to inform employment office except for unemployment benefit purposes, with privacy concerns addressed.
United Kingdom	All reasonable adjustments have to be made by the employer to facilitate continuation. These are outlined in the Equality Act (2010).	Employee has to take action in case of wrongful dismissal.
United States	Employers must make a good-faith effort to provide reasonable accommodation for workers with disabilities, and termination cannot happen before such effort has been made.	No requirement to inform the local employment office.

Source: OECD mental health policy questionnaires.

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In the various regulations, there is a general concern for protecting workers from wrongful, hasty or discriminatory terminations. Nevertheless, more specific support to employees in danger of losing their jobs for mental health-related reasons would be beneficial. This is the case of Australia, which has in place a programme to help maintain current employment by giving advice and arranging workplace adjustments.

Tackling stigma and promoting recruitment of people with mental disorder

Job retention is only one side of the coin. The other side is stimulating labour demand and encouraging recruitment of workers with poor mental health. Stigma towards workers

and job applicants with mental disorder is pervasive, caused by a lack of knowledge on the side of employers and middle management about mental illness and fears around having a worker with mental illness in the team, including fears about the consequences on other workers and team members of hiring such a worker. Acknowledging this problem, countries are increasingly embarking on awareness-raising measures.

Table 2.6 groups together some of the public policies and programmes dealing with stigma in the workplace and in hiring practices. There are several common themes which become apparent from this cross-country comparison:

- In terms of guidelines provided to employers on how to address mental health stigma in the workplace, most countries have several brochures available but the degree to which companies are required to follow such advice varies from none to strict accountability.
- Several countries organise conferences through which they try to increase awareness about the issue in general and guidelines for employers in particular. The material is universally available on-line, but some countries also deliver hard copies of this material during labour inspections.
- Most of the countries have taken some measures to tackle stigma in the workplace, some directed by the private sector, in others cases as public initiatives. Some countries point specifically to issues of stigma (Australia, Switzerland, United Kingdom, United States), whereas others refer in more general terms to the need to reduce work-related stress to avoid mental health problems.
- Government awareness initiatives are also quite widespread, with several countries referring to funded campaigns to promote awareness through conferences, on-line material but also TV and billboards. Switzerland introduced a "healthy company" label for firms that are particularly active and successful on this front.

While there is room for a more active involvement of governments in spreading awareness about the issue and in encouraging the relevant actors to seek out support when needed, there seems to be a general acknowledgment of the importance of increased awareness. The potential of anti-stigma campaigns and measures is difficult to judge. Poor mental health among workers and even more so among the unemployed is extremely widespread, but much of this is invisible. Disclosure of mental disorder is a big and challenging issue. Most unemployed seeking a job will not disclose their problems (unless they are so severe that they cannot be hidden) as they will often have had bad experiences with sharing them. Disclosing problems to caseworkers in public employment services would probably make it easier in many cases to identify the right supports and help in the best way. Disclosing a mental illness to an employer, however, is likely to generate negative attitudes and stereotypes – even if it would open new chances for job placement to be more successful and, especially, more sustainable.

For this reason, it is not surprising that people with common mental disorders, which often can and do remain undisclosed, would often face particular challenges in keeping a new job, provided they were successful in finding a job in the first place. As such, the disclosure of common mental health problems will remain a big question mark with no optimal solution.

Evidence provided in this section suggests that work-related stress and job strain have increased; that working conditions matter for the mental health of workers; and that workers with poor mental health tend to work in poorer-quality jobs with higher job strain. Management practices, and in particular the line manager's attitude, feedback and support

Table 2.6. **In most countries increasing attention is given to awareness campaigns and initiatives**

Initiatives at various levels including governments to tackle stigma at the workplace

	Guidelines for employers	Measures to tackle stigma	Public mental health awareness initiatives
Australia	Guidelines and guidance materials exist online and are also provided by state and territorial agencies.	"Beyondblue", the National Depression Initiative, aims to raise community awareness and reduce associated stigma. It also runs the National Workplace Programme – an awareness, early intervention and prevention programme for workplace settings. Others are "Mindframe Initiative" – addressing media reporting and depictions of mental illness and suicide, and "headspace", aimed at youth-specific information.	The Federal government has websites about workplace safety with information for employees and guides for managers. "Work Safe Australia Week" is an annual event promoting employer awareness through conferences, workshops, case studies and displays. Several other funding and support measures for those suffering from mental health problems.
Austria	Some guidelines are available online, and an on-going campaign focuses on the efficient implementation of risk-assessment procedures for psychosocial risk at work. Also brochures and an online game have been developed.	The reduction of work-related psychosocial disorders and the improvement of assistance are key government objectives, tackled through co-operation and exchanges of know-how. Several conferences have been organised.	On-going campaigns focuses on the psychosocial risk assessment in special sectors such as hotels and restaurants.
Belgium	There are guidelines and training available (primarily on stress). They are provided by Employment Offices, targeted mostly at human resource staff.	Small-scale anti-stigma campaigns by NGOs.	Conferences, workshops and awareness campaigns for mental health at work (*www.respectatwork.be*) and for youth (*www.noknok.be*)
Denmark	Several relevant guidelines are available through a website, including on work-related stress. Awareness about them is raised during inspections and through e-mails and pamphlets sent to employers.	The focus is on transmitting information and clarifying options on the labour market for the employees with disabilities, the employers and the Job Centres, in a long-term effort aimed and persistent attitude changes.	Funding is set aside for de-stigmatisation campaign for 2010-11 on TV and billboards to create awareness and address fears and prejudices.
Netherlands	Employers personalise official guidelines for their organisation and are held accountable for these during inspections.	Stigma perceived as associated with intimidation at work – legal obligation for employers to implement policies against such phenomena.	Sectoral approach with involvement of stakeholders. Recent example on public sector employment initiative.
Norway	No specific management guidelines endorsed by authorities on mental health, but several official brochures deal with adaptation, work organisation, threats in the workplace. These are available online and handed out during inspections.	Relevant training is available from private entities. Employers have access to "guides for employers", which give information and individual support when dealing with mental health problem challenges in the workplace.	Inspections and guidance over the telephone and through e-mails, as well as a national campaign about mental health and work aimed at increasing awareness.
Sweden		Public support for NGOs active in the area.	No government initiatives.
Switzerland	Management guidelines available from governmentt website and awareness built through annual health congress and workshops (with insurance companies).	Measures against stigmatisation of persons with mental health problems are individual occupational re-integration measures (*i.e.* placement services) and specialised disability organisations (*e.g.* ProInfirms).	Federal funding is available, and campaigns will be put in place soon (anti-stress campaign already in place). Also, "healthy company" label for firms active in health problem prevention.
United Kingdom	Guidelines based on the management standards, promoted through website and some active promotion.	"Time to Change" programme against mental health discrimination, dealing with knowledge, fears and others.	Shift initiative addresses stigma and discrimination and offers resources and material to employers.
United States	Employers are not required to proactively follow the existing guidelines. These are not universally prescribed but some resources exist online.	Several national organisations that work to minimise stigma around mental health disability, including the "National Mental Health Awareness Campaign".	Some federally-sponsored initiatives promote mental health awareness among employers and address stigma, such as the "Resource Centre to Promote Acceptance, Dignity and Social Inclusion Associated with Mental Health".

Source: OECD mental health policy questionnaires.

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to the worker are critical for maintaining health and employment, but in reality problems with workers with mental ill-health tend to be solved mainly through dismissal of the worker in question. Corresponding workplace policies and practices are changing but change is slow and enforcement poor.

2.4. Worker productivity as a key challenge

Labour productivity growth has trended downwards in a number of OECD countries and this trend could be worsened if workers who are employed are not able to work at their full capacity or if they do not appear at their workplace regularly. Deterioration in mental health can have an impact on both of these factors implying that poor mental health of the population is likely to have detrimental effects on the long-run prosperity of OECD countries.

In this section, two concepts are used to establish how poor mental health can impact on workers' productivity: *i)* presenteeism; and *ii)* sickness absence. In the first case, poor mental health reduces workers' marginal productivity when they are at work. In the second, poor mental health increases the rate of absence or reduces the number of hours worked. The section also looks at the key trends in sickness absence and its drivers, and distinguishes the determinants and consequences of longer-term and short-term absences.

Sickness absence has long been regarded as one of the key indicators for labour productivity (*e.g.* Chatterji and Tilley, 2002). In recent years, presenteeism has also become a prominent indicator for loss in productivity because it is increasingly recognised that given the stigma of mental illness, presenteeism might be more frequent amongst those suffering work-related stress than amongst those suffering other work-induced conditions. Stewart *et al.* (2003), for example, estimated that US workers lose an average of one hour per week owing to depression-related absenteeism but as much as four hours per week due to depression-related presenteeism.

Trends in sickness absence and presenteeism

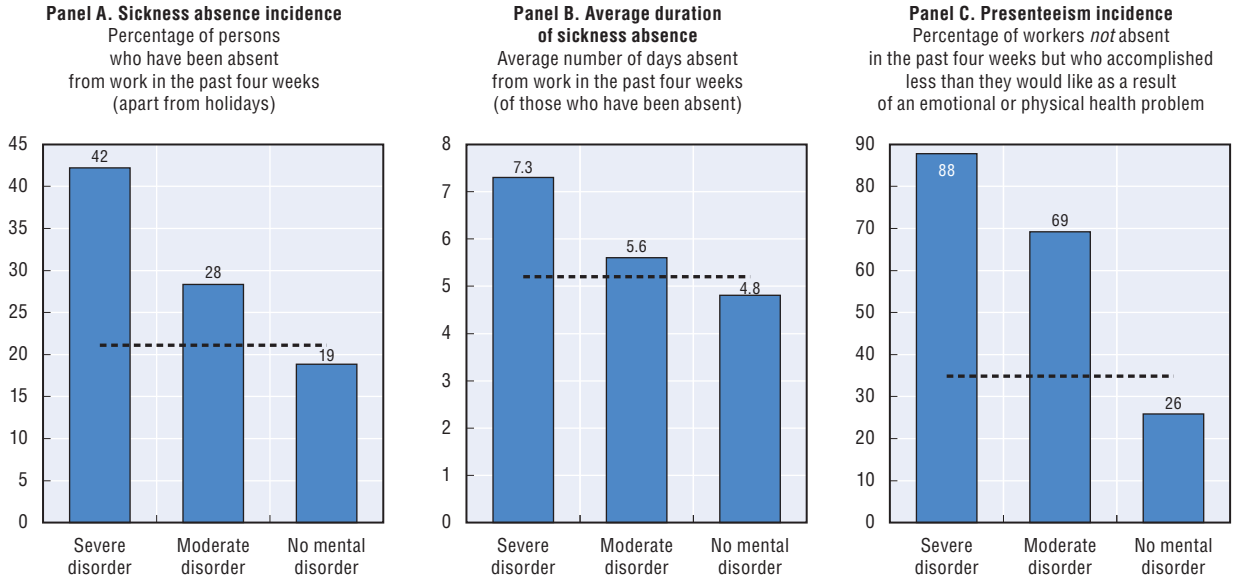
Poor mental health drives productivity downwards

Figure 2.19 shows several dimensions of labour productivity by the degree of severity of mental health problems. On average across the countries covered in the Eurobarometer survey, 42% of all workers suffering from a severe mental disorder have been absent from work in the past four weeks (Panel A). This is twice the overall average and more than twice the average for those having no mental health problem. Among workers with a moderate mental disorder, 28% have been absent in the past four weeks. The same pattern by severity of mental illness is apparent when looking at the average number of days of absence: the 42% with severe mental disorder off from work for health reasons have been away for 7.3 days on average, compared with an average of 4.8 days for the 19% of workers with no mental health problem absent from work, with workers with a common mental disorder again found in between the two groups though closer in absence behaviour to those without a mental disorder (Panel B).

However, not only do mental disorders increase the likelihood of temporary work absences, they also add to the likelihood of reduced performance while at work. In this case, the difference between the three mental health groups is even larger: workers with a severe mental disorder are more than three times as likely as those without any such disorder to accomplish less than they would like because of either emotional or physical

Figure 2.19. **Absenteeism and presenteeism both increase sharply with poorer mental health**

Incidence of absenteeism and presenteeism (in percentage) and average absence duration (in days), by mental health status, average over 21 European OECD countries in 2010



Note: Averages are represented by dashed lines.

Source: OECD calculations based on Eurobarometer 2010.

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health problems (88% *versus* 26%). Notably, in terms of presenteeism workers with a common mental disorder are more "similar" to those with a severe disorder, with 69% reporting reduced productivity at work (Panel C). Recent studies have also shown that sickness absence and presenteeism are to some extent substitutes for each other. For instance Bergstrom *et al.* (2009) show that presenteeism was a risk factor for sick leave in the future.[13] Overall, these findings are critical for the development of adequate sickness absence policies and workplace responses.

Marginal productivity of workers has fallen in the past five years

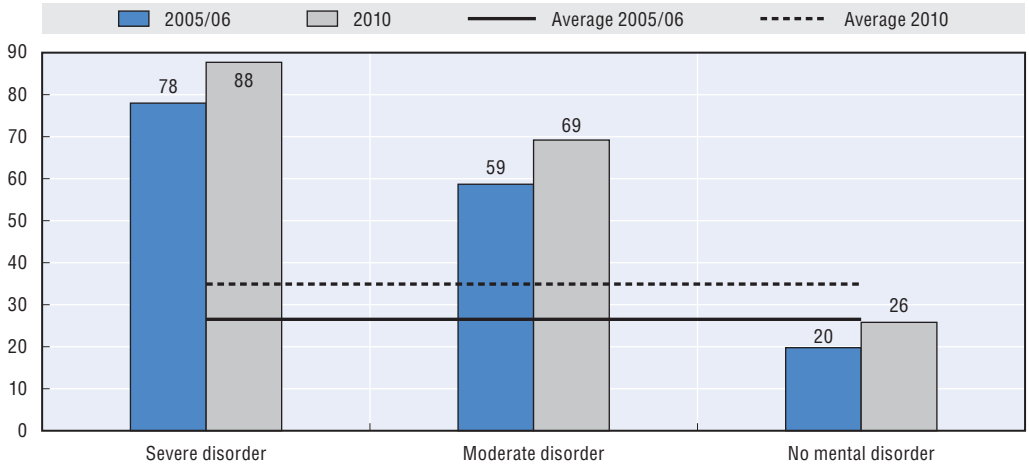
According to self-reported methods measuring worker's ability to concentrate and accomplish at work due to a physical or emotional problem, marginal productivity of workers has fallen over time for all workers and more so among workers with either a severe or a common mental disorder (Figure 2.20). This trend combined with the fall in annual hours worked over the past two decades (as seen in Section 2.2) could further put downward pressure on overall labour productivity, thereby leading to lower economic growth in the longer run.

Findings are robust across countries and indicators

Table 2.7 looks at the incidence of absenteeism and presenteeism of the three categories of mental disorder across the countries covered in this report. The very large differences in incidence between the EU Countries and Australia, the United States and Norway can be attributed to the use of different definitions. Whereas the Eurobarometer asks for absence incidence in the past four weeks, the question refers to the past two weeks in Australia and the past week in Norway. The US data from the National Health Interview Survey show all those who have been absent from work for health reasons for at

Figure 2.20. **Presenteeism has increased among all groups of the population**

Percentage of workers who were not absent in the past four weeks but who accomplished less than they would like as a result of either an emotional or a physical health problem, average of 21 European OECD countries, 2005 and 2010



Source: OECD calculations based on Eurobarometer 2005 and 2010.

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Table 2.7. **Absenteeism and presenteeism levels vary by country but mental health differentials are consistent**

Absenteeism[a] and presenteeism (in percentage), by country and severity of mental disorder, 2010 or latest year available

	Panel A. Sickness absence incidence				Panel B. Presenteeism incidence			
	Percentage of persons who have been absent from work				Percentage of workers who were not absent but who accomplished less than they would like as a result of an emotional problem			
	Severe disorder	Moderate disorder	No mental disorder	All	Severe disorder	Moderate disorder	No mental disorder	All
Austria	50	38	19	23	100	78	23	34
Belgium	65	37	17	22	86	81	25	37
Denmark	50	35	26	28	88	73	35	42
Netherlands	72	39	25	28	95	69	25	34
Sweden	44	51	29	33	84	72	25	35
United Kingdom	42	27	20	22	83	68	24	32
Average[b]	**42**	**28**	**19**	**21**	**88**	**69**	**26**	**35**
Australia	30	17	10	11	. .	. .	. .	. .
Norway	11	7	6	7	. .	. .	. .	. .
United States	17	10	6	7	. .	. .	. .	. .

. .: Data not available.

a) Absence is defined as follows: absence in the last four weeks for European OECD countries, absence in the last two weeks in Australia, absence in the last week in Norway and absence for ten days or more in the last year in the United States.

b) The average is based on all countries covered in the Eurobarometer survey.

Source: OECD calculations based on Eurobarometer 2010, and national health surveys for Australia, Norway and the United States.

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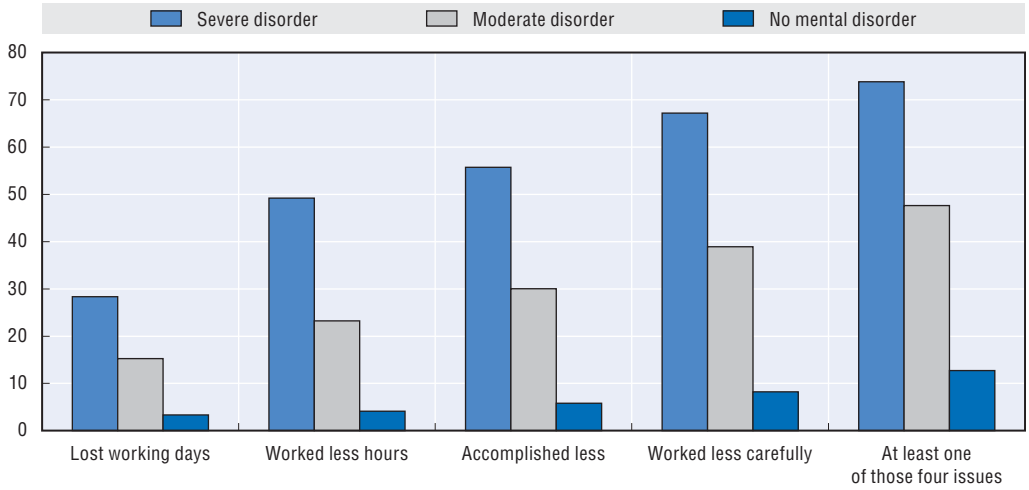
least ten days in the past year. Regardless of these differences, there are large and robust differences in the absence incidence between workers with severe mental health problems and those with none or only moderate problems in all countries. This is equally true for presenteeism incidences, for which differences between countries are very small but differences between mental health groups very large and robust.

Results are also robust across different definitions of reduced productivity or presenteeism. The 2005 round of the Eurobarometer allows a comparison of a range of indicators (Figure 2.21). Among all people with a severe mental disorder, 28% say they have lost work days in the past four weeks as a consequence of an emotional problem; 49% have worked fewer hours for the same reason; 56% have accomplished less and 67% have worked less carefully. The corresponding proportions for people with a common mental disorder are roughly half, and they are very low (less than 10%) for people with no mental disorder. In other words, differences across mental health groups are huge; and emotional problems cause very limited losses to productivity for workers in general but large losses for people with poor mental health.[14]

Figure 2.21. **Alternative measures of productivity loss all confirm these findings**

Percentage of workers who faced various productivity losses in the past four weeks, as a result of an emotional problem, by severity of mental disorder, average of 21 European OECD countries, 2005



Source: OECD calculations based on Eurobarometer 2005.

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What are the key drivers for sickness absence?

Linking the above findings on differentials in absence rates by severity of mental disorder in workers with previous results on working conditions and job strain, this section looks deeper into the drivers of sickness absence.

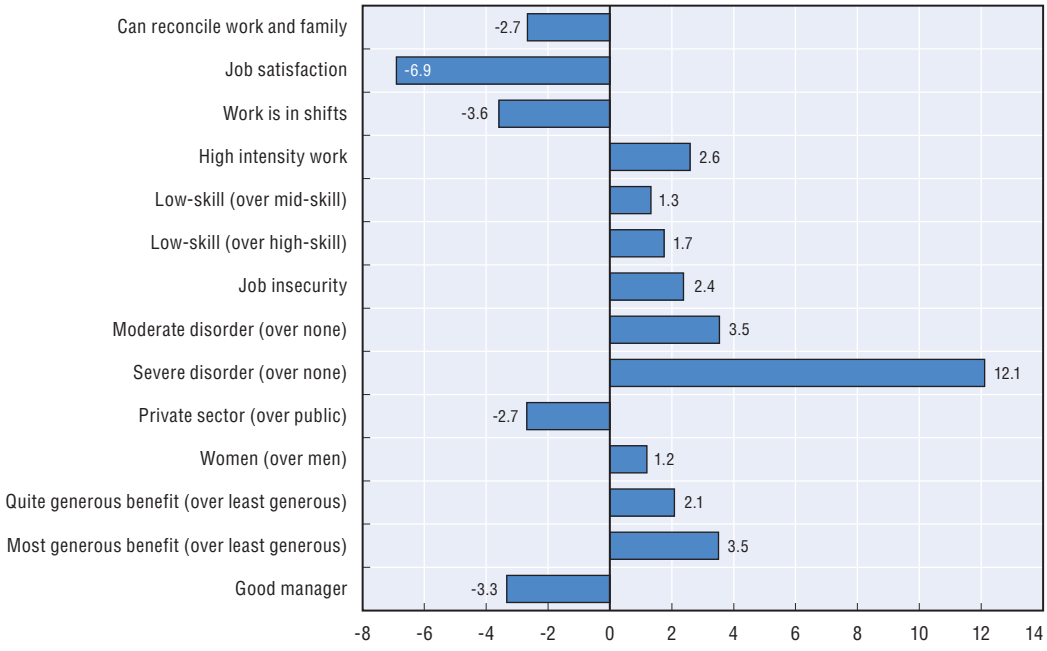
Figure 2.22 shows the additional number of days of sickness absence taken over the course of 12 months by different subgroups of the population.[15] Results are as follows:

- People who are satisfied with their job have significantly lower absence days (–6.90 days). Workers with a good manager (–3.34 days) and those who can reconcile work and family obligations (–2.67 days) also take fewer days of absence in a year. Working in shifts also reduced the number of absence days. On the contrary, high intensity work (+2.59 days) and job insecurity (+2.37 days) lead to a higher number of absence days.

- Individual characteristics also matter, with women taking more absence days then men (+1.19 days), workers in the private sector less than those in the public sector (2.69 days), and the low-skilled more than the medium and high-skilled (+1.33 days and +1.75 days, respectively).
- Policy variables also play an important role, with workers in countries with more generous sickness benefit systems taking more leave days (*e.g.* +3.51 days in countries with the most generous scheme relative to countries with the least generous scheme).
- Finally, people suffering from severe mental health problems are absent from work an astonishing 12.1 days more than those without such problems; no other variable has such a strong individual effect. A moderate mental disorder increases the number of sick days by 3.54 per year.

Figure 2.22. **Severe mental disorders influence sickness absence days more than any other variable**

Extra number of days a worker with the following characteristics would be absent in a year



Note: Results are based on all countries covered in the EWCS survey.

Source: OECD calculations based on European Working Conditions Survey (EWCS) 2010.

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Longer sickness spells are more detrimental to productivity than shorter spells

An additional question of interest is the impact of job strain on the probability of taking either short or long-term sick leave. This distinction is relevant in terms of the consequences for productivity. Arguably, the impact of sick leave on productivity is not linear, with long spells of absence potentially having more detrimental effects than shorter spells, even a series of such spells (D'Souza *et al.*, 2006). For example, there might be long-term negative consequences for the individual from being away from work for longer periods in the form of deteriorated skills, reduced chances of future employment and lower earnings in the long run. Furthermore, long-term absence is of particular interest because it has been shown to act as the main pathway into disability benefit (*e.g.* Karlström *et al.*, 2002; OECD, 2010; and Chapter 4).

Apart from the direct costs for the employer due to the worker's absence-reduced productivity, there are indirect costs especially relevant for longer absences. Evidence suggests that long-term sick leaves have spill-over effects on co-workers and supervisors (Dewa *et al.*, 2007; Dewa and McDaid, 2011). Co-workers may need to perform additional work to compensate, particularly in the case where employees work as part of a team and a stressed team will not function as efficiently, reducing productivity further.

Table 2.8 summarises some of the results of a series of models trying to identify differences in the determinants of short and longer-term absences with respect to job strain, perceived job attributes and mental ill-health.[16] Results from the base model suggest that experiencing job strain at work increases the chances of taking leave, more so for short-term leave than longer-term leave. Introducing job-attitude covariates into the model reduces the impact of job strain for short-term absence and eliminates it for long-term leave. Job satisfaction is a very strong deterrent of absence, equally high for short and long-term sick leaves. The impact of perceived job insecurity is *type*-specific: fearing job loss in the next six months decreases the chance of taking short-term leave (workers will try to avoid giving managers an extra reason to be laid off), but increases by a similar level the chances of taking long-term leave. This could indicate that job anxiety negatively affects labour productivity despite the short-run leave-avoiding behaviour.

Table 2.8. **Mental ill-health is a factor in short- as well as longer-term sick leave**

Differences in the determinants of short-term and longer-term[a] sick leave: marginal effects from a probit model

	Base model with job-strain variable		Base model plus job attitudes		Full model with mental health status	
	Short-term absence	Long-term absence	Short-term absence	Long-term absence	Short-term absence	Long-term absence
Job strain	0.03***	0.01**	0.02*	0.00	0.01*	–0.01
Job satisfaction			–0.09***	–0.09***	–0.06***	–0.07***
Job insecurity			–0.02*	0.02**	–0.03*	0.01
Moderate (relative to none)					0.11***	0.06***
Severe (relative to none)					0.10***	0.13***
Number of observations	*14 184*	*16 308*	*11 347*	*13 094*	*11 013*	*12 722*

*, **, *** statistically significant at the 10%, 5%, and 1% level, respectively.

Note: Model results are based on all countries covered in the EWCS survey.

a) Short-term absence is defined as absence below 11 days; longer-term absence is absence above 10 days.

Source: OECD calculations based on European Working Conditions Survey (EWCS) 2010.

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The full model which also includes the person's mental health status (further) reduces the impact of job strain and of perceived job insecurity on the probability of taking leave whereas the impact of job satisfaction remains large and highly significant. Mental health itself has a large influence on both types of leave. Common and severe problems alike increase the chances of taking short-term absence by some 10%. However, the impact of experiencing severe mental health problems is twice as large as that of moderate mental disorder when looking at long-term absence (6% *versus* 13%). Overall, this implies that mental health status is a key variable in sickness absence incidence, together with job satisfaction which seems to be a good composite measure of the quality of a job.

Evidence provided in this section suggests that worker productivity loss – measured through absence incidence, absence duration and presenteeism – is strongly driven by poor mental health. For workers with common mental disorders, reduced productivity while at

work is the biggest issue, potentially with considerable and typically hidden spill-over on co-workers. Added to this, presenteeism seems to have increased in all countries for all occupations, and more so for workers with a mental disorder. Mental health is also the biggest single determinant of sickness absence incidence and duration.

2.5. Conclusion: towards productive quality employment

Unemployment rates are very high for people with severe mental disorder but also for those with common disorder: 3-6 times and 2-3 times higher, respectively, than for people with no mental disorder. Moreover, the severe group also faces a much higher risk of unemployment being long-term. In addition, while employment rates are relatively high for some groups with a common mental disorder, they are much lower relative to their peers without any such disorder especially for men, low-skilled and older workers. People with a mental disorder who are employed tend to report average incomes, but those who are inactive or unemployed face a considerably increased low-income risk. This underlines the importance of the promotion of labour market integration of people suffering from poor mental health.

But also those people with a mental disorder who hold a job are facing considerable risks. They have a greater tendency to be employed in jobs which do not match well with their skills, work more frequently in low-skilled occupations and generally are less satisfied with their jobs and feel much higher job insecurity. Added to this, their labour market position has worsened in the past decade or so (employment fell or increased less than it did for those without mental disorder, and unemployment increased or fell less than for their peers). The recent economic downturn has worsened their situation further with deteriorating working conditions.

Evidence is very strong that unemployment is bad for mental health, with a particularly strong initial "shock" effect as well as – following some mid-term adjustment – a detrimental impact of long-term unemployment. However, not all jobs are good for mental health. Jobs which are psychologically demanding but leaving limited decision latitude, a situation commonly referred to as job strain, have a significant negative impact on the worker's mental health. And job strain has increased over time in most occupations. The quality of employment matters and one of the biggest factors in this regard is good management *i.e.* a manager who supports the worker, gives adequate feedback, recognises the work effort and talks to the employee.

In turn, mental ill-health has a number of repercussions especially on worker productivity. Workers with mental disorders take sick leave more frequently and are absent for longer, but they also report reduced productivity while at work much more often, with many of them never taking sick leave. Presenteeism of this sort is also very frequent among workers with common mental disorders and it has increased among all groups of employees but more so for those with mental disorders – in turn suggesting some relationship with worsening working conditions and increased job strain.

Workplace policies and practices need to respond more forcefully to many of these phenomena, including the fact that workers with poorer mental health suffer more from restructuring and changes in work organisation. Some regulations and good-practice approaches exist everywhere, but change is slow and enforcement poor. Today, the reality too often is that workers with mental health conditions are being dismissed (they have a 50% higher risk of involuntary job loss).

The connection between work, working conditions and worker productivity and the relationship with mental health needs to be better understood by employers, but also by policy makers who need to put more focus on policies to stimulate labour demand for disadvantaged groups of workers and on better co-ordinated supports linking employment services with health services. A good economic climate alone will not solve the problems, as is evident from the past. Policy intervention is even more pressing in the current weak economic climate. More intervention will be needed quickly especially for the (long-term) unemployed with moderate mental health problems to improve their chances of finding employment.

Notes

1. The size of the effects identified in these studies varies by type of mental illness. Alonso *et al.* (2004), for example, using a large sample in six European countries, find a 1.5-fold risk for the unemployed to have an anxiety disorder, a three-fold risk for a mood disorder and a five-fold risk for a substance-use disorder.
2. Breslin and Mustard (2003) found that becoming unemployed was asso-ciated with an increased likelihood of mental distress for the 31-55 age group, but not for the 18-30 age group. This is consistent with an earlier study by Clark and Oswald (1994) who found that the impact of unemployment on psychological distress was greatest for those aged 30-49.
3. Biffl and Leoni (2009) show that in Austria, in 2006, almost 27% of all early retirements (excluding retirement on disability benefit) were due to mental health problems.
4. Traditionally, it has been argued that men are at higher risk of experiencing a depression during periods of unemployment due to their higher earnings responsibilities. However, it has also been found that single women and main wage-earners have a similar reaction to unemployment as men (Leeflang *et al.*, 1992).
5. Unemployment rates in this report in most cases refer to 2007 or 2008, a year (just) before the recent hike in unemployment caused by the financial crisis; actual unemployment levels for those with as well as without mental disorder would be higher today in most countries.
6. The estimates are based on a probit model including fixed effects to control for country differences and individual characteristics that are constant over time.
7. Long working hours mostly affect male workers in specific sectors such as agriculture, hotels and restaurants, and construction. The proportion of workers has declined in most of these occupations.
8. The EWCS survey lends itself rather well to the job-strain model through its many questions dealing with the two dimensions of job strain. Each of the two axes of job strain is constructed from a set of relevant questions. To evaluate the level of psychological demands, a score was compiled from answers to six questions: *i)* whether the employees must work at high speeds; or *ii)* under tight deadlines; *iii)* whether their work involves monotonous tasks; *iv)* if the pace of their work is set by their colleagues; *v)* if they have enough time to finish their assignments; and *vi)* if they deal with unforeseen interruptions. Similarly for decision latitude, a set of seven questions are used including *i)* whether the employees' work involves learning new things; or *ii)* complex problems; *iii)* whether they can decide when to take a break; *iv)* or days off; and *v)* whether they can choose the order; *vi)* the method; and *vii)* the speed with which to work. The cut-offs chosen for this analysis are such that in the year 2010 the four quadrants are equal in size (25% each). The resulting thresholds for 2010 are then kept constant for the previous years; this allows to a certain degree measurement of the evolution of the percentage of workers experiencing job strain.
9. The probabilities are calculated for the average individual in the sample and based on estimation results from the main specification (column total) of the model shown in Table 2.3 below.
10. The results presented here are based on an Ordered Logit regression model with the mental health condition as a discrete dependent variable. Independent variables used in the model are: three dummies for job strain (base category is low strain). The model controls for gender, age, age squared, contract term, public sector, industry, firm size and occupation, as individual attributes. To control for working conditions, we include working hours, work shift, flexible working hours, frequency of night work, frequency of Sunday work, frequency of Saturday work, commuting time,

vibration in workplace, temperature of workplace, repetitive movement, assistance from colleagues, involvement in team tasks, rotating task, short repetitive task within ten minutes, dealing directly with people who are not in the company, meeting precise quality standards, assessing the quality of your own work, solving unforeseen problems on your own task, monotonous tasks, how well do you think your skills match the job requirements, undergone training paid for or provided by your employer, and manager's attribute. The model also includes country fixed effects and standard errors are modified by the cluster of country. The marginal effects are evaluated as the average of the pooled sample.

11. Manager's attitude is a dummy variable which takes the value "1" if the manager has a positive attitude *i.e.* provides worker with feedback on their work, respects the worker as a person, and encourages the worker to participate in important decisions, and "0" otherwise.

12. These gender differences can be attributed to the greater family responsibilities women have compared to men. For example, Krantz and Ostergren (2001) concluded that heavy domestic responsibility and/or a job-strain situation are factors that seem to make important contributions to the causes of a high level of common symptoms among salaried women 40 to 50 years of age in Sweden. While a simultaneous exposure to these factors had an even greater impact on mental health. Similarly, Canivet *et al.* (2010) in their recent study show that work-to-family conflict, although more prevalent among men, is more prominent in its impact on "exhaustion" in women than in men.

13. More specifically the authors show that presenteeism on more than five occasions during the baseline year (2000) was a statistically significant risk factor for future sick leave (in 2002 and 2003) of more than 30 days even after adjusting for previous sick leave, health status, demographics, lifestyle and work-related variables.

14. Definitions on lost work days and reduced accomplishment are different and stricter in Figure 2.21 (which only measures loss due to an emotional problem) as compared to Figure 2.19 (which measures all work days lost for health reasons and productivity loss due to emotional or physical problems). The resulting percentages shown in Figure 2.21 are therefore lower, especially for people with no mental disorder whose absenteeism as well as presenteeism incidences are predominantly caused by non-emotional problems.

15. The results presented here are based on an OLS regression model with the actual number of days of absence as a continuous dependent variable. Independent variables used in the model are: the ability to reconcile work and family life ("work and social commitments fit well and very well"); job satisfaction ("satisfied and very satisfied with the working conditions"); working in shifts; high intensity of work ("working at high speeds or under tight deadlines"); job insecurity ("agree and strongly agree that job could be lost in six months"); sector of activity; gender; having a good manager ("one that is good at resolving conflicts and organising work"); mental health problems (defined as elsewhere in this report); skill level (high-skilled are considered legislators, officials, managers, professionals, technicians and associate professionals, mid-skilled are clerks and service workers, and low-skilled are agricultural workers, craft and tradesmen and those in elementary occupations); and sickness benefit generosity (an index based on the benefit level and the payment duration). The model controls for age, education and country fixed effects. The specifications are set up to introduce one by one the variable of interest in the model. The exception is the specification investigating the impact of the level of generosity of the national health system in terms of sickness benefits, which does not include country fixed-effects because this generosity is country-specific and not individual.

16. The results are based on two reduced-form probit models reporting marginal effects at the mean: one model for the probability of short-term sick leave (less than 11 days) as compared to no absence, and one for the probability of longer-term sick leave (more than ten days) as compared to no and short-term absence.

$$abs_{short} = \begin{cases} 1, \text{ if absent} \leq 10 \text{ days} \\ 0, \text{ if absent} = 0 \text{ days} \end{cases}, \; abs_{long} = \begin{cases} 1, \text{ if absent} > 11 \text{ days} \\ 0, \text{ if } 0 \leq \text{absent} \leq 10 \text{ days} \end{cases}$$

$$\Pr(abs_{short,\,i} = 1) = \phi(X_i\beta + \Gamma_i + \varepsilon_i)$$

$$\Pr(abs_{long,\,i} = 1) = \phi(X_i\beta + \Gamma_i + ei)$$

Where i is the individual suffix, X is a vector of regressors of interest, Γ is a vector of control variables for age, gender, education, occupation, employment sector and country fixed effects, and ε is the error term. Data are from the European Working Conditions Survey 2010 using the question "Over the past twelve months, how many days in total were you absent from work because of health problems?" There is naturally some concern about the measurement error that can be

expected from a self-reported measure of sick leave over such a long period, but this also removes seasonal effects such as an increased frequency of sick leave in cold periods. Note that 53% of the sample population has not taken any day off for health reasons while 34% and 13%, respectively, have taken short and longer-term leave in the past year.

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Chapter 3

Mental Health Systems, Services and Supports

This chapter focuses on the links between treatment and employment of people with a mental disorder, both from the individual treatment perspective and a broader mental health care systems' perspective. In the past decades, effective medical and psychological treatments and differentiated, community-based mental health care systems have been developed. However, these improvements have so far neither translated into a substantially broader inclusion of people with a mental disorder into the workforce nor to financial independence. The evidence points to manifold reasons for this, including the still severe under-treatment, or delayed treatment, of people with a mental disorder, some intrinsic characteristics of even milder disorders like co-morbidity, chronicity and the role of the personality, as well as the lack of collaboration between the health care system, the employers and other stakeholders. Finally, although most mental disorders are strongly influenced by socioeconomic factors, there is a prevailing neglect of employment issues in the treatment situation.

3.1. Introduction: a multidimensional approach for complex problems

This chapter focuses on the links between mental health care and employment. Mental health care can be viewed from different perspectives. There is an individual treatment perspective – raising for example questions about the quality and efficacy of different treatment approaches with respect to labour market outcomes. There is also a broader system perspective. Even high-quality treatment would not have a substantial effect on work-related outcomes of people with mental health problems, if it is not easily accessible. Other relevant system aspects are the accessibility of vocational rehabilitation services, the continuity of care, and the collaboration between different services within the care system, as well as with external agencies and providers such as employment agencies, schools, or employers. This is critical because patients with severe mental illnesses tend to have a broad range of illness-related as well as social and vocational needs. This, in turn, is related to the fact that the onset, manifestation and outcome of the majority of mental disorders are influenced by different biological, psychological as well as social and socioeconomic factors. Such multidimensional health problems need to be approached in a multidimensional way covering clinical needs and social problems (see Box 3.1).

Box 3.1. **Mental disorders need a multidimensional health-care approach**

As is the case with most physical illnesses, mental disorders are not caused by a single biological, psychological or social factor, but by their interaction. The relative importance of these factors differs between different disorders. For example, schizophrenia and bipolar disorder are more influenced by biological (genetic, neurobiological) factors than neurotic conditions such as anxiety disorders or post-traumatic stress disorders which, on the other hand, may be strongly affected by psychological mechanisms and environmental circumstances. This interaction is captured by multidimensional disease-models like the bio-psycho-social-model (Engel, 1980).

Another useful model is the vulnerability-stress-model (Zubin and Spring, 1977). According to this model there must be a predisposing biologically or socially caused vulnerability which can lead to a mental health condition when a person is exposed to acute or chronic forms of stress (*e.g.* an enduring fear of losing one's job). This model points to the importance of underlying vulnerabilities and personality traits which – beyond illness symptoms – may have a strong influence on social and vocational functioning (Michon *et al.*, 2008).

Although such models are quite unspecific about the precise causes of a specific mental health problem, they give an important framework for mental health systems and supports. Because the determinants as well as the manifestations of mental health

Box 3.1. **Mental disorders need a multidimensional health-care approach** *(cont.)*

problems are multidimensional, the service system has not only to address the clinical needs of the patients, but also their social problems. The rising awareness of the necessity needs of the patients, but also their social problems. The rising awareness of the necessity of integrating the social circumstances into treatment, in combination with the closure or downsizing of large mental health hospitals, led to the development of social psychiatry around half a century ago (*e.g.* Bhugra and Leff, 1993).

Beyond the biological and psychological determinants of mental illness, there is a large body of evidence about the relationship between mental health and some socio-demographic as well as socio-economic variables. Mental health is distributed unequally by social position (Fryers *et al.*, 2005). For example women (Wittchen and Jacobi, 2005; Kessler, 2007), people who are not married or do not live in a partnership (Alonso *et al.*, 2004; Andrews *et al.*, 2001), single parents (Jenkins, 2001; Thornicroft, 1991), people with lower education (Alexandre *et al.*, 2004) or lower income (van Doorslaer and Jones, 2004; Weich *et al.*, 2003; Eibner *et al.*, 2004), those with housing problems and migrants or ethnic minority groups (Barsky *et al.*, 2005; Narrow *et al.*, 2000; Silver *et al.*, 2002) show consistently higher prevalence rates of mental disorders.

Not only the causes but also the manifestations of mental disorders are multidimensional. More than most other illnesses, mental disorders go along with, at least temporarily, adverse psychological outcomes, for example a reduced sense of self-esteem and self-confidence, a subjective quality of life which is even lower than it is in other socially disadvantaged groups, a low sense of control and mastery, demoralisation and a low expectation about possible achievements, and strongly increased fears of future failure. All of these possible psychological effects, in turn, impair clinical and social recovery.

The same is also especially true for the social manifestations, or consequences, of mental illnesses. Mental disorders not only affect the patients themselves, but in the long run also their contact to family members, friends, colleagues and neighbours. This can result in social decline, poor neighbourhood conditions, housing problems, disability, poverty, low social support and social isolation.

It is not only patients with severe mental illness who require a system approach. In the majority of cases, mild or moderate mental illnesses also show a recurrent or enduring course, which often affect the work capacity of the ill person. Therefore, the mental health system needs to target employment outcomes, not only clinical improvements, and provide services for people with moderate illness.

This chapter first reviews the effect of mental disorders on work capacity and functioning, before looking in detail at the potential of treatment, especially the potential for better work outcomes, the type of treatment available, the quality of treatment, and questions of accessibility. The chapter then discusses structural change in mental health systems relevant for this report before turning to the role of mental health care in regard to employment. It concludes that major improvements can only be achieved if employment becomes a main goal of the mental health system.

3.2. Mental disorders, work functioning and employment

Severity, chronicity, diagnosis, and co-morbidity are crucial

Chapter 2 discusses the far-reaching detrimental effects of unemployment, especially long-term unemployment, on a person's mental health status, and the protective effects employment can have on improving mental health. It seems evident that the effects go in both directions: mental health problems may cause work problems such as absenteeism, reduced productivity at work or job loss and, on the other hand, unemployment may cause or reinforce mental disorders.

Improved symptoms lead to improved work functioning

When symptoms improve, work functioning improves too, as shown in a Dutch study on the temporal relationships between the duration of depression, recovery and functional disability (Spijker *et al.*, 2004). The congruence of change in the severity of depression and the level of functional disability has also been found by others (*e.g.* Judd *et al.*, 2000; Ormel *et al.*, 2004). The good news of this research is that disability diminishes when depressive symptoms decrease. On the other hand, disability seems pervasive when depressive symptoms persist. Moreover, the longer the duration of depression, the worse are the functional outcomes. Thus, depressive symptoms should be treated rapidly.

A longitudinal study for the United States on the effect of depression on productivity showed persistently larger deficits than for other chronic medical conditions (Adler *et al.*, 2006). Moreover, although a reduction in the severity of depression over time was related to increased job performance, those persons still performed worse than the healthy control subjects. In other words, clinical improvement did not result in full recovery of job performance.

A follow-up study for the United States compared initial illness severity with serious outcomes a decade later (Kessler *et al.*, 2007). Results showed a clear relationship between the risk of serious outcomes such as hospitalisation, work disability, suicide attempts, or serious mental illness and the initial severity (Figure 3.1). Results also point to the fact that symptoms and work functioning are two different areas, with betterment of work functioning lagging substantially behind symptoms' improvement.

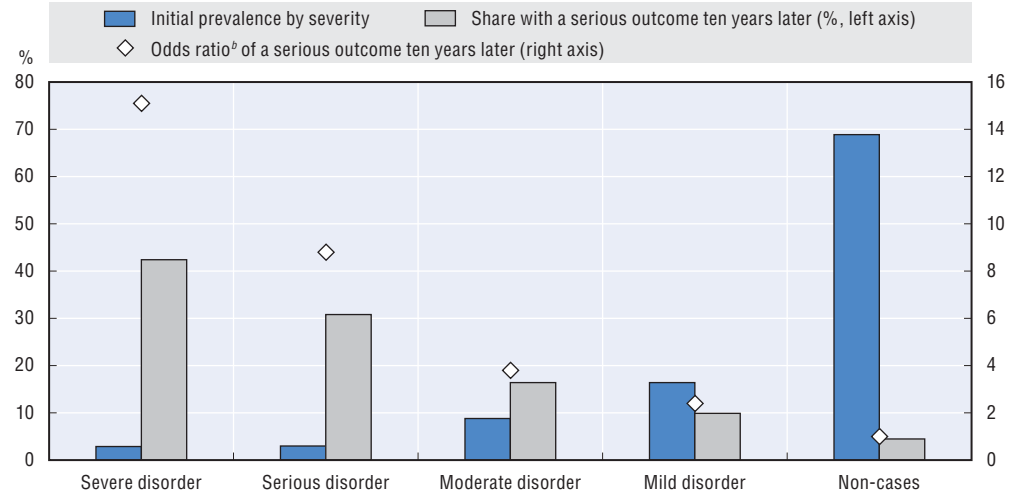
Also milder disorders may impair employment and work functioning significantly

The findings in Figure 3.1 also show the detrimental effects of mild and moderate mental disorders, which have a two- to four-fold risk for serious outcomes, including work disability, when compared with healthy people. This is significantly less than the 10 to 15-fold risk for serious and severe mental disorders; however, due to the much higher prevalence of mild and moderate disorders in the general population their overall impact is likely to exceed the burden stemming from severe mental illness.

Moreover, it was found that depressive symptoms at the sub-threshold level – *i.e.* below the diagnostic criteria for a disorder – are associated with increased psychosocial disability compared with a status without any symptoms (Judd *et al.*, 2000). This was already found more than twenty years ago by Broadhead *et al.* (1990) who concluded that depression was a significant precursor to disability and even milder forms of depression increased significantly the number of disability-related days in a 90-day follow-up period (Figure 3.2). Again, due to their high prevalence, the milder forms of depression accounted for a much higher amount of total disability days.

Figure 3.1. **Clinical severity predicts negative outcomes ten years later**

Initial prevalence by illness severity (1990-92) and serious outcomes[a] ten years later (2000-02), US evidence



a) "Serious outcome" includes hospitalisation for an emotional problem, work disability, suicide attempt, or serious mental illness.

b) The odds ratio (right axis) shows the elevated risk of a serious outcome of mild to severe cases compared with the non-cases (odds ratio = 1).

Source: OECD compilation based on the National Comorbidity Survey Follow-up (Kessler, 2007).

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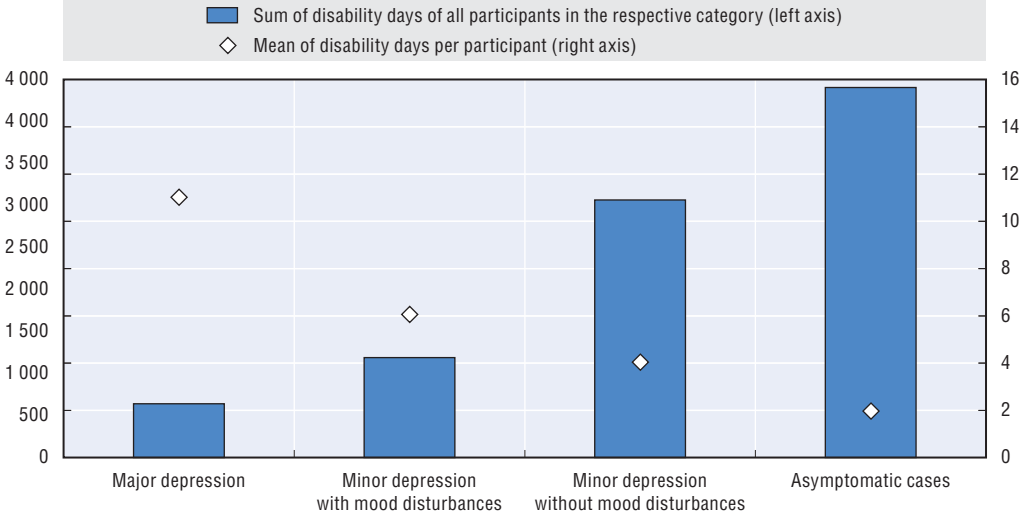
Figure 3.2. **Depression severity predicts disability one year later**

Number of disability days[a] during a 90-day follow-up period, by depression level at baseline, US evidence[b]



a) Disability days include days in which the respondent missed work due to illness, was late to work, spent all or part day in bed, or was kept from usual activities due to feeling ill.

b) N = 2 957 participants in this analysis. Asymptomatic cases (n = 1 997), Minor depression without mood disturbances (n = 696), Minor depression with mood disturbances (n = 176), Major depression (n = 49).

Source: OECD compilation based on Broadhead *et al.* (1990).

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Including milder mental illness in any analysis is also important because such illness, *e.g.* minor depression, may develop into a severe mental illness, *e.g.* major depression, over time. This was the case for 10% of all depressions at baseline in the study by Broadhead *et al.* (1990). This "mobility" over time in mental health status was confirmed by Hauck and Rice (2004), on the basis of 11 waves from the British Household Panel Survey.[1]

Not only disorders, but also personalities matter

However, not only mental disorders but also some underlying personality characteristics, have been found to have adverse effects on work functioning and employment. For example, higher self-esteem and emotional stability are strongly associated with better work functioning. Personality characteristics are linked to the course of mental disorders and to work functioning. This is of importance because such personality traits cannot be directly changed. This holds also true for personality *disorders*, which can be influenced by psychological interventions, coaching, or training (*e.g.* training of social skills, or work skills), but cannot be directly treated, or even cured, in clinical practice. The significance of enduring personality characteristics, be it accentuated personality traits which are quite common or real personality disorders, shows that there is a group of people in need of long-term supports in order to achieve vocationally.

Michon *et al.* (2008), for example, examined the question whether impaired work functioning is better understood by the presence of a mental disorder or by "difficult" personality traits. They found that the association between mental disorder and subsequent work impairment weakens or even disappears once personality characteristics were taken into account. Not only are personality traits not responsive to psychiatric treatments, but they can impede the vocational rehabilitation process, thus contributing to the limited effects of vocational training and treatment on work outcomes.

This finding is confirmed in a recent in-depth analysis of disability beneficiaries with a mental health diagnosis in Switzerland showing that, according to the assessing physicians, some 70% of the beneficiaries are not only mentally ill but also have a personality disorder or at least a "difficult" personality (Baer *et al.*, 2009). Personality-related problems are often associated with deficits in social skills, explaining why employers view such workers as more challenging than those with a specific and obvious mental disorder, such as schizophrenia, a compulsive-obsessive disorder or a phobia (Baer *et al.*, 2011). Employers will often not judge employees with personality problems as having a mental health problem, but instead treat them as poorly performing or undisciplined workers; consequently they would not call for professional help, but instead seek to dismiss them (see also Chapter 2).

Many mental disorders are chronic conditions

Beyond the disabling effects of some specific disorders, it is the *persistence* of a disorder which may be disabling. Many mental disorders show a recurrent or chronic course. Andrews *et al.* (2001) found that 60% of individuals with a mental disorder had this disorder a year earlier already. Hughes and Cohen (2009) found a majority of patients with a depressive disorder still suffering from recurrent depressive episodes ten years later. Chronicity has also consistently been found to be strongly related to a high utilisation of medical services (*e.g.* Fasel *et al.*, 2010), and to be a decisive factor for long-term sickness absence and disability (*e.g.* Bergh *et al.*, 2007).

There are several mental disorders which may be persistent or recurrent and, therefore, quite disabling; for example, personality disorders, recurrent depression and disthymia, but also schizophrenia, bipolar disorders, anxiety disorders, substance-abuse disorders, or obsessive-compulsive disorders. In schizophrenic disorders, for example, around 70% show substantial social and vocational impairments or residual symptoms (Möller *et al.*, 2008), while in bipolar disorders it has been found for Germany that around half of patients are on disability benefits at the age of 46 (Brieger *et al.*, 2004).

Different mental disorders show different effects on functioning

Although a specific psychiatric diagnosis does not automatically define either the amount or the specific nature of impairment, the diagnosis in itself has informative value. Beyond more general characteristics of serious mental disorders regarding work-functioning – like an often reduced ability to work under pressure, a reduced stability in work performance, a lowered self-confidence or an increased responsiveness to interpersonal problems – different mental disorders have specific consequences. For example, substance-use disorders may be related to greater safety risks, reduced motor skills, or memory problems. Persons with schizophrenia may be especially disabled by cognitive impairments, resulting in multiple task-solving problems. Depression may lead to loss of energy, feelings of worthlessness, or concentration difficulties, resulting in problems to start or finish a task, whereas a social phobia leads to avoiding social or performance situations, resulting in incomprehension and anger on the part of co-workers. Personality disorders, finally, may be related to interpersonal problems and conflicts in the workplace, partly due to the disorder-related lack of insight.

While this report is limited in terms of looking at diagnosis-specific details, it is crucial to recognise the significance of the different diagnostic entities. Beyond individual differences, there are disorders with typically an earlier age of onset and with broader consequences on work functioning (*e.g.* schizophrenia), and disorders with a later age of onset and more specific consequences (*e.g.* social phobia, or some obsessive-compulsive disorders). Furthermore, there are some disorders which can effectively be treated with short-term and focused therapies (*e.g.* like some depressive and anxiety disorders with cognitive behavioural therapy), and others that are deep-rooted and long-lasting (*e.g.* like schizophrenia or personality disorders), which cannot be treated within a few weeks, but may be in need of a more general supportive therapy or coaching over the long run. In view of the sometimes sizable and early damage to people by a severe mental illness, and in view of all its consequences on education and working life, it becomes understandable that therapies, which may be highly effective in symptom-reduction, may sometimes fail to translate their effects into employment and productivity.

Consequently, it might be important to state explicitly that not all mental disorders have the same chance of rehabilitative success, affective or neurotic disorders having better prospects than *e.g.* schizophrenic disorders. There is not a single best solution for all mental disorders. Rather, there should be a provision of different strategies, services and treatments for people with different mental health problems, having different needs of care. The significance of the diagnostic entity should also have implications regarding the rehabilitative process. When the diagnosis is of importance, it becomes essential that all work-related support is based on an interdisciplinary knowledge (including specialist mental health knowledge).

Co-morbidity: the more health conditions, the more disability

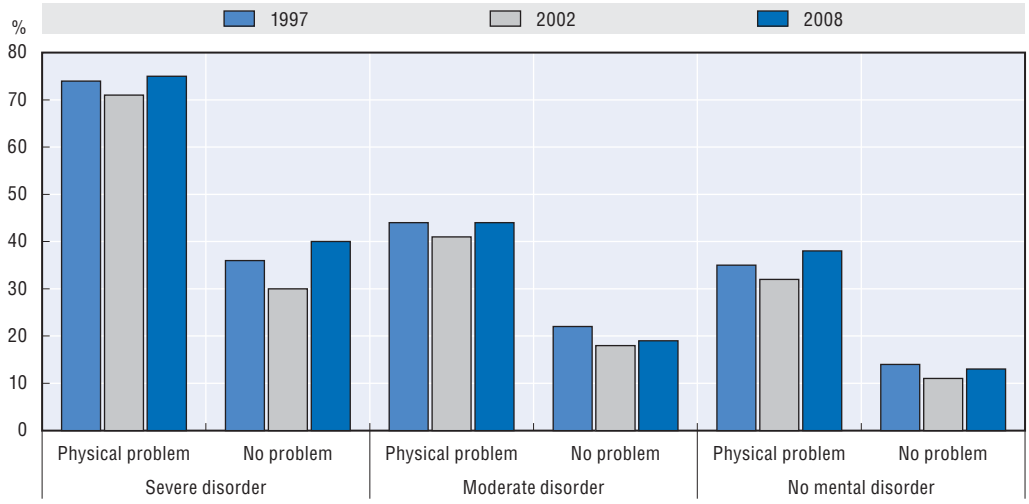
The existence of *several* mental health conditions is strongly related to a higher severity of the problems and more substantial functional impairments (Kessler *et al.*, 2005a; Alonso and Lepine, 2007; Andrews *et al.*, 2001). Some 30-40% of the people with a mental disorder suffer from at least two mental disorders (Wittchen and Jacobi, 2005; see also Chapter 1). Co-morbidities of mental and physical disorders are also frequent (Härter *et al.*, 2007). There is consistent evidence that such co-morbidity is related to higher

morbidity and mortality (Tiihonen *et al.*, 2009; Miller *et al.*, 2006), indicating a need to integrate the delivery of currently segmented mental and physical health services.[2]

Furthermore, co-morbidity causes worse treatment outcomes, more chronic courses and, finally, more disability. In the United States, for example, persons with a severe mental disorder, in combination with a physical health problem, have a benefit recipiency rate of over 70% – twice the recipiency rate of people with severe mental disorders who do *not* suffer from a physical problem. Similarly, stark differences are found for persons with common mental disorders, with a recipiency rate above 40% in the case of co-morbidity compared with less than 20% otherwise. In other words, people with common but co-morbid mental disorders seem to be struggling more in work life than people with a solitary severe mental illness (Figure 3.3).

Figure 3.3. **Benefit recipiency rates are much higher with co-morbidity**

Proportion of individuals receiving any income-replacement benefit,[a] by severity of the mental disorder and the prevalence of physical health problems, United States, 1997, 2002 and 2008



a) Income-replacement benefits include disability, unemployment, welfare and other income-replacement benefits.

Source: National health interview surveys of the United States.

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Overall, the evidence summarised in this section suggests that *i)* there is a strong negative relationship between mental ill-health and work functioning; *ii)* improved symptoms lead to improved work functioning but not at a one-to-one rate; *iii)* milder disorders impair work functioning considerably; *iv)* mental disability is mostly the consequence of recurrent or chronic courses of co-morbid disorders, not stemming from single episodes of single disorders; and *v)* personality characteristics are a key factor in the relationship between mental illness and work functioning. All this must be taken into consideration in designing policies aimed at better labour market outcomes.

Effects of work and vocational rehabilitation on mental health

The therapeutic effect of work on mental health has been known for a long time. However, mental health care has traditionally focused on work as a means to keep patients occupied; hence, work in the past was organised in sheltered settings, mostly in the area of mental hospitals or in work therapy. Over time, psychiatric services have developed a wide range of work schemes for their patients.

Traditionally, most countries have offered *sheltered workshops* where individuals can work in a protected, non-competitive environment. These programmes offer to people with the most severe conditions possibilities to be occupied all day long as a stabilising factor in its own right. Furthermore, some countries also have so-called "club houses" offering prevocational training and transitional employment programmes as well as other psychosocial interventions (Rosen and Barfoot, 2001). The underlying rationale of such programmes is that clients are in need of a stepwise approach to employment, with clients needing some training in a safe environment to reach their goals. One problem of prevocational training – which normally yields substantial positive effects in a supporting environment – is that these positive effects are hard to replicate in non-sheltered environments. The problem of transitional employment is, evidently, that it is transitional, offering supervised and typically low-level jobs on a temporary basis. These more traditional approaches have rarely been evaluated scientifically through randomised controlled trials, thus making it difficult to judge their effectiveness properly.[3]

That said, there is no single programme which works best for *all* clients. The *first-train-then-place* principle has been criticised over and over, but there is a group of clients who may profit from some specific prevocational training, while others profit from enhanced self-confidence experienced in transitional employment interventions, reducing their fear of failure and allowing them to make further steps towards employment. However, scientific evidence suggests that sheltered workshops, prevocational training and transitional employment are less effective than newer approaches which aim at placing clients into conventional paid employment.

In the past two decades, a new first-place-then-train paradigm has evolved (see Box 3.2). This new approach generally referred to as "supported employment" has shown a high effectiveness in placing patients with severe disorders into paid employment, partly due to underlying principles which respond precisely to the illness-related needs of the clients (Box 3.2, see also Chapter 4). Today, supported employment programmes are widely recognised as the gold standard in vocational rehabilitation.

Box 3.2. **Principles of supported employment services**

Supported employment (SE) helps people with severe mental illness find competitive jobs in their communities. Evidence-based SE is characterised by seven core principles:

- *Zero exclusion policy*. All persons with a disability can work at competitive jobs in the community without prior training. The only precondition for participation in SE is that the client wants to work. No one is excluded regardless of diagnosis, symptoms, work history, substance abuse, cognitive impairment or other problems.
- *Integration of vocational rehabilitation and mental health services*. Close co-ordination and collaboration of SE with treatment and other rehabilitation services is necessary to pursue the vocational goals of the client. This can be achieved when employment specialists work closely with other professionals, with regular meetings of all those involved. These meetings provide a vehicle for discussing clinical and rehabilitation issues relevant to work, such as medication side-effects, persistent symptoms, cognitive difficulties, or other rehabilitation needs.

Box 3.2. **Principles of supported employment services** *(cont.)*

- *Client preferences are important*. Vocational goals, support and timing should respond to the client's preferences regarding the type of work, work setting, work hours, other job features, and disclosure of mental illness.
- *Rapid job search*. Assessment is minimised in favour of rapidly helping the client to pursue the job that he or she chooses. To help direct the job search, the employment specialist draws up a vocational profile that includes a review of the clients' preferences. SE does not require lengthy pre-employment assessment and training.
- *Conventional paid employment is the goal*. The SE specialist is committed to help each client find a regular part-time or full-time job in the community that pays a minimum wage or more. A regular job is a paid job that anyone in the community can apply for. The SE model endorses regular jobs for several reasons: Clients prefer paid jobs; and such jobs reduce stigma, inspire self-esteem and enable life in the mainstream.
- *Time-unlimited support*. The goal of the employment specialist is to help clients become as independent as possible in their vocational role, while remaining available to provide support and assistance when needed. Some clients need support over long periods of time, even though for many the extent of support gradually decreases over time. Therefore, clients are never terminated from SE services, unless they request it.
- *Benefits counselling*. Benefit counsellors help clients calculate exactly how much money they could make at their jobs without disrupting benefit entitlements. They also advise clients and caregivers about benefit eligibility rules, income ceilings, work incentives and other issues and regulations related to employment benefits.

Source: OECD compilation based on Bond *et al.* (2001a), and Corrigan *et al.* (2008).

Beyond increased employment outcomes – around 50% of supported employment clients achieve paid employment at some time over a 12-18-month period compared with around 15-20% for other vocational interventions (Bond *et al.*, 2001a) – several fundamental lessons can be learned from the nature and functioning of supported employment:

- First, it is evidenced-based, which was and still is rather exceptional for vocational rehabilitation interventions. Vocational rehabilitation has traditionally been a pragmatic system in nature, not based on a scientifically sound theoretical background.
- Second, it assumes that even people with severe mental illnesses are able to work in normal settings. In most countries a decade ago, such confidence was unheard of, due to a widespread pessimism about the achievable employment goals of individuals with severe mental disorders. Such a positive attitude is crucial in view of the often enduring and disabling courses of severe mental illness leading to hopelessness in patients as well as among professionals.
- Third, it directly tackles the lack of integration of mental health care and employment services and the disconnection of different specialists. Supported employment interventions recognise the importance of the illness and its consequences, as well as the necessity to implement a strong employment focus into the treatment process.[4]
- Finally, supported employment has shifted the focus of the mental health system on employment, by demonstrating much better employment outcomes, for example of patients in day-treatment centres which were transformed into supported employment centres (Drake *et al.*, 1994).

However, although supported employment has been very effective in terms of placing clients in normal work settings, there are some limitations. Such programmes usually find entry-level jobs in the service industry, around half of the clients leave their jobs within six months, and clients do not normally work full-time in order not to jeopardise their social security benefits. Therefore, successful job placement does not have much of an effect on the benefit system. Finally, supported employment programmes are not as widespread as one would expect, due to implementation barriers including fragmented funding, in turn leading to fragmented service provision. Another important barrier is the beliefs of clinicians, who underestimate their patients' needs for vocational services (Bond *et al.*, 2001a).

Non-vocational outcomes of work and vocational rehabilitation

There is some evidence about positive non-vocational outcomes of work on mental health, or of vocational rehabilitation, respectively. Bond *et al.* (2001b) and Mueser *et al.* (1997) found clients with severe mental illness in conventional employment to have greater improvement in several non-vocational outcomes – like reduced psychiatric symptoms and improved self-esteem – than non-working clients. Similarly, Bell *et al.* (1996) showed that re-hospitalisation was less likely and symptom improvement more likely when people with schizophrenia obtained paid instead of unpaid work.

In a recent study, Bio and Gattaz (2011) found that vocational rehabilitation significantly improved patients' cognitive performances. This longitudinal study reinforced former, cross-sectional studies concluding that work might improve cognitive dysfunctions (*e.g.* McGurk and Meltzer, 2000).

Individual characteristics of successful vocational rehabilitation

A precise knowledge of predictive factors in vocational rehabilitation would allow for more targeted employment-related interventions. In the psychiatric rehabilitation field, there is a long tradition of *i)* measuring the success of vocational rehabilitation interventions; and *ii)* looking for the predictors of employment success. However, studies are often not comparable because success has been defined in very different ways, be it the presence of paid employment, an increase on a psychological scale, or work in general – with or without living from benefits. Predictors of success vary too, depending on the samples or the outcomes, be it a return to work, staying at work, or career progress. Nevertheless, there are some socio-demographic, work-related, illness-related and person-related factors that have consistently been shown to lead to significantly better work outcomes (*e.g.* Watzke and Galvao, 2008; Tsang *et al.*, 2010; Wewiorski and Fabian, 2004; Weis, 1990; Crowther *et al.*, 2001):

- Evidence of socio-demographic factors is mixed. Educational status plays an important role; the higher the education, the better is the employment prognosis for vocational rehabilitation. The findings on age are mixed and may depend on the specific mental disorder, but often a young age is found to lead to better employment outcomes. Finally, the role of gender is unclear.
- Some work-related factors show very consistent findings, especially with respect to work history. The better one has functioned before becoming ill the better the work prognosis. This is not only true for the pre-morbid work history, but also for pre-morbid social functioning in general, and the duration of unemployment until the beginning of rehabilitation interventions.

- Personal characteristics also influence work outcomes. Social skills are a key determinant: the ability to get along with others (*i.e.* with co-workers) is crucial for the likelihood of employment success. This is why social skills training gained importance in vocational rehabilitation. Social skills are needed for the job interview and they increase the chances to stay employed even if the work performance is fluctuating. This is a main reason for poor employment outcomes of those with personality disorders (Baer *et al.*, 2011).
- Finally, illness-related factors strongly impact on employment outcomes. The later the onset and the shorter the illness duration, the better the outcome. Regarding the diagnosis, schizophrenic disorders have an especially poor prognosis and affective disorders a better prognosis – though a weakness of the research is its concentration on schizophrenia, which has a very low prevalence in the population. Illness symptoms are predictive too; sudden excessive symptoms are associated with better work outcomes than a steadily increasing loss of cognitive capacities for example. Cognitive deficits, more generally, are a negative, predictive factor in vocational rehabilitation, especially deficits in the working memory, but also in general intelligence and social cognition abilities. However, this is probably a result of the schizophrenia bias in rehabilitation research. Very few studies have looked at predictive factors for different diagnostic groups. Where this has been done, results show that these factors vary according to the diagnosis (Baer, 2002).

These quite robust predictive factors have important consequences. First, in combination with the early onset of most mental disorders, the findings indicate that vocational interventions should start early and aim at the completion of education and apprenticeships (Chapter 5). Second, the importance of the pre-morbid work history points to the need of a thorough and interdisciplinary assessment of both the illness and the work capacity. Thirdly, the significance of social skills stresses the need of prevocational and on-the-job skills training, and of coaching of employees over a long period. Some clients can profit from social skills training, while others need enduring support. Furthermore, if diagnosis and symptoms affect the success of vocational rehabilitation, it is vital that vocational rehabilitation is integrated with specialised mental health treatment.[5] Lastly, the schizophrenia focus of most current research on success factors of vocational rehabilitation calls for a broader research agenda looking at predictive factors of the most prevalent mental disorders.

3.3. Under-treatment, adequate treatment and enhanced treatment

Treatment can improve employment outcomes

In view of the relationship between employment and mental health and the substantial effects of even mild mental disorders on disability, the role of the mental health treatment system is critical. As there is some congruency of illness-symptoms and work-functioning, the efficacy of treatment, to a large extent, decides whether and how fast work-functioning can be restored. However, there are mixed results in the literature of mental health treatment effects on vocational outcomes.

An older review of depressed patients by Mintz *et al.* (1992) found that work outcomes were better when treatment had improved symptoms, but work recovery lagged strongly behind the symptom remission. The effect of medication on work impairment was higher than a placebo and psychotherapy, respectively. Moreover, work outcomes improved as the duration of treatment increased, which was not related to better symptom outcome.

However, with respect to long-term work outcomes, symptom recurrence or relapse eliminated any previous short-term success.

Adequate treatment improves work outcomes

There is more consistent evidence from the literature, again mainly focusing on depression, that *adequate* treatment can improve work outcomes – "adequate" in this sense meaning that treatment reaches minimal criteria or follows minimum guidelines with regard to the number of psychotherapy sessions, the use of antidepressant medication and the follow-up by the physician to monitor the medication effects.

- In a randomised controlled trial with three intervention groups (usual care with depression treatment guidelines; extra support to nurses to provide medication follow-up; training to local therapists in Cognitive Behavioural Therapy), Schoenbaum *et al.* (2002) found that: *i)* 44% of the patients received appropriate care at follow-up, while patients in usual care were less likely to have appropriate care; and *ii)* appropriate treatment improved health outcomes and employment status more than usual care. The intervention groups showed a 76% remission rate (no depression) after six months compared with 30% for the usual care group. The group receiving appropriate treatment had a 72% employment rate afterwards, compared with 52% for the control group.
- In a cross-sectional study of depressed adults with disability enrolled in the US Medicaid programme, individuals receiving adequate antidepressant treatment had a three-fold probability to be employed – after adjusting for confounding variables. Adequacy was assessed with respect to dose and treatment duration (Smith *et al.*, 2009). Similar results were found by Lerner *et al.* (2004).
- Administrative data from Canada's prescription drug claims records show that, after controlling for demographic factors and the severity of depression, guideline-recommended antidepressant use is associated with more frequent return to work and a 24-day decrease in the length of the disability episode (Dewa *et al.*, 2003). The authors indicate that antidepressants might not be required for all employees with milder depression, but when prescribed, medication should start as soon as possible.

In conclusion, there is evidence that adequate treatment has positive effects on work functioning and job retention. However, it remains a fact that the positive employment effects are lower than the clinical effects (Frank and Koss, 2005), *i.e.* clinical improvement does not automatically nor fully translate into better work functioning (measured with functioning scales) and increased paid employment with substantial earnings, or in getting off disability benefit rolls.

There are several reasons for this finding. First, symptom improvements do not always go hand-in-hand with productivity improvement. Furthermore, clinical trials do not mirror the reality of usual care in practice, which has a lower rate of treatment adequacy compared with evidence-based clinical trials. To put it simply, treatment can improve work functioning but, at present, these improvements are often not substantial enough to translate into significantly improved labour market outcomes.

This also holds true for the most effective rehabilitation intervention, supported employment, which shows high rates of competitive employment of people with severe mental disorders. However, it has been found that the increases in earnings are not sufficient to offset lost transfer payments, nor is employment stable (around 50% of the people placed leave the job in six months) (Frank and Koss, 2005).

Under-treatment is still pervasive

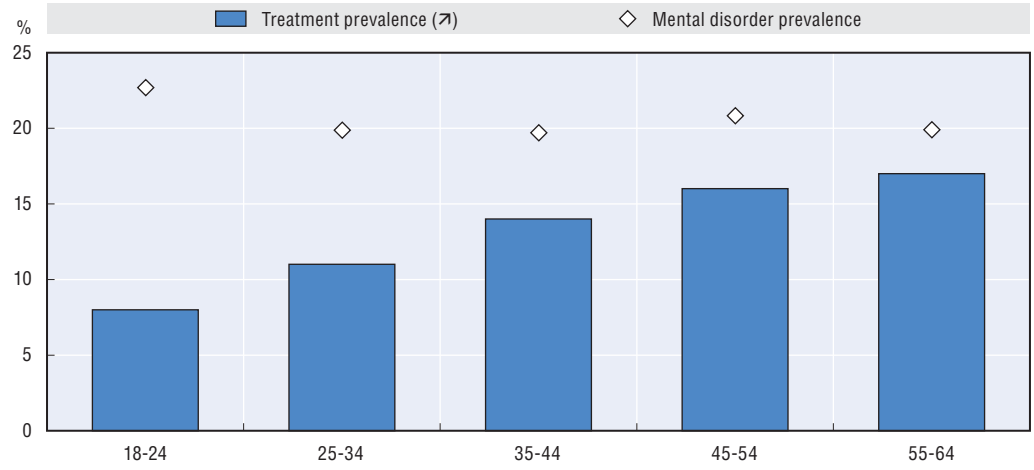
Beyond limitations in the effect of treatment on employment, there is the fundamental problem that many people in need do not seek treatment or have access to mental health care. However, although "need" is a central concept in mental health care planning, it is not an easy concept, and it may be questionable whether the existence of a psychiatric diagnosis automatically creates a treatment-need. Especially in view of limited resources, the question how need is measured (one potential measure being disability) is of high importance (Mechanic, 2003). Nevertheless, even when it is taken into account that not all people who have symptoms justifying the diagnosis of a mental disorder might be in need of treatment, there is still a severe under-treatment.

National surveys from Switzerland and the United States indicate that only around 30% of people with a severe mental disorder and around 15% with a moderate disorder have been in treatment in the past 12 months. Similar results have been found by epidemiological and primary-care studies in different countries (*e.g.* Kessler *et al.*, 2005a; Lecrubier, 2007; Alonso *et al.*, 2004).

Eurobarometer data for 2005 for 21 OECD countries indicate overall treatment rates of around 15% (taking severe and moderate mental disorders together). Treatment rates increase with age. Data from the national surveys of Australia, the United States and Switzerland show that treatment is most prevalent in the age groups 45 and over, and particularly low among those under age 35. Eurobarometer data confirm this pattern, showing a continuous increase of treatment rates across age groups (Figure 3.4). The average of the 21 OECD countries is 9% for younger people (15-24 years), 14% for adults (25-54 years), and 17% for seniors (55-64 years). The low treatment rate of young adults

Figure 3.4. **Treatment rates are extremely low among young adults and gradually increase with age**

Average 12-month prevalence rates of mental disorders according to the national surveys of six countries, and average OECD21 treatment rates, by age, 2005[a, b]



a) Average disorder prevalence rates of Austria 2006/07, Australia 2007, Denmark 2005, Norway 2008, United Kingdom 2006, and United States 2008.

b) Treatment prevalence rate: proportion of people who sought professional treatment for a mental health problem.

Source: OECD calculations based on national health surveys for disorder prevalence, and Eurobarometer 2005 for treatment rates.

StatLink http://dx.doi.org/10.1787/888932533703

is detrimental with respect to their employment pathway, especially in view of the high prevalence of mental disorders among adolescents, which is even higher than among adults.

Importantly, treatment rates among those with common mental disorders are generally very low. High under-treatment of common mental disorders may be a substantial problem, as milder disorders may transform into serious ones over time (Wang *et al.*, 2004), and because the population with milder mental disorders is challenging the benefit system most, due to their much larger numbers.

However, data for the United States point to a substantial improvement in the access to treatment in general, and especially in the youngest age group for which the treatment rate of those with a severe mental disorder almost doubled between 1997 and 2008. Treatment rates in the older age groups did not increase as strongly. Treatment rates of young adults who receive income-replacement benefits increased almost threefold, from 20-30% in 1997 to 50-60% in 2008. These increased treatment rates might be related to the Mental Health Parity Act, which was signed into law in 1996. This Act required that the financial limits for mental health benefits be no lower than the limits for medical or surgical benefits offered. However, it has been found that the expanded treatment rates in the United States seem to be concentrated among people with less serious mental health-related impairments, suggesting a "democratisation of mental illness", which might be risking the exclusion of some people with the most urgent treatment needs (Glied and Frank, 2009).

To a considerable degree, increased treatment rates in recent years are a consequence of an increase in the prescription of psychotropic medication, especially antidepressants, in turn indicating better access to mental health care and an increased awareness of the potential of medication (Box 3.3).

Looking at the population with a severe mental disorder receiving different income-replacement benefits, data show that access to mental health care has steadily improved in the United States in the past decade (Figure 3.5). This is especially true for the unemployed and those on welfare benefits. On the flipside, not even half of all beneficiaries with a severe mental disorder receive a treatment for their mental disorder. Moreover, people with a severe mental disorder who are not on benefits have very low treatment rates – around 25%. In a preventive perspective – aiming to help people with severe mental disorders to stay in the labour market and prevent them from moving onto benefits – this is a problem, indicating that the mental health care system does not reach people before they become unemployed or disabled.

Under-treatment among those employed

People who are claiming a benefit are more likely to be more severely ill and, therefore, in need of treatment. Eurobarometer data allow analysing treatment rates of workers with mental disorders according to their absence behaviour and reduced productivity while at work. Employees with reduced productivity due to an emotional or psychological problem have much higher treatment rates (around 40%) than those with sickness absences (around 20%) or those neither absent from work nor at work with reduced productivity (around 10%) (Figure 3.6). The high treatment rates of those at work while struggling with their work performance have not been given much attention by either research or policy.

Box 3.3. **The increased prescription of antidepressant medication to treat mental disorders**

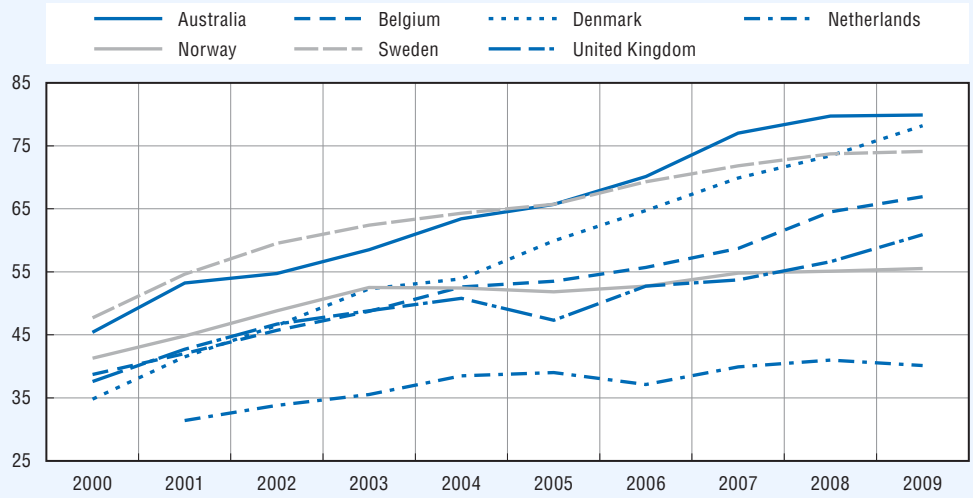
The development of pharmacological treatment in mental health care is of importance for the social and vocational integration of people with mental disorders. The enormous change in the mental health care system over the past 40 years (see below), from hospital-based to integrated community-based care, would not have been possible without psychotropic drugs (Lehtinen *et al.*, 2007). The availability of effective drugs together with new forms of psychosocial and psychotherapeutic interventions has facilitated the de-hospitalisation of long-term inpatients. Medication can also be an important factor in the treatment of less severe mental illnesses; the stabilisation of symptoms and behaviours in particular can be critical for better labour market integration and stable employment.

Antidepressants are the most widely used medication for mental disorders, especially as a treatment of frequent mood disorders as well as other disorders, such as anxieties. *OECD Health Data* show a gradual and rather substantial increase of antidepressant prescriptions over the past decade in all OECD countries. The so-called "defined daily dose" (DDD), the assumed average maintenance dose per day for a drug used on its main indication in adults, of antidepressant has roughly increased from 40 to 70 per 1 000 inhabitants in many countries. Other data show that the increase of antidepressant medication began with the introduction of a new class of antidepressants in the mid-1980s and the expansion of the use of antidepressants in other mental illnesses, for example in panic disorders (*e.g.* Rose, 2007).

The rising consumption of antidepressants may indicate an improved access of people with mental disorders to professional treatment, which is critical in view of the large under-treatment of depressive disorders (according to Lecrubier (2007); only 20% of individuals with a major depression receive antidepressant medication). It is probably also the consequence of better recognition and treatment of depressed patients in primary care practices, promoted over a long time by depression-awareness programmes. The continuously low level of medication in depressed individuals despite the recent increase, however, does not support the widespread concern that a growing number of people take "happiness pills" without any illness-related symptoms (Lehtinen *et al.*, 2007).

Antidepressant consumption, 2000-09

Defined daily dose (DDD) per 1 000 inhabitants per day



StatLink http://dx.doi.org/10.1787/888932533722

Source: OECD Health Data 2011 (www.oecd.org/health/healthdata).

Figure 3.5. **Treatment rates vary with the type of benefit and are highest in welfare recipients**

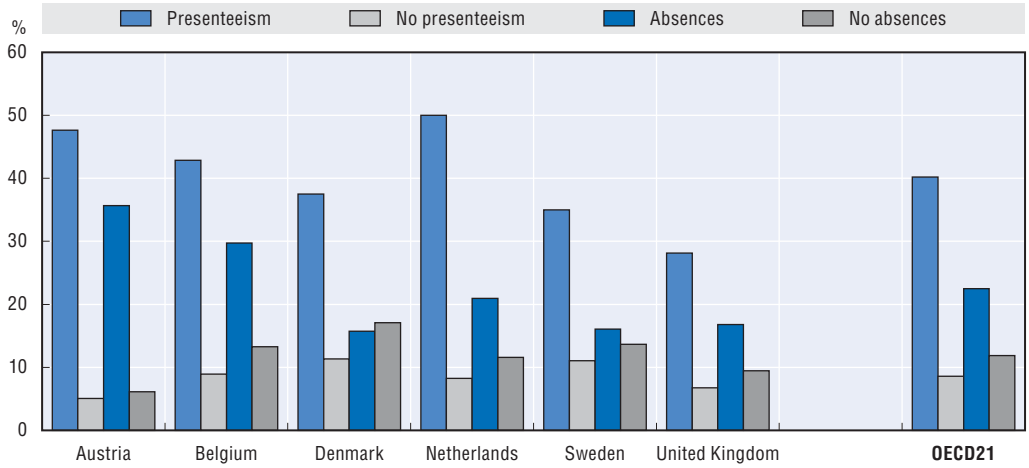
Share of people with a severe mental disorder who are in treatment, by type of working-age benefit received, United States, 1997, 2002 and 2008

Source: National health surveys of the United States.

StatLink http://dx.doi.org/10.1787/888932533741

Figure 3.6. **People with a mental health problem who have work problems have higher treatment rates**

Treatment rates of people with mental health problems, with reduced work productivity or sickness absence, 2010



Source: OECD calculations based on Eurobarometer 2010.

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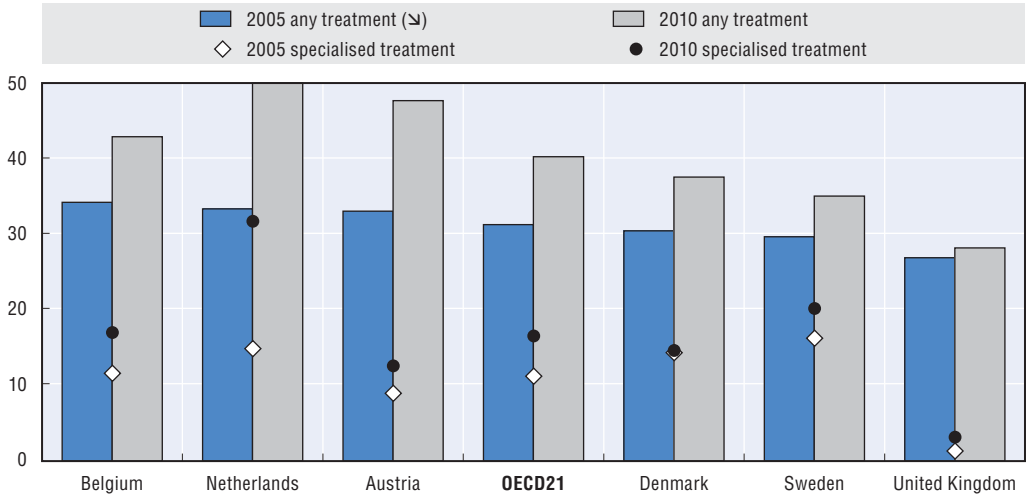
Treatment rates of workers with reduced productivity while at work have increased between 2005 and 2010 (Figure 3.7). The treatment rate is highest in the Netherlands, where it has increased from 35% to 50%, and lowest in the United Kingdom, where it remained stable at barely 30%. In the United Kingdom with its GP-oriented health care system, the rate of specialised treatment remained the same, whereas in the Netherlands, the specialised treatment rate doubled over the same period from around 15% to over 30%. This may be due to the presence of occupational health physicians at workplaces in the Netherlands, who are officially in duty when illness-related work problems arise. Taken

Figure 3.7. **Workers reporting reduced productivity are increasingly seeking treatment**

Share of people with reduced work productivity due to a mental health problem who sought treatment, by provider, 2005 and 2010



Note: "Specialist" includes psychiatrist, psychologist, psychotherapist, or psychoanalyst. "Non-specialist" includes general practitioner, pharmacist, nurse, social worker, or "someone else". "Any" treatment includes treatment by specialist or non-specialist.

Source: OECD calculations based on Eurobarometer 2005 and 2010.

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together, in all countries treatment rates for working people with illness-related problems at work have increased substantially. This result applies to the proportion who sought any treatment, with no respect to the specific provider, as well as to the proportion who sought help from mental health specialists (*e.g.* psychiatrists).

The problem of under-treatment has been recognised, and in some OECD countries, there have been large scale initiatives to improve the access to psychological therapies, *e.g.* in England with the "Improving Access to Psychological Therapy Programme", which began in 2008. These initiatives have had a strong focus on improved social and economic participation, as well as on employment, with the idea to offer patients with depressive and anxiety disorders effective psychological therapy (cognitive behavioural therapy), combined where appropriate, with medication. Similar initiatives and programmes have been started in Australia (see below).

Nevertheless, many individuals who claim a disability benefit for mental health reasons, are not at all, or not sufficiently, treated for this mental health condition. Only around half of the recipients of disability benefits with severe mental disorders, and 40% of people with illness-related work-problems, are in treatment. There is still a substantial potential for mental health care to reach individuals with mental health problems in order to improve their working situation. This has also been found for Norway, where around one-third of all disability benefit recipients have never sought professional help for any mental health problem (Øverland *et al.*, 2007). It has been concluded that better accessibility to the mental health care system, as well as increased involvement of mental health specialists in treatment before long-term benefits are awarded, might prevent people from leaving the workforce. Similar results have been found in Finland (Honkonen *et al.*, 2007) and Switzerland (Apfel and Riecher-Rössler, 2008) with substantial proportions of claimants for a disability pension being treated inadequately or not at all.

Beyond under-treatment, the wide time gap between the onset of the mental disorder and the first treatment contact is a key concern. This has consistently been shown for different countries. On average, for the treated population there are more than ten years between the onset of the illness and the first treatment (Kessler and Wang, 2008). Accordingly, there is also a very long delay between illness-onset and first contact with the rehabilitative system (Baer *et al.*, 2009). In response, many countries have started sustainable initiatives to improve the access to mental health care in general, as well as to specialist care and psychotherapy, for example Australia and the United Kingdom.

In many cases treatment is inadequate

Evidence indicates that treatment has a great potential to improve outcomes, provided the treatment follows adequate guidelines, but also that under-treatment continues to be extensive despite recent advancements. But this is not the full story. Not only are many people with a mental disorder not seeking treatment or not able to access mental health services, but among those who do, a very high proportion receive inadequate treatment.[6] Kessler *et al.* (2005b) in studying depression, for example, found that some 50% of the sample population seek treatment but only 42% of those treated received adequate treatment, *i.e.* overall less than one in four of the depressed population receives minimally adequate treatment.[7]

Results in Birnbaum *et al.* (2010) are even less encouraging. They find that one-third of the depressed respondents took antidepressants, while among those only 20% received *adequate minimal* treatment.[8] Adequacy of treatment, use of antidepressant medication and use of mental health services in total increased with depression severity. The authors conclude that their results call for an overall improvement of treatment quality at all levels of severity of depression.

Enhanced treatment approaches

Treatment is a critical factor in reducing symptoms and improving employment prospects for people with mental ill-health. *Enhanced* treatment approaches have considerable potential to improve outcomes, especially employment outcomes, compared with both usual and adequate treatment:

- In a randomised trial in the Netherlands, where sick-listed employees are regularly seen by occupational physicians, a psychiatric consultation model led to a much faster return to work; patients returned 70 days earlier than in the control group (van der Feltz-Cornelis *et al.*, 2010a). In the consultation model, occupational physicians not only received some psychiatric training, but also support from a psychiatrist, including a diagnosis and treatment plan and suggestions for successful strategies to improve work functioning with respect to the illness-related limitations. Consultant psychiatrists are trained beforehand to provide such rehabilitative suggestions.
- A meta-analysis of ten randomised controlled trials on psychiatric consultations in primary care confirmed this result (van der Feltz-Cornelis, 2010b). Psychiatric consultation models generally are not only effective regarding functional improvement in depressive disorders but also, and even with a larger effect, in somatic disorders.
- Improved work outcomes were also found in a randomised controlled trial in the United States for enhanced depression care, including telephone outreach to depressed employees, care management, and optional psychotherapeutic elements (Wang *et al.*, 2008). The focus of this intervention was on systematically assessing treatment needs; facilitating

the entry into psychotherapy and pharmacotherapy; monitoring and supporting treatment adherence; and providing telephone psychotherapy by care managers.

- Another randomised controlled trial looked at the costs of absence from depression, finding significant returns on investment in enhanced intervention in the order of 400-700%, depending on how costly the absence of a worker is (Lo Sasso *et al.*, 2006). Enhanced treatment included training for physicians and care managers to encourage patients to begin pharmacotherapy or psychotherapy. During the two years of the study, care managers provided treatment response monitoring through regular telephone contacts, encouraged treatment adherence and prepared monthly summaries of the treatment outcome for the physicians.

Taken together, the evidence shows that providing adequate treatment is an important first step, because illness symptoms (*e.g.* cognitive impairments, depressed mood, or lack of energy), which are treatable in principle, hinder work functioning. However, psychotherapy and medication alone are often not sufficient to help clients find a job or stay at work. Treatment, be it specialist treatment or treatment by general practitioners, also needs an employment focus and co-ordinated clinical and vocational efforts to substantially improve employability. Thus, two things seem necessary. First, professional care, which is mostly provided by general practitioners, needs a systematic support from mental health specialists. Second, professional mental health care in general needs support from employment specialists, and, in turn, employment specialists need psychiatric support from mental health specialists.

Symptom-oriented treatment is not enough for recurrent and chronic mental disorders

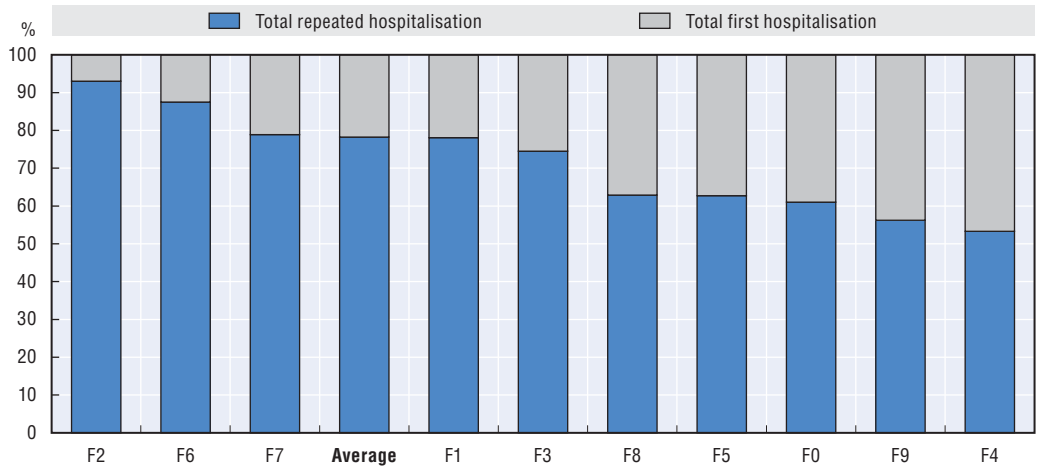
Dewa *et al.* (2003) found a substantial group of depressed employees – around 20% – who do not recover as fast and as well, and who are probably in need of more complex care. The authors conclude that an exclusively symptom-oriented approach does not meet the care needs of these patients. This is confirmed in a review of 14 studies of drug-treated depressed individuals (Hughes and Cohen, 2009) which concluded that for a certain group of treated individuals outcomes are poor, marked by multiple recurrences. In this review it is shown that about one-fifth to one-third achieve good or improved health conditions at follow-up but another one-fifth to one-third have poor outcomes, often related to long-lasting disability.

The often recurrent course of mental disorders, for example, also explains repeated inpatient admissions. Clinical data from Denmark show that, on average, only around 20% of all hospitalisations are first hospitalisations. Different disorders show different degrees of recurrence or persistence. Schizophrenic disorders (F2), personality disorders (F6), substance-abuse disorders (F1) and affective disorders (F3) have particularly high rates of repeat hospitalisations (75-93%) partly mirroring the long-term impact of different mental health conditions (Figure 3.8).[9]

Therefore, it should be kept in mind that many mental disorders are typically not well characterised by describing them as a "single crisis". On the other hand, inpatient data show only part of the whole picture. Patients in inpatient psychiatric care are a selected group. Inpatient data from Switzerland show that clinicians tend to overestimate the chronicity of their patients' illness because of a relatively small group of patients who are readmitted very often (Frick and Frick, 2010).[10] Diagnosis was strongly related to the risk of rehospitalisation and the duration between two consecutive inpatient stays, with a higher rehospitalisation risk as well as a shorter time until readmission for schizophrenia and personality disorders. There is evidence that the organisation of the mental health care system, for example by

Figure 3.8. **Readmissions are particularly frequent for schizophrenic and personality disorder**

Psychiatric inpatients by diagnosis and admission/readmission status, Denmark, 2009



Note: F0: organic disorders, F1: substance-use disorders, F2: schizophrenic disorders, F3: affective disorder, F4: neurotic disorders, F5: behavioural syndromes, F6: personality disorders, F7: mental retardation, F8: developmental disorders, and F9: emotional disorders.

Source: Centre for Psychiatric Research, Institute of Clinical Medicine, Aarhus University.

StatLink http://dx.doi.org/10.1787/888932533798

providing integrated care settings across different institutions, is critical for people with long-term and disabling conditions (Prince, 2006).

These results are in line with other research concluding that symptom-focused treatment alone does not often suffice to restore normal functioning of depressed individuals (Rhebergen *et al.*, 2010). This may especially be true for chronic depressive disorders such as dystymia and recurrent depression. Generally, with respect to serious work-related problems and disability, mental disorders are especially disabling when they are recurrent or chronic. Effects on work functioning and disability of a chronic or recurrent condition normally cannot be compensated by intervention in the form of "adequate treatment" as defined above, with only some six psychotherapy sessions or four follow-up visits after initial psychotropic medication. Disability is normally the result of an early-onset, long-lasting, severe and chronic condition. Treatment studies with a follow-up of up to 6-12 months can neither mirror the longer-term effects of high-quality treatment, nor can they predicate work-related treatment effects for recurrent or chronic disorders such as recurrent depression or personality disorders.

The need for psychotherapy treatment

Medication is an important element of treatment, but equally and often more important for adequate treatment of mental illness, are complementary therapies, or sometimes therapies only. The impact of short-term therapies, for example cognitive-behavioural interventions,[11] has been widely studied in recent years and was shown to have significant effects on work outcomes (*e.g.* Lewis and Simons, 2011). There are a few studies available showing that long-term psychotherapies and psychoanalysis may also have a positive effect (*e.g.* de Maat *et al.*, 2007). For example, Knekt *et al.* (2011) found that shorter-term effects were strongest with short-term therapies, while long-term psychotherapy was more effective after three years, and psychoanalysis was most effective

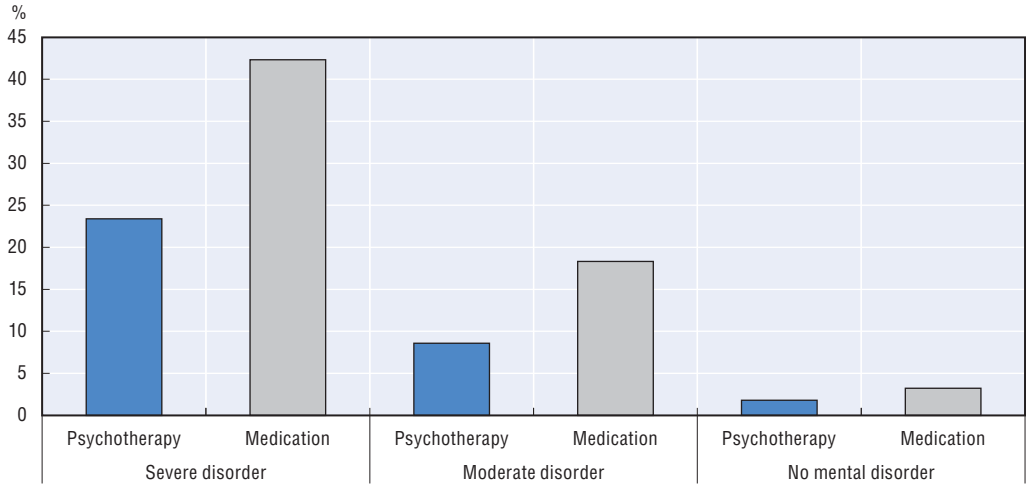
after five years. Despite some methodological limitations in the study design, these results suggest that long-term *and* intensive therapies may also have beneficial effects on work outcomes of people with mental health problems. However, the evidence base regarding long-term psychotherapy seems scarce, be it due to a lack of sound research concerning such approaches, or due to their lacking success. Beyond the somewhat unclear state of research, it is obvious that some groups of patients are in need of a long-lasting therapeutic support in order to achieve sustainable and competitive employment.

Psychotherapy is not used sufficiently

Evidence shows that psychotherapy is not only clinically effective, but also supports the social and vocational recovery process and work functioning. However, there is some indication that only few individuals affected by mental health problems have access to such therapies. According to Eurobarometer data, in 2005 some 15% of the working-age population received professional treatment due to a psychological or emotional problem.[12] Of those treated, over 40% received antidepressant medication if severely mentally ill and almost 20% if moderately ill. The proportions receiving psychotherapy were only half of this; 23% and 9%, respectively (Figure 3.9).

Figure 3.9. **Medication is significantly more frequent than psychotherapy in all mental disorders**

Share of people who took antidepressant medication and/or undertook psychotherapy, by severity, 2005



Source: OECD calculations based on Eurobarometer 2005.

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The severe underuse of talking therapies has been recognised not only in England (see above) but also in other countries, e.g. in Australia, where different initiatives have already been implemented. The "Better Access to Psychiatrists, Psychologists and General Practitioners trough the Medicare Benefits Schedule" initiative, the "Access to Allied Psychological Services" initiative as well as other programmes like online supports (the mental health online portal and virtual clinic) are targeted on improved treatment and management of mental illness in the community, to a closer collaboration between GPs and mental health specialists, and to increased referrals from GP professionals providing psychological treatment.

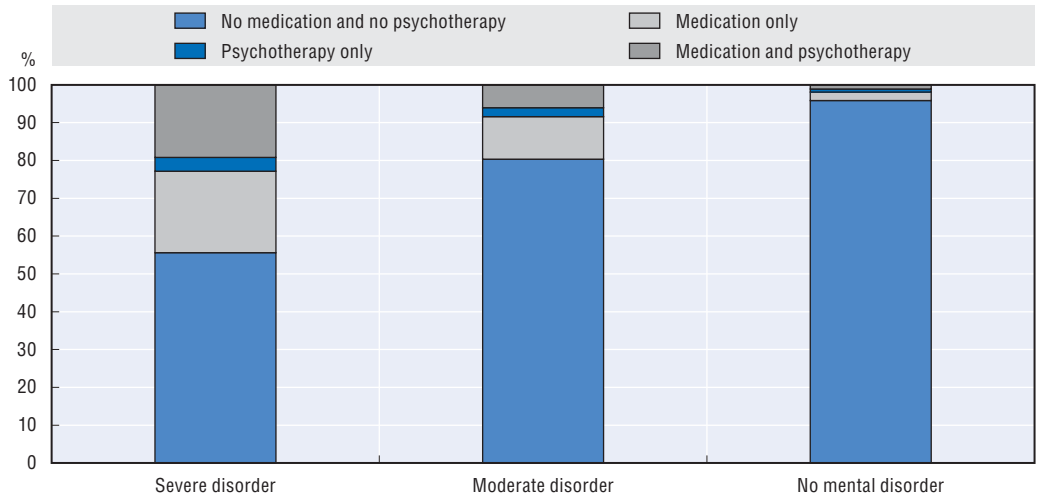
The preference for medication over psychotherapy partly reflects the large share of mental health services provided by general practitioners. It may also to some extent reflect the relative costs of the two approaches, with medication generally being cheaper than (sustained) professional therapy visits.

The high prevalence of drug treatment relative to psychotherapy treatment which also applies for those with a moderate mental disorder, and even those with no mental disorder, is in contradiction to general clinical evidence. According to the latter, the effectiveness of treatment with antidepressants increases with increasing illness severity, showing only a little more effect than a placebo in milder mental health conditions. Furthermore, psychotherapy is commonly recommended to treat milder forms of depression.

It is often recommended to combine antidepressant medication with psychotherapy in order to get the best treatment effects – especially for more severe mental health conditions. According to the same data set, out of a hundred individuals suffering from a severe mental health problem, 55% receive neither antidepressants nor psychotherapy, another 22% get antidepressants but no psychotherapy, while 4% get psychotherapy but no medication (Figure 3.10). As a result, less than one in five (19%) get antidepressants *and* psychotherapy – what is generally regarded as optimal treatment for most mental disorders (Lehtinen *et al.*, 2007). Among those with a moderate mental disorder, four in five do not receive any treatment at all and only one in twenty a combined treatment.

Figure 3.10. **Only a minority of all patients receive combined medication-therapy treatment**

Share of people in professional treatment[a] who received antidepressant medication and/or psychotherapy, 2005



a) Treatment for a psychological or emotional problem in the last 12 months.

Source: OECD calculations based on Eurobarometer 2005.

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Varying treatment modalities across countries

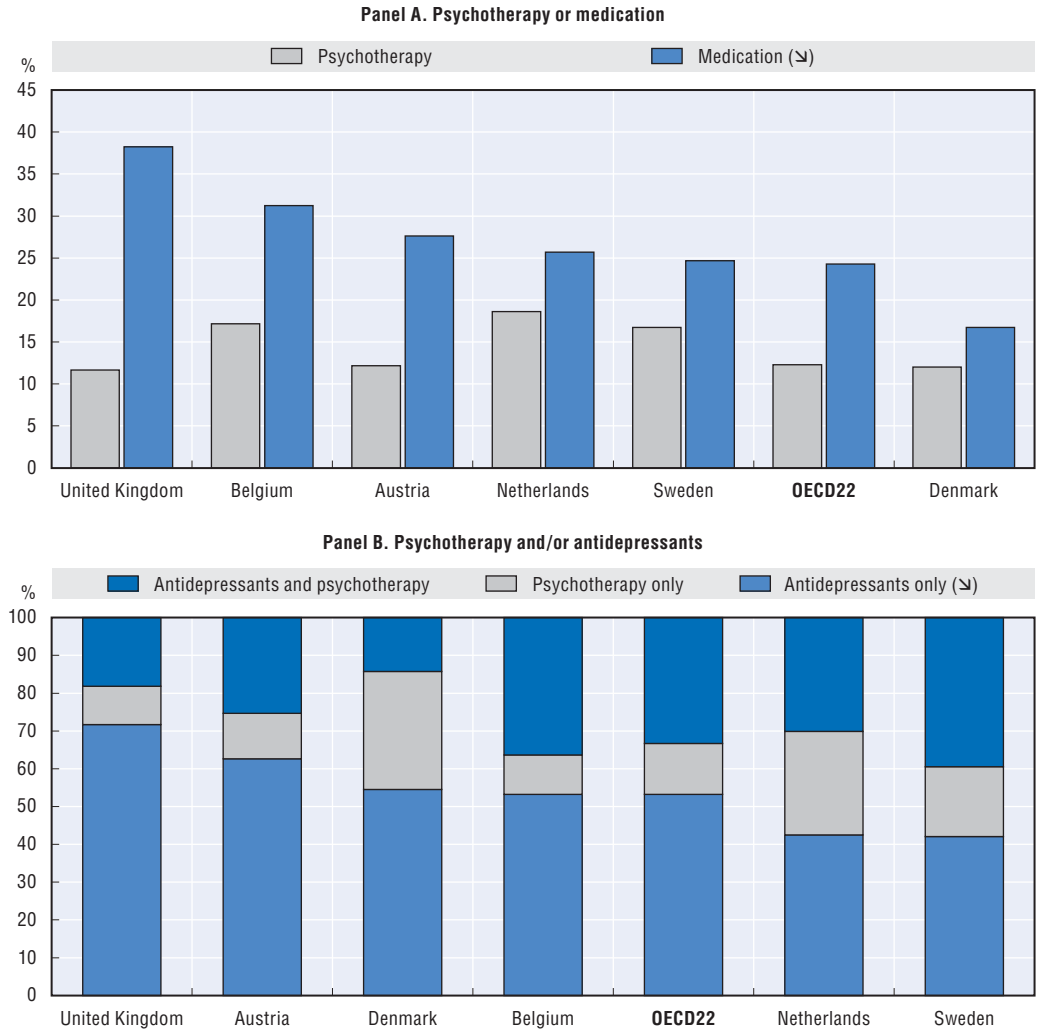
There are considerable differences between countries in the frequency of drug and psychotherapy treatment, and the relative use of either of the two forms of treatment. In the United Kingdom, almost 40% of all treated patients – people with moderate or severe mental disorders treated due to *any* emotional problem – are prescribed antidepressants,

but the share of patients receiving psychotherapy is comparatively low. On the other end of the scale is Denmark, with only just over 15% of the patients with mental health problems receiving medication (Figure 3.11). Overall, cross-country differences in the share of people receiving psychotherapy are much smaller.

Concerning treatment combinations, distributions of single and combined treatment modalities show that the United Kingdom and Denmark have a similarity insofar as both countries rarely use combined treatment (14-18% of all treatments). However, the United Kingdom has the lowest rate of pure therapies of all countries shown, whereas Denmark has the highest rate of pure psychotherapy provision. Sweden, Belgium and the Netherlands provide combined treatment more often than the other countries.

Figure 3.11. **Medication is most frequent in the United Kingdom and psychotherapy in Sweden**

Share of people in treatment[a] who received antidepressant medication and/or psychotherapy, 2005



Note: OECD22 is an unweighted average.

a) Professional treatment for a psychological or emotional problem in the last 12 months.

Source: OECD calculations based on Eurobarometer 2005.

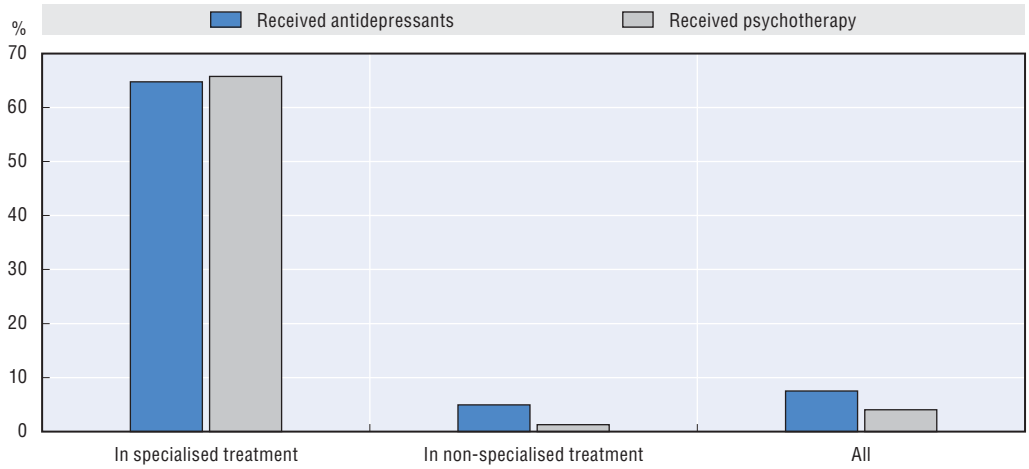
StatLink http://dx.doi.org/10.1787/888932533855

Who provides psychotherapy and medication – if at all?

Professional treatment is provided by different health care personnel: general practitioners (GPs), psychiatrists, psychologists, social workers, nurses, and other professionals. Health care providers can be classified into mental health care specialists (*e.g.* psychiatrists and psychologists) and non-specialists (*e.g.* GPs or nurses). Comparing the status of the mental health care provider with the actual provision of antidepressants and psychotherapy reveals a strong finding: medication and psychotherapy rarely are provided by non-specialists, most of who are GPs (Figure 3.12).

Figure 3.12. **Treatment modalities in specialised mental health care differ vastly from primary care**

Share of people in treatment for a psychological or emotional problem in the last 12 months, who received antidepressant medication and psychotherapy, 2005



Note: "Specialist" includes psychiatrist, psychologist, psychotherapist or psychoanalyst. "No specialist" includes general practitioner, pharmacist, nurse, social worker or "someone else".

Source: OECD calculations based on Eurobarometer 2005.

StatLink http://dx.doi.org/10.1787/888932533874

The prevalence of medication treatment and psychotherapy is 7.5% and 4.1% respectively, in the working-age population. In non-specialised treatment, the shares are below 5% and 2% respectively, and less than 1% of all patients treated in general health care receive a combination treatment, compared with 46% in the specialised treatment sector (not shown in Figure 3.11). In specialised treatment, antidepressant medication treatment and psychotherapy are each provided for two-thirds of the patients. Although the patient populations in specialised mental health care differ from those in primary care (the severe mental health conditions being over-represented in specialised care), the lack of drug treatment and psychotherapy in general practices possibly indicates a severe under-treatment of mental disorders in primary care. In view of such findings, widespread efforts that have been made over the past decade – for example, by the World Health Organization (Wonca, 2008) – to position mental health care in general medical care settings in order to reduce the treatment gap must be seen with some scepticism. The 5% antidepressant-medication rate in primary care seems to reflect a substantial level of undersupply of patients with mental health problems. The further displacement of the majority of mental

health care into general health services should therefore be accompanied by collaborative care approaches which go beyond providing education materials for family doctors and should include training and support to primary care physicians.

3.4. Mental health care system challenges

In industrialised countries, mental health care systems have undergone major changes in the past 50 years. Extensive mental health care reforms, as well as the availability of psychotropic drugs, have led to a fundamental change from a hospital-based to a community-based service system, referred to as "deinstitutionalisation".

From mental hospitals to community care

Although countries have followed different patterns of transformation with different timings, change follows some guiding principles (see *e.g.* Becker and Kilian, 2006):

- deinstitutionalisation and reduction of psychiatric inpatient beds;
- development of community mental health services;
- integration of mental health services with general health services; and
- integration of mental health services with social and community services.

The driving force behind this change, which was not primarily evidence-based but also based on idealism and concern for the quality of life of mentally-ill persons partly leading miserable lives in state mental hospitals (Lamb and Bachrach, 2001), was to integrate mentally-ill people into the community. It was assumed that community care in itself would have a therapeutic effect on patients who had suffered from the adverse consequences of the lack of activity, *e.g.* apathy, loss of interest and initiative, as well as the adjustment of needs and expectations to a very low level. This "institutionalism" was blamed to be partially responsible for the symptoms of these patients (Thornicroft and Bebbington, 1989). Therefore, deinstitutionalisation should lead people with mental disorders to social inclusion and to activity.

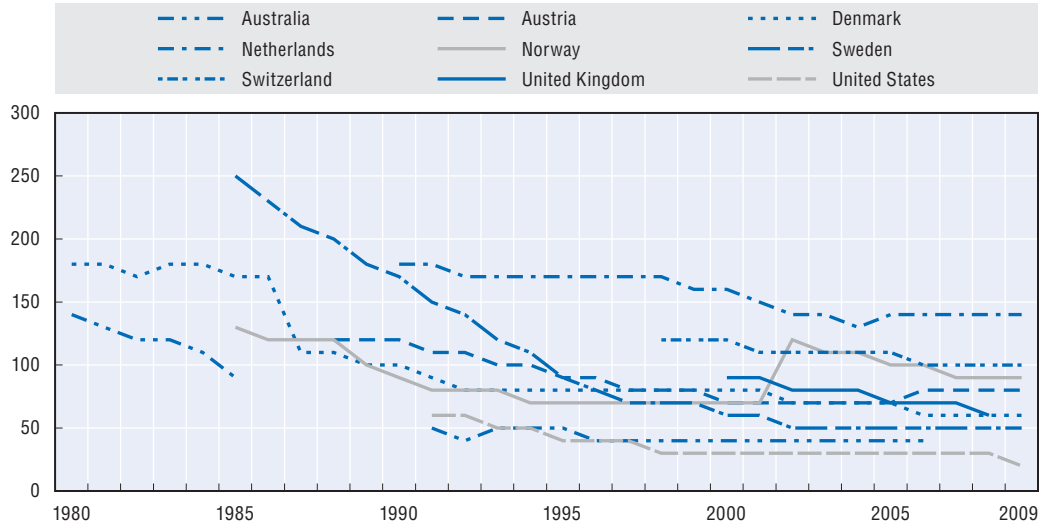
The first target of the transformation, the reduction of inpatient beds, has been partly met. For example, in the United States the number of inpatient beds per 100 000 of the population decreased from 339 to 21 over a 20-year period (Lamb and Bachrach, 2001). In Europe too, the number of psychiatric beds was reduced by about 50% between 1970 and 1990. This development is still continuing, even though the pace has slowed down over the past ten years (Figure 3.13). For example, in Sweden the number of psychiatric beds was reduced by around 80% between 1986 and 2009 (from 250 to 50 beds), in Australia by about 60-70% between 1980 and 2006 (from 140 to 40 beds) and in Denmark by two-thirds between 1980 and 2009 (from 180 to 60 beds).

Development of community-based services

Mental health reforms have brought major changes to the mental health care system, including the development of a great variety of community mental health services. Table 3.1 gives a rough outline of the main components of mental health care systems as they have been established in most industrialised countries. Key dimensions of differentiation are between *generalist* and *specialised* mental health care, and between *treatment* and *rehabilitation*. However, it should be kept in mind that the *organisation* of the mental health care system varies considerably by countries. The table has, in contrast to this real country-specific heterogeneity, mainly a didactic value. The table shows that

Figure 3.13. **Inpatient care has been declining gradually for about three decades**

Number per 100 000 population of psychiatric inpatient beds, 1980-2009



Note: The Australian "National Mental Health Report 2010" shows a slightly lower bed reduction rate of around 60% between 1980 and 2006.

Source: *OECD Health Data 2011* (*www.oecd.org/health/healthdata*).

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generally, the people with (most) severe mental disorders are the main target group of the institutionalised mental health care system. The private mental health care sector (psychologists or psychiatrists in private practice, depending on the country) is also open to individuals with milder disorders and sub-threshold conditions. However, the majority of mentally-ill patients in need, having at least a mild mental disorder and often being partially isolated from social and working life, do not find adequate help.

GPs are gatekeepers to the mental health care system, referring in many countries patients with complex and severe health care needs to a specialist. GPs treat the majority of people with mental disorders, mostly with depressive, anxiety and substance-use disorders. The primary care practice is the location where most people with mental health conditions turn up, particularly for the first time. Hence, recognition by GPs is critical, as is the referral to a specialist if necessary. However, the rates of recognised mental disorders in primary care are still rather low, below half of the patients concerned.

This holds true for the treatment in general wards of general hospitals which are, not least due to the high co-morbidity of mental and physical disorders, another important entry into the treatment system. The proportion of patients with a mental disorder treated in general hospitals, in most cases for a physical health problem, is about 30% (Bronheim *et al.*, 1998; Arolt, 1997). Among working-age patients, the predominant mental health problems are depression, substance abuse and acute stress reactions. This high prevalence is not restricted to general medical wards, but applies also to surgical, orthopaedic and gynaecologist wards. The recognition rate is rather low (at 40-50%), as is the referral rate, at only 20-30% of the recognised cases (Wancata *et al.*, 2000). Therefore, the availability of psychiatric services in general hospitals is of high importance to improve the current low referral rates.

Table 3.1. **Typical providers, services and functions of well-developed mental health care systems**

Provider	Services	Functions and main target group	Form
Generalist mental health care			
General practitioners, general wards in general hospitals	Consultation per hour	Detection	Outpatient
		Diagnosis	
		Treatment	
		Referral	
		More moderate mental disorders	
Specialised mental health services			
Psychiatrists, psychologists in private practice	Consultation per hour	Diagnosis	Outpatient
		Treatment	
		Consultation	
		Liaison services	
		More severe mental disorders	
Psychiatric hospitals (including psychiatric and psychosomatic wards in general hospitals)	Specialist inpatient care	Diagnosis	Inpatient,
	Psychiatric day or night hospitals	Treatment	Outpatient
	Crisis stabilisation care	Rehabilitation	
	Specialised units/centres for the treatment of specific disorders and for related rehabilitation programmes	Consultation	
	Rehabilitation services for specific disorders	Liaison services	
		Severe mental disorders	
Community mental health centers	Specialised outpatient care	Diagnosis	Outpatient
	Crisis centre	Treatment	
	Crisis intervention at home	Consultation	
	Assertive community treatment	Liaison services	
	Psychosocial services	Rehabilitation	
	Day centres	Relapse prevention	
		Severe mental disorders	
Rehabilitation services			
Social activities support	Day-care and drop-in centres	Integration	Outpatient
	Clubhouses	Social inclusion	
	Support groups, self-help groups	Long-term support	
		Most severe mental disorders	
Employment support	Employment/rehabilitation workshops	Integration	Outpatient
	Sheltered workshops	Social inclusion	
	Transitional employment programmes	Long-term support	
	Supported employment programmes		
		Severe mental disorders	

Table 3.1. **Typical providers, services and functions of well-developed mental health care systems** *(cont.)*

Provider	Services	Functions and main target group	Form
Housing support	Group homes	Integration	Outpatient
	Hostels	Social inclusion	
	Residential care	Long-term support	
	Supported independent housing		
		Most severe mental disorders	

Note: The table shows the typical providers and services in countries with a developed mental health system, *i.e.* the typical actors of the system. However, the organisation of the mental health care system is country-specific. For example, community mental health centres very often also provide rehabilitation services through an interdisciplinary team approach. Moreover, community mental health centres may involve both general mental health services as well as specialised mental health services. In Norway, for example, the municipal mental health services comprise both primary health care and social services, provided by psychiatric nurses, GPs, psychologists and other professionals. Additionally, these primary mental health services work together with specialised service units. Correspondingly, the target groups of these community services are very broad, including also milder disorders.

Source: OECD compilation based on Thornicroft and Tansella (2004), Rosen and Barfoot (2001), and WHO (2003).

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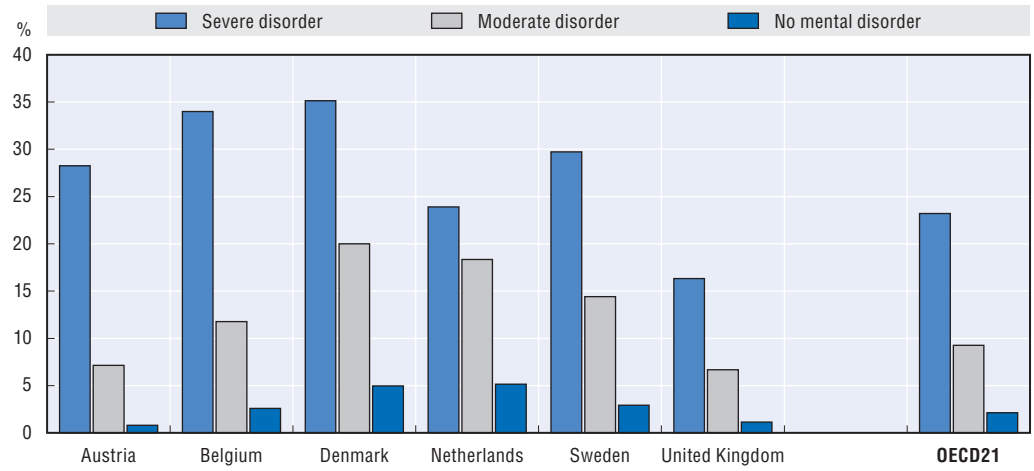
In many countries, psychiatrists and psychologists are not only specialists for providing psychiatric diagnosis, psychotropic medication and psychotherapy, but also for providing counselling, training, or liaison services to general practitioners, as well as to other providers of general medical care – for example, to nursing homes or housing institutions. The position of psychiatrists and psychologists within the service system varies widely across countries. Correspondingly, the characteristics of patients in private specialised practice differ. Data from European countries show that severe mental health conditions are over-represented in specialised mental health care, generally provided by psychiatrists (Figure 3.14). This finding was confirmed by recent epidemiological research in six European countries (Dezetter *et al.*, 2011).

The proportion of individuals with mental health problems treated in specialised care has increased slightly in these countries, by 3 percentage points in five years. Moreover, the availability of outpatient specialised mental health care located in private practice (*i.e.* psychiatrists) has increased steadily over the past decade in all countries with the exception of the United States (Figure 3.15). However, there was a steep increase of psychologists' services in the United States (Glied and Frank, 2009). Switzerland *e.g.* now has a rate of four psychiatrists per 10 000 of the population, well above the average in other countries for which comparable data are available. Since specialised mental health care, or enhanced primary care with support by mental health specialists, can improve functional treatment outcomes, this development can be judged as positive. An increase in specialised mental health care and in collaborative care respectively, has also been found in the United States; however, general medical providers rather than specialists have had the highest increase (Wang *et al.*, 2006).

There is not a clear relationship between characteristics of the mental health care system and the likelihood of seeking help from mental health specialists. However, there are typical factors generally improving treatment access and treatment adequacy, which have been promoted by guidelines from the American Psychiatric Association and the National Institute for Clinical Excellence in the United Kingdom. These guidelines emphasise the gate-keeping role of primary care, the provision of a sound training to

Figure 3.14. **The opportunity to seek specialist treatment varies considerably across countries**

Share of people in specialist treatment,[a, b] by severity of the mental disorder, 2010



a) "Specialist" includes psychiatrist, psychologist, psychotherapist or psychoanalyst. "No specialist" includes general practitioner, pharmacist, nurse, social worker or "someone else".

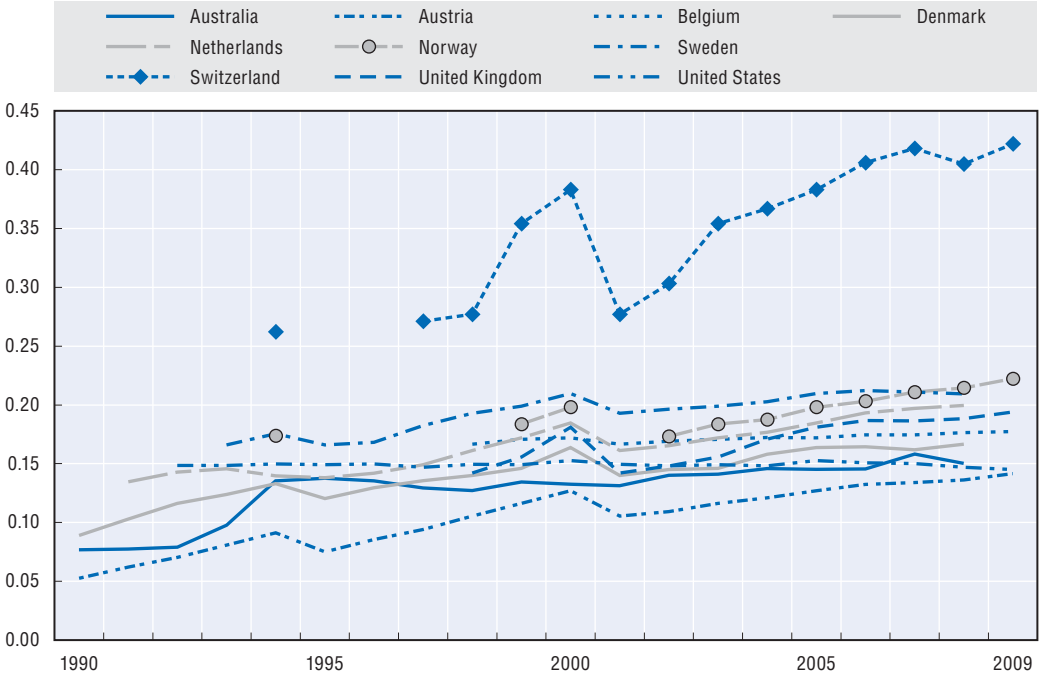
b) Treatment for a psychological or emotional problem in the last 12 months.

Source: OECD calculations based on Eurobarometer 2010.

StatLink http://dx.doi.org/10.1787/888932533912

Figure 3.15. **The number of psychiatrists has increased everywhere and most in Switzerland**

Number of psychiatrists per 1 000 population, 1990-2008



Source: OECD Health Data 2011 (*www.oecd.org/health/healthdata*).

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general practitioners, the reimbursement policy (*i.e.* financial incentives for doctors), and using psychiatrists as consultants and a background resource for other providers (Dezetter *et al.*, 2011). Similar successful initiatives have been undertaken by the Australian Government ("Better Access" initiative, "Access to Allied Psychological Services" initiative, see above; *e.g.* Harris *et al.*, 2011).

While psychiatric inpatient capacities have been reduced and outpatient mental health and rehabilitation services have been built up, the average length of inpatient stay has decreased substantially in all but a few OECD countries. In most of the countries participating in the current project, a majority of psychiatric inpatients will be discharged within one week from the psychiatric clinic. Switzerland and the United Kingdom, with comparatively long hospitalisation durations, have also experienced a strong decrease in the past few years, converging to the averages in other countries. Some countries, *e.g.* Norway or Denmark, have exceedingly short stays with a mean length below five days, pointing to fundamental differences between countries regarding their mental health care strategies.

There is some evidence that shorter periods of inpatient stay are related to better outcomes, especially with respect to independent living, whereas longer inpatient rehabilitation increases the risk that patients will use institutional care in the future (Nordentoft *et al.*, 2010). Furthermore, a Cochrane meta-analysis in 2000 did not find increased readmission risks of planned short-term admissions of patients with severe mental illnesses (Johnstone and Zolese, 2000).

Discharge planning seems to play a critical part in the debate about the beneficial role of short-term inpatient stays. The evidence suggests that *short* hospital days are beneficial if there is a developed and high-quality community care system which takes responsibility for aftercare immediately after discharge (Capdevielle and Ritchie, 2008). Several studies show that discharge planning, as well as the presence of well-co-ordinated and integrated services, play a central role (Fasel *et al.*, 2010). Without committed outpatient services, and without a systematic discharge policy, a longer duration of hospitalisation may even be more beneficial (but also more costly), giving more time to prepare the discharge.

Taken all together, the downsizing of mental health hospitals has been accompanied by a steady increase of specialised outpatient treatment, as well as of rehabilitative services. The installation of community care services in many countries has led to a differentiated set of mental health services and various stepped rehabilitative services, which should meet the different degrees and kinds of patients' needs in the areas of housing, activities and social relationships. It is generally agreed that mental health reforms have produced better outcomes in countries where the reduction of inpatient capacities has been compensated by a substantial building up of specialised outpatient and rehabilitative services.

Shortcomings of community care

It should be mentioned however, that the de-institutionalisation has not yet been fully achieved, for the reduction in psychiatric beds has been accompanied by a probably more than compensating increase in other forms of institutionalisation. While psychiatric inpatient beds have decreased by on average around one-third in Austria, Denmark, the United Kingdom, the Netherlands and Switzerland, there has been a rise in forensic beds, places in supervised or supported residential care, as well as a distinct rise in the prison population, which is known

to involve a high prevalence of individuals with serious mental disorders (Priebe *et al.*, 2008). This holds also true for the United States (Glied and Frank, 2009).

To summarise, reforms over the past decades have brought about a fundamental change of the mental health care systems in OECD countries, as well as substantial improvements in quality of life, quality of care and service provision for patients with severe mental disorders. However, the reforms have not yet reduced the institutionalisation of people with mental disorders. Although institutions *per se* are not ineffective, community-based care has obviously not led to the desired degree of social inclusion, independent living, or to paid employment. The reforms have allowed patients with severe mental illnesses to move from psychiatric hospitals into sheltered housing settings, day centres, clubhouses, or self-help groups but have not improved social inclusion to the same degree.

Why have the reforms not gone further?

There are some possible reasons, why health care systems, including community psychiatry and psychiatric rehabilitation services, have not gone further:

- The focus of mental health care reforms has been on the individuals with the most severe mental health conditions, predominantly people who suffer from chronic schizophrenia or severe bipolar disorders. This almost exclusive focus on this relatively small group is not fully consistent with the fact that a far larger group at risk of exclusion from the workforce does not belong to the most disabled group.
- Correspondingly, almost the entire psychiatric rehabilitation research of the past decades has concentrated on people with schizophrenic disorders, who have the lowest chance to get employed, and there is a lack of evidence regarding other mental disorders.
- Past mental health care reforms, and especially the development of the rehabilitative service sector, have been weakened by fragmentation, a lack of empirical evidence and ideological positions. For example, there has been a decade-long debate on whether the diagnosis itself is relevant to work rehabilitation issues. In many fields, this controversy is still ongoing (Eikelmann *et al.*, 2005; Baer and Cahn, 2008). Accordingly, there is not only a gap between the mental health care system and other sectors of society, but also between the treatment and the rehabilitative systems.
- Finally, other barriers to socially-inclusive mental health care services lie in the stigma of mental disorders and – partly a consequence of stigma – the very substantial under-treatment of people with mental disorders, and the large treatment gap between illness-onset and first treatment.
- Until recently, paid employment has not been seen as a direct objective in mental health care. Other than "work" in general, which had often been a part of the treatment rationale for a long time (*e.g.* working therapy as part of the treatment), the employment situation of mental health patients was not seen as a predominant issue (Reker and Eikelmann, 2004).

The current role of mental health care concerning employment

Perhaps in recognition of the rising inflows into disability benefits of people with mental ill-health, there has been a rapidly increasing awareness in many countries that employment, as well as other real-life outcomes of mental health care, are crucial (Table 3.2).

Table 3.2. **The role of mental health care concerning employment objectives**

Country	Is employment an explicit objective in national mental health policies?	How is employment incorporated into mental health programmes and services?	What are the barriers to expanding the role of mental health care to employment objectives?
Australia	Yes	The National Standards for Mental Health Services include the requirement that employment is considered as part of a personalised recovery plan for each client. Many initiatives ongoing. The clinical practice guidelines for several mental disorders mention employment.	Service co-ordination between the health, education and employment sectors. Health care and employment assistance are delivered by different services.
Austria	Mentioned, but not specified.	Included only in the guidelines for schizophrenia, but not for other disorders. Currently no further initiatives.	
Belgium	Yes	Currently programmes and initiatives to emphasise a more interdisciplinary health care, also with respect to employment.	
Denmark	Yes	The health sector is not held accountable for employment outcomes. Currently no further initiatives.	Different responsibilities for employment, and health care respectively.
Netherlands	No	The health sector is not held accountable for employment outcomes. In several clinical guidelines, employment is adressed, especially in the guidelines for occupational health physicians. Currently different initiatives.	Lack of financial incentives, fragmented funding of health care and vocational rehabilitation, lack of entitlements and resources to engage more in employment outcomes, the existence of a parallel occupational health system makes the "health" system feel less responsible.
Norway	Yes	In the National Plan for Mental Health 1999-2008, employment was an important topic. The National Strategic Plan for Work and Mental Health comprises an action plan. Many initiatives and measures.	Stigma of people with mental disorders.
Sweden	Yes	In the treatment guidelines for schizophrenia the National Board of Health and Welfare recommends Supported Employment (IPS model). The Health and Medical Services Act regulates the responsibility for health care, which lies with the county councils. The Act does not concern employment, which is primarily seen as a responsibility of the labour market.	Lack of co-ordination between different sectors (health care, social insurance, employment service) as well as between different levels (municipalities, county councils, state). While the different roles are clear, no actor is responsible for the person as a whole.
Switzerland	No	No programmes, no initiatives.	Different responsibilities, lack of legislation, stigma, lack of financial incentives.
United Kingdom	Yes	National Institute for Health and Clinical Excellence guidelines include employment as an objective. Several initiatives and pilots (*e.g.* the Department for Work and Pensions has been running a pilot of placing employment advisers within GP surgeries to improve the access to employment advice for people visiting primary care). Moreover, employment outcomes of people with long-term conditions are incorporated in the NHS outcomes framework for England.	Beliefs among healthcare practitioners that work is not realistic or beneficial. Financing problems (silo budgeting). Different organisations provide health care and employment sevices cause referral problems.
United States	Yes	Employment is not included in clinical guidelines. Several research projects and initiatives.	No Medicaid reimbursement for specific employment services in health care systems. Segmented approach by health-care providers focusing only on health care.

Source: OECD compilation based on mental health policy questionnaires.

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In many countries, employment has recently been established as an objective in national mental health strategies. In clinical guidelines for all mental disorders, employment is included only in Australia and the United Kingdom. In almost all countries, initiatives are currently underway to raise the emphasis on employment in mental health care; however, these initiatives have often been selective and not systematic. There is consensus regarding the main barriers of mental health care systems to expanding their role to employment objectives. There are organisational as well as financial barriers due to the different providers of health care and employment supports. This fragmentation impairs co-ordination and leads to financial disincentives to engage in employment outcomes. Of some concern, finally, is that in most countries up to now, the health care system has not been held accountable for employment outcomes.

The impact of employment on service use and health costs

Employment and employment supports may not only improve symptoms, self-esteem and quality of life, but also has a strong preventive effect on the use or over-use of the mental health system. Follow-up studies with employed and unemployed psychiatric patients over a ten year period show that service use declined for both groups, but according to one United States study with significantly greater decline for the steady-work group. From the third year on, steadily working people use only one-third to one-half of service hours compared with the minimum-work group, and their hospitalisation days are reduced by around 75% (Bush *et al.*, 2009). When the utilisation of psychiatric and other medical services is regarded in relation to unemployment, it has been repeatedly found that unemployment, underemployment and disability are strongly connected to service use. An analysis of all psychiatric hospitalisations in Switzerland between 2000 and 2004 showed an up to 17-fold hospitalisation risk for unemployed persons in comparison with full-time employed patients (Kuhl and Herdt, 2007).

In a similar analysis of the length of stay in a psychiatric clinic in Switzerland over seven years with around 9 200 discharges, Baer and Cahn (2008) found that adjusting for illness-severity at admission to the psychiatric clinic, competitively employed inpatients had much fewer hospitalisation days compared with non-working patients and patients in sheltered employment, respectively (Figure 3.16). In this analysis, the work-related difference in hospitalisation days is substantial. Independent of illness severity at the time of admission, employed patients showed a much shorter length of stay than the no-work group. To be in sheltered employment, on the contrary, did not reduce the hospitalisation duration.

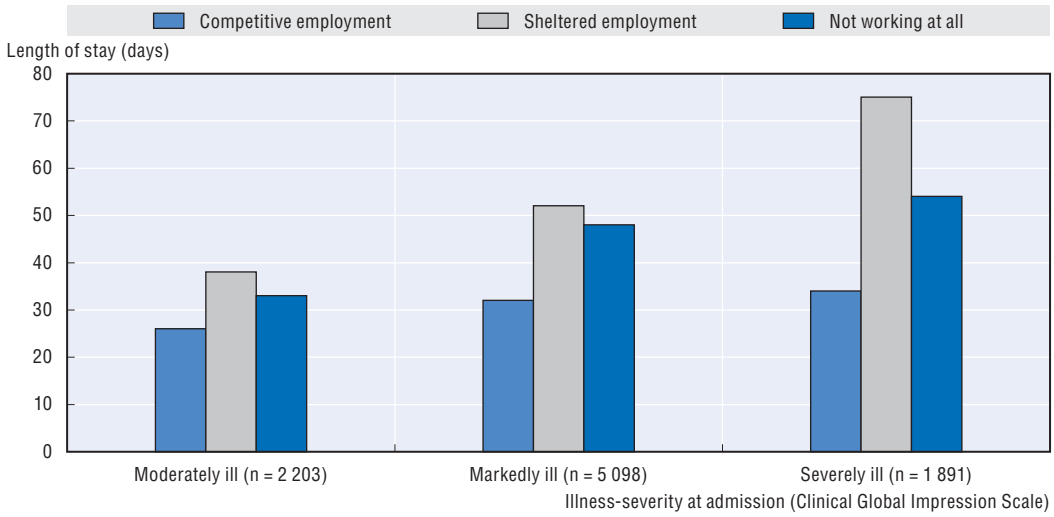
On the other hand, the lack of employment is generally one of the predominant risk factors for the high utilisation of medical services. Numerous studies reviewed by Fasel *et al.* (2010) found a higher unemployment rate among high medical service users – ranging from 33% to 93%. Correspondingly, unemployment is also a predominant predictor of the total costs of the (mental) health care system.

The role of mental health care from the patients' perspective

From the patients' perspective, it seems clear that employment should be a priority objective in mental health care. To work is a predominant need of individuals with mental disorders (Mueser *et al.*, 2001; Baer, 2010; Crowther *et al.*, 2001). Depending on the specific study, between 70% and 90% of unemployed psychiatric patients say they would like to be employed (Grove *et al.*, 2005). Surveys on quality of life consistently find that employment is a priority need of people with mental disorders (Evans and Repper, 2000). From the

Figure 3.16. **Competitive employment reduces the length of psychiatric inpatient stays**

Length of stay (in days) of hospitalisations in a psychiatric clinic by employment status and illness severity, Switzerland, 1998-2006[a, b]



a) Ratings on severity are based on the Clinical Global Impression Scale (CGI), a validated and widely used measurement tool for the clinical practice (Guy, 1976). The grades of severity (for example "moderate") are to be understood as a psychiatric inpatient comparison, and do not mean that the severity is "moderate" when compared with the general population.

b) Regarding the sheltered employment group, there might be a selection effect, because patients in sheltered employment have typically a chronic disorder, which might not fully be reflected by the severity status at admission. In Switzerland, working in sheltered employment is normally restricted to the disability pension recipients.

Source: Baer and Cahn (2008).

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relatives' perspective, work needs are of high importance in health care provision as well. To help patients obtain work is what relatives most frequently demand from mental health care – 70% of the relatives request this (Angermeyer *et al.*, 1997).

On the other hand, the predominant work need is relatively seldom substantiated by patients due to their fears of failing, or becoming ill again (Baer and Fasel, 2009). The fear to not be able to accomplish the tasks at the workplace prevents many people with mental disorders from looking for a job in an active way. In this regard, patients would need mental health care professionals to support them through these difficult and uncertain periods until they feel safer in a new workplace. Moreover, patients need carers who help them find their way back to work, and who translate their illness-related problems to the employers or to the vocational specialists, respectively. Most employed patients would feel relieved if their therapists would contact the employer in case of work problems or sickness absences, in order not to get fully detached from the workplace, or in order to settle conflicts (Baer and Fasel, 2010). Finally, there is a group of people with mental disorders, who are reluctant or fearful of disclosing their illness-related impairments which, as a consequence, often puts pressure on them when working. Mental health care professionals could help them in finding a way to cope with this situation.

Translating health care performance indicators into employment outcomes

In the past few years, quality aspects of care, as well as their measurement across different countries and agencies, have finally gained in importance in mental health care

– whereas in other medical areas, quality measures have been used for a much longer time (Pincus *et al.*, 2011). Key indicators that have repeatedly been proposed in national strategies or policies are mental health care accessibility, continuity, effectiveness and safety (Spaeth-Rublee *et al.*, 2010).

Employment outcomes are not very prominent among the indicators used or proposed. For example, effectiveness as a central indicator is often referred to in terms of clinical status, quality of life, global functioning, the rates of inpatient readmission, suicide rates, and housing. However, there are some recent initiatives to use the employment situation as an indicator for the effectiveness of mental health care (Spaeth-Rublee *et al.*, 2010). Table 3.3 describes the main indicators and their potential significance for employment-related issues – based on the work done in this background report. Work-related quality indicators might have an impact on a professional's engagement with the work-related needs of their patients. Without achieving social outcomes, treatment success is very likely to be incomplete (Shrivastava *et al.*, 2010).

3.5. Conclusion: employment as a goal for the mental health system

Mental disorders have multidimensional characteristics, including biological, psychological and social aspects. Therefore, individual treatment and mental health care systems should not only address the clinical needs of their patients, but also their social and working problems. Employment is one of the predominant factors affecting the mental health status of individuals. However, employment-related needs of patients frequently do not seem adequately addressed, either by mental health care professionals or by the mental health care system as a whole. It is only very recently that in some countries national mental health strategies have been developed, which also cover employment issues. Finally, in recent efforts to develop and implement mental health quality indicators, employment measures are conspicuously absent.

The detrimental impact of mental disorders on functioning and disability is not restricted to severe mental disorders. Moderate disorders may also severely impair work functioning, and may lead to disability, especially when they are enduring. Due to the high prevalence of moderate mental disorders in the population, their effect on the societal burden through disability and unemployment is much larger than the effect of the relatively small population with severe mental health conditions. Thus, the population with moderate mental health problems and their working problems should be a major target group of policies and initiatives, as well as of mental health care. However, to date this is not the case.

Milder forms of mental disorders should be of high importance for several further reasons. First, they often develop into more severe conditions over time. Second, becoming long-lasting or recurrent they manifest themselves in substantial impairments and working problems. Thirdly, people with milder illnesses are often still integrated in the workforce and have, in general, better chances for success than individuals with the most severe disorders. Finally, the severity of a mental disorder is not the only factor leading to work problems and disability. Other aspects, such as the duration and course of the disorder, the co-morbidity with other mental or physical disorders, and the personality are equally important for employment outcomes. Therefore, the widespread restriction of mental health care and vocational services to the persons with the most severe disorders does not seem reasonable.

Table 3.3. **Mental health care performance indicators with relevance to work outcomes**

Indicators, description and relation to work

Indicator	Description	Relevance to work (examples)
Acceptability	Addresses the perspective of the service user, the community, other providers and funding organisations. Acceptability refers to the satisfaction of the client and the affected family with the services received. Client and family involvement in treatment decisions, service delivery, and planning are crucial to the acceptability of the mental health system.	Establish employment as a main target of mental health care. Mental health care should become a partner to employer organisations. Vocational rehabilitation planning should also be based on clients' preferences, as well as on their inner experiences. Involvement of the familiy in rehabilitative assessment, and in establishing a rehabilitation plan.
Accessibility	Refers to the ability of people to obtain health care at the right place, and at the right time based on needs. Another aspect is the availability of local services. Timeliness is another dimension of accessibility. It includes prompt attention to emergencies, as well as reasonable waiting times for other referrals. Delays in, and denial of service is harmful for persons with serious mental illnesses and their families. Moreover, early diagnosis and treatment avoids unnecessary suffering, and helps preventing the social deterioration.	Employers, as well as employees should have the possibility of early direct contact with the mental health care system. Counselling and referral of adolescents with problems in school-to-work transition. Enhancement of treatment access of individuals with working problems. Screening of patients with existing work-potential in social- and medical-care settings. Early and precise diagnosing to give a base for rehabilitation, including assessment of a possible personality (disorder). Raise awareness with teachers and employers regarding potential mental disorders, above all regarding depressive, substance use, and personality disorders.
Appropriateness	Care is appropriate if it is relevant to the persons needs and based on established standards. The provided care has to be tailored to the individual characteristics and requirements of the client. Furthermore, the provided services have to conform with guidelines that are evidence-based or derived from expert consensus on what constitutes "best practice".	Interdisciplinary assessment of specific functional impairments, work history, medical history, necessary workplace accomodations, among others, in collaboration between vocational and mental health professionals. Early screening of all working-age inpatients and outpatients with respect to employment situation and needs. Develop an effective sick-note policy with respect to rehabilitation. Develop interdisciplinary guidelines of medical examinations, which integrate illness aspects and functions.
Continuity	Continuity refers to the ability to provide uninterrupted, co-ordinated care or service across strategies, programmes, practitioners, organisations, and levels over time. One aspect is continuity across different settings in the mental health system, which calls for co-ordination between *e.g.* inpatient and community services when clients move between treatment settings. The continuity between providers is also of importance, concerning the integration of services delivered by multiple providers. Continuity is also crucial over time, across the course of an illness, recognising that clients will have different needs at different points in time. The case management approach is one possibility to ensure co-ordination in a fragmented system of care and to facilitate access to multiple providers for clients with complex and changing needs. A formal discharge plan, and a responsive outpatient support system for psychiatric inpatients, as well as care planning between physicians and other providers are core requirements as far as continuity is concerned.	Involvement of the important parties in planning, including, if possible, also the employer, and – with younger people – the parents. Establishing a rehabilitation plan, and a shared "philosophy" of proceeding, as well as a collaborative setting. Establish means for ongoing support (also at work). Establish processes, how to recognise problem situations early, and how to react in crisis situations.
Effectiveness	This means care, intervention or action that achieves desired outcome in an appropriate timeframe. Effectiveness measures are generally regarded as the most important requirement for health service monitoring. There are three sub-domains. First, the client outcomes which focus on the impact of health care on the client's clinical status and functioning. Second, the outcomes of the family carers means the impact of the mental disorders on the quality of life of family members and other carers as they support a person experiencing mental illness. The third domain addresses the extent to which mental health services are effective in maintaining clients in the community, without unnecessary hospitalisation.	Establish functioning, and real-life work outcomes as high-priority effectiveness measures of psychiatric treatment. Establish systematic collaboration with employer agencies and enterprises as effectiveness measures of mental health care systems. Establish employment supervision and support to general practitioners and to psychiatrists/psychologist in private practice as effectiveness measures.

Source: OECD compilation.

StatLink http://dx.doi.org/10.1787/888932534710

Mental health treatment can have positive work-related outcomes. However, only around half of people with severe mental disorders are treated, and treatment rates are substantially lower for individuals with milder mental illnesses. When treated, treatment

adequacy, like adequate medication or provision of a minimal set of psychotherapy sessions, does not meet minimal standards in around 50% of the cases. This is an important shortcoming, because adequate or enhanced treatment can improve work outcomes. One critical aspect is the involvement of mental health specialists. If seeking treatment, people mostly seek help from general practitioners; only one in four are treated by a specialist. A more extensive use of specialist mental health care, as therapists or consultants to other health care providers, would improve health care outcomes. Some countries have initiated programmes along these lines.

The mental health care systems in all OECD countries have undergone major changes in the past fifty years, with a fundamental shift from hospital-based to community-based care. The aim of these reforms has been to improve the social inclusion of people with mental disorders. Although today's situation and quality of life of patients with severe mental disorders is not comparable to their often very poor living situation in long-stay facilities some decades ago, the de-institutionalisation has not generally led to improved social inclusion and employment.

One reason for these shortcomings lies in the almost exclusive focus on the patients with the most severe disorders. The rehabilitative systems in most countries concentrate explicitly on people with severe disorders, rarely offering interventions to people with milder illnesses. Due to this development, there is a lack of evidence concerning the majority of persons with moderate problems. Moreover, due to the concentration on the most severe problems, the mental health care system so far is not a real partner to employers and enterprises. In most countries, a systematic mental health care approach to employers does not exist and mental health care practitioners are not held accountable for the employment outcomes of their patients.

Psychiatric services have developed a wide range of work schemes for their patients. Supported employment services have shown a high efficacy in placing patients with severe disorders into paid employment, and it remains unclear, why such programmes have not been adopted yet to individuals with less severe disorders. However, the majority of these successful placements have not yet resulted in a substantial decrease in disability benefit status of these individuals, partly due to the often poor quality of the jobs in terms of pay and career prospects.

Finally, a major problem is the under-treatment of individuals suffering from mental disorders, and treatment delay as well as the substantial drop-out from treatment. Moreover, there is a severe under-treatment of individuals claiming or receiving disability benefits, raising the question whether it is reasonable to give people benefits without ever having tried to treat the cause for their benefit claim. There seem to be some signs that treatment rates of people with mental disorders are increasing, especially among young people, who have the highest prevalence rates but the lowest treatment rates.

Notes

1. Mobility of that sort, *i.e.* a worsening of severity of the mental illness over time, was found to be more pronounced for unemployed persons and those with low incomes suggesting that disadvantaged groups experience both more and more persistent mental health problems.
2. On average, the presence of a serious mental disorder is related to a ten-year reduction in life expectancy.

3. Macias *et al.* (2001) is an exception; they show that clubhouses are as effective as supported employment.
4. The high success rate of supported employment is restricted to models with health and employment service integration (see Cook *et al.*, 2005).
5. The polarisation between treatment and rehabilitation, which had been supported by an influential article of Anthony and Jansen (1984) stating that illness-related issues do not contribute to employment outcomes, needs to be overcome. The denial of illness-related factors has been destructive to vocational outcomes of clients, to research, and to the co-operation of all the necessary players.
6. The definition of treatment adequacy varies across studies and also over time, with the development of new drugs, more clinical trials, etc.
7. "Adequate treatment" in this study was defined as "six or more sessions of psychotherapy or treatment with an antidepressant, anxiolytic or mood stabiliser, with at least four physician visits".
8. "Adequate minimal treatment" in this study was defined as "receiving at least four outpatient visits with any type of physician for psycho-pharmacotherapy that included use of either an antidepressant or mood stabiliser for a minimum of 30 days, or at least eight outpatient visits with any professional in the specialty mental health sector for psychotherapy lasting at least 30 minutes".
9. Hospitalisation strategies of mental health systems vary by country. Denmark's system is characterised by high re-admission rates combined with a very short length of inpatient stay.
10. Out of 185 000 patients with a mental disorder treated in a psychiatric clinic or a general hospital, some 56% had more than two inpatient stays in the observation period 1998-2006.
11. Cognitive-behavioural interventions (CBI) teach individuals to understand and modify thoughts and behaviours, where they learn to recognise difficult situations that have produced inappropriate or violent responses, and then identify and implement an acceptable response.
12. The following section uses the 2005 rather than the 2010 Eurobarometer because the latter does not include a question on the use of psychotherapy.

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Chapter 4

Benefit Systems and Labour Market Services

This chapter looks at the role of and developments in different parts of the benefit system and the take-up and effectiveness of labour market services. It finds that benefits other than disability benefit – mainly unemployment and social assistance benefits – play a large role, especially for people with common mental disorders. The functioning of these systems is therefore crucial for the overall outcomes, especially the ability of those systems to identify a client's mental illness and the resulting support needs. For the disability benefit system the findings suggest that the rising share of claims caused by mental disorders is to a large extent the result of i) *a work-limiting understanding of mental illness, and* ii) *the shift among people with co-morbid conditions towards taking the mental health condition as the primary cause for incapacity. On the effectiveness of employment services the chapter concludes that systems fail to ensure a timely delivery of services for people with a mental disorder.*

4.1. Introduction: responding to the increase in disability benefit claims

Over the past two decades, most OECD countries have seen a sharp increase in the number and share of people claiming disability benefit on the grounds of mental ill-health (OECD, 2010). This trend potentially has major implications for the functioning of the disability benefit system – a system which was introduced many decades ago, when most benefit claimants suffered from physical ailments, and some systems did not even provide benefits for those with a mental disorder. Although this is a strong and universal trend increase, still little is known about what is driving it.

This trend is part of a more generalised social trend observed in many OECD countries towards an increase in disability beneficiaries alongside a decline in the caseloads of other working-age benefits; in this context, disability benefit has *de facto* become the main last-resort benefit for people of working age.[1] At the same time, previous studies (OECD, 2003; OECD, 2010) have shown that many of the people with (self-assessed) disability, including those with mental ill-health, do receive benefits *other* than disability benefit. Therefore, the functioning of other benefit systems is equally important to improve labour market participation of people with mental ill-health.

This chapter first presents new comparative evidence on trends in disability benefit claims and caseloads for mental health conditions in an effort to identify some of the driving forces behind these trends. It then summarises evidence on the determinants of disability benefit receipt and the impact of mental ill-health on later disability benefit claims. The subsequent section looks at the role of other working-age benefits for people with mental ill-health, in addition to disability benefits, and consequences for policy-making. This is followed by evidence on labour market measures aimed at preventing benefit recipiency for this population group. The chapter concludes that a broad strategy including all benefit systems is required to improve labour market inclusion of people with mental ill-health.

4.2. Disability benefits: understanding trends, questioning myths

Mental diagnoses explode in proportion

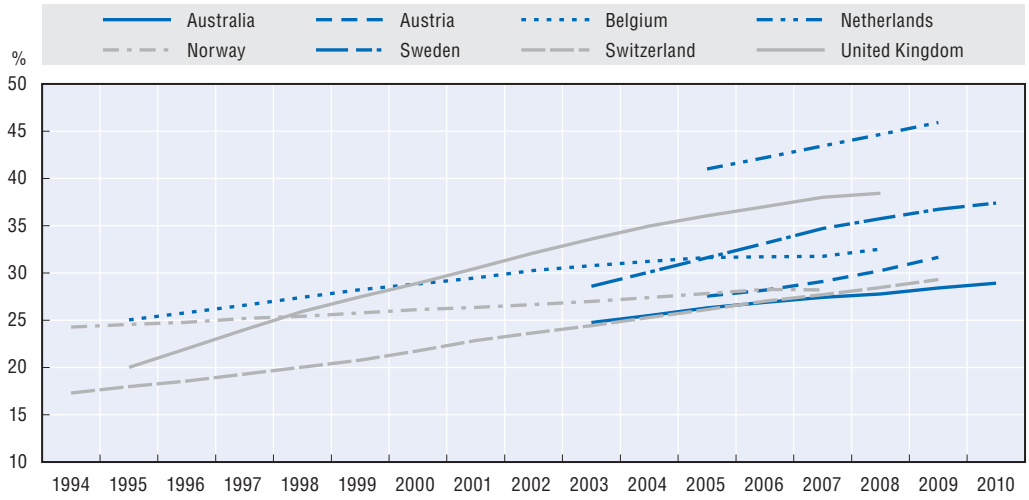
The *share* in the total disability beneficiary caseload of people who were granted a benefit on the grounds of a mental health condition has been increasing in many OECD countries over the past decades: from around 15-25% in the mid-1990s to some 30-50% in 2009/10 (Figure 4.1). The increase was very fast in most countries, with a 20 percentage-point increase over a 15-year period in the United Kingdom, for example. Only in Norway, which had one of the highest shares back in the mid-1990s, change was modest.

Data further show that the incidence of mental-disorder related disability benefits (*i.e.* the number of disability benefit recipients with a mental disorder over the total working-age population) has increased in all countries, albeit only slightly (Figure 4.2).

Such increase has actually been observed in all age groups, even though the total recipiency rate – taking all health conditions into account – has fallen in some countries in the most recent years.

Figure 4.1. **Fast trend increase in the share of disability benefit recipients with a mental disorder**

Recipients assessed with a mental health condition,[a] as a share of the total number of disability benefit recipients



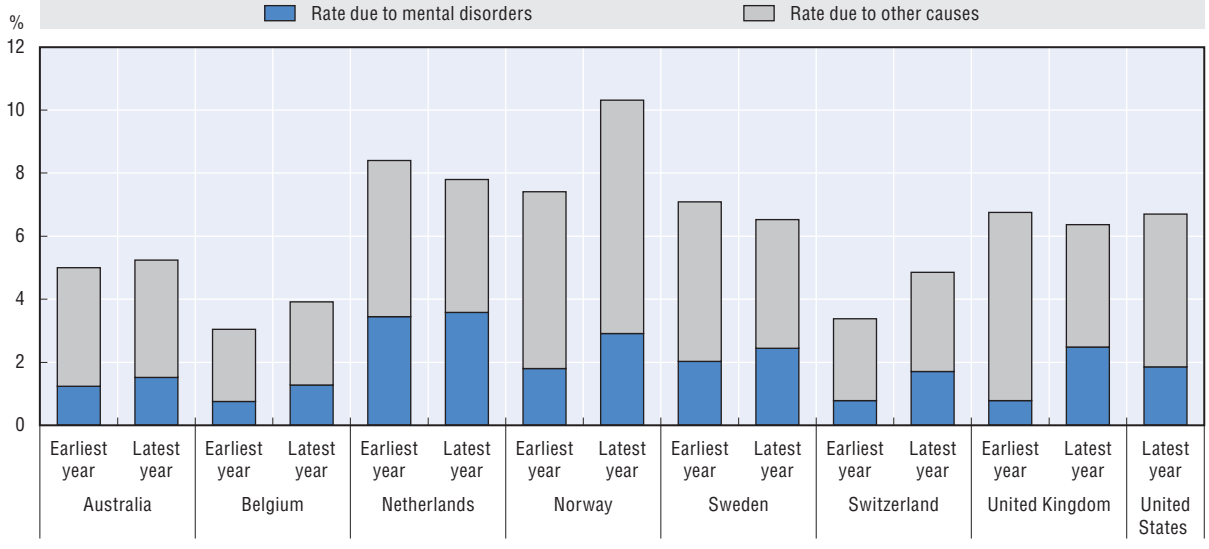
a) Data include mental retardation/intellectual disability, organic mental and unspecified mental disorders for: Belgium, the Netherlands and Sweden; organic mental and unspecified mental disorders for Norway and mental retardation for Switzerland.

Source: OECD questionnaire on mental health.

StatLink http://dx.doi.org/10.1787/888932533969

Figure 4.2. **The risk of being on a disability benefit with a mental disorder also increased**

Disability benefit recipients as a proportion of the total working-age population, caseload due to mental disorders and due to other health problems[a]



a) Data for Belgium exclude the non-contributory income replacement allowance (roughly one-third of the total disability caseload).

Source: OECD questionnaire on mental health.

StatLink http://dx.doi.org/10.1787/888932533988

Trends in new claims show a multifaceted picture

Figure 4.3 looks at trends in new disability claims. Like for the overall caseload, the share of new claims with a mental disorder in all claims is increasing (Panel A). This increase, however, is less pronounced in most cases than the increase in the share of the caseload because the latter is partly explained by the younger average age of the increasing number of claimants with a mental disorder and the longer duration these people stay on benefits.

The absolute number of new disability benefit claims for mental health reasons, however, has fallen in half of the countries, sometimes substantially, *e.g.* in the Netherlands, Sweden, Switzerland and the United Kingdom (Figure 4.3, Panel B). However, most countries have either seen new claims with mental disorder growing faster than other claims (*e.g.* Australia, Austria, Denmark), or declining less than other claims did (*e.g.* Sweden, Switzerland, United Kingdom) (Figure 4.3, Panel C). This suggests two things: First, there has generally been a shift from non-mental to mental causes in *new* benefit claims. Second, countries which have seen a drop overall in new disability benefit claims in the aftermath of a comprehensive structural reform (see OECD, 2010) have also seen sizeable drops in the number of new claims for mental disorders.

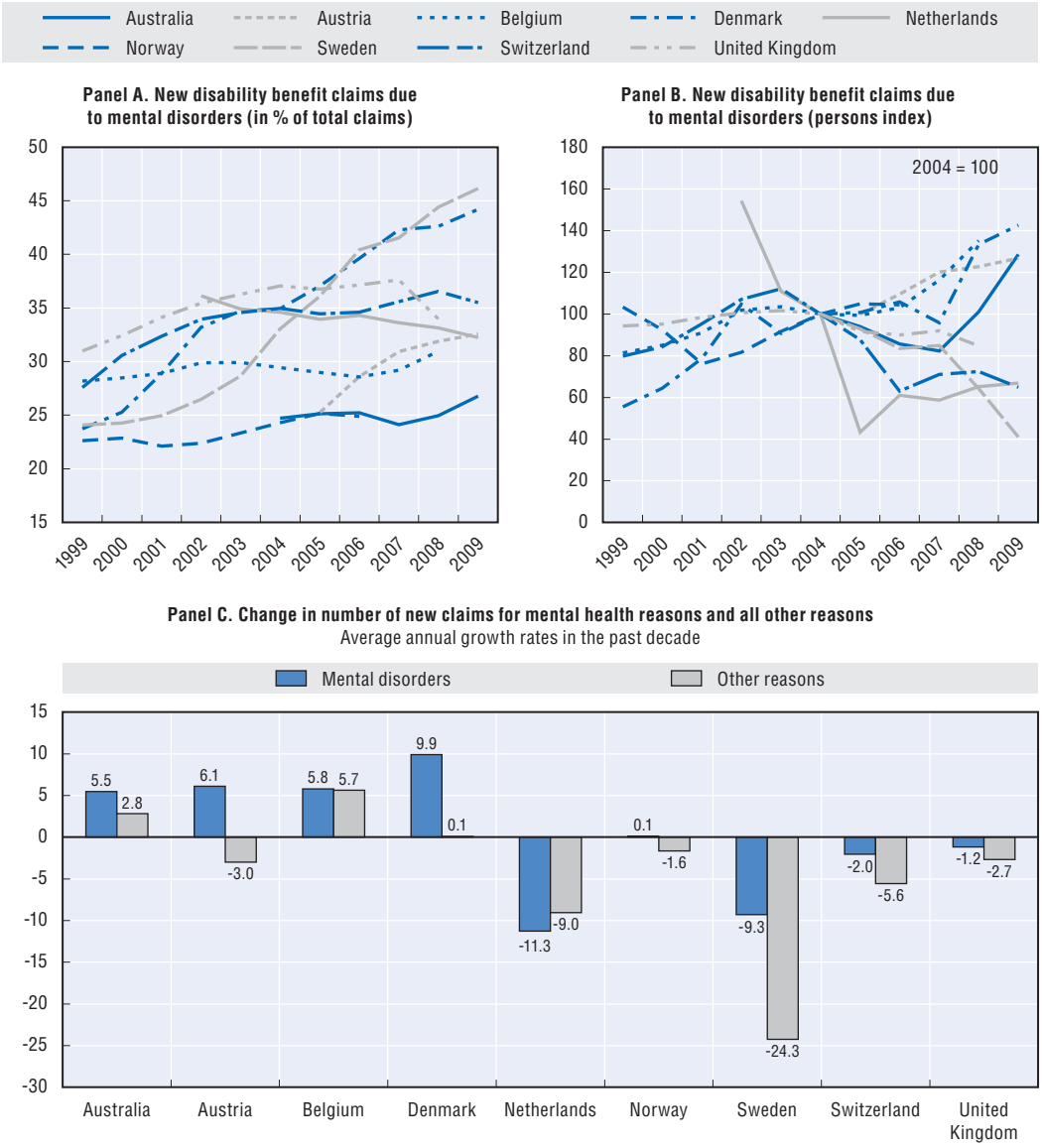
The shift from physical to mental conditions as a main driver of new disability claims can have various roots. One of them could be a shift in the *assessed* cause for disability (*i.e.* reduced work capacity) without an underlying shift in the *actual* cause, resulting from the greater awareness and the reduced stigma of mental illness. Given the high rate of co-existing mental and somatic illnesses (Chapter 3), assessing doctors and benefit administrators might increasingly identify the claimant's mental illness as the main cause for the inability to work. Data do not allow a full assessment of this issue, because only a few countries collect statistics on the claimants' primary and secondary health condition. Findings differ across countries but suggest that co-existing conditions are frequent. Of those assessed with a primary *mental* health condition, 20-45% also has a somatic condition (in Sweden, only 10%) and 20-35% a secondary mental disorder (Figure 4.4). Likewise, of those assessed with a primary *somatic* condition some 10-15% have a secondary mental disorder (again, fewer in Sweden) and another 25-50% a second somatic condition.

In-depth analyses of a sample of case records in Switzerland confirm these findings but also indicate further developments. First, the average number of diagnoses of a claimant granted a disability benefit in the period 1999-2005 was 3.5, up from 2.5 for claims granted before 1991 (Baer *et al.*, 2009), largely due to an increase in the number of people claiming with somatoform disorders, *i.e.* pain disorders without a physical cause. Second, individual medical records of around one in three claimants show a shift over time, the time period before a disability benefit has been granted, from somatic illness as the main reason for work incapacity to mental illness.

These findings suggest that the increase in mental ill-health as a driver for new disability benefit claims is in part the result of a shift in the assessed cause. However, the continuously high incidences of co-morbidity suggest further room for further increases in mental health causes as a primary condition even without changes in health, more so in Australia and least in Sweden.[2]

Figure 4.3. **New disability benefit claims for mental disorders are increasing but not in all cases**

New disability benefit claims for mental disorders:[a] as a share of all new claims (Panel A), in absolute numbers (Panel B, 2004 = 100),[b] and annual growth rates[c] in the past decade (Panel C)



a) Data include mental retardation/intellectual disability, organic mental and unspecified mental disorders for: Belgium, the Netherlands and Sweden; organic mental and unspecified mental disorders for Norway and mental retardation for Switzerland.

b) Austria refers to base year 2005.

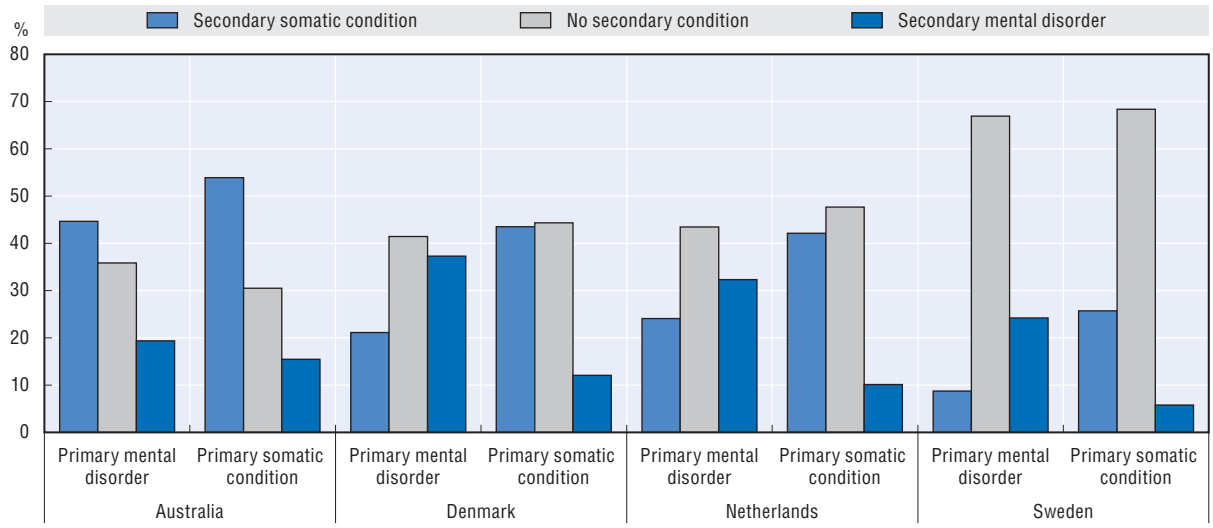
c) Growth rates refer to 1999-2009 or the corresponding period for which data are available for a country (as in Panels A and B).

Source: OECD questionnaire on mental health.

StatLink http://dx.doi.org/10.1787/888932534007

Figure 4.4. **Co-morbidity of mental and somatic disorders is frequent in new benefit claims**

New disability benefit claims by primary and secondary health condition: proportions with only one condition and with a co-existing mental or somatic condition



Note: The chart shows the primary condition on the X-axis and the secondary condition as columns, for each primary condition. Australian data are recording only one (main) secondary condition, thus underestimating the full instance of co-morbidity.

Source: OECD questionnaire on mental health.

StatLink http://dx.doi.org/10.1787/888932534026

What do diagnosis-specific data show?

Another way of looking at trends in claims for mental health reasons is to further disaggregate claims by the *type* of mental illness. Again, available data are limited but a few countries collect statistics using (a variation of) ICD-10 codes. Comparability is restricted somewhat by different groupings used in different countries. Bearing this caveat in mind, the following picture emerges (Figure 4.5):

- Affective and neurotic disorders taken together account for the largest proportion of claims, from over 80% of all cases in Norway and the United Kingdom, to 70% in Austria and Switzerland and 55% in Denmark. Affective disorders – various forms of depression and mood disturbances – dominate the claims in Austria and the United Kingdom, while neurotic disorders prevail in Denmark and Norway.
- Affective disorders have increased in all countries in both absolute and relative terms. It was also the fastest increasing group in all countries (*e.g.* 18 percentage-point increase in Norway).
- Trends for neurotic disorders are also strongly upwards in some countries, namely Austria and Denmark and to a lesser extent Switzerland, but downwards in Norway and the United Kingdom.[3]
- Substance abuse, which is accepted as a cause of a disability claim in all five countries for which data are available, constitute around 10% of all mental health-related claims and the trend is downwards in all countries, especially Switzerland.
- Likewise, schizophrenia accounts for around 10% of such claims on average. Trends are downwards everywhere (in Denmark only relative to other mental illnesses).
- All other types of mental illness, including personality disorders (with Denmark again being an exception) account for just a few percentage points of all types of claims.

Figure 4.5. **Affective and neurotic disorders dominate in mental health diagnoses**

New disability benefit claims with a mental disorder by type of mental illness:[a, b] numbers and trends

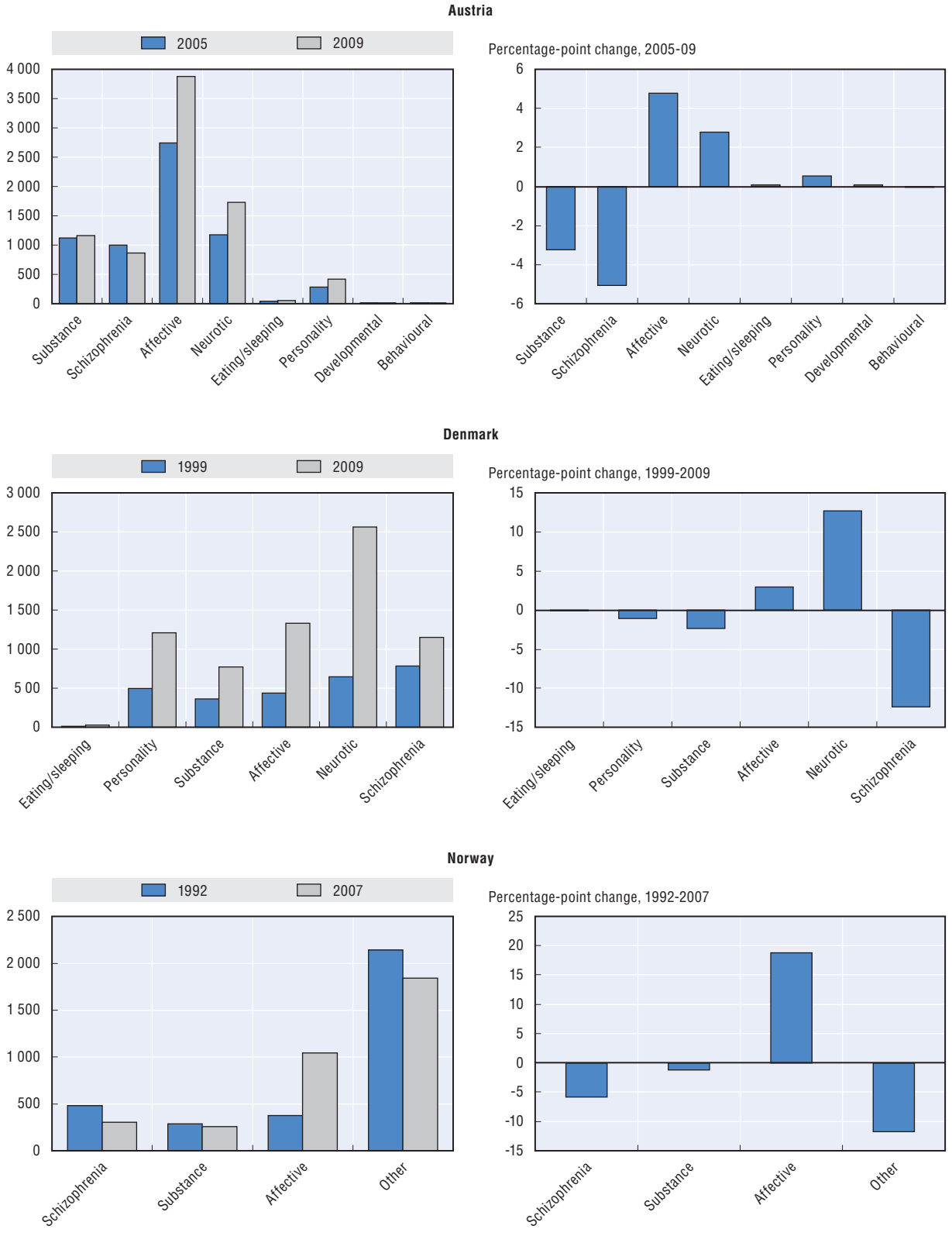
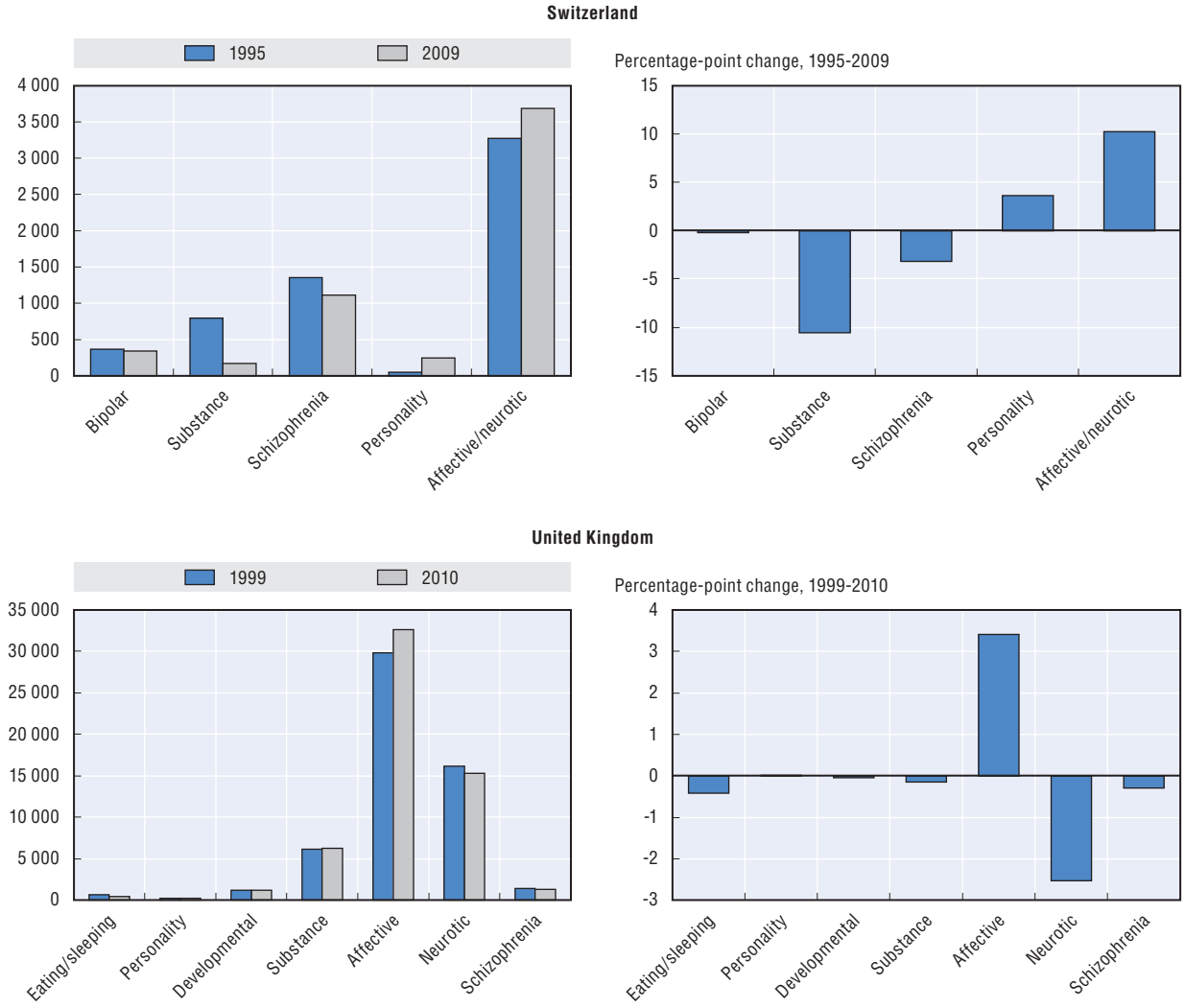


Figure 4.5. **Affective and neurotic disorders dominate in mental health diagnoses** *(cont.)*

New disability benefit claims with a mental disorder by type of mental illness:[a, b] numbers and trends



a) In Norway, "Other" covers neurotic, eating/sleeping, personality, developmental, behavioural/emotional and unspecified disorders.
b) In Switzerland, "Affective/neurotic" refers to the total of affective, neurotic and personality disorders.

Source: OECD questionnaire on mental health.

StatLink http://dx.doi.org/10.1787/888932534045

These differences are probably associated with the high co-morbidity prevalence shown earlier. Judgements on the primary health condition, or the primary mental illness in case of co-existing mental health problems, are likely to differ between doctors within and across countries, presumably also due to cultural reasons.

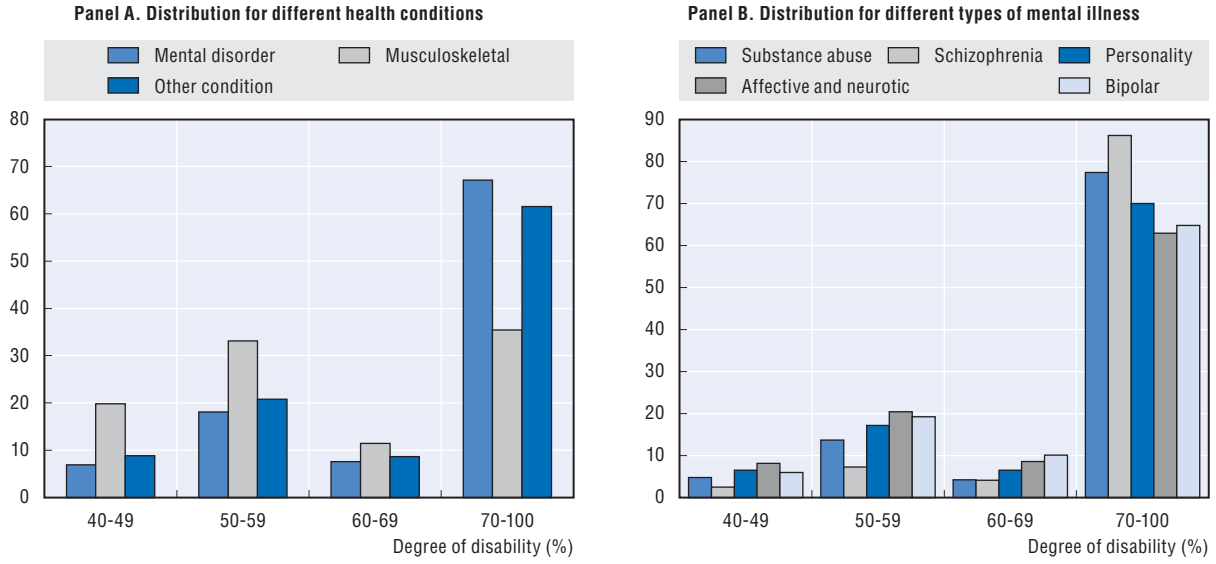
Baer *et al.* (2009) have looked into the mental diagnoses of Swiss claimants in more detail, distinguishing between diagnoses identified in the document and those which, according to systematic reinterpretation of the case files by doctors, seem to have been decisive for the authority in assessing work incapacity and granting a disability benefit. They find personality disorders to be by far the most critical single mental diagnosis generating work incapacity, even though the dominant primary health conditions in the files were affective disorders (recurrent depressive disorder as well as episodic depression).

Full or partial, temporary or permanent benefit

An issue on which only limited information is available is the use of partial benefits for people with mental health conditions. Several OECD countries grant partial benefits for people with partially-reduced work capacity, and many countries have recently changed their approach towards these people, raising the requirements for them to seek employment in line with their remaining capacity (OECD, 2010; OECD, 2007). Swiss data suggest that claimants with mental disorders are far more likely than those with muscular-skeletal conditions to be granted a full benefit: almost 70% of them receive a full benefit which is granted when earnings capacity is reduced by at least 70%, compared to only 35% of those with *e.g.* low back pain and related conditions (Figure 4.6, Panel A). Among those with a mental diagnosis, those with neurotic and affective disorders (anxiety, depression) are least likely to be on a full benefit but, at 60%, even for this group the share is comparatively high (Panel B).

Figure 4.6. **Swiss beneficiaries with a mental disorder usually receive a full disability benefit**

Proportion of disability benefit grants in Switzerland by degree of disability and health condition, 2009



Source: OECD questionnaire on mental health.

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Mental illness has many characteristics which imply that a full and permanent disability benefit may not be the best solution. The Swiss data suggest that these persons' remaining work capacity may not be used to the full extent. Evidence from other countries to substantiate this finding is lacking, *e.g.* from countries such as the Netherlands or the United Kingdom which since recently try to identify more clearly in their assessments those who are fully disabled and considered unable to work, and granted a higher and also permanent payment.

An important development in many OECD countries in the past two decades is the shift away from granting permanent disability benefit too quickly. In many countries today, a benefit is initially granted for a temporary period, generally for three years or so, followed by a reassessment to determine continued entitlement (OECD, 2010). This development could be related to the trend increase in mental disorder-driven benefit claims and be

particularly promising in view of the treatment potential of most mental illnesses. Unfortunately, data on temporary *vis-à-vis* permanent benefit grants are rare in combination with health-condition information.

Data for Austria, one of the countries that have gone very far in granting benefits temporarily, indicate that claimants with a mental disorder are particularly likely to be granted a temporary payment initially: some 70% of all those with a mental health cause receive such payment, with little variance by type of mental disorder, compared to only 25-40% of those with other causes (Figure 4.7, Panel A). Partly this is due to the different age structure of new claimants with far more people with other causes than mental disorder found in the 55-64 age group; people who are generally granted a permanent benefit in most cases. Young people who are assessed with a mental disorder in a majority of cases (see Chapter 5) are almost always granted a temporary disability benefit initially.

Caseload data (rather than new-claims data) for Norway also suggest that those with mental health conditions are more likely to be on a temporary benefit – at 14% compared to 8% for people with other conditions (Figure 4.7, Panel B).[4] People with affective disorders are most likely to be on a temporary payment, at 20%, but even people with schizophrenia are on such benefit as often as people with the most frequent somatic disorders.

This shift towards temporary disability benefit has the potential to reduce overall claims, but in practice across the OECD such payments are often transformed into permanent ones at a later stage (OECD, 2010). Data on this issue is very poor in general and nothing is known about the frequency of entitlement reassessments of those with mental health compared to other health conditions or, more importantly, the outcomes of these assessments; the likelihood a benefit is reduced or withdrawn; and the likelihood of moves into employment of those persons affected by such changes in entitlements.

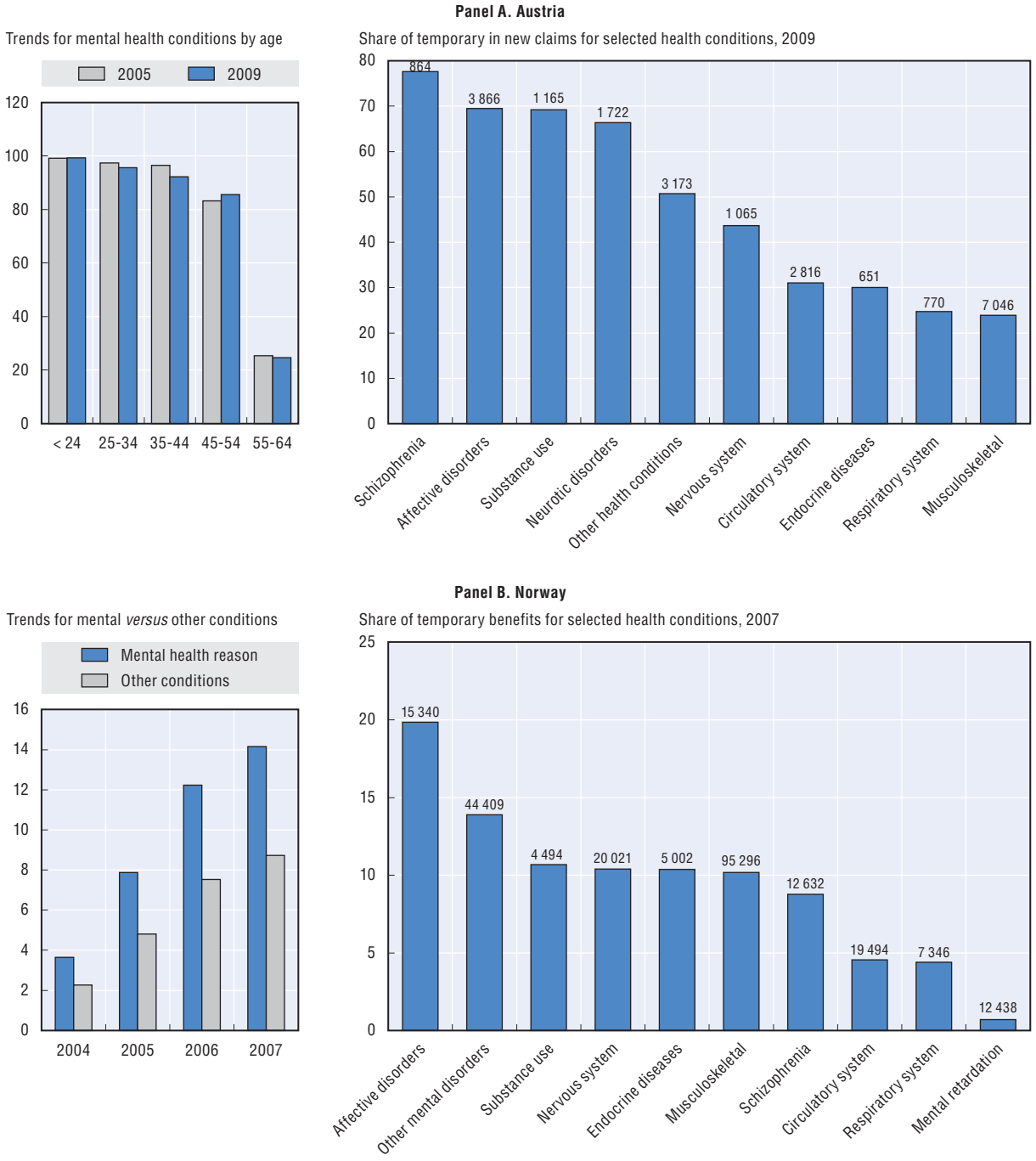
Rejections, reassessments and benefit off-flows

Another useful indicator to help understand recent trends and the challenges around them is the likelihood with which people who claim a disability benefit are granted such payment. Data for Denmark and the Netherlands – two countries with very different levels of benefit denials – suggest claimants with a mental disorder are facing rejection rates that are much lower than those with a muscular-skeletal condition, at all ages (Figure 4.8, Panel A). The difference to other health conditions is small. Likewise, in Australia rejection rates are lower for mental disorder than for most other conditions (Panel B).

Data for the United Kingdom do not support this conclusion; in this country, the likelihood to get a claim rejected is roughly the same for people with muscular-skeletal and mental conditions, lowest for those with other conditions and highest – contrary to the other countries – for claimants in older age groups. Australian data further show that people with *common* mental disorders such as anxiety and depression face the same likelihood of a benefit rejection as those with *e.g.* muscular-skeletal conditions; only those with more severe mental disorder but also those with alcohol dependence are seeing higher probabilities of their claims being successful. Follow-up of rejected cases is a key policy issue in view of the frequent reapplication of rejected claimants. Data for the United Kingdom, for instance, show that one-third of all disability benefit applicants are repeat claimants (Kemp and Davidson, 2007).

Figure 4.7. **People with a mental disorder are more likely to be granted a temporary disability benefit**

Proportion of temporary claims/recipients among all new disability benefit claims (Austria) and among the total number of disability benefit recipients (Norway), by type of health condition

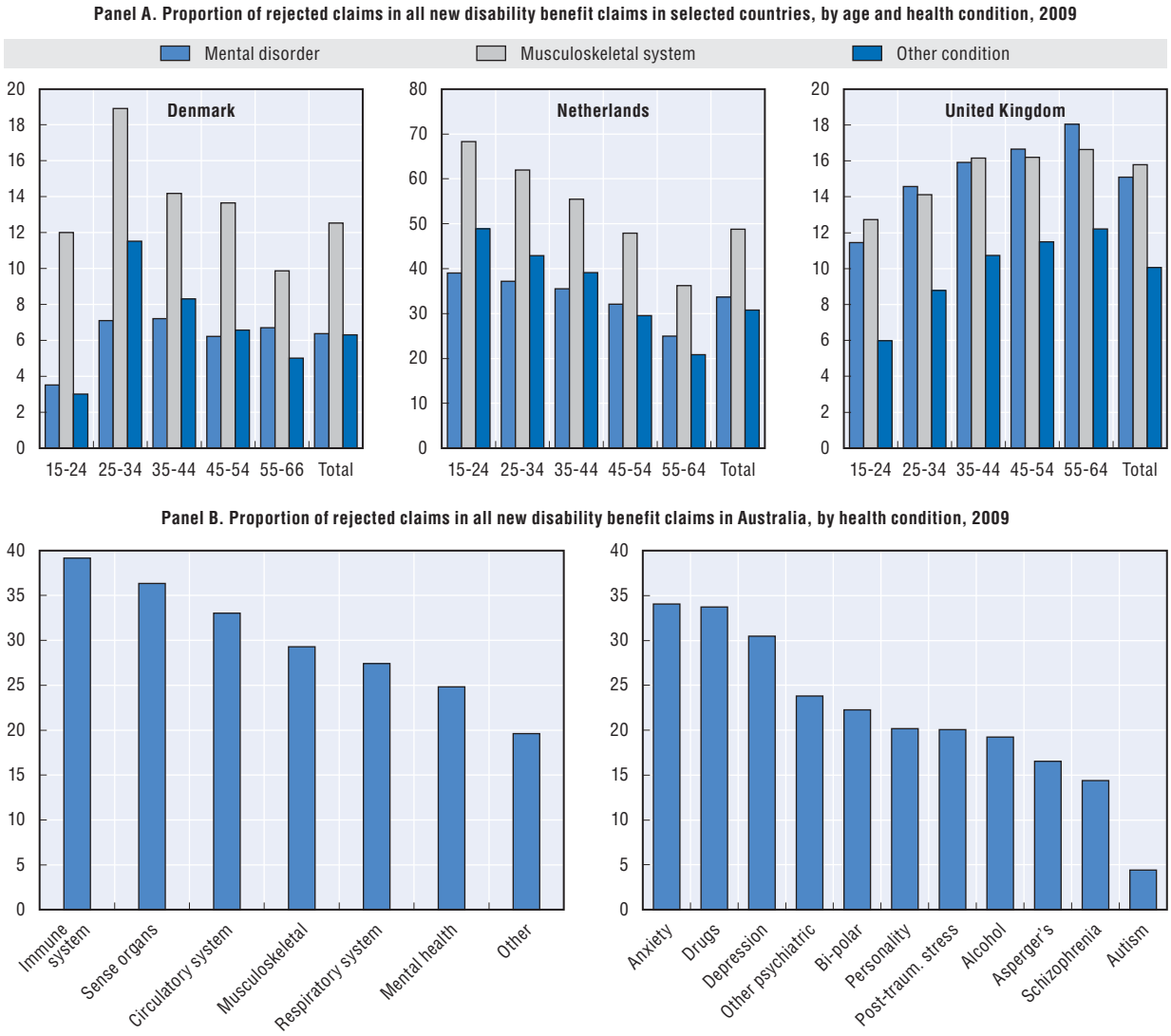


Note: In Norway, "Other mental disorders" includes neurotic disorders, personality disorders, and behavioural and emotional syndromes and disorders.

Source: OECD questionnaire on mental health.

StatLink http://dx.doi.org/10.1787/888932534083

Figure 4.8. **People with a mental disorder are less likely to be denied disability benefit**



Note: Data for the United Kingdom refer to November 2009.

Source: OECD questionnaire on mental health.

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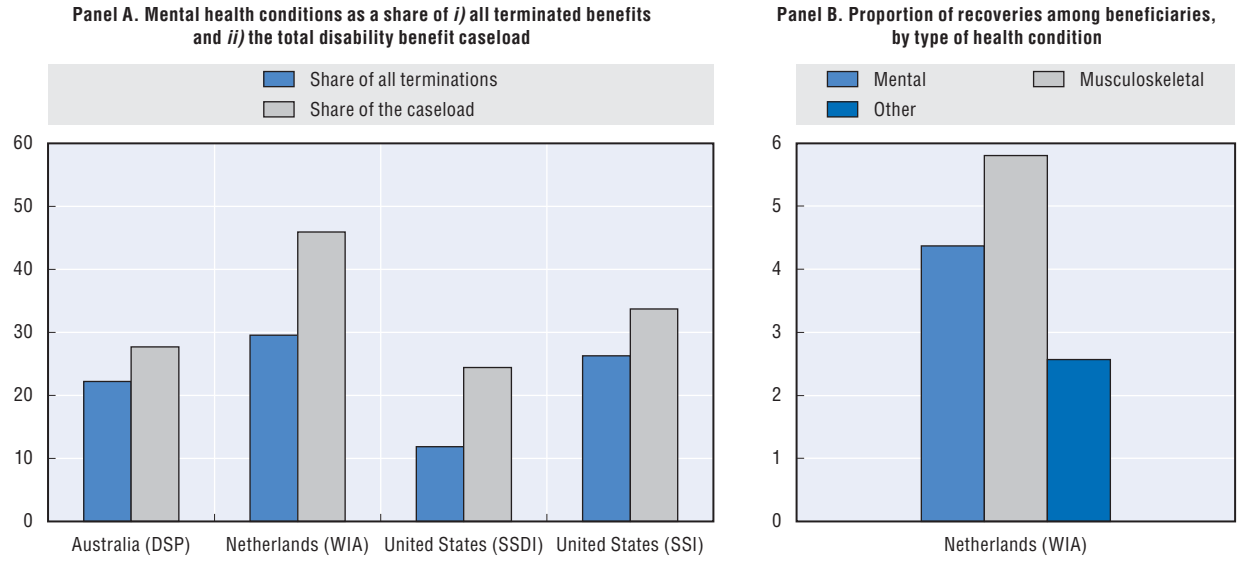
A related question is the frequency with which beneficiaries are leaving the rolls, be it voluntarily (this rarely happens) or after a reassessment and loss of entitlement. In line with several of the previous findings, data for Australia, the Netherlands and the United States suggest that beneficiaries with a mental disorder are *under*-represented among benefit terminations (Figure 4.9, Panel A). The likelihood to leave the benefit because of recovery is also lower for claimants with mental disorders in the Netherlands when compared to those with muscular-skeletal conditions (Panel B; no data available for other countries).

In conclusion, this section identifies a number of factors that contribute to explain the fast increase in most OECD countries in the share of disability benefits granted for mental health reasons: Changes in the understanding of the primary condition underlying a claim

Figure 4.9. **People with a mental disorder are less likely to leave disability benefit**

Share of mental health conditions[a] in terminated cases in selected countries and recoveries by health condition, 2009



a) Data include organic mental disorders for Australia.

Source: OECD questionnaire on mental health.

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with co-existing problems; more frequent granting of full benefits in case of mental disorders; insufficient reassessment of otherwise more frequently granted temporary entitlements; fewer benefit denials; and fewer benefit outflows.

There is little evidence that this shift towards a higher share of mental-disorder related benefit claims is driven by underlying changes in people's health status. Rather, it appears that mental disorders are no longer overlooked to the same degree.[5] Available evidence also indicates that this shift is unlikely to have reached its limit and the trend observed in the past 15 years, therefore, likely to continue. Moreover, structural reform has proven to reduce benefit claims of all types but least for mental-disorder claims. This suggests that the more difficult situations with complex and often co-existing health, as well as other, problems are increasingly regarded as being driven by the person's mental health issues.

4.3. Mental ill-health as a predictor of disability benefit awards later in life

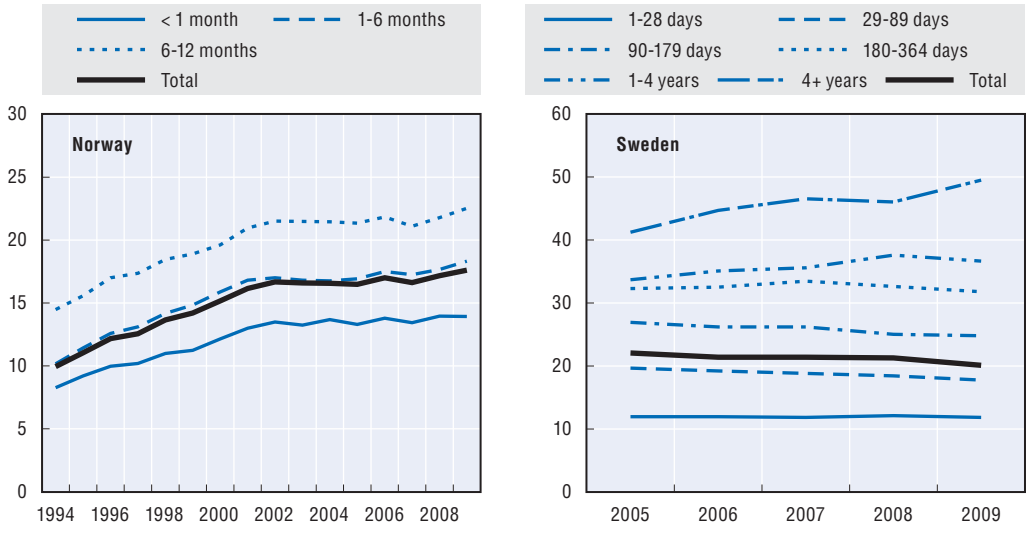
Pathways into disability benefit

A key piece of evidence to better understand the support needs of people claiming or receiving disability benefit is their pathway onto such benefit. Data on pathways is scarce overall, and even worse when it comes to distinguishing different groups of benefit claimants. OECD (2010) identified two groups of countries: *i)* countries in which almost all new claimants of disability benefit go through the sickness and rehabilitation route (including the Netherlands and Norway, and to a lesser extent also Sweden); and *ii)* countries with a variety of pathways. Among the latter, typically some 60% of all new claimants come through employment or sickness and about one-third is unemployed at the time of the claim, most of them with long spells of joblessness and often on social-assistance. This is, for example, the situation in Australia, Austria, Denmark and the United Kingdom.

The extent to which sickness absence for reasons of mental health problems has increased can only be investigated for Norway and Sweden – two countries where sickness benefit is the main precursor to a later disability benefit claim. Administrative data for the two countries suggest that: *i)* mental illness is causing an increasing share of all sickness benefit claims in Norway – from 10% up to 18% of all claims in a 15-year period (at around 20-22%, the share is higher in Sweden but has remained rather stable in the past five years); and *ii)* the share of mental causes increases with the duration of absence or sickness benefit receipt, ranging from 10-15% of all shorter-term absences of less than one month to 22-33% for absences of 6-12 months to almost 50% in Sweden[6] for absences of over four years (Figure 4.10). This suggests that trends in sickness benefit claims partly explain recent trends in disability benefit claims.[7]

Figure 4.10. **Mental health conditions are frequent among long-term absences and their share is increasing**

Share of mental health conditions in total sickness beneficiaries, by duration of absence, Norway and Sweden



Source: OECD questionnaire on mental health.

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Information on differences in pathways between new claimants with a mental health problem and those with other conditions is available for Australia, Denmark and the United Kingdom. In all three cases, claimants with mental health problems are at a greater distance to the labour market (Table 4.1). In the United Kingdom, they are somewhat less likely to have been in work immediately prior to the claim or in the past two years and if so, more likely to have held a temporary job. In Australia and Denmark, claimants with a mental health condition are very different from those with other health conditions: they are far more likely to claim disability benefit from an unemployment status (Australia) and have had much lower employment rates in the past five years and higher rates of unemployment or inactivity (Denmark). This difference is crucial in view of earlier findings that unemployment and inactivity spells increase the probability of disability benefit recipiency (OECD, 2009).

Is mental ill-health a major factor for disability benefit recipiency?

Various studies have shown that socio-demographic characteristics and health factors are key determinants of disability benefit recipiency (*e.g.* OECD, 2009). These studies,

Table 4.1. **Claimants with a mental disorder are further away from the labour market**

United Kingdom: Main category of a claimant's health condition by work status, 2007

Category	Mental	Musculoskeletal	Other	Base
	Percentages			
In work prior to claim?				
In work	22.0	47.0	31.0	*401*
Not in work	28.0	36.0	36.0	*1 337*
Share within each category	*19.1*	*28.1*	*20.5*	
Worked in last two years?				
Worked	25.0	41.0	34.0	*1 330*
Not worked	31.0	30.0	40.0	*399*
Share within each category	*72.9*	*82.0*	*73.9*	
Most recent job (of those who had a job in the last two years)				
Permanent	24.0	42.0	34.0	*1 105*
Temporary	31.0	37.0	32.0	*271*
Share within each category	*75.9*	*82.2*	*81.2*	

Denmark: New claimants by health condition and labour force status in the last five years, 2009

Category	Mental	Musculoskeletal	Other	Base
	Percentages			
In work prior to claim?				
Employed	37.5	27.9	34.5	*8 373*
Unemployed/inactive	68.6	15.9	15.5	*8 942*
Share within each category				
Employed	*33.9*	*62.2*	*67.6*	
Unemployed/inactive	*66.1*	*37.8*	*32.4*	

Australia: New claimants by health condition and previous beneficiary status, 2009-10

Category	Mental	Musculoskeletal	Other	Base
	Percentages			
Previous beneficiary status				
Unemployment benefit	35.6	28.0	36.4	*42 497*
Income replacement benefit	28.1	29.4	42.5	*12 935*
No benefit	17.7	29.2	53.1	*34 148*
Share within each category				
Unemployment benefit	*61.0*	*46.3*	*39.5*	
Income replacement benefit	*14.6*	*14.8*	*14.1*	
No benefit	*24.3*	*38.8*	*46.4*	

Source: OECD questionnaire on mental health for Australia and Denmark; and DWP Research Report, No. 469, for the United Kingdom.

StatLink http://dx.doi.org/10.1787/888932534729

however, have not looked at the role of mental ill-health as defined for this report, or the impact of changes in mental health status. This is done in this section, using the Survey of Health, Ageing and Retirement (SHARE).[8]

Using a logit regression model (see Box 4.1 for technical details), Table 4.2 shows that mental health is a major determinant of disability benefit recipiency, alongside with several other factors. The older a person; if male rather than female; the lower the level of education; and the poorer the person's mental health, the higher the likelihood of

disability benefit receipt. Adding disability status into the model shows that disability and mental health are two different and independently significant variables (Table 4.2, column 2; signs and significance levels of the other coefficients remain unchanged).[9]

Box 4.1. **Estimating determinants of disability benefit recipiency (using cross-sectional data) and moves onto disability benefit (using longitudinal data)**

The empirical analysis presented in this chapter uses a logit model as the main specification. Logistic regression models are commonly used to investigate the relationship between a binary response and a set of explanatory variables as those under investigation in this chapter.

A multiple linear regression model usually takes the form:

$$Y_i = \beta_0 + \sum_{j=1}^{k} \beta_j X_{ij} + u_i, \; i = 1, \cdots, n, \qquad Y_i \in \{0,1\} \tag{1}$$

Where Y_i is the variable to explain, X_2, ..., X_k, are a set of explanatory variables; β_0 is the intercept, and the β_k are the other regression coefficients. In the empirical analysis, however, the dependent variable is of qualitative nature (*i.e.* a dummy variable taking on two values). For example, as it is the case in some of the specifications presented in this chapter, it is the probability of receiving a disability benefit for the *i*th individual.

This feature requires the use of a more sophisticated model to avoid the limitations of a linear probability model. The model defined in terms of a latent variable Y_i^* follows:

$$Y_i^* = \beta_0 + \sum_{j=1}^{k} \beta_j X_{ij} + u_i, \; i = 1, \cdots, n, \tag{2}$$

What is observed in practice is the realisation of the latent variable (for example the fact that the individual takes up disability benefit) such that:

$$Y_i = \; Y_i = \begin{cases} 0 & Y_i^* \le 0 \\ 1 & Y_i^* > 0 \end{cases}$$

The probability of observing $Y_i = 1$ may thus be written as:

$$\Pr(Y_i = 1) = \Pr(Y_i^* > 0) = \Pr\,(u_i > -(\beta_0 + \sum_{j=1}^{k} \beta_j X_{ij}) =$$

$$= 1 - G_u(-(\beta_0 + \sum_{j=1}^{k} \beta_j X_{ij})) = G_u(\beta_0 + \sum_{j=1}^{k} \beta_j X_{ij})$$

Assuming that G is the logistic function, Pr(Yi = 1) takes the form of:

$$\Pr(Y_i = 1) = \frac{\exp\,(\beta_0 + \sum_{j=1}^{k} \beta_j X_{ij})}{1 + \exp\,(\beta_0 + \sum_{j=1}^{k} \beta_j X_{ij})} = \frac{1}{1 + \exp\,(-\beta_0 - \sum_{j=1}^{k} \beta_j X_{ij})} = \Lambda(\beta' x)$$

Increasing X_j by one unit leads to an increase in the response probability $\beta_j \Pr(Y_i = 1)\,(1 - \Pr(Y_i = 1))$.

By algebraic manipulation, the logistic regression equation can be written in terms of an odds ratio.

$$\frac{\Pr(Y = 1 \mid X)}{1 - \Pr(Y = 1 \mid X)} = \frac{\hat{\pi}}{1 - \hat{\pi}} = \exp(\beta_0 + \sum_{j=1}^{k} \beta_j X_{ij})$$

Or, by taking the natural log of both sides, we can write the equation in terms of logits (log-odds):

$$\log \frac{\hat{\pi}}{1 - \hat{\pi}} = (\beta_0 + \sum_{j=1}^{k} \beta_j X_{ij})$$

This transformation is very convenient for parameters' interpretation because the log-odds are a linear function of the predictors and express the amount the logit (log-odds) changes, with a one unit change in *X*.

Table 4.2. **Mental ill-health itself is a major determinant for disability benefit receipt**

Coefficients and significance levels from a logit model

	Base model	Base model *plus* disability status	Base model *plus* job variables	Full model
Age (50-54)				
55-59	0.307***	0.241***	–0.309**	–0.334**
60-64	0.308***	0.243***	–0.667***	–0.629***
Gender (men)				
Women	–0.356***	–0.281***	–1.026***	–0.846***
Education (ISCED 0-2)				
ISCED 3-4	–0.602***	–0.486***	–0.289**	–0.207
ISCED 5-6	–1.221***	–1.051***	–0.683***	–0.489**
Mental health (severe disorder)				
Moderate disorder	–0.640***	–0.288**	–0.066	0.169
No disorder	–1.637***	–0.839***	–0.951***	–0.343
Mental health – abriged (no disorder)				
Severe or moderate disorder	1.174***	0.634***	0.901***	0.473***
Disability status (no disability)				
With disability		2.180***		1.908***
Working conditions in the main job (continuous)			–0.106***	–0.093***
Years in employment (continuous)			–0.051***	–0.045***
Number of jobs held (continuous)			0.035	0.019
Constant	–1.972***	–3.261***	1.815***	0.502
Number of observations	*17 854*	*17 854*	*3 468*	*3 468*

*, **, *** statistically significant at the 10%, 5%, and 1% level, respectively; the model also includes country dummies most of which are significant at 1% in the base model but only few of them in the full model.

Note: Working conditions in the main job is a quasi-continuous variable defined as a composite index of seven individual questions, all with five answer categories from good to bad, thus allowing scores between 7 and 35. Model results are based on all countries covered in the survey.

Source: OECD calculations based on the Survey of Health, Ageing and Retirement (SHARE).

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With life history information collected retrospectively, SHARE also allows to analyse the impact of working conditions and other characteristics of the respondent's main job during his/her working life. Model results presented in the last two columns of Table 4.2 show that some of the job-related variables are significant determinants of disability benefit recipiency: the poorer the working conditions in the main job (calculated as a composite index of seven different factors) and the shorter overall lifetime job tenure, the higher the likelihood of disability benefit receipt. The number of jobs held, on the contrary, has no effect. Some of the variables lose significance in the full model: the difference between severe and moderate mental ill-health, and between low and medium level of education are no longer significant when bringing job-related variables into the model.[10]

Not only is mental ill-health a key determinant of disability benefit recipiency, but *change* in mental health status influences the likelihood of a person's transition onto disability benefit. In a logit regression model using the longitudinal feature of SHARE (see again Box 4.1),[11] the deterioration of mental health between 2004 and 2006 has a highly significant impact on the transition to disability benefit in the observed period. Table 4.3 shows results for three different mental health variables: the *standard* model using three mental health statuses (measuring the change from good mental health to

Table 4.3. **A worsening of mental health significantly influences moves onto disability benefit**

Coefficients and significance levels from a logit model

	Standard model (three mental health statuses)	Abridged model (two mental health statuses)	Continuous model (continuous mental health variable)
Age (50-54)			
55-59	0.419	0.407	0.451
60-64	0.951***	0.916***	1.015***
Gender (men)			
Women	–0.267	–0.249	–0.296
Education (ISCED 0-2)			
ISCED 3-4	–0.106	–0.100	–0.058
ISCED 5-6	–0.724**	–0.716**	–0.638**
Worsening in mental health	0.669***	0.565**	0.201***
Working conditions in the main job (continuous)	–0.103***	–0.104***	–0.108***
Constant	–1.349*	–1.302*	–1.391*
Number of observations	*3 710*	*3 726*	*3 672*

*, **, *** statistically significant at the 10%, 5%, and 1% level, respectively; the model also includes country dummies some of which are insignificant at 5%.

Note: Model results are based on all countries covered in the survey.

Source: OCED calculations based on the Survey of Health, Ageing and Retirement (SHARE).

StatLink http://dx.doi.org/10.1787/888932534767

moderate mental disorder, or from moderate to severe disorder); the *abridged* model with only two mental health statuses (measuring the change from good mental health to mental disorder of any severity); and the *continuous* model with a quasi-continuous mental health variable. Significant control factors in the transition to disability benefit are age (the older, the more likely this transition); education (the better educated, the less likely the transition); and the working conditions in the person's main job (the poorer the quality of work, the more likely the transition).

Using the logistic relationship in a logit model between the coefficient and the odds ratio, the model results imply that a shift from good mental health to mental disorder (when calculating the odds ratio for the abridged model) increases the probability of a move onto disability benefit by 76%. Alternatively, a one-unit worsening of mental health on the quasi-continuous 12-unit mental health scale (continuous model) increases the odds of moving onto disability benefit by 22%.

This finding is in line with previous studies showing that health shocks influence transitions from employment or other labour force statuses into disability benefit (OECD, 2009). However, exploiting only a two-year period is not enough to fully understand the impact of mental health and mental ill-health earlier in life on a disability benefit claim later in life. This issue is discussed in more detail in the next subsection, based on available literature.

Findings from research across the OECD

There is considerable rigorous research available on the extent to which poor mental health translates into disability benefit awards later in life, mostly for Denmark, Finland, Norway and Sweden.[12] Studies use different measures of mental ill-health or psychological distress; look at the impact of severe mental disorder or common disorder or both; measure

the impact on disability benefit overall or disability benefit with a mental health condition only or both; and they sometimes analyse the impact of specific disorders rather than mental disorder in general. The main findings can be summarised as follows (see Table 4.4 for study-specific details):

- Severe mental disorder is a very strong predictor of disability benefit award later in life, but common mental disorder such as depression is also in most cases a strong predictor.
- Even sub-threshold symptom loads – *i.e.* symptoms below the clinical threshold for a disorder – make an important contribution to later disability benefit awards.[13]
- Mental health problems or psychological distress predict not only later disability benefit awards with a mental health condition but benefit awards for all types of reasons.
- Some studies find even higher relative risks for later benefit awards for *e.g.* cardiovascular or muscular-skeletal conditions than for mental disorders. However, this depends on the country: in Sweden where today a much higher share of new claims (compared *e.g.* with Norway) is given a mental disorder diagnosis, fewer claims seem "incorrectly" assessed as somatic.
- Some authors, *e.g.* Mykletun *et al.* (2006) in an analysis of the situation in Norway, accordingly conclude that there continues to be an overuse of physical diagnoses in disability benefit awards.
- In general, the poorer the mental health or the higher the psychological distress at the outset, the higher the likelihood of later disability benefit award. Accordingly, relative risks are much higher for people with co-morbid conditions (*e.g.* anxiety plus depression) than for those with just one mental health condition.

Some studies also looked into the long-run impact of specific mental illnesses. For example, insomnia complaints (Øverland *et al.*, 2008), hypochondriasis or health anxiety (Mykletun *et al.*, 2009) and occupational burnout (Ahola *et al.*, 2009) were found to be particularly strong predictors of later disability benefit awards.[14] The authors infer that this is related in part to the high incidence of co-existing somatic as well as other mental illness in patients with hypochondriasis and insomnia.

A few studies are more specific on the official diagnoses stated as the reason for a disability benefit award in relation to the mental health status several years earlier. According to Øverland *et al.* (2008), of those with clinical depression at the outset, roughly one-third each were granted a disability benefit on the grounds of mental, musculoskeletal and other reasons, respectively. Similarly, of people with moderate health anxiety at the outset only one-fifth was later on granted a disability benefit for a mental disorder and 50% for a muscular-skeletal disorder (Mykletun *et al.*, 2009). Ahola *et al.* (2009) find that severe burnout is pretty likely to lead to a disability benefit award with a mental diagnosis, whereas mild burnout typically leads to one with a muscular-skeletal diagnosis.

All these studies demonstrate the importance of early identification of mental health complaints and early action aimed at preventing the otherwise inescapable path into long-term disability-benefit dependence. In order to demonstrate the need for early and preventive intervention at the workplace, another strand of prospective studies is looking at the impact of job-related variables and working conditions on disability benefit awards

Table 4.4. **Common and severe mental disorders as a predictor of disability benefit later in life: what does the literature tell us?**

Author(s)	Country coverage	Study population	Initial year	Follow-up period	Measure of mental ill-health	Severity/type of mental ill-health	Odds ratio or risk of disability benefit claim for people *with* a mental disorder relative to people *without* a mental disorder		
							All claims	Mental disorder claims	Non-mental disorder claims
Ahola *et al.* (2008)	Finland	Entire country, age 30-60	2000-01	4 years	Maslach Burnout Inventory (plus disagnostic interview on mental disorder)	Burnout	1.70	n.a.	n.a.
						Burnout; adjusted for mental disorder	1.49	n.a.	n.a.
Bültman *et al.* (2008)	Denmark	Entire country, age 18-59	1995	10 years	Mental Health Inventory (MHI-5)	Severe depressive symptoms	2.88	n.a.	n.a.
Kivimäki *et al.* (2007)	Sweden	One county, age 16-49	1985	11 years	Sickness absence longer than 7 days with mental diagnosis	All sick leaves	1-5 years later: 4.18 6-11 years later: 3.00	n.a.	n.a.
						Sick leaves with musculoskeletal diagnosis	1-5 years later: 6.94 6-11 years later: 4.10	n.a.	Award 6-11 years later: 5.70
						Sick leaves with mental diagnosis	1-5 years later: 8.68 6-11 years later: 4.99	Award 6-11 years later: 14.05	n.a.
Knudsen *et al.* (2010)	Norway	One county, age 40-46	1997-99	7 years	Hospital Anxiety and Depression Scale (HADS-14)	Anxiety	1.64	n.a.	1.31
						Depression	1.95	n.a.	1.66
						Co-morbid anxiety and depression	3.59	n.a.	2.38
Manninen *et al.* (1997)	Finland	Farmers aged 18-64	1979	10 years	Psychological distresss score (SCL-90)	Moderate distress	n.a.	All mental disorders: 0.84 (n.s.) Depression: 0.51 (n.s.)	Cardiovascular: 1.40 Musculoskeletal: 1.20 (n.s.)
						High distress	n.a.	All mental disorders: 1.29 (n.s.) Depression: 0.92 (n.s.)	Cardiovascular: 1.60 Musculoskeletal: 1.20 (n.s.)
						Very high distress	n.a.	All mental disorders: 2.48 Depression: 2.57	Cardiovascular: 2.12 Musculoskeletal: 1.62
Mykletun *et al.* (2006)	Norway	One county, age 20-66	1995-97	30 months	Hospital Anxiety and Depression Scale (HADS-14)	Anxiety	1.5	n.a.	1.02
						Depression	1.71	n.a.	1.49
						Co-morbid anxiety and depression	2.70	n.a.	1.51
Mykletun *et al.* (2009)	Norway	One county, age 40-46	1997-99	7 years	Whiteley Health Anxiety Index	All health anxiety	1.55	n.a.	1.65
						Severe health anxiety	3.05	n.a.	3.13
Øverland *et al.* (2008)	Norway	One county, age 20-66	1995-97	48 months	Two questions on sleeping problems; HADS-D for depression	Insomnia	1.66	n.a.	n.a.
						Depression	1.56	n.a.	n.a.
						Co-morbid insomnia and depression	2.76	n.a.	n.a.
Rai *et al.* (2011)	Sweden	One county, age 18-64	2002	5 years	General Health Questionnaire (GHQ-12)	Mild distress	n.a.	2.2	1.7
						Moderate distress	n.a.	4.3	1.8
						Severe distress	n.a.	10.9	2.5

n.a.: Not available.
n.s.: Not significant.
Source: OECD compilation.

StatLink http://dx.doi.org/10.1787/888932534786

later in life. These studies, again limited to the Nordic countries, identify a number of work-benefit relations suggesting that psychological workplace factors are crucial:

- Low job satisfaction elevates the risk of disability benefit awards in Denmark in the coming 15 years, by 40% for women and over 20% for men (Labriola *et al.*, 2009).
- Low social support from supervisors is associated with higher disability benefit awards in Finland six years afterwards, with an odds ratio of 1.7 (Sinokki *et al.*, 2010).
- Finnish Workers who experience *major* organisational downsizing have an 80% increased risk of disability benefit claims four years later compared with no downsizing, with minor downsizing not having any significant impact (Vahtera *et al.*, 2005).
- Low decision authority and limited variation in work (odds ratio 1.4-1.8 depending on gender) lift the risk of benefit claims in the subsequent 15 years in Denmark (Christensen *et al.*, 2008).

4.4. The role of benefits for people with a mental disorder

Disability benefit is only one of several working-age benefits for people with a mental disorder. Not everyone who is out of work or about to lose a job will be entitled to a disability benefit, also because many of these people will not fulfil the often strict disability criteria. Or people are not even applying for a disability benefit because of stigma considerations or the fear to lose labour market attachment. It is important to understand the relevance of other benefits for people with mental ill-health. For those administering the schemes and supports, it is important to identify those people and their support needs.

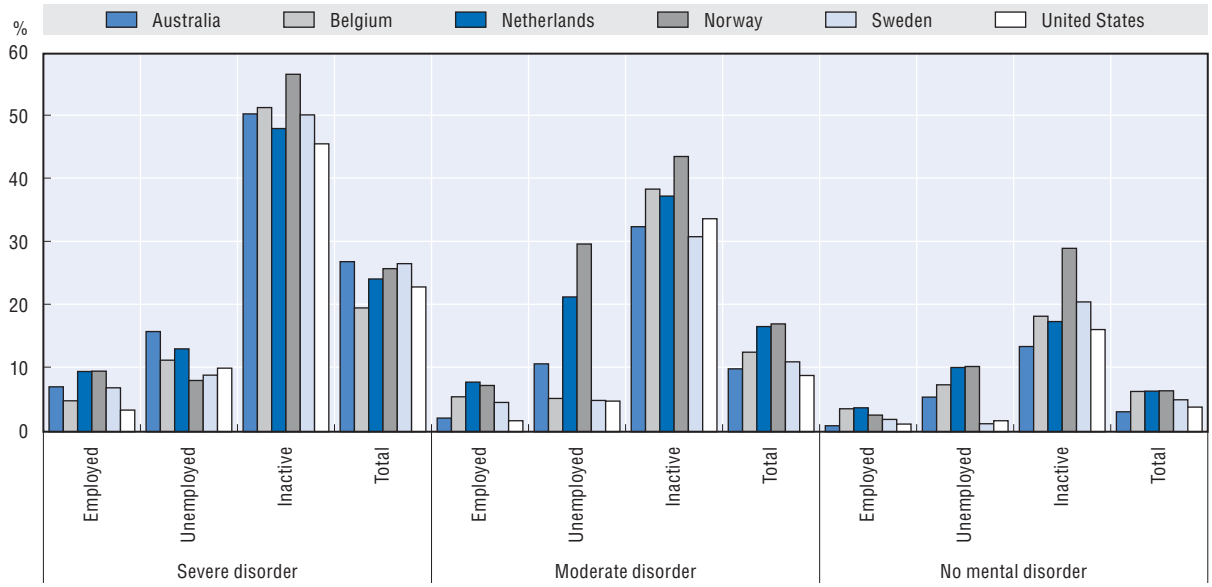
What benefit for which group of people?

Figure 4.11 shows the distribution of disability benefit recipiency across both mental health status and labour force status for five countries, two Nordic countries with very high overall disability beneficiary rates, two non-European countries with average beneficiary rates and Belgium with a below-average rate. Results are very similar across these countries: among people with a severe mental disorder, overall one in four receives a disability benefit and even one in two among those who are inactive. For people with a moderate disorder, the corresponding proportions are around 10% overall and 30% for those who are inactive. Among inactives without a mental disorder, also some 15-20% receives disability benefit (Figure 4.11). Country differences in overall disability benefit recipiency levels are to a considerable degree explained by the higher share of recipients among people with a moderate mental disorder or without a mental disorder in the Nordic countries, especially Norway.

These results also imply that the overwhelming majority of people with a moderate mental disorder and still three-quarters of those with a severe mental disorder do *not* receive a disability benefit. Many of those people are working, as shown earlier (Chapters 1 and 2). However, many others are out of work either unemployed or on another inactive benefit. Evidence suggests that the number of people with a mental disorder who receive either unemployment benefit or social assistance payments (or, lone-parent benefit in the case of Australia) roughly equals the number receiving disability benefit (Figure 4.12, Panel A). Among those with a moderate mental disorder, and in Belgium also among those with a severe disorder, there are more people on other benefits than on disability benefit.[15]

Figure 4.11. **One in four people with a severe mental disorder receives a disability benefit**

Proportion of people receiving a disability benefit by mental health status and labour force status, five OECD countries, latest year available



Note: Data for Belgium include sickness benefit; this leads to a slight overestimate especially among employees with either a moderate or no mental disorder.

Source: National health surveys (see Figure 1.3).

StatLink http://dx.doi.org/10.1787/888932534159

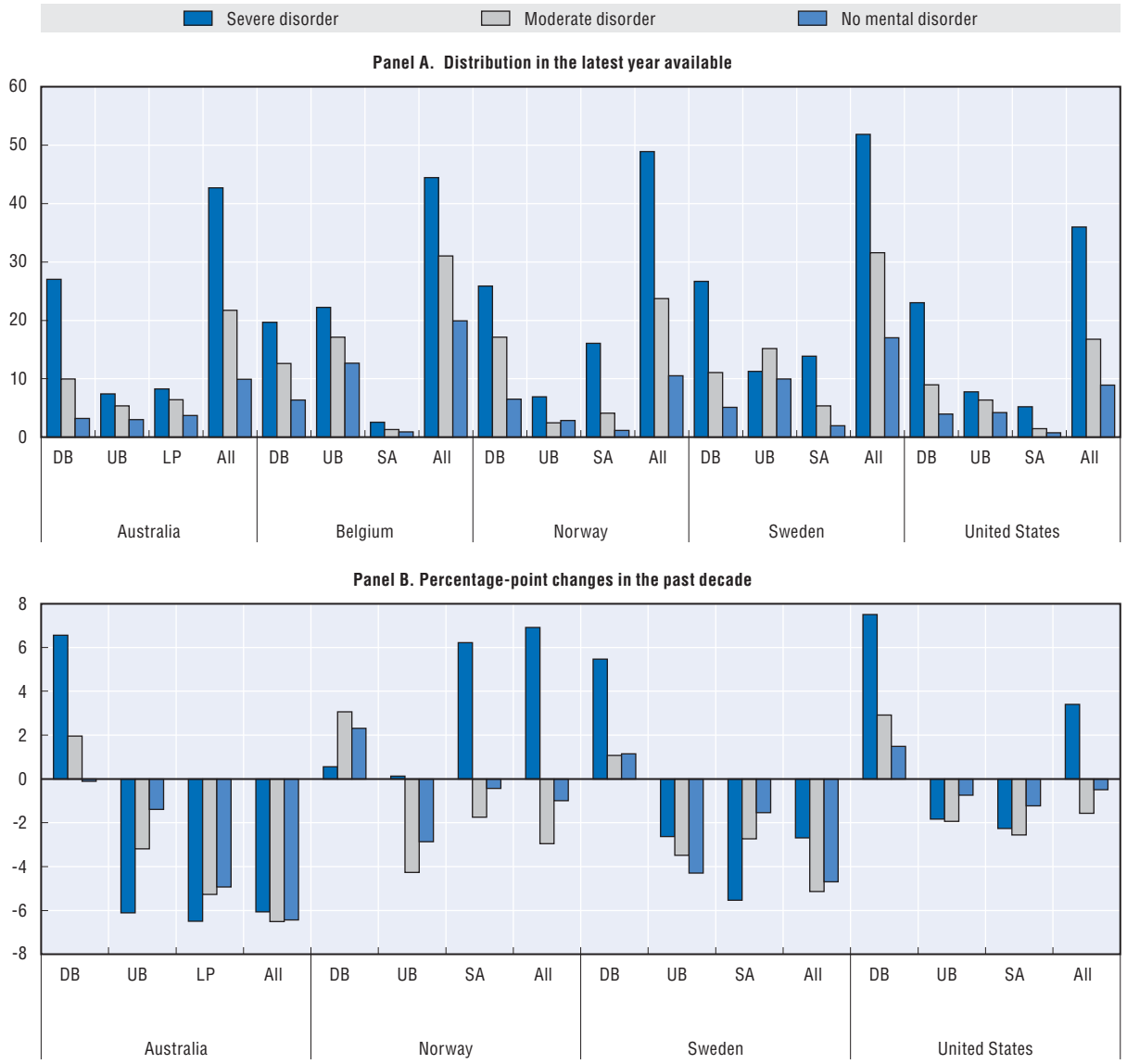
Changes in these distributions are also informative. Disability benefit recipiency has increased everywhere compared to a decade ago. Today, in three of the four countries with data for at least two points in time (Australia, Sweden and the United States) people with a mental disorder, and those with a severe disorder in particular, are far more likely to receive disability benefit rather than any other benefit (Figure 4.12, Panel B). This is in line with the general shift mentioned earlier towards disability benefit becoming the main working-age benefit. Overall benefit recipiency – taking all three benefits together – has fallen in the past decade in Australia (for all groups) and in Sweden (less so for those with a severe mental disorder), and has increased in Norway and the United States for those with a severe disorder but fallen otherwise.[16] Norway has seen a sharp increase in the proportion of those with a severe mental disorder receiving social assistance – partially explaining why today relatively fewer of them are found on disability benefit.

For other countries, data of this type is only available through SHARE. These data are not strictly comparable as they only cover the population aged 50 and over, a population for which employment rates are relatively low in some countries and early retirement very widespread. Moreover, as disability prevalence increases with age, in comparison to the total population a different distribution across disability and unemployment benefits should be expected.

In Austria where early retirement is particularly widespread, other benefits – predominantly early retirement benefits – prevail, even more so for people with a moderate mental disorder or no such disorder (Figure 4.13). To a lesser extent, this is also true for Belgium. For the other countries, evidence confirms the importance of other benefits including unemployment and social assistance benefits, especially for those with

Figure 4.12. **Many people with a mental disorder receive unemployment benefit or social assistance**

Proportion of people receiving a disability benefit (DB), an unemployment benefit (UB), a social assistance payment (SA) or lone-parent benefit (LP), by mental health status, five OECD countries



Source: National health surveys (see Figure 1.3).

StatLink http://dx.doi.org/10.1787/888932534178

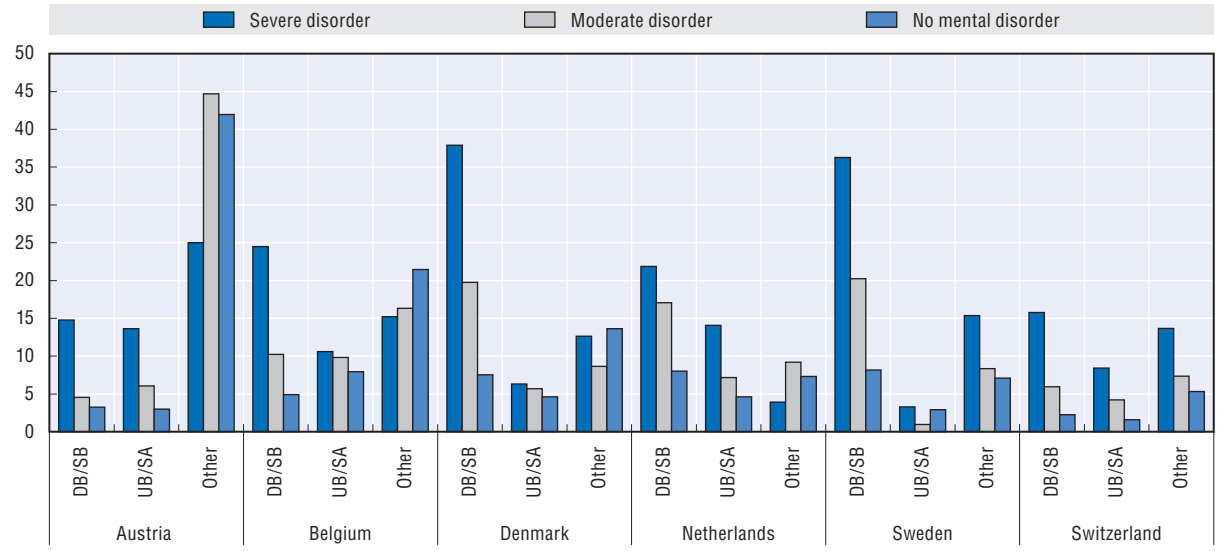
a moderate mental disorder. As expected, for those over age 50 disability benefit plays a comparatively more important role than unemployment benefit and social assistance, certainly for those with a severe mental disorder but in some countries (Denmark, Netherlands, Sweden) also for those with a moderate mental disorder.

Benefit coverage and income security

The main aims of social policy are to encourage and facilitate employment and to secure incomes in periods of temporary or permanent work incapacity. Different benefit schemes follow this dual objective in different ways and with a different balance, but the

Figure 4.13. **Older people with a mental disorder depend on a range of different working-age benefits**

Proportion of people aged 50-64 receiving disability/sickness benefit (DB/SB), unemployment benefit/social assistance (UB/SA) or other working-age benefits, by mental health status, six OECD countries, 2006



Source: OECD compilation based on the Survey of Health, Ageing and Retirement (SHARE).

StatLink http://dx.doi.org/10.1787/888932534197

goals are broadly the same and, for all schemes, the policy trend is towards more effective activation of those able to work. Yet, the income security component remains essential; it is important to know whether the different systems deliver in this regard, and for whom. For people with a mental disorder, who face particular labour market challenges and at the same time draw on a range of different benefits in periods of non-employment, the ability of the different schemes to provide income security is paramount.

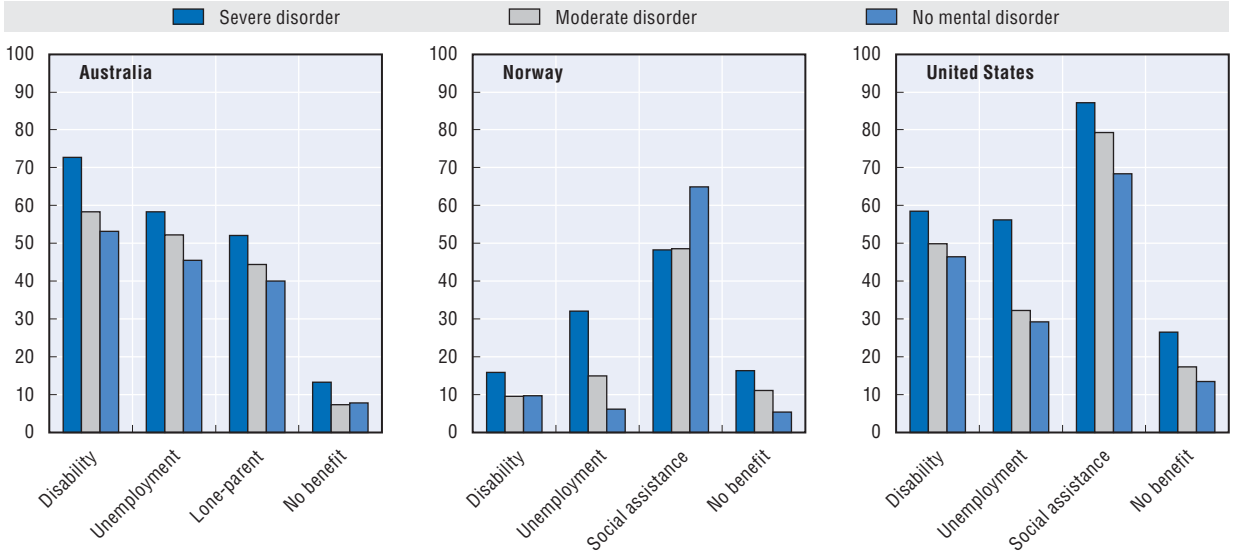
Evidence on this in relation to people with a mental disorder is scarce. As stressed in Chapter 1, overall poverty levels are much higher for those with a severe mental disorder compared with those without such a disorder, and somewhere in-between for those with a moderate disorder. Data for Australia, Norway and the United States suggest that a considerable part of these differences is due to the much higher benefit dependency of these groups. Poverty risks are lower with better mental health no matter what benefit people receive but within the same benefit category these differences are not very large (Figure 4.14). However, people with a mental disorder are more dependent on the various types of benefits. In Norway and the United States, those depending on means-tested social assistance payments face the highest poverty risks, irrespective of their mental health status. In Australia, where all benefits are means-tested, differences between benefits are small and poverty risks very high for all benefit recipients. Not receiving a benefit *i.e.* being in work is the best strategy to tackle poverty, although in Norway also those receiving disability benefit are well protected from falling into poverty, irrespective of their mental health status.

Identification of people with mental ill-health

The frequent flow of people with mental disorders onto benefits and the high dependence on such benefits, call for better ways of assessing benefit claims. In this

Figure 4.14. **The higher poverty risks for people with a mental disorder result from higher benefit dependency**

Poverty risks for people with a severe, moderate or no mental disorder by type of benefit received



Note: Poverty risk is defined as the proportion of people with equivalised income below 60% of the median income.

Source: National health surveys (see Figure 1.3).

StatLink http://dx.doi.org/10.1787/888932534216

regard, three dimensions are critical. First, it is important to identify people early on when work motivation is intact. This implies early identification at a time when people are holding a job, when taking sick leave or even before then (Chapter 2). Second, in view of the early onset of many mental disorders, even earlier identification when still in school or in other forms of education is essential (Chapter 5). Third, people need to be identified properly when applying for a benefit, and offered support as needed to avoid long-term benefit claims. This is the subject of this subsection.

For people applying for a *disability* benefit, there is a good chance that their psychiatric rehabilitation needs – including medical and vocational elements – are identified. The rapid increase in most countries in the share of claims for mental disorder suggests that the mental health problems of an increasing share of new claimants is in focus (even though for some claimants with co-existing conditions this will still not be the case). Table 4.5 summarises some of the main characteristics of the identification and assessment process for a disability benefit in the countries under study. For claimants with a mental disorder, a number of conclusions arise:

- The most important factor in benefit eligibility is the applicant's (partial) work capacity or the ability to earn a living by working. In most cases, the work incapacity/limitation/impairment must be *caused* by a health condition.
- The role of diagnosis differs widely. A diagnosis alone will rarely generate benefit eligibility. In some countries, the specific diagnosis is important because impairment listings are used which are linked to a particular diagnosis. In other countries, diagnosis is only needed indirectly to support the assessment of the remaining work capacity (Netherlands, Sweden and the United Kingdom). Only few countries exclude particular diagnoses (*e.g.* substance use disorders) explicitly.

- Some countries are relatively strict in requesting state-of-the-art treatment before considering granting a benefit (Australia, Norway, Switzerland and to a lesser degree the United States). Other countries have relatively strict vocational rehabilitation requirements before a benefit could be paid (Austria, Norway, Sweden, Switzerland and, via the employer, also the Netherlands).
- Most countries use assessment instruments which directly address mental health or mental functioning. Some do this through impairment or limitation lists (Australia, Netherlands and the United States), others through psychological testing (Austria, Switzerland). Denmark and the United Kingdom determine mental functioning through a resource profile and a capability assessment, respectively. Norway and Sweden have no explicit mental health component in their assessment tools.
- The particular nature of mental ill-health is not addressed very much. Some countries have a focus on granting benefits temporarily, at least initially, with repeated retesting (*e.g.* Austria and the Netherlands) or have periodic eligibility reviews (United States). In Australia, the fluctuating nature of some mental disorders is addressed by interpreting work ability as the ability to work reliably for a period of 2 weeks without excessive absences.

Overall, this suggests that in most countries there is room for increasing the focus on mental disorders in the benefit eligibility determination process; to the particular characteristics of such disorders; and to the frequent lack of treatment and/or vocational rehabilitation. The importance of this rests with the necessity to identify support needs comprehensively and timely in order to raise the chances to prevent a disability benefit claim.

The application for a disability benefit is often the last step, or in any case a very late step, in a difficult employment or labour-force-exit trajectory. This implies that even the best identification tools will have limited impact. Appropriate identification of needs will, in many cases, be required at a much earlier stage in the process of deteriorating mental health. This is confirmed by the large number of people with a mental disorder receiving *other* working-age benefits. Accordingly, identifying people with a mental disorder and their particular support needs on those other benefits – (long-term) unemployment benefit and social assistance in particular – is equally important.

By and large awareness of the importance of this matter is limited. The lacking statistics on the number of people with a mental disorder on either unemployment or social assistance benefits in almost all OECD countries is a clear signal for this. Some countries have information on the number of people with disability on their unemployment or social assistance caseloads. In Germany, for example, 10% of the long-term unemployed have an officially registered disability, and 20% among those aged 50 and over (Brussig and Knuth, 2010); but these are people with very significant disability. In Israel, 30% of the unemployed and 60% of the long-term unemployed have a disability.

The lack of knowledge on the number of clients with mental illness on unemployment or social assistance schemes is a missed opportunity. Research in Norway, for example, suggests that 58% of all social assistance clients have psychiatric problems and one-third problems with drugs. Similarly, 80% of all labour market programme participants have variable or reduced ability to work, and of those 23% have a mental disorder (Van der Wel *et al.*, 2006). For the United States, it was estimated that 35% of all recipients of Temporary Assistance to Needy Families (the social assistance equivalent) have psychological distress symptoms, with depression being the most commonly reported disorder (Montoya and Brown, 2007).

Table 4.5. **Assessing disability benefit eligibility for claimants with a mental disorder: what is required and how is this done?**

Country	Eligibility definition	Treatment requirements	Assessment instrument	Attention to the characteristics of mental ill-health
Australia	Impairment resulting from a diagnosed health condition, preventing work for at least 15 hours per week (or be re-skilled for such work) for the next two years.	Without reasonable treatment (nature and efficacy of past treatment, appropriateness of current treatment, plans for future treatment) a condition is not considered permanent.	Impairment tables, including tables on psychiatric impairment and substance use (new focus on functioning); Job Capacity Assessment to identify barriers to work (most assessors are psychologists and social workers); Employment Services Assessment to identify the type of assistance needed.	No impairment rating for temporary conditions, including acute short-term psychiatric conditions (like *e.g.* reactive depression); for fluctuating illness, ability to work reliably for a period of 26 weeks without excessive absences.
Austria	Diagnosed (ICD-10) illness leading to capacity reduction; labour market chances not taken into account.	No treatment requirements, but psychiatric or vocational rehabilitation services always considered and can be mandatory.	Psychiatric interview; if needed psychological testing.	Benefit usually granted temporarily; (re) assessment by physicians familiar with the nature of mental illness.
Belgium	Work capacity loss of more than 66%.	Vocational rehabilitation can be proposed to restore work capacity. After the training the beneficiary loses benefit entitlement within six months.	Work capacity assessment based on opinion of the insurance doctor.	Not particularly.
Denmark	Permanent reduction of work capacity so that person cannot provide for himself/herself by means of a job.	Where applicable, treatment and/or psychiatric rehabilitation and/or vocational rehabilitation (including on-the-job training, mentor support) has to be tested.	Resource profile with 12 components, including for example health; social competences; ability for change; social network.	Resource profile is flexible but fact that illness can improve over time not always taken into account.
Netherlands	Limitation to work resulting from an illness or disability (causal link).	Employer and employee obliged to do everything possible in the two-year sickness phase; employee must do everything to recover.	Level of limitations assessed against a list of 70 items relating to physical and psychological aspects.	Fluctuating nature and co-morbidity are taken into account (*e.g.* frequent use of reassessments).
Norway	Permanent (ICD-10) diagnosed illness leading to permanent loss of function in turn causing a work-capacity loss.	Person must have undergone (or made an effort to try) adequate medical and vocational treatment and rehab to improve work capacity.	Workability judgement tool (including medical documentation) but no special mental health component.	Not particularly.
Sweden	Diagnosis not required but often necessary to establish that the work incapacity will exist for all foreseeable future.	Any kind of rehabilitation that could create or restore work capacity has to be tried or reviewed (*de facto* in most cases medical and vocational rehab prior to benefit).	No assessment instrument (in development); assessment based on opinions from doctors and employment service caseworkers (and specialists, if needed).	No diagnosis-related regulations; but all aspects of the illness should be considered.
Switzerland	Work impairment more important than diagnostic criteria; certain diagnosis (*e.g.* anxiety, drug abuse, somatoform pain disorder alone) are explicitly excluded.	State-of-the-art treatment is required and vocational rehabilitation requirements also have to be fulfilled.	Assessment includes a particular mental health component with psychological tests and a clinical examination.	Special institutions to examine people with mental illness (including exhaustive interviews, observation over a longer period); in the future, more frequent reassessment.
United Kingdom	Inability to work because of illness or disability, as determined by the claimant's functional capability; condition as such plays a lesser role.	No particular requirements.	Work Capability Assessment includes a mental functioning assessment *e.g.* looking at ability to cope with change, form relationships, and communicate appropriately; emotional resilience; level of fear and anxiety.	Work Capability Assessment captures some of the key elements; usually face-to-face assessment with well-trained assessors.
United States	Medical evidence resulting in an impairment that makes it impossible to do any substantial gainful activity for a continuous period of not less than 12 months; substance abuse alone does not create benefit eligibility.	No treatment requirements but any treatment received is considered carefully, in combination with the diagnosis, in terms of its effectiveness and side effects; no psychiatric or vocational rehabilitation requirement.	No work capacity tool, but use of impairment listings for each body system (including mental disorders) to determine if impairment considered severe enough to prevent an individual from doing any gainful activity.	Impairment needs to be expected to last for at least 12 months; reassessment at predetermined intervals of one, three, five or seven years, to determine if the medical condition has improved since benefits were awarded.

Source: OECD compilation based on mental health policy questionnaires.

StatLink http://dx.doi.org/10.1787/888932534805

Unemployment benefit systems in most countries are ill prepared to identify additional needs of jobseekers with mental illness. Generally, there is no systematic approach to the identification of such problems and needs, and the respective skills of caseworkers in employment services are insufficient (Table 4.6). Some countries provide special training to caseworkers but training is often not sufficient and not available to everyone. Some countries (*e.g.* Austria) have special advisors in the employment offices, and others have their own psychologists and social workers (*e.g.* Sweden). In Australia, jobseekers with mental health needs are probably more likely than in other countries to be referred to the right expert quickly, through the combination of a comprehensive profiling tool used at the intake phase and the immediate referral to a more comprehensive Job Capacity Assessment and/or Employment Services Assessment (also used by the disability benefit scheme) for those with complex barriers to employment.

Table 4.6. **Identifying and supporting people with a mental disorder in the unemployment system**

Country	Identification in the unemployment system	Expert advice in the employment service
Australia	Job Seeker Classification Instrument (JSCI) to identify barriers to employment, including mental health problems (but would require self-disclosure); those with complex barriers may be referred to a Job Capacity Assessment (JCA).	Through profiling (JSCI) and the close link with the disability scheme (with its two assessment tools), people would quickly be referred to the right expert; health professionals assess any temporary exemption from participation requirements.
Austria	No identification of those with mental illness but of persons with disabilities.	Special advisors with extra time, knowledge and training; some training for caseworkers.
Belgium	Identification relies on self-disclosure first, and then administrative verification; psychological/medical evaluation is also available.	In Flanders, caseworkers have access to special evaluation tools from medical staff. In Wallonia, caseworkers have training for dealing with mental health problems.
Denmark	Sequence of dialogue and active assistance allowing identification of such problems.	Relying on education and experience of caseworkers; referral to psychological assistance possible.
Netherlands	No identification but obligation to offer (buy) adequate reintegration services.	Medical professionals and special experts on working possibilities and the labour market.
Norway	Same workability judgement tool used as profiling instrument for all working-age benefits.	Individual plan allowing co-ordinated help for people in need of a range of co-ordinated services.
Sweden	Various profiling tools such as the work-readiness profile and, if necessary, psychological testing and assessment – to assess the risk of long-term unemployment.	Own psychologists, occupational therapists and social workers involved or making an assessment supplementary to the available medical evaluation.
Switzerland	No uniform profiling tool to detect mental health problems.	Relying on employment service caseworkers.
United Kingdom	No intake tool to identify medical disorders for unemployment benefit purposes. Identification relies on self-disclosure to inform job-search plan.	All advisers have access to introductory training and ongoing advice and can offer health and well-being related support or refer to specialist disability employment advisers and work psychologists who handle more complex needs.
United States	No intake tool and no identification of medical disorders for unemployment benefit purposes.	Specialised training but not sufficient and high caseloads.

Source: OECD compilation based on mental health policy questionnaires.

StatLink http://dx.doi.org/10.1787/888932534824

4.5. Labour market services for people with a mental disorder

Once identified, the key issue is to help people with mental disorder remain in, or return to, the labour force, or where applicable to stay in their jobs. In view of the very low chances to move off disability benefit (OECD, 2010) additional investment is necessary to prevent moves onto benefit in the first place. This section looks at *i)* the chances of benefit applicants with mental disorder to participate in, and benefit from, employment-oriented

measures; *ii)* the determinants of a successful return to work from a longer-term sick leave as identified in the literature; and *iii)* possible lessons from evaluations of programmes developed for people with other than mental disorders.

Participation in employment-oriented programmes

Across the OECD, information on the share of participants with mental disorders in various employment measures and, even more so, the effectiveness of these measures for this particular target group is limited. Only half of the ten countries can provide some information of varying nature on the number of participants in active labour market programmes (ALMPs), as shown in Figure 4.15.

Data for Belgium and to a large extent also the United Kingdom suggest that people with a mental disorder are widely under-represented among ALMP participants. While they account for 30-35% of all new disability benefit claims, their share is only around or even less than 10% in the various programmes. This is a very big difference, reflecting lower work motivation of some of those people and/or the belief by caseworkers that this group is more disabled and less likely to benefit from an employment measure.[17]

However, data for Australia, Denmark and Norway – three countries which have recently given a great deal of attention to mental health and work policies – show a different pattern.[18] In these three countries, the share of participants with mental disorders is broadly in line with and partly even higher than the share of this group in new disability benefit claims. This is also true for the UK's Pathways to Work programme, which was introduced as a pilot in 2003/04 and delivered as a national programme until April 2011 (see OECD, 2008). Some schemes, like the Australian Job Capacity Account, are predominantly used by people with mental disorders.[19]

The Australian data also show a fast increase in the number of users with mental disorders in programmes provided by the specialist service network (Vocational Rehabilitation Services and Disability Employment Services). Moreover, data are proof for the importance of general labour market services (provided by Job Services Australia) for people with mental illness; the number of participants in these services is even higher than in the specialist services (around 48 000 compared with around 35 000, see Figure 4.15) – although the share of people with mental illness in general services is naturally much lower. This is likely to be a typical situation for most OECD countries. The Danish data show that three in four new disability benefit claimants with mental disorder have participated in some employment measure prior to being granted a benefit. This must be seen against the background of the requirement in this country to test all potentially relevant rehabilitation offers before a benefit can be granted.

Programme evaluation

Information on the effectiveness of programmes for people with mental illness is even scarcer. The United Kingdom data in Figure 4.15 suggest that the Pathways process is initially equally effective for this group as it is for those with other health problems (same share in Pathways *starts* and Pathways *job entries*). In-depth evaluation of Pathways, which comprised a series of work-focussed interviews with a personal advisor and access to a range of supports (the *Choices Package*) including Condition Management programmes, suggests that customers with mental ill-health are doing much worse. Dorsett (2008) finds a significantly bigger employment effect of Pathways for those not reporting a mental health problem, and also that personal advisors were least confident with those with

Figure 4.15. **The share of active labour market programme participants with a mental disorder varies across country and programme**

Share of participants or claims with a mental disorder (percentages), selected years and countries

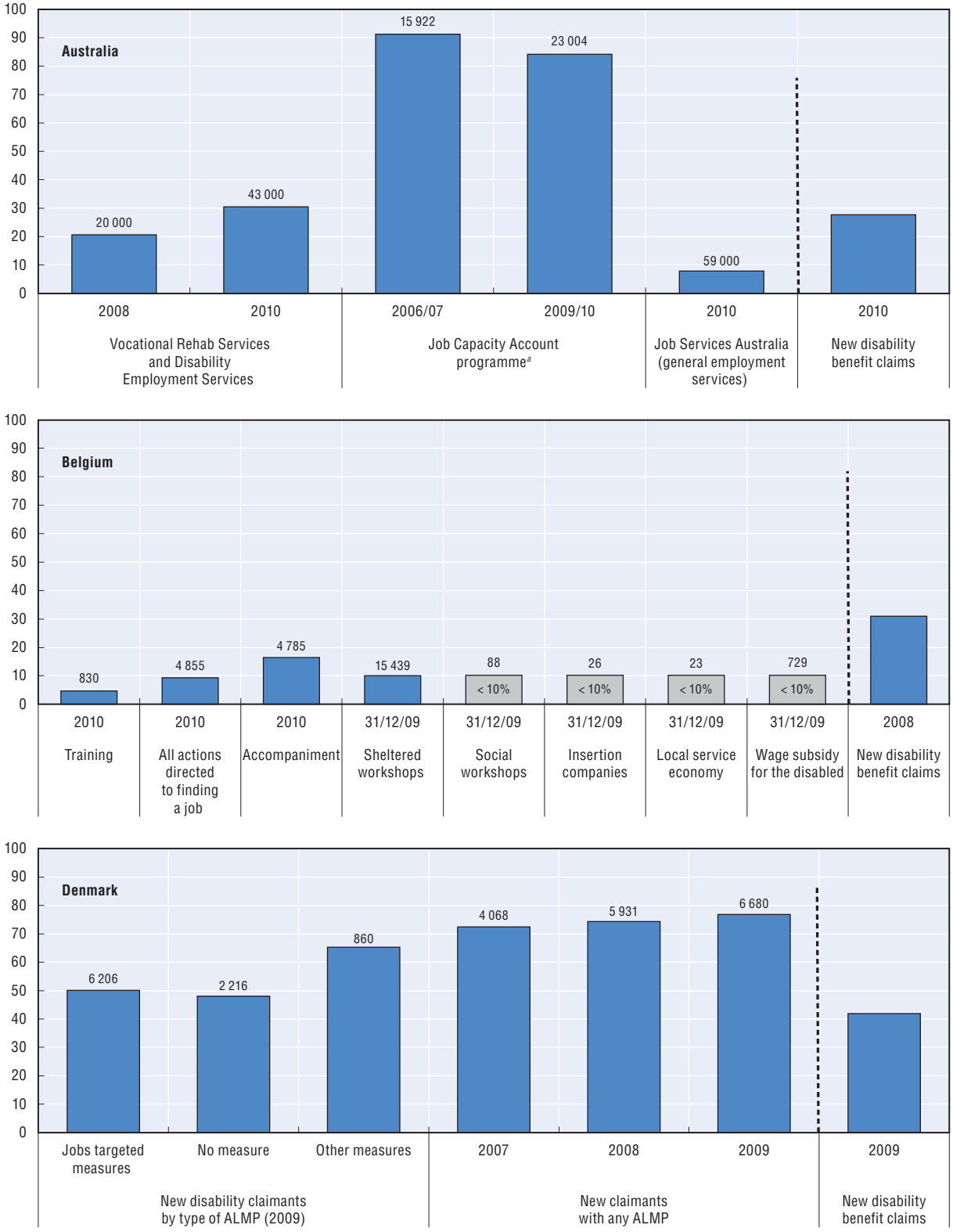
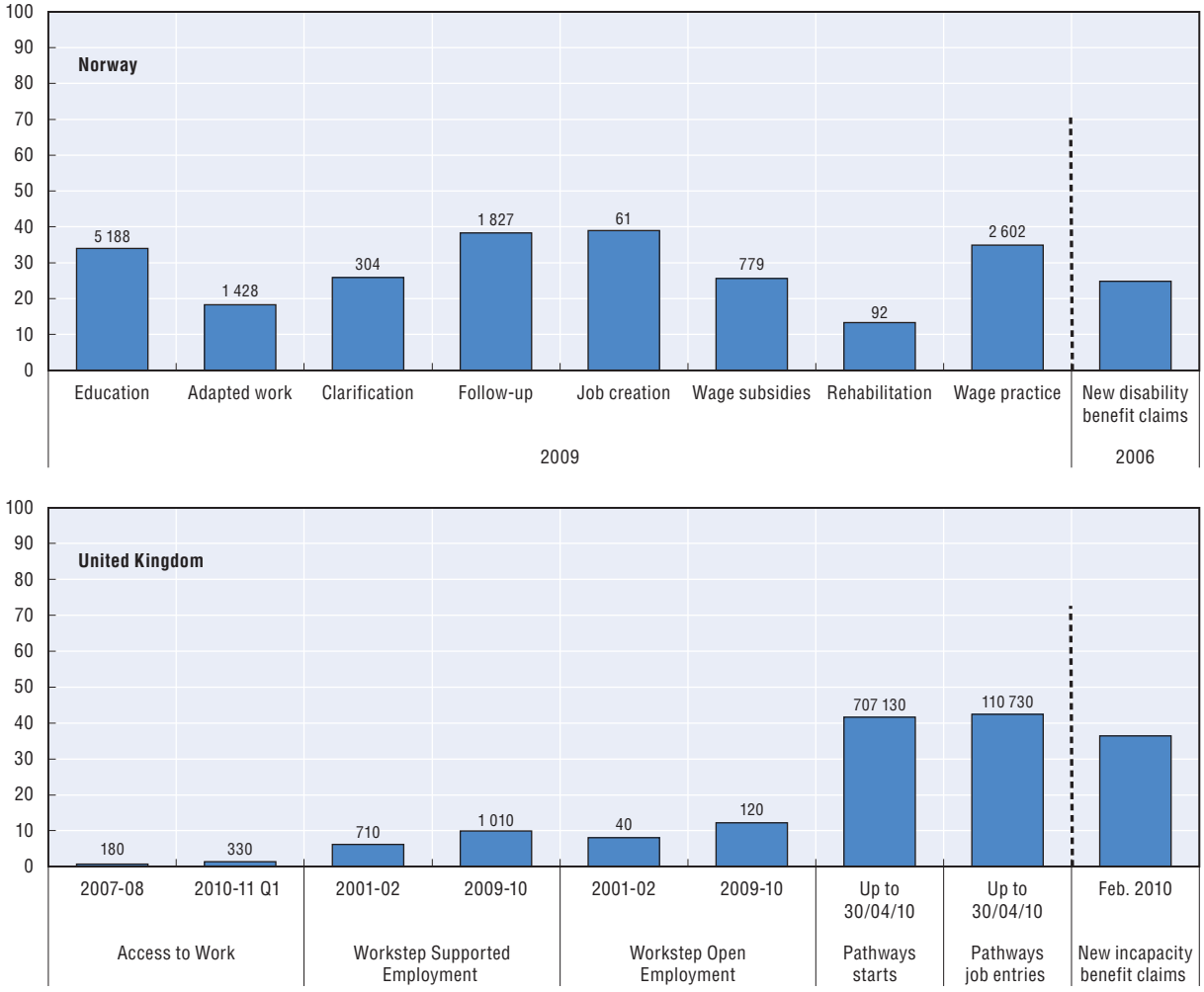


Figure 4.15. **The share of active labour market programme participants with a mental disorder varies across country and programme** *(cont.)*

Share of participants or claims with a mental disorder (percentages), selected years and countries



a) The JCA programme ceased on 31 December 2010.

Source: OECD compilation on the basis of the OECD questionnaire on mental health.

StatLink http://dx.doi.org/10.1787/888932534235

mental health problems who they found particularly hard to help. Hayllar *et al.* (2010) conclude that customers with a mental health condition (as main or secondary health issue) were half as likely to be in paid work 13 months after their start on Pathways as those without such conditions (17% compared to 34%), and also less likely to be actively looking for a job (18% compared to 23%). This is despite no difference between the two groups in their commitment to the process and the work-focused interviews and the supports they were subsequently referred to.

On the contrary, an evaluation of labour market assistance provided in Australia finds comparable effects for people with a mental illness compared to those with physical disability, in terms of moves off benefit (Evaluation and Program Performance Branch, 2010). More precisely, effects are very similar for most schemes and irrespective of whether the customers previously received disability benefit or one of the unemployment benefits (Youth Allowance or Newstart Allowance).

Partial sick leave

The Nordic countries are recently putting great emphasis on using partial or graded sick leave, in an effort to stimulate a swifter return to work, especially from longer-term absences. Rules differ across countries, but the aim is essentially the same. In Norway, for example, doctors granting sick-leave certificates are obliged to always consider graded leave before granting a full leave of absence. In Finland, on the contrary, partial leave (or partial return to the job) can only be used after an absence period of 60 days. The systems in Denmark and Sweden are more flexible. In principle, the *nature* of mental illness which will often allow some work to be done, in particular during periods of illness recovery, is particularly suitable for such a system; in so far, this new policy focus aimed at reducing absences and, thereby, long-term labour market withdrawals has considerable potential.

Depending on the country's system, there may be various ways to define part-time sick leave. Andrén (2011) discusses this issue for Sweden, which has the most flexible and also the oldest system (part-time sick leave has existed ever since the beginning of the 1960s). People can be on part-time sick leave right from the beginning or swop between part-time and full-time sick leave. Probably the most interesting policy question is whether part-time sick leave can speed up full restoration of work capacity of a person initially on full-time sick leave, or increase the likelihood for this person to return to work fully recovered. For all sick-leave cases taken together, part-time sick leave in Sweden has a positive effect on full recovery after one year in 48% of all cases, and a negative effect in 6% (Andrén, 2011). Moreover, it appears that part-time sick leave generally increases the probability of recovering for long absence spells while it reduces the chances of recovery for spells that are shorter than 120 days (Andrén and Andrén, 2009). Using a very different modelling approach based on the sick-listing records of physicians in Norway, Markussen *et al.* (2010) arrive at a similarly positive conclusion: absentees who are issued graded absence certificates have shorter absences on average (150 compared to 200 days), fewer absence recurrences and higher subsequent employment rates two years later (92% compared to 78%) than they would have had otherwise on full-time sick leave.

The evidence concerning the impact of part-time sick leave for absentees with a mental health condition is mixed. For Sweden, Andrén (2010) concludes that assigning employees with a full-time sick leave due to a mental disorder to part-time sick leave at any point *after* 60 days leads to statistically significant better outcomes. More precisely, 40% will be better off – *i.e.* more likely to return to work fully recovered – and only 4% worse off. Shifts to part-time sick leave at an earlier point in time have no significant effect, and lead to an equal number of gainers and losers. Høgelund and Holm (2011), on the other hand, find that in Denmark much of the similarly positive effect of part-time sick leave disappears when adjusting for unobserved differences between part-time and full-time sick listed. For absentees with a mental illness such adjustment takes away all the effect of part-time sick leave while for absentees with other health conditions the positive effect of part-time sick leave on the likelihood of returning fully recovered is reduced but remains significant.

Predictors of return to work for people with mental ill-health

Administrative sources and programme evaluations are too scarce to allow a firm conclusion on the effectiveness for people with mental disorder of programmes intended to move people off benefit and back into the labour force, or to prevent moves onto disability benefit. Even the evidence on programmes for the unemployed at large is scarce and partial (Forslund *et al.*, 2011); less is known about programmes for the long-term

unemployed; much less about measures for people with disability; and probably least about interventions for people with mental ill-health many of who are (long-term) unemployed. In response to the fast increase in the share of sickness absences and disability benefit claims caused by mental disorders, in recent years an increasing number of studies has tried to identify the determinants of a successful return to work (RTW) of people with mental disorders, typically looking at people who have been on sick leave for an extended period. Evidence is growing slowly but it is still limited.

- First, behavioural and attitudinal factors play a crucial role. These factors include for example work attitude (Brouwer *et al.*, 2009), the expectation of a successful return (Nielsen *et al.*, 2010), and more generally self-esteem and attitudes towards the future (*e.g.* Rytsala *et al.*, 2007). This implies that motivation to RTW is critical and that the mindset needs to be focused to RTW at an early stage in the process, including *e.g.* by the General Practitioner who will often be the first contact for a person with a mental ill-health episode (see Chapter 3).[20]
- Second, people with no prior longer-term sickness absence with a mental health problem are more likely to RTW (*e.g.* Nielsen *et al.*, 2010, Rytsala *et al.*, 2007); and the longer the absence, the lower the RTW likelihood (St-Arnaud *et al.*, 2007). This makes identification and intervention during the first absence spell(s) crucial. Koopmans *et al.* (2011), for example, following a cohort of employees in the Netherlands, found that one in five had a recurrence of a long-term absence within seven years, 90% of whom within 3 years and typically after ten months. For Sweden, Vaez *et al.* (2007) found that only one-third of those with a long-term absence spell due to psychiatric disorder in 1999/2000 had less than 17 absence days some 3 years later, and over 50% more than 90 days.
- Third, workplace and employer characteristics matter. Employer-related determinants of a successful or faster RTW include *e.g.* better communication between supervisor and employee (Nieuwenhuijsen *et al.*, 2004) and accommodation and rehabilitation activities by employers and occupational health services, which make a difference even for the long-term sick (Everhardt and de Jong, 2011). People with work-related absences are less likely to RTW than those with absences related to personal reasons, and those with combined personal and work-related causes are the least likely (St-Arnaud *et al.*, 2007). Work overload, non-recognition of effort and conflicts with supervisors reduce RTW (St-Arnaud *et al.*, 2007). Hence, RTW will be most successful when working closely with the employer.
- Finally, disorder-related factors need to be taken into account. Several studies confirm that more severe symptoms, co-existing secondary conditions, long-duration episodes of mental illness (*e.g.* depression) and a larger number of previous episodes reduce work functioning and RTW (Lagerveld *et al.*, 2010). Moreover, the underlying diagnosis also matters, with for example stress/burnout having a better RTW prediction than depression and other mental health problems (Nielsen *et al.*, 2010). All this, in turn, underlines the important role of the doctor and the health system in general in the RTW process.

Taken together, the limited evidence highlights the need for early action involving all relevant players. But more work is required to better understand why improved symptoms and quality of life as a result of various medical and psychological treatments do not translate into improved work outcomes, or what would be required for this to be the case, and similarly to overcome the lack of scientific clarity on the effectiveness of vocational rehabilitation (Waddel *et al.*, 2008).

Learning from programmes developed for muscular-skeletal conditions

With the limited knowledge about RTW success factors and the use and impact of active labour market programmes for people with mental disorder, looking at the transferability of lessons from interventions for people with other health conditions, especially muscular-skeletal disorders can be useful. Underpinning this argument, Waddel *et al.* (2008) conclude that mental health problems today show lots of similarities with low-back pain in the 1980s:

> "*… an exponential increase in sickness absence and long-term incapacity despite no good evidence of significant change in the prevalence of mental illness; a lack of distinction between non-specific psychological symptoms and diagnosable mental illness; a debate over the provision of more healthcare set against concerns about over-medicalisation; and a focus on purely clinical rather than work outcomes.*"

Briand *et al.* (2007) probably provide the best attempt to identify the transferability to people with mental disorder of interventions originally developed for muscular-skeletal conditions. For the latter, specific work rehabilitation programmes have been developed including psychological and occupational factors, work environment and organisation factors and factors related to the involvement of the various stakeholders in the rehabilitation process. They conclude that the Therapeutic Return to Work (TRtW) programme developed for muscular-skeletal conditions (*e.g.* Durand and Loisiel, 2001) is highly relevant for workers with mental health problems.

The TRtW programme is designed for workers with longer-term absences of several months, with intervention delivered on a daily basis typically for 8-12 weeks (with structured weekly tasks). The team providing support is interdisciplinary and includes occupational therapists, psychologists, work rehabilitation physicians and a clinical co-ordinator – pretty much the same group that would be needed to facilitate a successful, sustainable return to work for people with mental disorder. The TRtW programme consists of four basic components, or steps (Briand *et al.*, 2007):

- First, the evaluation of the work disability situation through a Work Disability Diagnostic Interview, with the aim to identify levers and obstacles to return to work.
- Second, steps to increase the readiness to commit to the return to work – including reducing fears about the return to work, increasing confidence, reactivating work habits and, where possible, reactivating the employment relationship.
- Third, steps to support active commitment to return to work – by maintaining the readiness to commit to the return-to-work process, fostering a realistic perception of the situation and adjusting expectations, creating a context conducive to return to work, and supporting the individual as he returns to his role as worker.
- Finally, steps to maintain work – including assuring a safe work site, increasing the worker's self-regulation skills and reducing work-related stress and anxiety.

These steps are directed mostly at variables not related to the initial muscular-skeletal injury and, therefore, largely applicable to the RTW process of workers with mental disorders. Some steps will be even more important, including the integration of work as an instrument in the reconstruction of health and work capacity; specific work accommodations and attention to working conditions. The TRtW programme combines a gradual return to work with a clinical-therapeutic approach thus being a promising

complement to a flexible part-time sick leave scheme which by itself and without the involvement of all stakeholders is not good enough to ensure a progressive return to work.

Learning from supported employment evaluations

There is probably no other vocational intervention as well defined, developed and evaluated as *supported employment*, an evidence-based practice aimed at helping people with severe disabilities as much as possible into the regular labour market (see also Chapter 3), while supporting them on an ongoing basis. In a Meta analysis of 11 randomised controlled trials in Australia, Canada and the United States, supported employment was shown to increase the likelihood of open employment (on average, 61% compared with 23% with more traditional interventions); to reduce the share only finding part-time work (on average, 44% working more than 20 hours compared with 14% otherwise); to shorten the time until job placement; and to increase the duration of employment (Bond *et al*., 2008).

Because it is a resource and staff-intensive service, however, even in countries with long experience with this model (like the United States) the number of people served in this way is very small. Advocates of evidence-based supported employment claim that more frequent provision of such intervention could reduce the growing disability rates and enable those already disabled to contribute to the workforce and their own welfare, at little or no cost to the government (Drake *et al*., 2009). Evidence on the cost-effectiveness on a longer-term basis, however, is limited – most available evidence is about short-term cost per client-year (*e.g*. Salkever, 2011) – as is, more generally, evidence on the long-term sustainability of initial employment outcomes.

Most importantly, supported employment currently targets a relatively small group, *i.e*. people with severe disability sometimes including people with a severe mental disorder but more often those with severe intellectual disabilities. The key element of the supported employment model is the co-operation of employment specialists and mental health workers aimed at helping clients identify what kind of work they would like to do, find a job as quickly as possible, and succeed on the job with support for as long as needed, or move to another job as appropriate. All this is potentially highly relevant for many people with a mental disorder, including mild and moderate disorders, who struggle in keeping or finding employment.

Challenges for providers of services

In applying lessons learned from programme evaluations, randomised controlled trials and schemes originally designed for other target groups, it is important to keep in mind the specific challenges in engaging with and delivering services to people with mental illness. The heterogeneity of this target group in terms of symptoms, severity, complexity and disability is immense and there is certainly no typical case. However, there are a number of challenges potentially relevant for many of those people largely falling under the headings "interaction" and "identification" (see Asher, 2010).

Interaction challenges include difficulties of some clients with mental illness with certain methods of communication and compliance, which can be threatening and distressing; difficulties in understanding rights, entitlements and responsibilities which can lead to non-claiming of benefits or services; the inability of clients to provide the information necessary for a claim or service eligibility; and the unwillingness of potential clients to accept their problems and disability.

Identification challenges relate to the proper identification of support needs in view of the fact that many clients are partly unaware of their problems and/or not ready to fully disclose them; a lack of knowledge about what the most appropriate supports are for whom, and at what stage, including knowledge about related servicing needs from other agencies; issues of information sharing and co-operation between different systems and agencies; but also issues of ineligibility to certain supports or payments because of the episodic nature of some mental illnesses.

These aspects need to be better understood and addressed by labour market institutions and benefit systems engaging with people with mental illness and striving to improve the effectiveness of their employment services for this group.

4.6. Conclusion: towards co-ordinated action of the social security system

Available evidence suggests that work is the best way for people with mental ill-health to avoid falling into poverty. But when losing a job or unable to (re)enter the labour market, people will rely on the public to provide an adequate transfer income. Often this will be a disability benefit. However, benefits other than disability benefit are equally important as a source of income for people with a severe mental disorder as disability benefit, and for those with a common mental disorder even more important than disability benefit. This has a range of policy implications, the most important being that policy focusing on sickness and disability benefit systems only will not deliver. It is critical for these other systems – unemployment and social assistance schemes in particular – to identify people with mental disorders and their support needs.

Even so, in most countries very little is known about the mental health status of the unemployed and social assistance clients. This lack of knowledge creates a big challenge for caseworkers in the employment offices, who are confronted with the task of providing the right service to the large number of jobseekers with a mental disorder. Most countries rely on the caseworker to identify those people and their needs, even though caseworkers tend to lack the necessary mental health expertise.

All this is even more important in view of the finding that early employment support is doubly effective. A return to work is far more likely if intervention comes at the very first absence for reasons of mental ill-health and involves the workplace and the employer; and the earlier support is given, the more likely it is that higher severity of mental illness and co-morbidity with somatic or other mental illness can be avoided – two factors making labour market integration particularly difficult. At this stage, we only know that disability benefit claimants with a mental disorder are not necessarily less likely to receive employment supports, but they seem to be less likely to benefit from these measures. This would reiterate the finding that support is coming too late and, as the limited positive impact of part-time sick leave suggests, not sufficiently comprehensive and encompassing and lacking interdisciplinary collaboration.

When it comes to the disability benefit system, also more can be done in the assessment phase and the process of needs identification to attend to the special characteristics of mental disorders. The very high proportion of new disability benefit claims for mental health reasons without a comparable increase in the prevalence of mental disorders shows the importance of a better understanding of these problems. Increasingly, for people with complex and co-morbid conditions (a group that has always existed) the mental health component is moving centre stage.

At the same time, the move towards a larger share of claims for mental health reasons partly seems to result from a "disabling" interpretation of mental illness: those people are more often granted a full benefit; temporary entitlements are not reassessed properly; their claims are less frequently denied; and once on benefit they are even less likely than others to ever move off benefits. Partly this is because claimants with mental disorders are further away from the labour market at the time of their claim – in turn again suggesting that policy action is coming too late and opportunities for earlier intervention (in other benefit schemes) have been missed. This is confirmed by the large body of literature indicating the strong impact mental disorders – even at sub-clinical level – have on the likelihood of a disability benefit claim later in life. This causation can only be broken with a big change in policy aimed at timely and well-co-ordinated interventions at various stages in the lifecycle.

Notes

1. With the recent economic downturn, the situation has temporarily changed in some countries in which unemployment and long-term unemployment has increased sharply. It is too early to tell what the longer-term impact of this will be on disability beneficiary numbers. In some countries, including for example the US, there are signs of a consequential structural increase in the disability beneficiary rate. In others, however, where the trend in this rate was recently downwards as a consequence of structural reform of the disability benefit scheme (*e.g.* the Netherlands, Sweden, Switzerland, the United Kingdom), this trend decline has continued despite rising unemployment.
2. Other demographic, economic and policy factors explaining changes in disability claim numbers more generally – such as increases in the legal retirement age of women, changes to the disability benefit system itself or, more generally, the ageing of the post-war baby-boom cohorts – could also have an impact on (the share of) benefit grants attributable to mental disorders but little is known about this.
3. More detailed data for Austria indicate that gender differences in changes observed in the past few years can also be very significant: the number of cases with affective, neurotic and personality disorders increased sharply in men and women, but the increase was twice as large in women and for neurotic disorders, even three times as large.
4. Administratively, Norway was running its partial disability benefit, which was introduced in 2004, as a separate benefit scheme, before this new benefit was merged with the medical and the vocational rehabilitation benefit, two other intermediate and time-limited benefits. Data in Figure 4.7 refer to the total number of recipients. Among *new* claims, the share of temporary grants was much higher.
5. Norwegian administrative records back to 1977, though not fully comparable and with weaknesses in the classification codes, seem to confirm these conclusions and also indicate that mental disorders might have been a major cause for disability benefit claims already back in the late 1970s.
6. The possibility in Sweden to receive sickness benefit without any time limit was abolished recently. Since mid-2008, sickness benefits can be received for up to 2.5 years (with exceptions for serious diagnoses and work injuries). After the first six months, work capacity is assessed against *all* types of jobs on the labour market (again, with some exceptions) and after one year the benefit is somewhat reduced (for more details see also OECD, 2009). Consequently, the share of long-term claims is now falling.
7. Evidence for other countries confirms these levels. The share of sick days due to mental disorders is 23% in the Netherlands (Roelen *et al.*, 2009) and 26% in the United Kingdom (Wynne-Jones *et al.*, 2009).
8. Interpreting results based on SHARE one always has to keep in mind that this is a survey covering the population aged 50 and over only. However, since the majority of disability benefit recipients are in this age group, the results are highly relevant.

9. The difference between mental health and disability status is explained in the introduction. Adding disability status into the model reduces the size of the marginal effects of mental health status by half.
10. To measure the impact of mental health in the full model, an alternative model was used which only distinguishes two statuses (no mental disorder *versus* severe/moderate disorder). This "abridged" model shows that mental health remains a key determinant although not when using three statuses.
11. Transitions onto disability benefit are modelled for the period 2004-06, using the first two waves of SHARE. The third wave in 2008 has collected respondents' retrospective life and work histories.
12. This literature is predominantly published in medical or epidemiological journals and refers almost exclusively to the Nordic countries, due to the unique possibility in these countries to link population surveys with social insurance records (on the basis of a person-specific identifier).
13. Knudsen *et al.* (2010) conclude that because of the large number of people in the sub-threshold group, addressing sub-threshold conditions is particularly important. According to their findings, eliminating sub-threshold conditions could prevent 12% of all disability benefit awards, compared to 17% that could be prevented were all moderate and severe above-threshold mental disorders eliminated.
14. Ahola *et al.* (2009) find that over half of those with a severe burnout also have a mental disorder, typically depressive disorder, and around one in four of those with mild burnout, compared to one in ten in the sample population (aged 30-60 years) with no burnout.
15. Norway is an exception in so far as far more people with moderate mental disorder receive a disability benefit than in other countries, and consequently fewer of them are found on other benefits.
16. Changes generally refer to the decade until 2007/08, *i.e.* before the recent economic downturn.
17. Labour market programmes for people with disability are organised in different ways in different countries. Australia and the United Kingdom, for example, have special disability employment services which are run in parallel to regular employment services targeted at the unemployed. Belgium and Norway have several schemes offered by specialised providers targeted to people with disability. In some countries, including Denmark, the public employment service or the corresponding authority is responsible for all jobseekers and beneficiaries. Data in Figure 4.15 refer to the corresponding national context.
18. This attention is reflected in particular mental health and work strategies in the three countries, the Norwegian *National Strategy for Work and Mental Health*, the Council of Australian Governments *National Action Plan on Mental Health* and a series of smaller strategies in Denmark.
19. The Job Capacity Account ended in 2010. It was replaced by similar supporting interventions funded from the Employment Pathway Fund. Eligibility for such support is determined by the Employment Services Assessment or the Job Capacity Assessment.
20. Recent changes in the United Kingsom, as of April 2010, by which a fit-note replaced the used sick-note represent a crucial step into this direction, aiming to reframe the discussion between doctor and patient and between employee and employer to facilitate a faster return to work (Black, 2008).

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Chapter 5

Education Systems and the Transition to Employment

This chapter addresses a number of key issues concerning the mental health of youth. The early onset of mental disorders – with a median age of onset across all types of illnesses of around 14 years – highlights the importance of prevention and early intervention to avoid that mental health problems affect the development and education of children and adolescents, and consequently their social and professional life as adults. The chapter discusses the potential of the education system in promoting good mental health and preventing mental ill-health, and the challenges for support systems that surround the transition from adolescence to adulthood and into employment. Lack of awareness and non-disclosure are key challenges for better intervention and improved rates of treatment at an early age. Another challenge in many countries is the large and rising flow of young adults onto the disability system, without or with only limited work experience. This underlines the importance of policy intervention that is multidisciplinary and well-co-ordinated across the education, health and labour market sectors.

5.1. Introduction: addressing the early onset of mental disorders

A comprehensive approach to dealing with mental health issues needs to address the early onset of mental disorders in the lifecycle. Childhood and adolescence are crucial periods for the promotion of psychologically healthy development and the prevention of mental disorders. An extensive literature shows that both biological factors and adverse psychosocial experiences during childhood influence child and youth mental health (see Box 5.1).

The age 15-24 is the period of life when most people complete their academic career, establish themselves in the job market and perhaps start a family. Since mental health problems might reduce the likelihood of these crucial transitions being completed successfully, mental disorders in young people may have substantial and long-lasting effects on their economic and social outcomes. Without proper intervention, mental health problems can negatively affect the development and education of children and adolescents, and consequently their social and professional life as adults.

This chapter addresses a number of key issues concerning the mental health of youth. First, it discusses the prevalence of mental disorders in children and youth. Second, it examines the potential of the education system in promoting good mental health and preventing mental ill-health. Third, it discusses the challenges for the support systems

Box 5.1. **Risk and protective factors influencing mental health**

A range of risk and protective factors are known to influence the mental health of children and adolescents. These factors can be individual, contextual (family, school, community), or the interaction between individual and contextual factors. Risk factors increase the likelihood that a disorder will develop and can exacerbate the burden of existing disorders, while protective factors reduce the likelihood of mental health problems by reducing the exposure to risk or by mitigating the potentially negative effects of risk factors (WHO, 2004). It is important to note, however, that while the available evidence shows that these risk and protective factors are associated with mental health outcomes (*e.g.* Coie *et al.*, 1993; Ingram and Price, 2000), the strength of the association and the level of evidence for causation varies (*e.g.* Platel *et al.*, 2007). Also, it is not the mere presence of risk and protective factors, but their interaction and the accumulation over time that affects the development of mental health problems.

Risk factors include: individual characteristics (such as physical health problems, special education needs); family characteristics and functioning (such as lone parenthood, changes in family structure, poor educational levels, lack of employment, low income, psychological distress in mothers); school context (such as bullying, failure to achieve academically); stressful life events and situations (such as physical, sexual and emotional abuse and neglect, migration); and community and cultural factors (such as lack of social cohesion, over-crowding, crime and violence).

Box 5.1. **Risk and protective factors influencing mental health** *(cont.)*

Protective factors include: individual factors (such as adequate nutrition, problem-solving skills, social competences, good physical health); family factors (such as family harmony, good communication, consistent parenting); school context (such as a positive school environment, sense of belonging, school norms against violence); life events and situations (such as involvement with other person (partner/mentor), economic security); and community and cultural factors (such as social networks, involvement in community groups).

Most of the protective and risk factors for mental health lie outside the main ambit of mental health services and in the social, economic and cultural sphere. Promotion, prevention and early intervention for mental health, thus, need to take place beyond and outside of the (mental) health sector. On the other hand, effective interventions will have positive outcomes beyond the mental health domain.

The OECD Centre for Educational Research and Innovation (CERI) launched the Education and Social Progress (ESP) project to identify skills that matter for social outcomes (including mental health) and how these skills can be improved. The project will exploit a variety of longitudinal datasets in OECD countries to address, among others, which cognitive and non-cognitive skills improve mental health conditions, and which learning contexts (*e.g.* family, school and the community) best develop these skills.

that surround the transition from adolescence to adulthood in dealing with mental health issues. The chapter concludes that policy intervention needs to be multi-disciplinary and well co-ordinated across the education, health and labour market sectors.

5.2. Mental health problems among children and youth

Evidence for the United States shows that 50% of mental disorders (all types of disorders taken together) have their onset by the age of 14; 75% have developed by the age of 24 (Table 5.1). The median age of onset is much earlier for anxiety and impulse-control disorders (11 years) than for substance-use disorders (20 years) and mood disorders (30 years). In addition, the ages of onset for most disorders likely to persist into adult life fall within a relatively narrow time frame, for instance between 6 and 21 years for anxiety disorders, and between 7 and 15 years for impulse-control disorders.

Table 5.1. **Most mental disorders typically have their onset in childhood or adolescence**

Prevalence and age of onset of mental disorders, United States, 2001-03

	Prevalence (%)			Median age of onset	Age of onset distribution (25th-75th percentile)
	Age 18-29	Age 30-44	Age 45-59	*Years*	
Anxiety disorder	30	35	31	11	6-21
Mood disorder	21	25	23	30	18-43
Impulse-control disorder	27	23	–	11	7-15
Substance use disorder	17	18	15	20	18-27
Any mental disorder	**22**	**23**	**16**	**14**	**7-24**

– Not assessed for this age category.

Source: Based on Kessler *et al.* (2005), "Lifetime Prevalence and Age-of-Onset Distributions of DSM-IV Disorders in the National Comorbidity Survey Replication".

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Prevalence of mental disorders among children increases with age

Little or no internationally comparable data on mental health among children are available. The Health Behaviour in School-aged Children (HBSC) survey conducted in co-operation with the WHO includes a non-clinical measure of mental health, reflecting both psychological and somatic health, which is found to be sensitive to the presence of psychosomatic disorders and psychological distress.[1]

Data for selected OECD countries suggest that 20-40% of children aged 11 to 15 have multiple recurrent psychosomatic health complaints, although in most countries the prevalence has slightly decreased between 2001/02 to 2005/06 – except Switzerland and the United States (Figure 5.1). Recurrent complaints are more prevalent among girls than boys (Panel A) and increase with age, although only markedly in a few countries (Panel B).

In addition, psychosomatic well-being is lower among children in poorer families than among children in richer families (Figure 5.2) – with differences typically around 10-15 percentage points. As family income can be difficult to collect from children because they do not know or are not willing to reveal such information, a family's socioeconomic status is estimated by the family affluence scale (FAS) which is based on a set of items reflecting family expenditure and consumption.[2] Children growing up in disadvantaged circumstances typically face a range of risk factors that children from more affluent backgrounds are not confronted with, or less so, such as major financial worries, an unemployed parent, over-crowding, etc. (see also Box 5.1). These stressors and challenges can negatively affect their emotional development and well-being and lead to social-emotional-behavioural problems (*e.g.* difficulties in being self-confident, in concentrating, or in containing aggression).

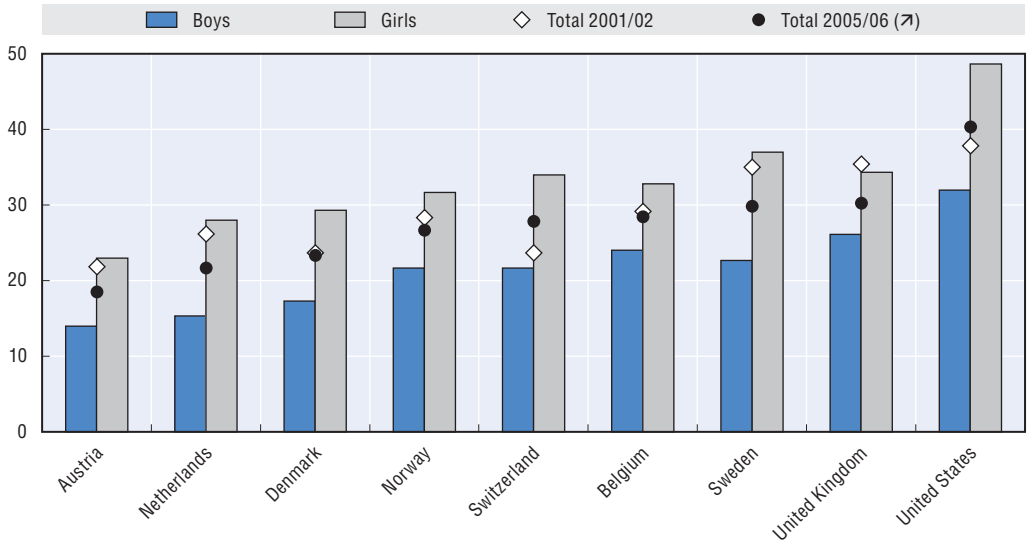
Mental disorders are more common among youth than among adults

Around one in four young people aged 15-24 are identified as having a mental disorder, ranging from 15% in Austria to 28% in Norway (Figure 5.3).[3] The ratios of the prevalence in the youth population (aged 15-24) over the prevalence in the total population (aged 15-64) presented in Figure 5.4 show that overall young people more often present mental health problems than the total population in most countries – with the exception of Austria, the Netherlands and Switzerland. This pattern is very different from the age gradient of *disability*, which tends to increase sharply with age (OECD, 2010a). The relative prevalence of moderate mental health problems is, however, very different from the relative prevalence of severe mental health problems: while both are more frequent among youth than among adults in the Nordic countries, the opposite is true in Austria, the Netherlands and Switzerland. In the four other countries, moderate and severe mental health problems show an opposite relative prevalence. Lastly, as was found in other studies (*e.g.* Platel *et al.*, 2007), there is no clear trend of mental ill-health prevalence among young people over time (Figure 5.3).

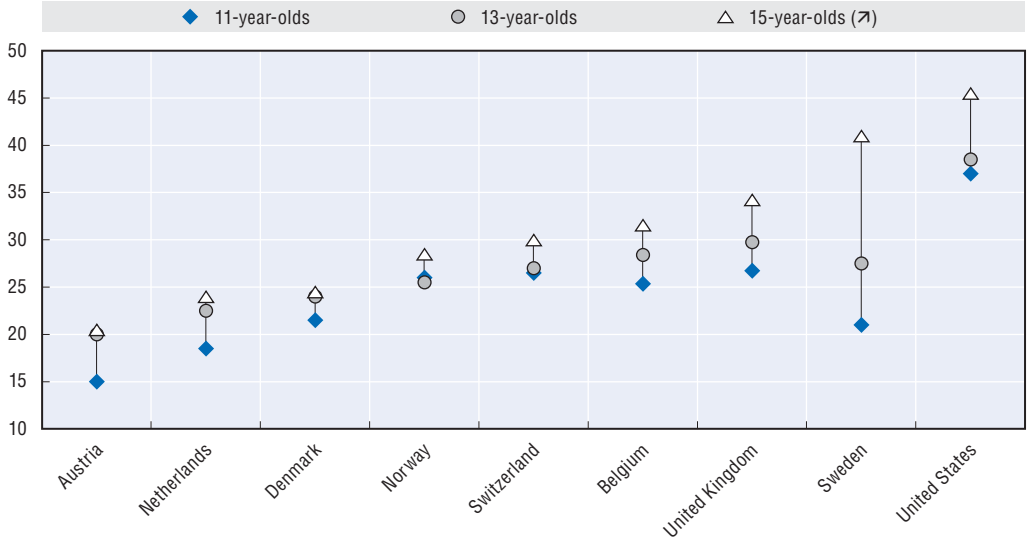
The fact that youth tend to have moderate rather than severe mental disorders in most countries (with the exception of the Nordic countries) is related to the fact that disorders are not as chronic at this age, due to the shorter period since onset. This is an opportunity and also suggests that intervention at such early age could contribute to preventing moderate disorders from developing into more severe ones.

Figure 5.1. **Psychosomatic complaints among children are higher for girls and increase with age**

Panel A. Children aged 11, 13 and 15 years reporting multiple recurrent health complaints (in percentage), by gender, 2001/02 and 2005/06



Panel B. Children aged 11, 13 and 15 years reporting multiple recurrent health complaints (in percentage), by age, 2005/06



Source: Health Behaviour in School-aged Children Survey (HBSC).

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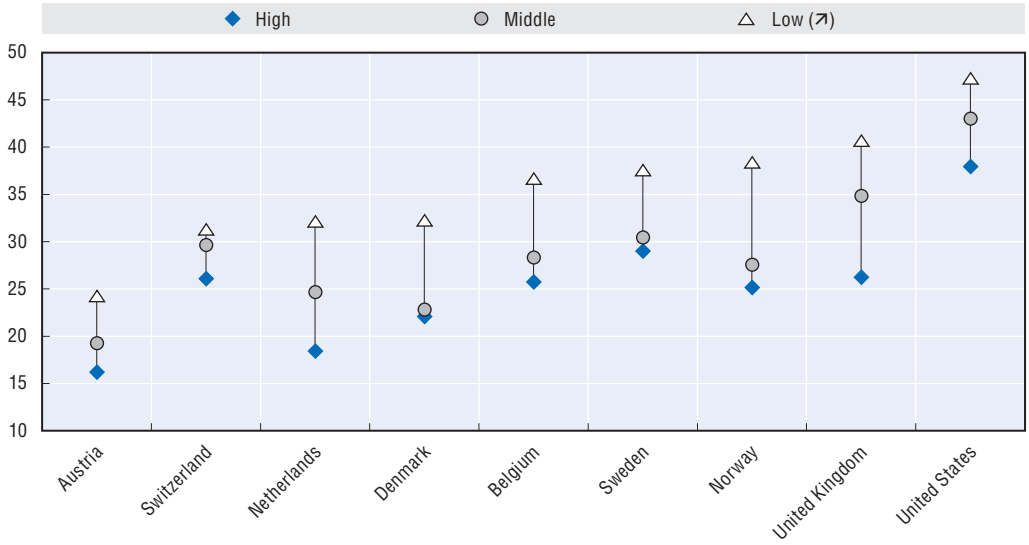
Figure 5.2. **Psychosomatic complaints among children decrease with family affluence**

School-aged children reporting multiple recurrent health complaints, by family affluence,[a] 2005/06



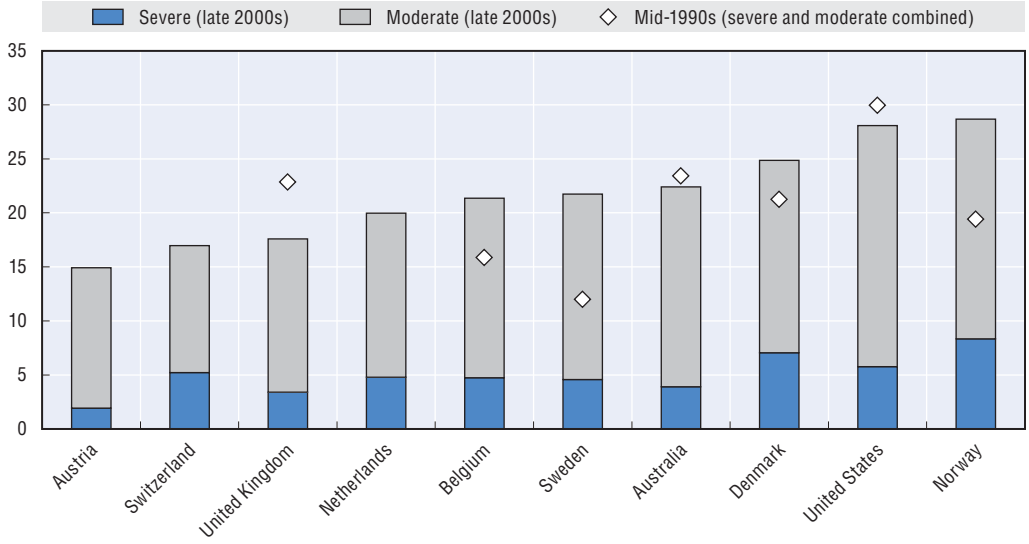
a) The family affluence scale is based on a composite score of four items (family ownership of cars and computers, having own bedroom and number of family holidays) and acts as a proxy for family income.

Source: Health Behaviour in School-aged Children Survey (HBSC).

StatLink http://dx.doi.org/10.1787/888932534273

Figure 5.3. **Around one in four young people have a mental disorder**

People aged 15-24 with a mental disorder as a percentage of the total youth population, late 2000s and mid-1990s

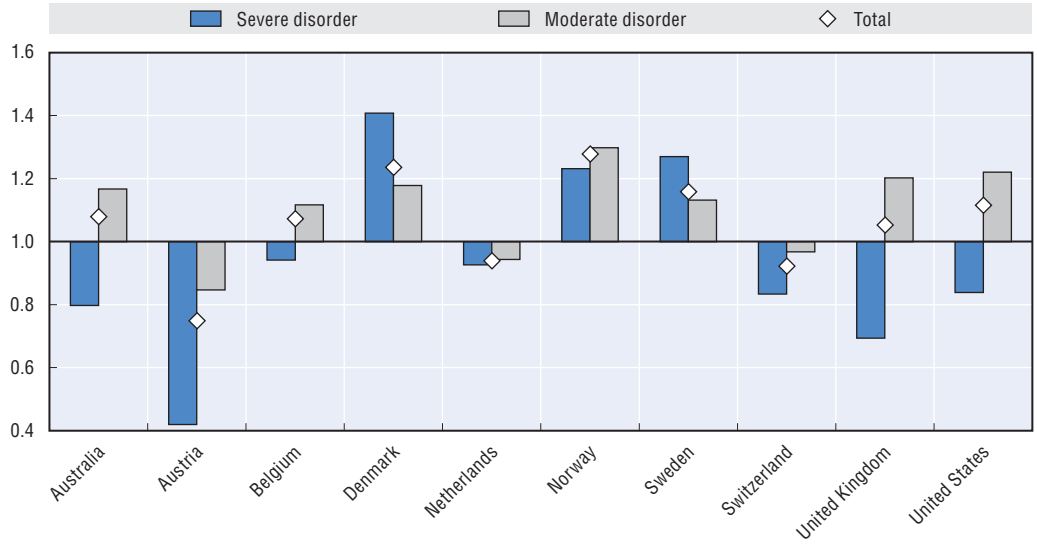


Source: National health surveys (see Figure 1.3).

StatLink http://dx.doi.org/10.1787/888932534292

Figure 5.4. **The prevalence of mental disorders is higher among youth than in the total population**

Ratio of the prevalence in the youth population (aged 15-24) over the total population (aged 15-64), late 2000s



Source: National health surveys (see Figure 1.3).

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5.3. The education system

Schools may play an important role for mental health promotion and preventive intervention among children and adolescents. With children spending a large portion of their time in school, teachers have direct day-to-day contact with their pupils and, thus, potentially a good knowledge of their problems. They can also reach their parents relatively easily. Besides knowledge and professional skills, children also develop their identity, interpersonal relationships and other social and emotional skills in school. The school is therefore an ideal place to identify risk factors, to build protective factors that establish resilience, and to support vulnerable children and adolescents, either at school itself or by referring them to appropriate services outside the school system.

Empirical evidence suggests that providing mental health promotion and mental disorder prevention to children and adolescents can be effective in improving their mental health outcomes, even though the practical implementation of such programmes varies greatly (WHO, 2004). Programmes to promote mental health or to prevent mental disorder can be universal to promote the mental well-being of *all* children and adolescents, or targeted at high *risk* groups – like children with social-emotional-behavioural problems – or those who are suffering or recovering from mental health problems.

An effective mental health system requires a combination of both universal and targeted intervention programmes (WHO, 2005). Targeted interventions have the advantage of investing limited resources in those with the greatest needs, whereas universal services avoid stigmatisation and discrimination of risk groups. Through focusing on a good learning environment for all children and adolescents, schools can promote health, well-being and learning, and prevent bullying and harmful behaviour, which are important factors in promoting mental health. Universal services also present an opportunity to identify emerging risks and recommend targeted interventions. In

addition, research has shown that prevention, promotion and intervention programmes that focus simultaneously on different levels, such as changing the school environment as well as improving students' individual skills and involving parents, tend to be more effective than those that intervene solely on one level (Domitrovich *et al.*, 2005).

However, the education system is facing a number of important challenges in terms of building mental health promotion and disorder-prevention programmes. Insufficiency of support services coupled with a reluctance of young people to seek help can mean that children and adolescents will not get the help they need. Added to this is a lack of tools to identify those at risk early enough. In turn, many of these young people will leave the education system prematurely, with long-term consequences on their ability to realise their employment potential.

School support services are often insufficient to meet youths' needs

While in the past school-based mental health services were primarily provided to students in special education systems, many countries have recently expanded their school mental health and social services to students in all types of schools. School support services now include alcohol and drug-use prevention and treatment, case management, individual and group counselling, and referrals to community mental health systems and providers.

In addition, most countries try to avoid further marginalisation of children with mental (and physical) disabilities by keeping them in the regular school system, while providing specialised support services (OECD, 2007).[4] Some schools have also sought to influence non-disabled children to hold more accepting attitudes towards disabled children (Gray, 2002). Only a very small number of children and adolescents with severe mental health problems may need to be sent to special schools if their learning and development cannot be supported within the mainstream school system.[5] Parents typically have the right to decide in which setting their child is educated, even though many safeguards and barriers are in place to discourage the special education system as a ready alternative. Children and adolescent enrolled in a special education programme in a regular school can apply for teacher aide time, medical intervention support or individual learning plans, while parents, teachers and school staff receive advice, support and training about mental health problems (due to the lack of funding – see below – the reality is often different). Some schools offer special classes within the mainstream school to provide more targeted support according to the needs of the students.

However, despite this welcome shift towards the greater provision of mental health services within the regular school system, their services are often insufficient to meet the needs of young people. Especially the connection with other community systems remains a significant challenge in many countries. Yet, effective collaboration between educators, primary health care providers and mental health professionals is crucial for the implementation of high-quality mental health services for children and adolescents (Stephan *et al.*, 2007). Other barriers include insufficient funding leading to very high caseloads for counsellors, social workers and school psychologists, a general lack of training for teachers and school staff, the difficulty of co-ordinating a full continuum of prevention and intervention services, and limited evaluation of outcomes of services to improve programmes (Weist *et al.*, 2007). For instance, funding may be temporary and volatile rather than coming from stable government allocations. Even in countries with an identifiable budget for child and adolescent mental health services, there is no parity with the resources provided for adult mental health services (Belfer, 2008).

Young people are reluctant to seek professional help

A wide range of studies, covering different countries, illustrate the reluctance of young people to seek professional help for their mental health problems (*e.g.* Rickwood *et al.*, 2007). While not all adolescents with mental health problems are in need of treatment, help-seeking is also very low among those with the most severe symptoms (Zachrisson *et al.*, 2006). Even when children are identified as being "at-risk" by a mental health screening test, many families do not seek help (Hacker *et al.*, 2006).

A major barrier to help-seeking is a lack of information and knowledge about mental health problems, the associated risks, causes and effective treatments; and about how to seek mental health information and services (Kelly *et al.*, 2007). As friends and family are often consulted first, they play a significant role in early recognition and appropriate help-seeking (Zachrisson *et al.*, 2006). Other barriers include confidentiality concerns, stigma, poor service accessibility, negative attitudes towards mental health services, and in some countries a lack of funding (see Anderson and Lowen, 2010, for an overview).

Increasingly, countries are trying to raise the awareness for mental health issues in children and youth through campaigns, such as *MindMatters* in Australia and Switzerland and *Mental Health Awareness in Action* in the United Kingdom. Several countries, such as Denmark, have been developing courses to train teachers in recognising mental health problems. In Austria, youth workers in youth centres and youth organisations are increasingly being trained to distinguish signs of mental health problems from "normal" adolescence problems. *KidsMatter Primary* in Australia stresses the role of parents and includes advice on parenting as a key component of the programme.

While schools can provide an easily accessible environment where students know and often trust the staff (their teachers but also others), youth organisations and other community centres have the potential to reach youth who do not attend school. Also alternative and innovative access points such as arts, music, the Internet, and telephone services have been emerging in many countries and can be effective at engaging hard-to-reach youth and alleviating confidentiality concerns (Anderson and Lowen, 2010).

Screening could contribute to the early identification of risk groups

Screening for mental health problems has some potential to contribute to the early identification of risk groups and, if properly linked to preventive intervention services, to reduce the propensity for future problems (Albers *et al.*, 2007). Children identified as at risk could then be referred for preventive intervention programmes before their problems worsen and negatively affect their development and success in school. Very few countries have introduced screening for mental health problems among children, not the least because of the fear of early labelling and stigmatisation. Opponents to screening procedures argue that the likelihood of false positive test results is large, potentially causing undue stress or stigmatisation for children and their parents. Besides, screening tests typically examine deficits and problems, but do not look at children's positive skills and protective factors that may prevent the development of a mental health disorder (Feeney-Kettler *et al.*, 2010).

It should be kept in mind, however, that screening does not diagnose children; it only determines the risk status of children for future problems and could, thus, be seen as a step towards a more complete evaluation by a mental health expert. Only the small subgroup of children who screen positive would be referred for a more costly expert diagnosis, hereby alleviating the burden on mental health specialists and permitting more timely and

specialised programmes for children in need (Essex *et al.*, 2009). Screening, as currently done in the United States on a voluntary basis (Weist *et al.*, 2007) could increase the awareness of mental health in society and reduce the stigma and fear related to mental health treatment, thereby increasing the probability of timely identification of children with mental health needs.

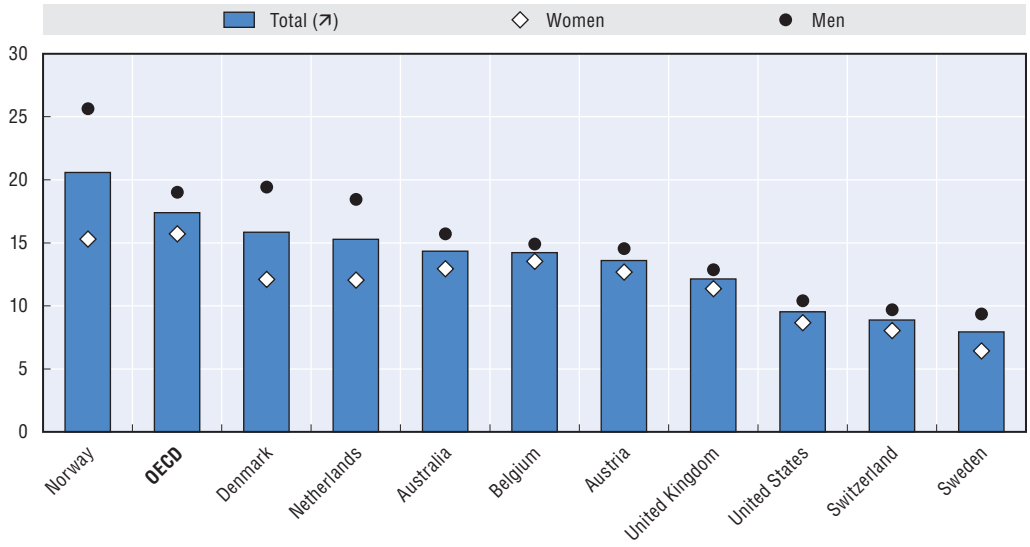
Unmet needs for services may lead to school drop-out

Unmet needs for services of youth with mental health problems may exacerbate their problems and eventually lead to school drop-out. For instance, surveys undertaken by Statistics Sweden (2007) and the Swedish National Agency for Education (2007) indicate that mental illness is among the most important reasons for leaving school early, as well as other mental health aspects, such as bullying, disaffection with school, lack of engagement and participation, school stress, and lack of help and special support from teachers. In addition, while many of the young people who drop out of school eventually earn a diploma as they mature, young people with emotional and behavioural disabilities are at a particularly high risk of never earning a high school credential (Wyckoff *et al.*, 2008).

Across the OECD, around 17% (2008) of all youth leave school prematurely,[6] with nine of the ten countries covered in this report found below that average (Figure 5.5).[7] In all countries, early school leaving is slightly higher for young men than for women. Unfortunately, no systematic information is available on the causes of early school-leaving or the role of mental disorder in explaining (part of) the phenomenon. Such information would be essential to collect.

Figure 5.5. **Across the OECD, roughly one in six youth leaves the school system prematurely**

Percentages of youth aged 20-24 who are not in education and without upper secondary education diploma, 2008



Source: OECD (2010b), *Off to a Good Start? Jobs for Youth.*

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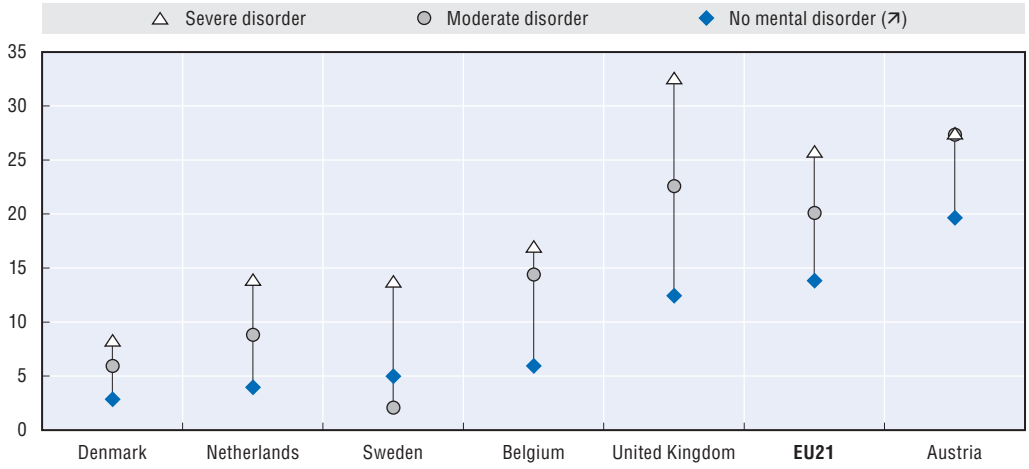
Eurobarometer data contain information on the age when people stopped full-time education – a proxy for premature school-leaving – and their mental health status. Significantly more people with severe and moderate mental disorders have left full-time

education before the age of 15 (Figure 5.6): 26% and 20%, respectively, on average in the EU21, compared with 14% for the population without mental health problems. In Austria, Belgium and Denmark, those with a moderate mental disorder seem to have left school prematurely as often as those with a severe disordre, while in Sweden those with moderate disorders are more like those with no mental disorders.

Figure 5.6. **People with mental health problems are more likely to stop full-time education early**

Share of people who stopped full-time education before age 15, by severity of mental disorder, 2010



Source: OECD compilation based on Eurobarometer 2010.

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Similarly, longitudinal data for Australia and the United States show that around one-fourth of youth who had a severe or moderate mental disorder at age 18 had left high school without a diploma by age 20. In Australia, youth with severe and moderate mental health problems both have similarly poor education outcomes, while in the United States severely mental-ill youth fare worse than those with a moderate mental disorder, who, in turn, have education outcomes which are significantly worse than those for youth without mental health problems (Table 5.2).[8]

Table 5.2. **One in four youth with mental health problems leaves high school without a diploma**

Completion rates among youth aged 20 by degree of mental disorder at age 18 (in percentage), Australia and the United States

	Australia (2006/09)			United States (2002/05)		
	Severe disorder	Moderate disorder	No mental disorder	Severe disorder	Moderate disorder	No mental disorder
Completed high school	73.4	74.7	83.7	69.0	78.5	84.0
Left without completing high school	26.6	25.0	16.0	29.8	20.7	14.8
Still in high school	0.0	0.3	0.2	1.2	0.8	1.1

Note: Weighted population estimates based on 2 340 youth in Australia and 3 289 youth in the United States.
Source: OECD estimates based on Youth in Focus (Australia) and the National Longitudinal Survey of Youth 1997 (United States).

StatLink http://dx.doi.org/10.1787/888932534862

A limited number of studies suggest a causal effect of education on mental health conditions. For example, Chevalier and Feinstein (2006) show that having a secondary education qualification reduces the risk of adult depression by 5 to 7 percentage points. This effect is strongest for women and is present even after controlling for work and family characteristics. Conti, *et al.* (2010) suggest that approximately half of the correlation between educational attainment and depression is due to causal effects. Again, the effect is stronger for women.

Policy makers have recognised the importance of completing high school and have put in place a variety of prevention and intervention programmes to minimise the drop-out rate (OECD, 2010b). For instance, *Check and Connect* in the United States is a programme developed to encourage youth at high risk of dropping out to remain engaged in school and stresses building relationships between the school staff, student and family. *Youth Connections* in Australia provides a safety net for young people who have disengaged from education, or are at risk of disengaging, through the provision of individually tailored case management and support to help them to reconnect with education or training. Finally, in many countries, young people who dropped out of school are a priority group at the public employment services and receive intensive guidance and support in the form of second chance studies, work experience through internships, etc. (see below).

However, limited attention has been devoted to mental health problems among school drop-outs. Youth workers are typically not trained to recognise mental health problems or may not be aware of treatments and interventions targeted at mental illnesses, such as cognitive-behavioural interventions.[9] Yet, improved identification and targeted interventions in close co-operation with mental health professionals could contribute to an increase in school completion rates (Goulding *et al.*, 2010).

5.4. Transition from adolescence to adulthood

Moving from adolescence to adulthood often implies leaving home to live independently, going to university or work, and possibly starting a family. These are all challenging aspects of life, but for young people with mental health issues the transition to adulthood is made more difficult by the complexity of both their individual conditions and the mental health system. Young adulthood is also a period of heightened risk for the onset of new disorders, as well as for the development of co-occurring disorders among those with pre-existing mental health problems.

Youth with mental disorders who cannot make a successful transition may impose significant costs to the society – from benefit dependency to criminal activity – while contributing little to the economy. Among this group, young women may also face the additional challenge of raising children and many have difficulties providing adequate care. Their children experience numerous problems and are at increased risk of developing their own mental health problems, hereby creating a vicious circle. Supporting young people in their transition to adulthood is thus a critical step in averting the path of lifelong exclusion from the labour market and society.

This section first discusses some evidence on the transition of youth with a mental disorder into higher education and employment, drawing on longitudinal data for a few countries, before moving onto identifying the main obstacles to successfully managing these transitions stemming from the health system, the education system, the labour

market institutions and the disability benefit system. The section concludes that there is a strong need for co-ordinated supports during the critical transition into adulthood.

Evidence on higher education and labour market participation

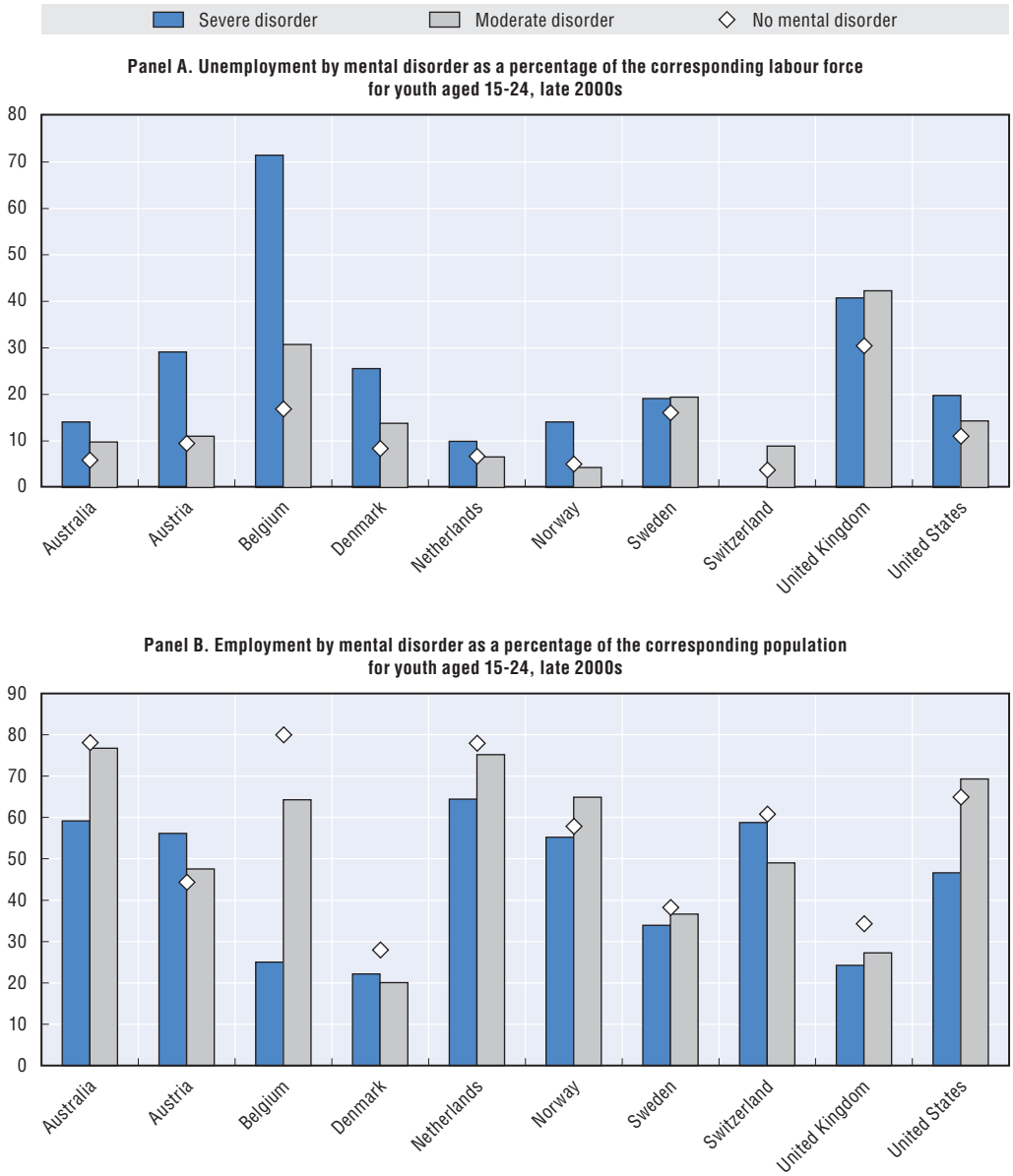
As for adults, youth with a mental disorder are broadly speaking more likely to be unemployed and less likely to be employed in most countries, illustrating the challenges these young adults face to participate successfully in the labour market. The unemployment rate for youth with severe mental disorder is around 5-20 percentage points higher than for youth without mental health problems (and in Belgium, as much as 50 percentage points), whereas the gap is around 0-14 percentage points for youth with moderate disorder (Figure 5.7, Panel A).

For youth with severe mental health problems, the employment rate is also significantly lower in most countries compared with youth without such problems. However, because a larger share of those with severe mental disorders has left education early, this gap is much smaller than for the adult population (Chapter 1). This also explains why in Austria, a country with a highly-developed apprenticeship system, youth with severe mental disorders even have higher employment rates than those without such disorders. The employment gap for youth with moderate mental disorders is very small in all countries (Figure 5.7, Panel B). Partly this is because they are facing similar employment opportunities at the time of entry into the labour market, but partly this is again due to differences in upper-secondary school attendance. Because youth with mental health problems are more likely to drop out of upper secondary school or fail to continue in higher education, they tend to enter the labour market earlier.

Longitudinal data for Australia, Norway and the United States illustrate that youth with severe mental disorders face bigger barriers to pursue higher education.[10] Youth with a severe mental disorder at age 18 are significantly less likely to be enrolled in higher education by age 20, compared with their peers without mental problems (Figure 5.8). For the United States, this is also true to a lesser extent for youth with moderate mental health problems. In Australia and Norway, however, outcomes for this group hardly differ from those for youth without mental health problems, suggesting that this group is not facing a bigger barrier to enter the higher education system. In the United States, among those continuing to post-secondary education, a smaller share of the (severely and moderately) mentally-ill enrols on a full-time basis and a bigger share opts for a technical or shorter programme rather than for university (which is four years and more). A United States study by Newman *et al.* (2009) reveals that within the group of disabled youth, mentally ill fare much worse than youth with other types of disabilities: young adults with emotional disturbances are not only less likely to attend post-secondary education compared to youth with other disabilities, they also have the longest waiting period before entering post-secondary education and they are among the least stable in their enrolment, *i.e.* taking classes some semesters or quarters but not others.[11]

These longitudinal data also confirm the early, but difficult, labour market entry for youth with severe mental disorders. Youth who had a mental disorder at age 18 are more likely to be employed by the age of 20 compared with their peers without mental ill-health, but they are also significantly more likely to be unemployed or inactive (Figure 5.8). Moreover, United States data also show that by age 25 they have a significantly lower salary despite the same number of jobs held in the past five years (Table 5.3).

Figure 5.7. **Youth with a severe mental disorder face lower employment but higher unemployment rates**



Source: National health surveys (see Figure 1.3).

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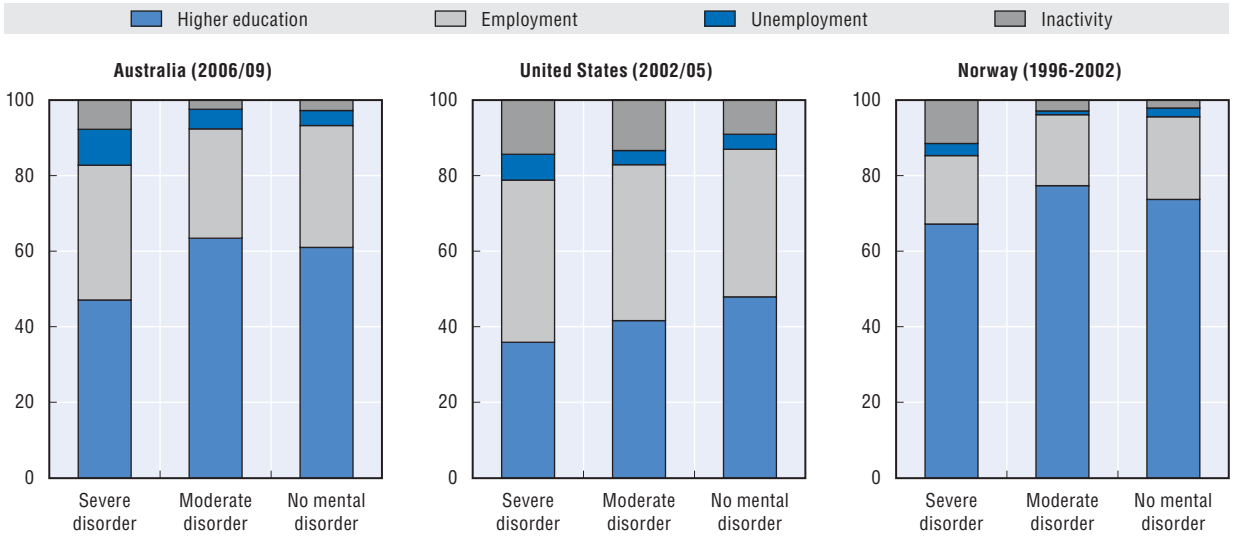
Again, labour market outcomes of youth with moderate mental health problems are very similar to those of youth without mental disorders. It is thus critical to ensure career prospects of those young people to avoid negative outcomes later in life. Yet, a UK study has shown that youth with mental health problems are less likely to be in high-status occupations (professional and managerial jobs) by the age of 26 than those with other or without disabilities (Burchardt, 2005).[12] Among disabled youth in the United States, those with emotional disturbances have the highest job turnover rate and they are least likely to inform their employer about their disability (Newman *et al.*, 2009).

Figure 5.8. **By age 20, more youth who had a mental health problem at age 18 have left education**

Activity by age 20 of youth who had a mental health problem at age 18, selected OECD countries



Note: Weighted population estimates based on 2 334 youth in Australia and 3 172 youth in the United States. Norwegian data are unweighted and based on 1 228 youth representative for the population aged 20 of the Nord-Trøndelag County.

Source: OECD estimates based on Youth in Focus (Australia), Young HUNT (Norway), and the National Longitudinal Survey of Youth 1997 (United States).

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Table 5.3. **By age 25, US youth with mental ill-health have lower earnings and more job changes**

Selected labour market outcomes by age 25 of youth who had a mental health problem at age 18, by severity of mental disorder, United States, 2007

	Severe disorder	Moderate disorder	No mental disorder
Hourly wage (in USD)	13.2	15.6	15.9
Number of jobs held since age 20	4.2	4.1	3.9

Note: Weighted population estimates based on 1 655 youth.

Source: OECD estimates based on the US National Longitudinal Survey of Youth 1997 (NLSY97).

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At the same time, many young adults are unaware of their mental health problem or unwilling to accept and, therefore, not requesting help. For instance, in Australia one-half and three-quarters of the 18-year-olds with a severe and moderate mental disorder, respectively, have never been diagnosed as such by a health professional (Table 5.4). In a similar vein, in the United States over 60% of the students with emotional disturbances who were identified by their secondary school as having a disability did not consider themselves as disabled by the time they transitioned to postsecondary education. Among those who viewed themselves as disabled, nearly half did not inform their college (Newman *et al.*, 2009). On the other hand, 40% of the Australian youth who have been told to have a depression or anxiety are not identified as having a mental health status at the age of 18 (Table 5.4). Partly this is because those young people no longer have a mental health problem passing a clinical threshold, at least not at the time of the interview.

Table 5.4. **Few youth with a mental disorder have ever been diagnosed by a health professional**

Proportion of 18-year-olds diagnosed for depression or anxiety by mental health status, Australia, 2006/09

		Mental health status at age 18		
		Severe disorder (5.0)	Moderate disorder (16.2)	No mental disorder (78.8)
Have you ever been told by a health professional that you suffer from depression or anxiety?	Yes (11.7)	22.9	37.6	39.5
	No (88.2)	2.6	13.4	84.0
Proportion never diagnosed		46.2	72.8	94.1

Note: Weighted population estimates based on 2 340 youth.
Source: OECD estimates based on the Australian Youth in Focus survey.

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Break in support and services during the transition into adulthood

Reaching adulthood often means a break in access to support and services. Until the age of 18-21 or as long as they are in secondary education (depending on the country) young people with mental disorders typically fall under the responsibility of the Ministry of Education. After leaving secondary education, different systems become involved and more than before the extent to which young adults receive support will depend on their own ability to demonstrate their needs and to find out themselves about the available services and arrangements. In addition, many countries define adult disability in terms of reduced working capacity and no longer in terms of educational need as is the case for child or adolescent disability or ill-health. Such definition changes not only imply a reinitialisation of administrative procedures, which may be costly in terms of time and energy, but also imply that many young adults can no longer access support provided to them in their childhood and adolescence.

Service fragmentation occurs at a moment when many young people with mental disorders are in particular need of support and assistance to overcome the many barriers youth face in making a successful transition. Frequently, the social problems faced by youth with mental ill-health are overlooked, as their families are not always able to financially support them through the transition period. In addition, mentally-ill youth often struggle to develop a sense of autonomy, form mature relationships with their parents and other adults, and sustain close relationships with friends (Osgood *et al.*, 2005). They are also at a higher risk of having unplanned pregnancies or a criminal past, abusing drugs or alcohol, and being unemployed (see above). Beyond continued access to appropriate health services, some of these young adults may need the continuing attention of a person dedicated to help them completing secondary or pursuing higher education, finding employment and establishing an independent life.

Health system

Despite the high prevalence of mental disorders during adolescence, mental health service utilisation drops off as youth move into adulthood. For the United States, for example, Pottick *et al.* (2007) show that service utilisation falls from 34% for 16-17 year-olds to only 18% for 18-19 year-olds, with the largest decline in the use of outpatient services, *i.e.* presumably those with moderate mental health problems. Not only is the provision of mental health services weakest for those in the transition age group (Bailey and Dolan, 2004), youth also encounter significant barriers to appropriate supports when they

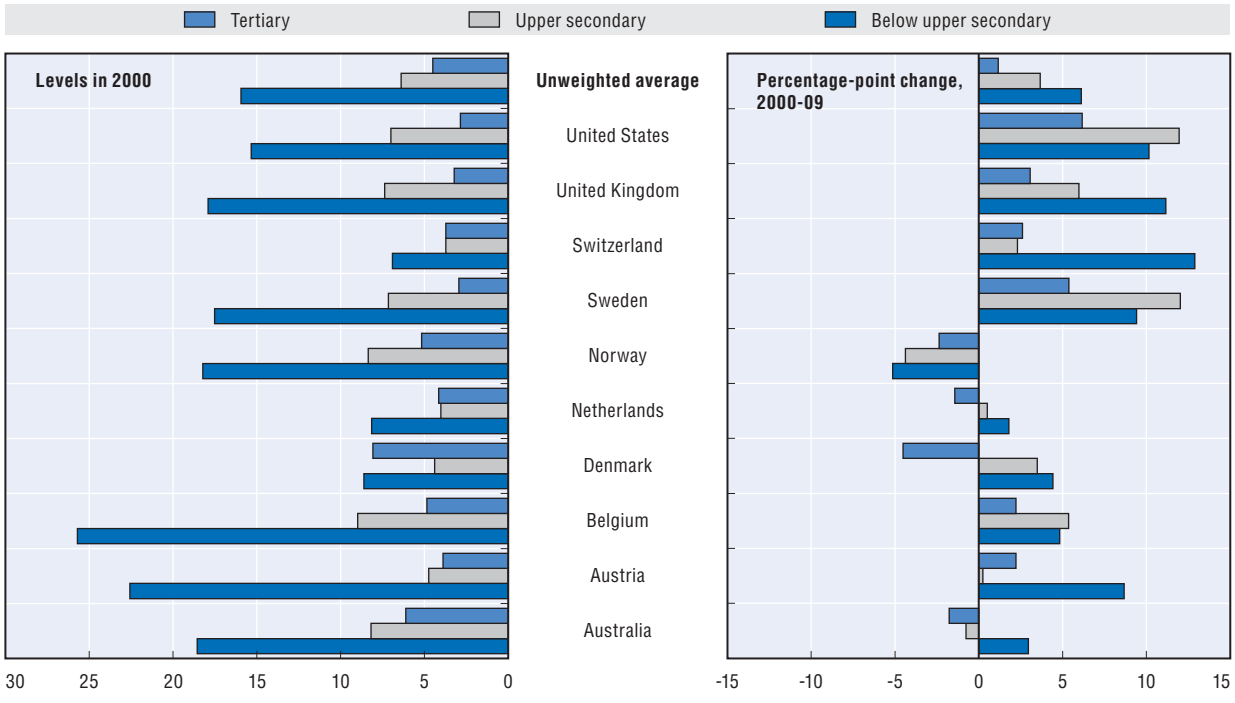
leave the child health system (Davis, 2003). Health services during the transition to adulthood for youth who have been identified as having a mental health problem and/or severe emotional disturbances tend to be fragmented and disorganised in many countries. Eligibility rules change by age and diagnosis, and programmes suffer from different financing structures and different philosophies.

Higher education

As economies are becoming more and more knowledge based, ensuring access to post-secondary and tertiary education for young adults with mental disorders is essential to enhance their employment opportunities and provide them with better incomes. For example, unemployment rates are much higher in general for youth with below upper-secondary education and they have worsened more in the past decade (Figure 5.9). Therefore, the poorer education outcomes of youth with mental disorders are a key concern. However, improving access to higher education is not sufficient as students with mental health problems are more likely to drop out of university despite their intellectual abilities and potential for advancement (Newman *et al.*, 2009).

Figure 5.9. **Youth with higher education do significantly better in the labour market**

Unemployment rate of youth aged 15-29 in 2000 and percentage-point change in this rate over the period 2000-09, by educational attainment



Source: OECD (2011), *Education at a Glance: OECD Indicators*.

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Higher education is associated with significant new stressors, such as the emotional demands of leaving home and secondary school to the less structured environment of higher education, independent study, examinations, and financial and social pressures. Although stress is not so much a cause of mental disorder in and by itself, it can contribute to stronger emotional symptoms or exacerbate pre-existing underlying disorders. Students

may not necessarily recognise their mental health problems and simply withdraw from higher education as a result of underperformance. Even if they are aware of their problem, poor self-esteem and stigma may hold them back from seeking help.

There are significant obstacles to access and continuity of support and care for students with mental disorders (Grant, 2002). Mental health services provided at universities tend to include medical services, mental health promotion, support services and professional counselling. Some universities also provide on-campus psychiatric treatment. Even so, students in difficulty, especially the large number with mild and moderate mental health problems, do not necessarily turn to officially designated mental health services, but look first for more familiar sources of help, such as friends, tutors or family (again, Grant, 2002). Information dissemination related to mental health is crucial to raise the awareness among students and university staff in order to improve early recognition. A designated mental health advisor to whom students and staff may turn for information may also improve early intervention and, if needed, referral to specialist services (see *e.g.* Royal College of Psychiatrists, 2003).

Labour market

In all OECD countries, young people can obtain job-search assistance through the public employment service (PES). As the transition from education to a stable job is difficult for many youth (not only for those with mental health problems), unemployed youths are typically one of the main target groups in active labour market programmes (ALMPs), including for example job-search assistance, vocational guidance, internships, and training programmes, organised by the PES (OECD, 2010b).

A key problem with these ALMPs is that the most disadvantaged young people, among which many youth with mental problems, are difficult to reach. Only the most motivated tend to voluntarily come to the PES to participate in labour market programmes, while many disadvantaged youth are either not looking for a job, or if they are, they have no incentives to register at the PES. In most OECD countries, school-leavers and young people without sufficient work experience are not entitled to unemployment benefits, while access to employment measures is often limited to recipients of unemployment benefits (OECD, 2010b). As a result, ALMPs do not necessarily reach those who need them most. If they do register, the next question is whether or not they disclose their mental health condition so that caseworkers in the PES could help adequately. This in turn raises the question of whether there are adequate means at the PES to identify mental health problems and corresponding needs (see Chapter 4).

Reaching the group of youth with mental disorders is a big challenge which is not easy to solve. Yet, early intervention is crucial to prevent these youngsters from sliding into long-term unemployment and inactivity which not only implies considerable individual distress, but also a lasting social cost for the society. This is doubly important because the first labour market experience is crucial in shaping the lifelong job and career path for young people with special needs.

Some countries have recently strengthened their outreach programmes for disadvantaged groups. For instance, the closer co-operation introduced in England in 2009 between Connexions Services – in charge of guidance and support services for all young people aged 13-19 – and Jobcentre Plus – the PES in charge of jobseekers from the age of 18 – prevents teenagers at risk from losing contact with the labour market (OECD, 2010b).

The Youth Guidance Centres in Denmark and the Labour and Welfare Administration in Norway are obliged to establish contact with youth under age 25 (age 24 in Norway) who are not involved in education, training or employment. In both cases, these institutions co-operate closely with the labour market authorities as well as with the educational institutions to help these youth back into education or employment (Duell *et al*., 2009; and OECD, 2010c).

A second problem is that standard ALMPs are unlikely to be successful for young people with mental disorders who tend to accumulate several social risk factors (such as low education, drug use and poverty). Although many OECD countries have more intensive ALMPs for youth with disabilities, including youth with mental health problems, few countries go beyond the traditional activation measures of job-search assistance, vocational guidance, internships or training programmes. Research has shown that services and supports for people with mental disorders need to integrate not only training/activation measures, but also close mentoring, work and income support, health services, and mobility and housing assistance. As keeping the job is often the real challenge, support should continue even after the person is placed in a job.

In countries where more intensive programmes are offered, such services are often only open to a small group of people with severe impairments, while youth experiencing moderate mental health problems may not be eligible although also being in need of support. For instance, in Austria, on-the-job coaching is provided to youth with a degree of disability of at least 50%, while Sweden and the United States offer more extensive supported employment programmes to people on disability benefit schemes. Australia, on the other hand, has improved inter-institutional co-operation for all jobseekers through one-stop-shop service delivery (Centrelink), which connects not only employment service providers and social services, but also medical and housing services.

Increasing rates of young adults on disability benefits

Increasingly, young adults with mental disorders who fail to make a successful transition into employment end up on disability benefits. Depending on the country's benefit eligibility rules, this shift can happen very early in life, often around age 18 as in the Netherlands, Sweden and the United States; sometimes with special entitlement rules and special rules for determining the benefit level (Table 5.5). These young people have typically never worked or only for a very short period. Although benefits paid to those beneficiaries are typically flat-rate and around the level of a minimum wage in several countries, in the short run the payment could be a considerable barrier to seek employment in view of the perceived restricted employment and earnings opportunities. In the longer run, this would lead to a lifetime dependency on a low income.

Disability beneficiary rates among 20-34 year-olds are on average around 2% in the OECD – up to almost 4% in the Netherlands and the United Kingdom – and have been increasing in most countries over the past decade (OECD, 2010a). The increase was particular fast among youth under age 25 in a number of countries, and among them, the growth rate was significantly higher for claims with mental disorder than claims overall. Average growth rates reach around 10% annually in some countries, and even more than 20% in Sweden; only in the Netherlands the share of claims for mental health reasons dropped significantly recently (Figure 5.10, Panel B). The faster growth for the mental-disorder group results from a gradual shift in all countries in the share of claims with a mental health reason – with annual increases of around 0.5-1.0 percentage points in most

Table 5.5. **In many countries, youth can access disability benefits from a very early age**

Disability benefit eligibility criteria and payment levels for young benefit applicants

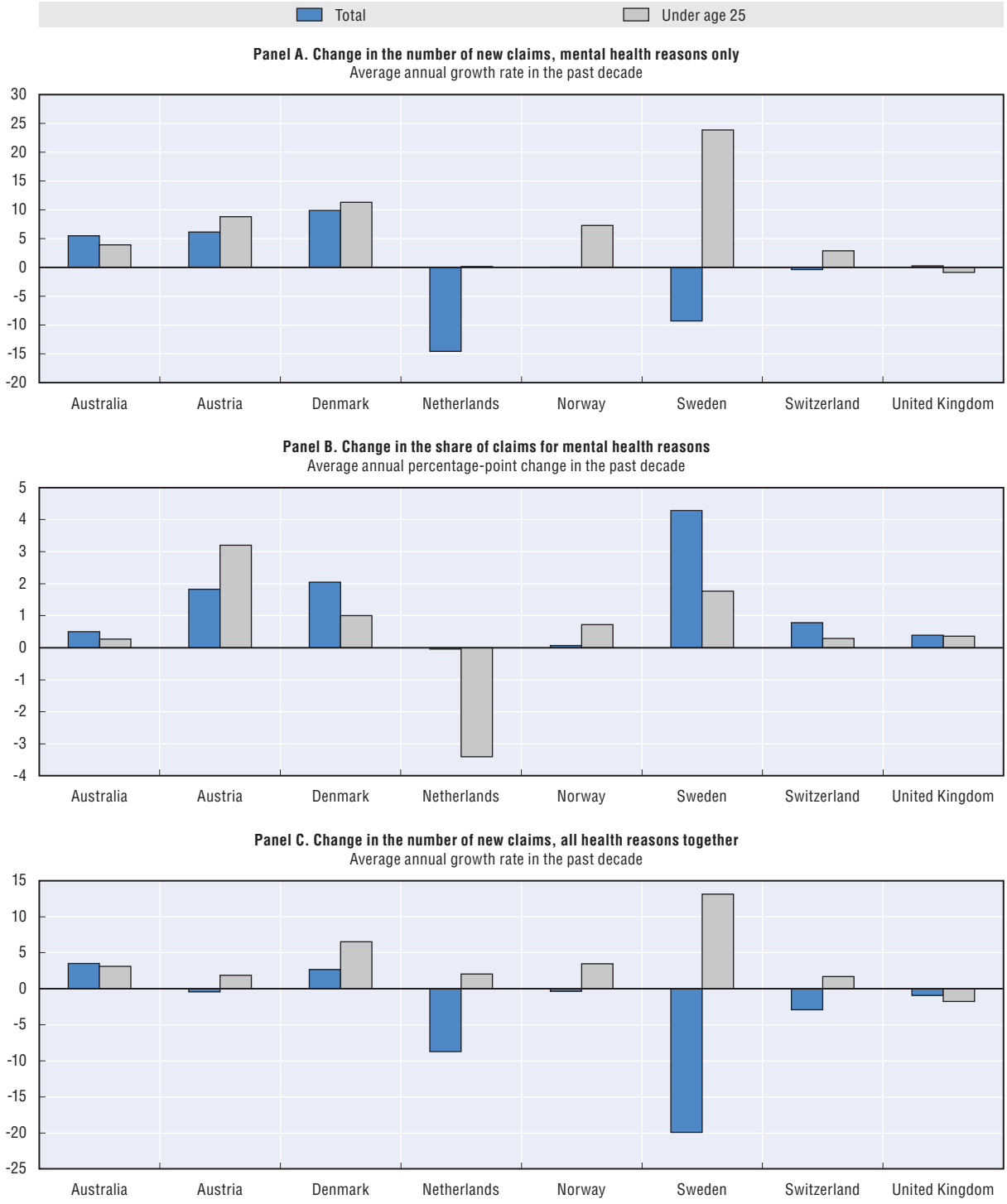
Country	Age	Eligibility	Payment level
Australia	16	A person must be permanently blind; or have a physical, intellectual or psychiatric impairment of 20 points (not 20%) under the impairment tables and be unable to do work of at least 15 hours a week, or be re-skilled for any work, for a period of at least two years. Must be resident in the country for a total of at least ten years.	Single people younger than age 18 and living away from the family home, up to AUD 498.70 every two weeks; AUD 322.70 if living in the family home. For single people aged 18 to 20 and living away from the family home, up to AUD 498.70 every two weeks; AUD 365.80 if living in the family home. These payment rates include the Youth Disability Supplement of AUD 110 per fortnight.
Austria		Reduction in capacity for work of 50%. Benefit criteria for youth do not differ from those for adults. As long as the criteria is achieved youth and young adults receive a benefit, but with reaching the legal age the benefit increases.	Depending on insurance period and earnings, as for old-age pension, but with a lower accrual rate.
Belgium		Reduction in capacity for work of at least 66%. Minimum period of affiliation for entitlement is six months, with 120 days worked.	65% of the lost earnings (subject to ceiling) if there are dependants, 53% if single without dependants, 40% if cohabiting person without dependants.
Denmark	18	A person whose capacity for work is permanently reduced to an extent that the person cannot assure his/her subsistence. At least three years of residence as of age 15.	Calculated according to periods of residence between the ages of 15 and 65. If income does not exceed a certain level, DKK 195 420 per year for persons living alone and DKK 166 104 for married or co-habiting pensioners.
Netherlands	18	Wajong: 25% incapacity. Persons incapable of work when reaching the age of 17 or have become disabled since that date and were students for period of at least 6 months in the year immediately prior to that date.	When the beneficiary is completely and continuously disabled, the benefit is 75% MYW. When he/she is able to work: until the age of 27: he/she will receive benefits that will supplement income up to 100% MYW (as income gets higher, benefit gets lower.) Minimum income (wages + benefit) is 75% MYW. If one earns less than the remaining earning capacity, the total income will be of course lower, as benefits remain the same, but income from work is lower. MYW = statutory minimum (youth) wage (level depends on age).
Norway	Basic pension: 16 Disability pension: 18	Disability pension: three years of insurance immediately prior to the disability. If that condition is not met, an insured disabled may obtain a right to a pension a year after he last became insured, provided he has not been out of the scheme for more than a total of five years after the age of 16. Disabled, who were under 26 and members of the National Insurance Scheme when they became disabled, are exempt of the three-year condition.	Stipulated future insurance periods and stipulated future pension points will compensate for insufficient insurance and earning periods for those becoming disabled at an early age.
Sweden	18	An assessed loss of work capacity of at least 25% and be covered when the disability began. The disability pension consists of a guarantee and an earnings-related pension. The former pension requires at least three years of coverage and based on residence. The latter requires at least one year of income in Sweden within a given period.	Basic universal pension: 90% of 2% reduced base amount if totally disabled, 72.5% if married. Earnings-related pension depending on earnings and on insurance period.
Switzerland	18	40% incapacity for a quarter pension, 50% for a half pension, 60% for a three-quarter pension and 70% for a full pension.	Ordinary benefit guarantees subsistence level (max = two times min); full pension with continuous contributions. Extraordinary benefit: 133.3% of minimum.
United Kingdom	16	Must undergo a 13-week assessment phase and satisfy at least one of the following: 1) pass a contributory test or be under age 20 (or 25 in certain cases), 2) pass a low-income test.	Paid according to the insured's income, working capacity, age, and marital status, and not paid if savings exceed GBP 16 000 or if the insured's partner works for more than 24 hours a week.
United States	18[a]	Inability to engage in substantial gainful activity due to impairment expected to last at least one year or result in death. Insured status: must have credits in 1.5 of the quarters elapsing in the period after the quarter of attainment of age 21 and up to and including the quarter the disability began (maximum of 40 quarters) and must have at least 20 quarters of coverage within the ten-year period before the disability began. More liberal requirements for younger individuals, with a minimum requirement of at least 6 quarters of coverage for individuals who become disabled before age 24.	Based on covered earnings averaged over period after 1950 (or age 21, if later) and indexed for past wage inflation, up to onset of disability, excluding up to five years with the lowest earnings.

Note: Disability-related benefit payments to children are not included in this table.
a) A medical review is conducted to determine if child recipients meet the adult disability requirements upon attainment of age 18.
Source: OECD compilation based on mental health policy questionnaires.

StatLink http://dx.doi.org/10.1787/888932534919

Figure 5.10. **Disability benefit claims for youth with a mental disability have increased in many countries**

New disability benefit claims with mental health conditions for youth under age 25 and working-age population: trends in numbers and shares



Note: Trends refer to the following periods: Australia 2004-10, Austria 2005-09, Denmark 1999-2009, Netherlands 2002-09, Norway 1992-2007, Sweden 2003-10, Switzerland 1995-2009, and the United Kingdom 1999-2010.

Source: OECD questionnaire on mental health.

StatLink http://dx.doi.org/10.1787/888932534425

countries, but 1.8 and 3.2 percentage points in Sweden and Austria, respectively (Panel B). Today, around two-thirds of all new disability benefit claims in this age group are due to a mental health condition as the primary cause, and up to as much as 80% in Sweden, which is a much higher share than is found for the total working-age population (see Chapter 4).

Granting youth with mental health problems access to a long-term benefit may permanently trap them in inactivity and poverty. As discussed in OECD (2010a), the probability of returning to work is extremely low once a disability benefit is rewarded. Yet, mental health problems are typically fluctuating in nature, and with the right treatment, services and support, most mental health problems in youth can get better. To avoid long-term benefit dependency, it is thus important not to grant disability benefits too early in life.

Partly in response to this, many countries have been tightening access to permanent disability benefit. Temporary and more flexible payments with periodic reassessments would be particularly relevant for young beneficiaries. Indeed, young people (OECD, 2006) and people with mental disability (Chapter 4) are granted a temporary benefit more frequently. However, so far this has hardly had any impact in practice with reassessment being insufficient and with most temporary entitlements being transformed to permanent ones at some stage.

An alternative approach is to consider replacing disability benefit for young people by a more active payment. Denmark has recently discussed this option. Such a change took place in Sweden a few years ago, when it introduced an activity compensation for those aged 18-29 which replaced disability benefit. However, Figure 5.10 suggests that this change has led to an increase rather than a decline in the number of beneficiaries. This might indicate an easier granting of a benefit which is thought to be less passive and less trapping. The risk is that this payment may simply be transformed into a long-term payment by age 30.

As young people claiming disability benefit usually lack work experience and have on average lower educational backgrounds, strong reintegration measures accompanied by participation requirements are fundamental to help them access the labour market. Recent reforms of the special disability scheme for young people in the Netherlands (*Wajong*) have been in this direction. The aim is to make better use of claimants' work potential. The scheme has now been split into two phases: those aged 18-27 are given a mandatory "participation plan", either work or study with a wage or study subsidy, with intense job-seeking support and job coaching. Only at the age of 27 is a final assessment made to establish their degree of disability (*i.e.* the degree of earnings capacity loss with respect to the minimum wage). The impact of this latest change remains to be seen; the fast drop in inflows at all ages, including the age group 18-24, is not yet the result of this change but of comprehensive reform affecting all claimants (OECD, 2008). Moreover, the inflow into the special *Wajong* scheme of those aged 18-19 has been increasing rapidly in the past decade or so and has not yet started to stabilise or fall.

5.5. Conclusion: helping school-leavers in their transition to work

Childhood and adolescence are crucial periods for the promotion of mental health and the prevention of mental disorders. Epidemiological data indicates that three-quarters of people suffering from a mental disorder have experienced its onset by the age of 24, and one-quarter already by the age of 7. As a result, prevalence of mental disorder in children is very high. Most of these young people suffer from mild or moderate mental illness and

can expect a productive life. However, their mental health problems can negatively affect their education, and consequently their social and professional life as adults.

School is a key location for protection of mental health in youth, as well as for teaching coping abilities. To be effective, interventions should be multi-disciplinary and involve school psychological services, child psychiatric services and social workers. The involvement of parents and carers, and appropriate support for them is also crucial. However, school support services are generally not sufficient to meet youth's needs, and lack co-ordination with the health system and other community services.

A key challenge, just as for other stages in the lifecycle, is how to identify those in need of support. Screening for mental health problems could contribute to the early identification of risk groups and, if properly linked to preventive interventions, reduce the propensity for future problems. However, screening is often inaccurate and can be costly, and attention must be devoted to avoid stigmatising or discriminating already disadvantaged groups.

On the other hand, unmet needs for services of youth with mental health problems are likely to exacerbate their problems and increase the risk of early school drop-out. Early school-leaving is still quite frequent in most OECD countries typically affecting some 15% of a cohort aged 20-24. Most countries have programmes in place to minimise school drop-out or to reconnect school leavers with education or training. However, little attention is devoted to mental health problems as a possible cause for drop-out, and no data is available on the share of school drop-outs who have a mental disorder. Survey-based evidence for European countries suggests that the proportion of youth with severe mental disorder leaving full-time education before the age of 15 is around 26%, compared to 20% for those with moderate mental disorder and 14% for those without a mental disorder. This is critical in view of the increasing skill requirements in today's labour markets. Flexible, individualised support will be needed for some of these youth to foster continued education and a transition into appropriate and sustainable work.

Today, too many and often increasing numbers of these young people are moving onto disability benefit very early in life. The share of 20-34 year-olds in the ten countries under study receiving a disability benefit is around 2% of the population, up from 1.6% a decade ago, despite no evidence of an increase in the prevalence of mental disorders among youth over time. Three in four of those claims are due to mental disorders. It is not a good solution to grant a disability benefit too early in life, knowing that *i)* with appropriate services and supports, most mental health problems in youth and adolescence can get much better, and *ii)* there is almost no way back into the labour market once in the benefit system.

Notes

1. The HBSC survey is a cross-national research study conducted in collaboration with the WHO Regional Office for Europe. It is a school-based survey targeted at young people aged 11, 13 and 15 attending school with data collected through self-completion questionnaires administered in the classroom. The survey is carried out on a nationally representative sample of approximately 1 500 children from each age group in each participating country. To measure subjective health complaints the HBSC study uses a standard symptom checklist and asks children: "*In the last six months, how often have you had the following: headache, backache, feeling low, irritability or bad temper, feeling nervous, difficulties in getting to sleep, feeling dizzy?*" Response options were: "*About every day, more than once a week, about every week, about every month, rarely or never*" (Currie *et al*., 2008).

2. The family affluence scale is based on a composite score of four items (family ownership of cars and computers, having own bedroom and number of family holidays) and acts as a proxy for family income (Currie *et al*., 2008).
3. See Chapter 1 for the details on the methodology used to identify the population with mental disorders.
4. In the United Kingdom, for instance, 35% of children with an emotional disorder, 52% of children with a conduct disorder and 71% of children with a hyperkinetic disorder are enrolled in a special educational programme (Green *et al*., 2005).
5. The percentage of compulsory school-aged pupils in special schools (including all types of disabilities, not only those with mental disorders) hovers around 0.5-3% in most West-European countries (data obtained from *www.european-agency.org/*). The biggest advantage of special schools typically is a much more favourable pupils-per-teacher ratio.
6. Early school leavers are defined as the number of youth aged 20-24 who are not attending school (including school-work programmes that are considered as equivalent to upper secondary education) and have not obtained an upper secondary education.
7. The high figure for Norway is partly explained by more frequent interruption of upper secondary studies and a higher incidence of diploma completion *via* second-chance schools.
8. These findings are based on the longitudinal surveys *Youth in Focus* (YIF) for Australia and *National Longitudinal Survey of Youth 1997* (NLSY97) for the United States. The Australian survey, YIF, is a longitudinal survey designed to study inter-generational links and the transition into adulthood. The first wave took place in 2006 and consisted of 4 079 18-year-olds and their parents, randomly selected from the administrative records of Centrelink, a one-stop-shop agency for the delivery of almost all government benefits, covering around 85% of all young people in Australia. Some 41% of the round-1 sample was interviewed in round 2 (fielded in 2008-09). The statistics were kindly provided by Robert Breunig. The US survey, NLSY97, was designed to document the transition from school to work and into adulthood. It consists of a nationally representative sample of youth born between 1980 and 1984. The first wave of the survey took place in 1997 and consisted of 8 984 youth and their parents. The data presented in this chapter are based on waves 6 and 8 and refer to the period 2002-03 and 2004-05.
9. For a definition of cognitive-behavioural interventions, see Chapter 3 (footnote 11).
10. The longitudinal surveys are *Youth in Focus* (YIF) for Australia; *National Longitudinal Survey of Youth 1997* (NLSY97) for the United States, see footnote 6 above; and *Young HUNT* for Norway. Young HUNT is a longitudinal survey covering the total youth population (about 9 000) of the Nord-Trøndelag County born between 1976 and 1982 (except 1980). Statistics were kindly provided by Steinar Krokstad.
11. Newman, *et al*. (2009) use the National Longitudinal Transition Study-2 (NLTS2) to study post-high-school outcomes of youth with different types of disabilities. NLTS2 is a nationally representative study based on more than 11 000 youth with disabilities who were age 13-16 and receiving special education services in grade 7 or above in December 2000.
12. Burchardt (2005) uses the 1970 British Cohort Study (9 000 observations by the age of 26 in 1996 – 56% of the original sample) to study occupational outcomes of youth with different types of disabilities.

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Chapter 6

Summary and Conclusions

This chapter summarises the main findings of the report, including new evidence which questions some of the myths and taboos around mental ill-health and work. People with a severe mental disorder are too often too far away from the labour market, and need help to find sustainable employment. The majority of people with a common mental disorder, however, are employed but struggling in their jobs. Neither are they receiving any treatment nor any supports in the workplace, thus being at high risk of job loss and permanent labour market exclusion. This implies a need for policy to shift away from severe to common mental disorders and sub-threshold conditions; away from a focus on inactive people to more focus on those employed; and away from reactive to preventive strategies.

6.1. Mental health as a new priority challenge for the labour market

The costs of mental ill-health for the individuals concerned, employers and society at large are enormous. A conservative estimate from the International Labour Organisation put them at 3-4% of gross domestic product in the European Union. Most of these costs do not occur within the health sector. Mental illness is responsible for a very significant loss of potential labour supply, high rates of unemployment, and a high incidence of sickness absence and reduced productivity at work. In particular, mental illness causes too many young people to leave the labour market, or never really enter it, through early moves onto disability benefit. Today, between one-third and one-half of all new disability benefit claims are for reasons of mental ill-health, and among young adults that proportion goes up to over 70%.

Mental ill-health is a difficult issue to analyse. The available evidence on mental illness and its connection with work is partial or incomplete, and many important elements are still unknown or not fully understood. Misconceptions are widespread due to the significant stigma attached to mental illness and a range of fears about people with mental illness in society and at workplaces. This report aims to broaden the evidence base and summarise what is known, and what further information is required, in order to reform policies in ways that will improve the labour market inclusion of people with mental disorders.

Mental ill-health is widespread, but prevalence is not increasing

Mental disorder in this report is defined as mental illness reaching the clinical threshold of a diagnosis according to psychiatric classification systems. Epidemiological and clinical evidence unequivocally shows that the prevalence of mental disorders is high. At any one moment, around 20% of the working-age population in the average OECD country is suffering from a mental disorder in a clinical sense. Typically, prevalence rates are higher for younger adults, women and people with low levels of educational attainment. The 12-month prevalence is even higher and lifetime prevalence has been shown in several studies to reach levels up to 50%. This implies that the risk of experiencing mental ill-health at any moment during working life is high for everyone.

Contrary to widespread beliefs, the prevalence of mental disorder is *not* increasing. There is ample epidemiological and clinical empirical evidence that prevalence has been very high already several decades ago. But because of the gradually reduced stigma and discrimination and greater public awareness of the issue and better means and tools of assessment (including better psychiatric services), more cases of mental disorders are now being identified and disclosed.

The main question then is why mental disorders seem to be associated with greater problems in the labour market than used to be the case, as also shown by increasing rates of disability benefit claims driven by mental disorders. To some extent, it appears that the increased perception of mental health problems has gone hand-in-hand with a changed

view on the work capacity of people with mental disorders, *i.e.* a more work-limiting evaluation of these problems. This would imply that better awareness has so far mostly led to more exclusion from the workforce.

However, at the same time the job requirements in the workplace have increased or changed. Higher requirements on social skills and cognitive competences make it increasingly difficult for workers with mental ill-health to perform adequately. In order to understand these trends better, more needs to be known about the situation of people with mental disorders; the impact of mental disorders on functionality and work capacity; changes in the workplace; the relationship between mental health and work; and the impact of various institutions, systems and policies.

Most mental disorders are moderate or common disorders

Severe mental disorders are relatively rare. Most mental disorders are mild or moderate, frequently referred to as "common mental disorders" (CMD). Mood disorders (depression), neurotic disorders (anxiety) and substance-use disorders are by far the most frequent CMDs. However, any of these illnesses can evolve to become so severe that they would be classified as severe mental disorders (SMD).

Typically, three quarters of those affected by mental disorder have a CMD, and one-quarter a SMD.* The main difference is that CMD is generally less disabling and, thus, less of a problem for the individual concerned and society at large. However, some symptoms of CMD can affect work-related functionality considerably. One of the main challenges for policy makers is therefore to prevent mental health problems at a sub-clinical level from developing into chronic and disabling CMD.

Mental illness commences very early in life

One of the key characteristics of mental disorders is the early onset. The median age at onset across all types of mental disorders is around 14 years of age, with 75% of all illnesses having developed by age 24. Anxiety disorders start particularly early in life and substance-use disorders typically in youth, whereas the first appearance of mood disorders shows a broader distribution across age, with more frequent onset in the thirties and forties.

The early onset of mental illness has several important policy implications. There is considerable lack of awareness, non-disclosure and under-treatment among adolescents and young adults, with the gap before the first treatment of a mental illness on average being about 12 years. Hidden mental disorders at such a young age often have detrimental effects leading to poor performance at school and early school leaving, with negative repercussions in working life.

Chronicity and co-morbidity lead to disability

Many mental disorders are persistent and show high rates of recurrence. For instance, recurrence of depressive episodes varies from 40% to 80%, even with medication. The more chronic a mental disorder, the more disabling it is and the larger are the challenges for labour market inclusion.

* The established epidemiological knowledge that around 5% of the working-age population suffer from SMD and some 15% from CMD is used in this study to identify the target population, on the basis of national and international health surveys which use a range of mental health instruments (see Chapter 1 and especially Box 1.1 for more details).

Similarly, several mental disorders often co-exist, sometimes also with physical health conditions. For example, co-occurrence of depression and anxiety is very frequent, as is the co-occurrence of a substance-use disorder with other health conditions. Again, co-morbid mental disorders tend to be the more disabling ones; for instance, US data from the National Health Interview Survey suggest that the likelihood of being inactive and receiving a benefit is substantially higher with a co-morbid CMD than with a SMD alone (the rates are 45% and 35%, respectively, and 75% for a co-morbid SMD).

Policy will have to put more focus on moderate mental disorders

Because of its high prevalence, the overall cost of CMD to society is larger than the cost of SMD – taking into account all costs for the health system, the social security system and the employers. Similarly, the cost of sub-threshold conditions, because of the even higher prevalence in the population, is potentially very high, as some studies demonstrate. This is explained by the fact that direct health-system costs are only a very small part of the total costs of mental illness, much lower than, in particular, the costs of productivity losses.

This observation alone has significant relevance for policy makers. Policy today predominantly targets people with SMD. This is understandable given the strong and urgent needs of people suffering from SMD and limited public resources. However, in order to deal with mental disorders more effectively greater focus should be devoted to CMD, which when becoming long-lasting or recurrent can manifest themselves in substantial impairments with negative repercussions on work functioning.

Much of the evidence about the treatment and consequences of mental illness also refers to SMD. We know a lot about the problems and possible solutions for people with schizophrenia, for example, but this has limited relevance because very few people have such disorder. Much more evidence is needed about the large group of people with CMD, both in terms of their labour market outcomes and policies to improve those.

6.2. Evidence on the interface between mental health and work

Most people with mental disorders are in work

Employment rates of people with mental disorders are much higher than is generally thought. The employment rate of people with CMD is around 60-70%, or 10-15 percentage points lower than for people with no mental disorder. This seems a high rate but, given the large size of this group, this gap reflects a very large loss to the economy, and for the individuals concerned and their families. The corresponding employment rate of people with SMD is around 45-55%. This is also higher than is commonly known, which is partly explained by the fact that people with the most severe mental illnesses would usually not be included in the reference population used in health surveys.

Many other people with mental disorders want to work but cannot find jobs. Unemployment is a key issue as people with SMD are typically 6-7 times more likely to be unemployed than people with no such disorder, and those with CMD 2-3 times. Moreover, there is a high share of long-term unemployment (as a percentage of total unemployment) for people with SMD, leading to a high risk of discouragement and labour market withdrawal. People with CMD, on the other hand, do not face higher long-term unemployment shares than the general population. This, in turn, indicates that they seem to be able to find jobs as much as any other unemployed person but also that they will

often lose their job again quickly: it is more difficult for people with CMD than for the general population to hold on to their job.

It should also be stressed that unemployment itself is very detrimental to mental health. Unemployment seems to be particularly harmful for mental health initially (caused by an unemployment shock), then there seems to be some adjustment to the situation, before it worsens again in the longer-term. Along the same lines, there is also evidence that people with mental disorders who find a job see significant improvements in mental health. This is in line with clinical findings according to which employment can be an important element in recovery, improving also non-vocational outcomes. This clinical evidence is, however, not reflected sufficiently in mental health policy, which still has a very limited focus on employment.

Work is good for mental health but not under all work conditions

There is increasing evidence suggesting that access to employment is associated with better mental health. However, poor-quality jobs can be detrimental for mental health. This is of concern because workers with mental disorders are more likely than workers without mental illness to work in jobs which do not match well with their skills. They are also more likely to work in low-skilled occupations (clerical work, sales and service work, elementary occupations) more often than others.

This is problematic because these occupations tend to combine, more often than jobs in other occupations, high psychological demand with low decision latitude – a combination likely to lead to *job strain*, *i.e.* unhealthy work-related stress, which indeed is a driver of poor mental health. Moreover, there has been a tendency – as shown by data from the European Working Conditions Survey – for job strain to increase over time in many occupations. This suggests that some of the working conditions relevant for a worker's mental health have indeed worsened.

That said, there are also key workplace variables that can contribute to prevent a worsening of mental health, the most important one being good management, *i.e.* a line manager who supports the worker, gives adequate feedback and recognises the work effort. However, European survey data suggest that far fewer workers with mental disorder have such a manager: less than 60% of those with SMD, compared with 70% of those with CMD and 85% of those with no mental disorder.

Productivity losses through mental ill-health are large

Given that the large majority of people with mental disorder are in employment, a key policy objective should be to ensure that these workers retain their jobs and can work productively. Evidence on productivity losses suggests there is a long way to go in order to achieve this.

Workers with mental disorder are absent from work for health reasons more often than other workers, and if they are, they are away for longer. The incidence of absence in a four-week period is 42%, 28% and 19% for workers with SMD, CMD and no mental disorder, respectively. The corresponding average duration of absence is 7.3, 5.6 and 4.8 days, respectively.

However, many workers with mental disorders do not take sick leave but instead may be underperforming in their jobs. Productivity losses while at work are potentially large, with 88% of all workers with SMD reporting reduced productivity at work in the past four

weeks. The corresponding figure for workers without a mental disorder is only 26%. Importantly, on this measure people with CMD are far more similar to those with SMD, with an incidence of 69%. This finding of substantial productivity losses on the job by people with CMD is one of the most important of the report, highly relevant for the design of an adequate policy response.

Such high losses in productivity suggest that policies directed at sickness monitoring and sickness management are essential. But this approach is not enough because it implies that intervention and support is in many cases coming too late. This, in turn, comes back to the crucial role of good-quality jobs, good working conditions and, in particular, good management. The reality is often very different, with little understanding by management and co-workers (and often also individuals concerned themselves) of mental health and the needs of workers with a mental disorder, leading to much higher rates of dismissal. According to a US study, workers with a mental disorder have a 50% higher likelihood of *involuntary* job loss, and also a 30% increased likelihood of *voluntary* job quits.

Employment is the best way to secure good incomes

Work is also important to ensure adequate incomes. Evidence suggests that people with mental disorder who have a job typically have *average* (per person equivalised household) incomes. But not everyone is employed; accordingly, people with CMD have an income around 90% of those with no mental disorder, and the figure is only 60-80% for those with SMD – with correspondingly higher risks of living in poverty. The main reasons for this difference are the lower employment rate, the higher dependence on benefits, and a higher share of people neither employed nor receiving a benefit.

People with mental disorders often receive unemployment benefits

Inactive people of working-age with a mental disorder are often receiving a disability benefit but many receive *other* working-age benefits. Among people with SMD, roughly half receive a disability benefit and the other half other benefits. Due to their closer connection to the labour market, people with CMD receive other benefits more often than disability benefits, the ratio being roughly 2 to 1. Differences between countries in these "distributions" across benefits are surprisingly small. Only in Norway are there relatively more people with CMD who receive a disability benefit.

Consequently, unemployment benefit schemes in particular, but also social assistance and possibly lone-parent benefits, are as important in designing better policies for people with a mental disorder as disability benefits. The biggest challenge for these systems is the identification of both the problem and the needs arising. There is a considerable lack of awareness of the importance of this issue; for example, public employment services generally have no particular tools for identifying mental ill-health although many of their clients, especially among the long-term unemployed, are suffering from mental health problems. With a few exceptions, in the countries included in this study there are no particular identification tools available and no corresponding statistics either.

The lack of action for the unemployed creates big challenges for the disability benefit system

Evidence from data on new entrants to the disability benefit rolls shows that those with mental disorders typically have been at a greater distance from the labour market at the time of their claim than entrants with other health problems: fewer of them have been

employed in the year(s) prior to their claim and more of them long-term unemployed. This is a major challenge for the disability benefit system. The lack of identification and action in "previous" benefit systems might explain why employment measures offered to disability benefit claimants with a mental disorder tend to be less successful than for other claimants, *e.g.* in the United Kingdom. In turn, the better outcomes for claimants with a mental disorder of employment and rehabilitation measures in Australia compared with the United Kingdom might be related to the better one-stop-shop system of identification and referral. (Data on this issue are largely unavailable for other countries.)

Also for the disability benefit system the challenge is to, first, identify mental disorder and, second, take the right steps in terms of work-capacity assessment, needs assessments and supports. This is urgent in view of the increase in (almost) all OECD countries of the share of disability benefit claims caused by a mental disorder – especially among younger claimants. The reasons behind this increase are not fully understood but, again, the trend is not the result of a higher prevalence of such disorders; and only partly is it due to the bigger labour market challenges these people are facing today.

Many of these claimants have multiple or co-morbid conditions and there appears to have been a shift over time towards taking the mental disorder as the primary health condition as it is the main factor in the person's reduced work capacity. In other words, it seems that the higher awareness and the capacity-limiting view of mental illness have resulted in a shift in identification – without necessarily facing a different clientele. This opens opportunities to do better in helping those people back into work and preventing a long-term disability benefit grant.

However, to date these opportunities have not been fully harvested. Claimants with a mental disorder are too easily classified as being unable to work. They are more often granted a *full* benefit immediately; when they are granted a *temporary* benefit initially this is not *reassessed* properly but turned into a permanent payment later; their claims are less often *rejected*; and they are less likely to *exit* disability benefit for reasons of recovery or employment. This suggests that not enough is being done for this group of claimants to either keep them in work or help them back into employment. The OECD's recommendations on disability benefit system reform (see OECD, 2010) are, therefore, very relevant for those claiming with a mental disorder: Policies need to pay greater attention to keeping people in the labour force and preventing them from moving onto a lifetime benefit.

Comprehensive reform of the disability benefit system has in many cases led to large drops in the number of new benefit claims. Importantly, such reforms – as in the Netherlands, Sweden or Switzerland – have also achieved a rapid decline in the number of new disability claims with mental disorder. In order to be able to assess the success of these reforms, however, more needs to be known about the "fate" of those people (with mental disorder) no longer accessing disability benefit.

Better identification and better policy are hindered by non-disclosure

The challenges for all benefit systems are strongly linked with the issue of disclosure of the underlying reasons for a benefit claim. First, people are often unaware of their mental illness, a situation which is widespread for personality disorders. Second, even if they are aware, they will often choose not to disclose their problems, largely because of the stigma and discrimination attached to mental illness and often negative experiences from the past. In this case, one aim of policy should be to influence systems and workplace

policies to an extent that the advantages of disclosing mental disorders (*i.e.* opening up the possibility for adequate support) outweigh the disadvantages (*i.e.* discrimination and risk of dismissal): to provide people with assistance to manage their personal information in a way so as to access sufficient supports while avoiding unfair discrimination too easily triggered by diagnostic labels.

At the time of a disability benefit claim, people are likely to be willing to disclose their mental illness, provided they are aware of it. But this is a very late stage in the process and a time when, for example, return-to-work programmes are unlikely to succeed. The evidence shows that such programmes are likely to be more effective at a much earlier stage, ideally at the very first longer-term sick leave for reasons of mental ill-health and at a time when work motivation is high.

Under-treatment is a key challenge for the mental health system

Awareness and disclosure of mental health problems is also a big challenge for the mental health system. People unaware of an illness and/or unwilling to disclose their illnesses are unlikely to seek professional advice and treatment. The result is that among those with a CMD, some 80% do not receive any treatment; this is a very high share even though some of those people might not need treatment. Even among those with a SMD, as many as one in two do not seek or receive treatment. Treatment rates are particularly low for young adults. Treatment coverage has increased somewhat in the past two decades for all population groups, in line with an increase in the number of psychiatrists, but there is still a huge gap to be closed.

The low treatment rate is of concern because with treatment most mental disorders can get better. Certainly treatment improves the non-vocational/clinical outcomes, *e.g.* in the form of better mood or higher self-esteem. But there is also evidence that "adequate" treatment also improves work outcomes – with US studies showing a post-treatment employment rate of around 70% for adequate treatment compared to only around 50% for traditional treatment.

However, the identification of adequate treatment is often challenging. Depending on the disorder, it is often a combination of medication and therapy, following minimum treatment guidelines regarding the number and frequency of therapy sessions, the type and duration of medication and the extent of follow-up by the physician to monitor the effects. This is another challenge for the mental health system: not only are treatment rates low, but among those who are treated only about 50% receive adequate treatment, according to clinical studies.

Providing adequate treatment requires a clearer role for general practitioners

The relative lack of adequate treatment again is related to the issues of awareness and disclosure. If seeking support, people predominantly seek support from a general practitioner (GP). GPs are generally not sufficiently trained and qualified to deal with the complexities of mental illness, which is in contrast to the high prevalence of mental disorders in patients in a general practice. They will also have to be trained that sickness absence, *i.e.* prescribing to "rest", is often not a useful answer to a mental disorder and potentially harmful to the patient.

One indication of the problems with treatment is the very high share of those treated with a CMD who receive medication only, rather than a therapy or both. This contradicts

clinical evidence that medication is least effective for CMD and most effective for SMD. In view of the fact that (in many cases only) GPs get to see the overwhelming number of patients with mental disorders, especially those with CMD, much remains to be done to enable them to identify and treat patients properly, including referrals to specialist treatment as necessary. An improved referral routine presupposes a specialist mental health care system that cares about the needs of GPs and is able to provide rapid supports.

The mental health system itself needs to change

The mental health care system also faces two other important system-related challenges. First, the system is directed predominantly towards people with SMD. It is often not well equipped for dealing adequately and comprehensively with the needs of people with CMD, or does not reach those people sufficiently. This is not an efficient use of resources. The strengths of approaches currently directed to people with SMD, such as for example the key elements of supported employment, have considerable potential to help people with CMD back into employment effectively.

Related to this, employers and companies so far are not a real partner for the mental health care system. A systematic approach towards employers does not exist. In line with this and despite the knowledge that employment is an important element in recovery, the mental health care system takes little responsibility for the employment outcomes of their patients. Accordingly, to date, mental health care quality indicators do not include any element of employment.

6.3. New directions for mental health and work policies

Policy can and must respond more effectively to the challenges for labour market inclusion of people with mental illness. A three-fold policy shift will be required thereby giving more attention to: *i)* common mental disorders and also sub-threshold conditions; *ii)* disorders concerning the employed as well as the unemployed; and *iii)* preventing instead of reacting to problems.

Two elements stand out as particularly important for policy makers: first, to intervene at the right time; and second, to co-ordinate interventions in a much better way. The early onset of most mental disorders implies a need for a different way of looking at prevention and early intervention. Intervening when people claim a disability benefit will be far too late in most cases. The system complexity implies that progress can only be made by thinking beyond silos and integrating specialists and vocational supports into the first-line treatment.

Early intervention at various points in time

Intervention during adolescence

The early onset of most mental disorders implies a need for a different way of looking at prevention and early intervention. Intervening when people claim a disability or maybe any other public benefit will be far too late in many cases. Help should be provided much earlier by:

- preventing mental disorders at an age when adolescents attend school or undergo an apprenticeship, with early intervention and referral to services as appropriate;
- intervening early and assertively for pupils who display behavioural problems and, thereby, preventing school drop-out;

- assuring better education outcomes for early school leavers who are particularly at risk of developing mental health problems, through apprenticeships and second-chance school programmes; and
- helping youth with mental disorders in their transition from adolescence to adulthood and from mandatory to higher education and into employment.

Intervention at the workplace

The high rate of employment among people with mental disorders and the high productivity losses of those workers mean that the workplace is a key target for mental health policy aimed at improving and sustaining labour market inclusion of those with mental illness. Again, policy intervention is needed in different but concerted ways by:

- securing good working conditions which avoid job strain on the one hand, and sound management practices on the other, to avoid the development of work-related mental health problems and to minimise productivity losses of workers caused by such problems;
- systematic monitoring of sick-leave behaviour to detect longer-term or repeated absences as early as possible and manage those by providing immediate retention support; and
- helping employers avoid unnecessary dismissal caused by mental health problems through the provision of adequate incentives, information and support.

Intervention for the unemployed

Today, too many workers with mental illness lose their jobs and become unemployed, and struggle in finding a new job. As a consequence, they face a high risk of long-term unemployment and permanent labour market withdrawal. Added to this, a large number of the long-term unemployed develop mental health problems; a vicious circle. Caseworkers in the employment service have yet to deal with this issue adequately. Improvements should be sought in a number of ways by:

- making efforts to identify systematically unemployed and especially long-term unemployed suffering from mental ill-health, and assessing their work capacity and their support needs;
- working together with employers to help the unemployed with mental illness find jobs;
- directing return-to-work services to people on longer-term sick leave (or to recipients of longer-term sickness benefit) due to a mental health problem; and
- replacing ineffective vocational support services with effective, evidence-based (or at least experience-based) services and reinforcing outcome measurement.

Intervention for disability benefit claimants

Many of those with mental ill-health applying for a disability benefit are excluded from the labour market and trapped on long-term inactivity benefits too quickly and permanently. Preventing new disability benefit claims to the extent possible and helping beneficiaries who are able to work in their return to employment will require:

- better assessment of the problems of claimants with mental disorders, who typically suffer from complex, co-existing and chronic illnesses, and better identification of their work capacity and support needs;

- strengthening of the requirements for both benefit applicants (in line with their capacities) and benefit authorities, *i.e.* strengthening the activation elements of the disability system; and
- enabling those on disability benefits already to leave benefits through making work pay and introducing steps to eliminate the fear of benefit loss, together with better-targeted return-to-work measures adequate for those with significant distance to the labour market.

Co-ordinated supports at all stages

The main policy challenges and the nature of the interventions and supports needed at different stages of the (working) lifecycle are structurally similar at all stages. They involve better integrated services with the participation of a range of actors and systems to work together, to share client information and to refer clients to each other. Adequate, timely and well co-ordinated supports will require co-operation and co-ordination – at different times and in different ways – of employment services, health services, education institutions and benefit authorities.

Integration of approaches and services that often operate in isolation will require aligning objectives and incentives of the different systems that serve individuals with mental disorders. In the longer run, all stakeholders would benefit from the provision of integrated and effective supports and minimising system failures that hinder the provision of appropriate services. For example, integrating mental health services within the education system has positive impacts on educational attainment and other outcomes for children with mental health problems. Similarly, the integration of clinical and vocational services is associated with improved employment outcomes.

Health services in particular tend to be isolated and disconnected from other systems, with little or no emphasis on employment despite strong evidence that work is good for mental health and an important tool in a broader treatment strategy. This has also to do with the strong focus of current mental health systems on people with a severe mental disorder. Refocusing to address more effectively challenges of people with common mental disorders can only be done through a better co-ordination with other systems and a strong co-operation with both employers and employment services. Treatment services alone do not sufficiently help with continuing education and retaining employment.

The solution probably lies in *how* programmes are being co-ordinated. Promising approaches are to enable the mental health service to directly employ an employment specialist to help clients get and keep a job, and to form a formal partnership between health and employment services to provide a new joint service that encompasses employment and higher education as part of the recovery plan.

The high prevalence of mental disorders among children, workers and the unemployed also means that several stakeholders outside of the specialised mental health treatment sphere have a very critical role to play. Teachers, managers, public employment service caseworkers and general practitioners are key actors in tackling mental health and work challenges in a new way. They need to be more aware of mental disorders and better qualified to play the role they will have to play for employment outcomes to improve. None of them need to be psychiatrists, but they will have to be empowered to be able to support their pupils/workers/jobseekers/patients, to provide enhanced care and to co-operate with and involve experts systematically whenever needed.

Efforts are needed to improve the evidence base which continues to be incomplete

Last but not least, all countries – or, all key institutions in all countries – will have to make further efforts to improve the evidence base. The unawareness of, and stigma attached to, mental illness have led to a blind spot in all of the systems involved in terms of their data collection systems.

Most importantly, more evidence is needed on the link between health and employment outcomes. For example, the mental health care system should systematically collect information about the employment status of patients before and after treatment. Similarly, the public employment service should collect information about the mental health status and needs of their clients.

Finally, more research is required to identify good country examples of where a more integrated approach to the treatment and prevention of mental disorders is being adopted. This is the objective of the next phase of the OECD's review on the issue of mental illness and work.

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