

IABtopics

IAB Labour Market Research Topics

Institut für Arbeitsmarkt- und Berufsforschung der Bundesanstalt für Arbeit
Institute for Employment Research of the Federal Employment Services, Germany

No. 54, 2003

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The Health Status of the Unemployed in German Unemployment Statistics

Bundesanstalt für Arbeit

Federal Employment Services

Publisher of the series:

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Distribution:

To order apply to the IAB, Regensburger Strasse 104, 90478 Nürnberg

Annual price:

15,- €(for German subscribers); foreign subscribers are currently supplied free of charge

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ISSN 0945-8093

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- observation of and forecasts for the German labour market
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- evaluation of employment programmes
- regional and international labour markets
- occupation sociology
- research in skills and qualifications
- technological development and the labour market
- business and personnel management

The Health Status of the Unemployed in German Unemployment Statistics

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0 Abstract

The health status of unemployed people is much worse than that of people with jobs. More detailed information on the health of unemployed people at Bundesanstalt für Arbeit (BA), the German federal employment service, comes primarily from three data sources: First, placement counsellors enter health problems in computer-assisted position wanted listings. They are based on information provided by the unemployed person, the degree of disability recognised by the pension offices, and the results of the medical report procedure. Approx. one million unemployed people are registered as having health problems.

The second source of information comes from the conclusions of medical reports by the employment office medical service, whose diagnoses of diseases and function are published in aggregate form. Over 300,000 medical reports were prepared for the unemployed in 2001 alone. Analyses show that the most frequent diagnoses in the medical report procedure of BA's medical service were "diseases of the musculoskeletal system and connective tissue" followed by "mental and behavioural disorders." Certain occupational groups are affected disproportionately.

The third source – as a result of the legal provisions governing the payment of benefits and the way the statistics are designed – is information on the occurrence of cases of unfit for work among the unemployed. The outflow statistics record over 1.2 million cases of unfit for work in 2002. That is an annual average of over 84,000 unemployed people who received unemployment benefits or assistance. However, unemployment statistics systematically underestimate the percentage of unemployed people with health problems due to the recording of the outflow of people who are unfit for work due to ill health.

As shown by a representative IAB survey, unemployed people with health problems have poorer chances of reintegration into the labour market. Health problems are a major barrier to seeking a new job. It is urgent to develop approaches to prevention and health promotion that will support integration into the labour market.

1 Introduction

The health of unemployed people is often neglected by researchers and people in the field. However, approx. one million unemployed people in Germany have health problems. Furthermore, health problems are one of the greatest impediments to reintegration into the labour market and the search for work by unemployed people. Results based on the three main sources of information on the health of the unemployed from German unemployment statistics and administrative data are presented below: entries in position wanted listings which are relevant to placement; the conclusions of medical reports by the medical service of Bundesanstalt für Arbeit (BA), the German federal employment service; and cases of unfit for work. Health reporting is the first step and must be followed by long-term preventive measures and efforts to promote the health of the unemployed, in order to increase their opportunities where health is concerned and for reintegration into the labour market.

2 Empirical findings on the health of the unemployed compared with wage earners

The health status of unemployed people is much worse than that of people with jobs (Hollederer, 2002). That is substantiated by numerous studies and representative German surveys such as Mikrozensus (Dittrich 2001), Sozioökonomisches Panel (Steinle, 2001; Elkeles/Seifert 1993, 1996), or the national health surveys (Elkeles, 1999). Possible influences on selection and issues of causality have been discussed as explanations. Do sick people become unemployed or do unemployed people get sick? A selection process that works against people with health problems could take place, for example, in company hiring procedures or dismissals. According to current research, such selection processes do occur on the labour market, but the extent of their effects is small. Recent international meta-analyses (Murphy/Athanasou 1999; Paul/Moser 2001) show that prolonged unemployment can also cause or exacerbate mental illnesses in particular. Previous studies involving a change between employed status to unemployment showed that people frequently experience a worsening of their mental health. Conversely, mental states usually improve considerably when unemployed people go back to work.

The Health Report for Germany (1998) sees job loss and prolonged unemployment as independent psychosocial stressors that are felt on three levels:

- 1) The aspects of economic security, social integration, feelings of self-worth, time structuring, and external demands that are related to employment weaken or disappear entirely.
- 2) Experiencing everyday problems such as financial concerns, uncertainty about the future, or social stigmatisation leads to an increase in stresses.
- 3) Forms of coping that society views as intolerable are attributed to the affected persons themselves.

3 German statistical concept for determining the stock of unemployed people and implications for “unfitness for work”

Differences in statistical concepts defining who is unemployed and in terminology make it difficult to produce a synopsis of existing international studies. With regard to the health status of the unemployed, the definition of an unemployed person used by Bundesanstalt für Arbeit differs in decisive ways from the usual international concept of the labour force.

BA registers as unemployed within the meaning of §16 Social Security Code III any person seeking employment who has not yet reached age 66, is not in an employment relationship or is in such a relationship for less than 15 hours each week, is not attending school or university or participating in vocational training schemes, is not so ill as to be unfit for work, is not receiving an old-age pension, is available to begin working immediately, and has personally registered as unemployed.

One criterion for being unemployed is “immediate availability” for the labour market. The definition of unemployment in the “labour force” concept specifies immediate availability within two weeks. In contrast, BA defines “immediate availability” as “availability today”

without a grace period. The health problems of the unemployed are considerably underestimated due to this statistical counting method. When a person becomes unfit for work [*arbeitsunfähig*] and has registered as being ill, that person is no longer “immediately available” to the labour market according to the definition of unemployment and this statistical concept and is therefore recorded separately as a so-called “non-unemployed job seeker” [*nichtarbeitslosr Arbeitssuchender*].

An unemployed person’s established “unfitness for work” corresponds to a functional diagnosis that can be linked to claims to benefits such as the sickness benefit. However, if an unemployed person gets sick, he is considered to be unfit for work only if for health reasons he is no longer available to the labour market for *all* jobs for which he must be fit for work and ready for work to establish his entitlement to the unemployment benefit. This means that unfitness for work is not measured in terms of concrete gainful employment but rather according to fitness for placement in jobs a person can currently be expected to do.

4 Health problems in official unemployment statistics

Little detailed information has previously been available about diseases and their frequency among the unemployed. This section presents health data on the unemployed which can be obtained from official unemployment statistics and administrative data.

Bundesanstalt für Arbeit is the only employment service in the world to create its own medical service. Its very complex, valid medical opinions of experts are therefore of great interest.

4.1 Entries by placement officers in applicant files

According to official unemployment statistics, the stock of unemployed people in Germany amounted to approximately 4.6 million at the end of March 2003. Health problems can be relevant for the effort to place them in jobs. Therefore, such problems are recorded by the placement counsellor if they can affect the occupation for which the applicant is a candidate based on his suitability, his request for placement, and the prospects for placement. Such entries provide initial indications concerning health status. However, to protect the data of the person concerned, only rough categories concerning the degree of disability and the health problems involved are recorded in counselling and placement documents.

Health problems were established in 1,054,250 unemployed people in March 2003. That corresponds to almost one-quarter of the total number of unemployed people. As shown in detail in Table 1, a total of 169,500 were severely disabled or unemployed with a status equivalent to severely disabled. Of those severely disabled people, 17.5% had a particularly high “degree of disability” (German abbreviation GdB) of over 80. In Germany, a disability is officially established by the local pension administration. The prerequisite is a disturbance of health that is not temporary and lasts more than six months. The extent of the problem is indicated by the degree of disability. People whose disability is rated at least 50 are considered to be “severely disabled”. However, people with a GdB between 30 and 50 can be considered equivalent to severely disabled if, due to their disability, they cannot get

or keep an appropriate position without the equivalence. The number of unemployed severely disabled people declined after 1997. One factor is that older people in particular ended up under “inactive population” [*Nichterwerbstätigkeit*], for example by receiving a pension for a severe disability or for reduced capacity for gainful employment. Another factor is that BA increased its efforts to place severely disabled people in jobs. At the same time, however, the number of employed people with severe disabilities declined, and the number of unemployed people with severe disabilities is now rising again. In March 2003, in addition to unemployed people with severely disabled status, there were 121,687 unemployed people with a GdB between 30 and 50. A total of 763,072 unemployed people have other health problems that are relevant for placement.

As lifespans increase, both the proportion of people with severe disabilities and the proportion of people with other health problems among the total number of unemployed have increased considerably. Only 0.8% of the total population under age 20 has severe disabilities, while that level rises steadily to 8.3% among people from ages 55 to 60.

An increase in the percentage of severely disabled people can also be observed as the duration of unemployment increases. Only 3.0% of people who have been unemployed for less than one month have severe disabilities, but that rises to 4.9% for unemployment lasting two years and longer. The portion of people with other health problems increases analogously from 13.1% to 30.5%. That increase also reflects a proven higher risk of long-term unemployment for unemployed people with health problems and with recognised disabilities (Rudolph 1998). Overall, placement counsellors must take disabilities or health problems into account for one-third of the long-term unemployed.

4.2 *Diagnoses by the medical service of Bundesanstalt für Arbeit*

Little information has previously been available about diseases and their frequency among the unemployed. German federal statistics do not show unemployed people separately in important national analyses such as statistics on types of disease. Internationally, only self-reported health data on selected unemployed persons have been available.

New knowledge can be gained from the medical reports of the **medical service of Bundesanstalt für Arbeit**. BA is the only federal employment service in the world to create its own medical service with its own statistics on medical reports. Around 300 employment service physicians and around 1,000 contract physicians work for BA’s medical service in Germany. They may be consulted to support placement of job seekers, in order to determine relevant health problems and the person’s capability to work. Generally speaking, the initial advisory session with a placement counsellor or advisor is held soon after a person registers as unemployed. At that time a decision is made about whether, based on the described health problems, a medical examination is necessary to assess the available opportunities, prepare a placement strategy, and determine availability. For example, the placement counsellor or advisor may ask the medical service to determine the person’s suitability for a specific activity based on his health or to make a “capability assessment” [*Leistungsbild*] so that a vocational rehabilitation measure can be initiated. Another typical rea-

son for the vocational advisor to consult the medical service is to support the vocational choices of

Table 1: Unemployed people with disabilities and health problems by age and by duration of unemployment

Status End of March 2003

Federal Republic of Germany

	Stock of		of these (column 1)		
	unemployed people	Disabled/ equiv. status		Other health impairments	
		absolute	absolute	% for line	absolute
	1	2	3	4	5
Total no. of unemployed	4,607,885	169,500	3.7	884,750	19.2
<i>of these: degree of disability(dod) 80 and higher</i>		29,634	0.6	-	-
<i>50 up to max. 80 dod</i>		128,148	2.8	-	-
<i>30 up to max. 50 dod equiv. status</i>		11,718	0.3	-	-
<i>30 up to max. 50 dod no equiv. status</i>		-	-	121,678	2.6
<i>other health impairments</i>		-	-	763,072	16.6
Age					
under 20 years	89,568	690	0.8	6,052	6.8
20 up to max. 25 years	472,253	6,517	1.4	43,894	9.3
25 up to max. 30 years	462,256	7,950	1.7	54,013	11.7
30 up to max. 35 years	554,241	10,894	2.0	75,468	13.6
35 up to max. 40 years	654,988	15,961	2.4	107,055	16.3
40 up to max. 45 years	637,895	21,040	3.3	126,160	19.8
45 up to max. 50 years	575,055	24,958	4.3	133,486	23.2
50 up to max. 55 years	569,687	35,181	6.2	159,250	28.0
55 up to max. 60 years	466,263	38815	8.3	144,923	31.1
60 up to max. 65 years	125,679	7,494	6.0	34,449	27.4
Length of unemployment					
less than 1 month	427,575	12,876	3.0	55,944	13.1
1 up to max. 3 months	933,855	26,590	2.8	117,880	12.6
3 up to max. 6 months	916,191	30,377	3.3	139,177	15.2
6 up to max. 12 months	870,204	33,476	3.8	173,153	19.9
1 up to max. 2 years	748,585	31,344	4.2	181,644	24.3
2 years and over	711,475	34,837	4.9	216,952	30.5

Source: Bundesanstalt für Arbeit: Unemployment stock March 2003; author's calculations.

young people with health problems or to determine their suitability for occupations involving particular challenges for health.

Diagnoses of diseases

BA's physicians prepared 391,826 medical reports for the unemployed in 2001 alone (Statistic St80 of BA's medical service, 2002 / own calculations). Over one-third of the unemployed people who were examined were women (38%), and almost two-thirds were men (63%). They were 43 years old on average, although their ages were widely distributed over all age groups. One-quarter were up to 35 years old, over half were up to 45 years old, and over four-fifths were up to 55 years old. Eighty-nine percent were German citizens.

A total of 322,278 medical report procedures ended in diagnosis of a disease. Of those, 310,054 medical reports are available for further analysis with valid coding according to

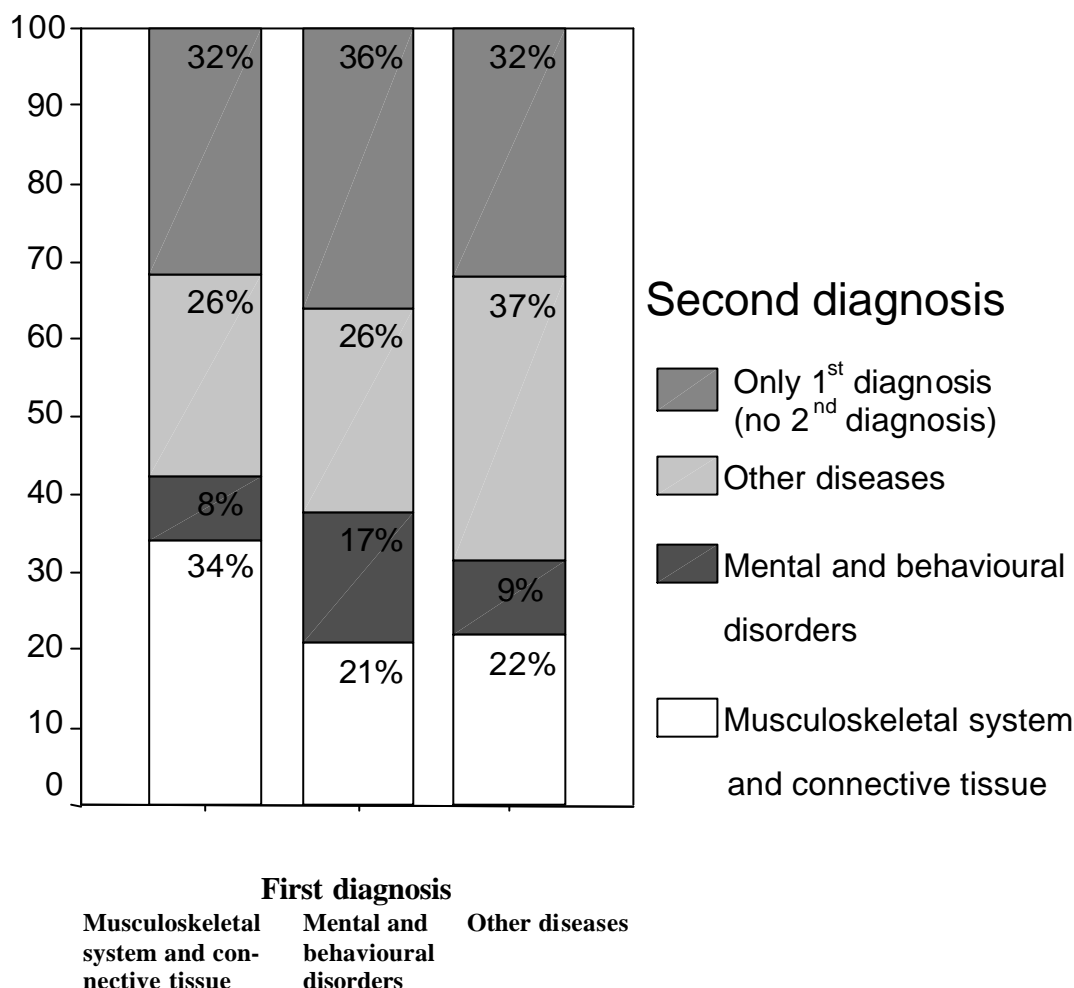
ICD-10¹ (Table A1 in the Annex). The remaining 3.8% of medical reports had erroneous coding (in some cases according to the earlier classification ICD-9). Forty-two percent of the valid medical reports with a diagnosis of disease (131,522) involved the most frequent first diagnosis “diseases of the musculoskeletal system and connective tissue”. In second position, the number of certified “mental and behavioural disorders” is particularly high, and was included in 25% of the medical reports (77,440). “Diseases of the circulatory system” were diagnosed in 7% of cases (20,114), and “injury and poisoning” were diagnosed in 5% (14,693). “neoplasms”, “diseases of the respiratory system”, and “diseases of the nervous system” occurred at a rate of 3% each. All other disease groups combined accounted for 12% of the medical reports. These include metabolic diseases, diseases of the eye and ear, diseases of the digestive system, etc. There was barely any difference in the distribution of the diseases between men and women. However, the conclusions of the medical reports follow the regional structure of unemployment, so there were considerable differences among the German states (see Table A2 in the Annex). The proportion of mental and behavioural disorders was highest (31%) in the former West German state of Baden-Württemberg and lowest (17%) in the former East German state of Brandenburg. This does not mean that more people with mental disorders live in Baden-Württemberg but only that their percentage among the unemployed is higher there and that their risk of unemployment may be higher. Obviously the local structure of unemployment is reflected in the medical reports. The proportion of unemployed people with mental disorders tends to be lower in regions with higher unemployment. For example, it is 20% in eastern Germany and 27% in Western Germany.

A second impairment with an additional diagnosis of disease was established in two-thirds of the medical reports with a valid first diagnosis (208,189). Figure 1 shows the percentage distribution of the second diagnosis in combination with the first diagnosis. In medical reports with the first diagnosis of “diseases of the musculoskeletal system and connective tissue”, around one-third had only the first diagnosis, around one-third had a second diagnosis from the same disease group, 8% had a second diagnosis of “mental and behavioural disorders”, and the remaining one-quarter had a second diagnosis from the other disease groups.

Of the medical reports with an first diagnosis of “mental and behavioural disorders”, over one-third were concluded without a second diagnosis, 17% had a second diagnosis from the same disease group, around one-fifth had a second diagnosis of “diseases of the musculoskeletal system and connective tissue”, and around one-quarter had second diagnoses of other diseases. Overall, therefore, “mental and behavioural disorders” are a factor in almost one-third of the medical reports (31%), either as first or second diagnosis.

¹ Diagnoses of diseases according to the International Classification of Diseases and Related Health Problems, tenth revision (ICD-10)

Figure 1: First and second diagnoses in medical reports on the unemployed by BA physicians in 2001 (100% scaled; N=310,054)



Drug Addictions

Little information has previously been available concerning drug addictions among the unemployed. According to medical reports by BA's physicians, over one-third of diagnosed mental and behavioural disorders are related to the abuse of psychotropic substances (Table 2). That first diagnosis was made in 27,519 medical report procedures in 2001 and is therefore the largest group within the mental and behavioural disorders. Most cases involve an alcohol abuse. The first diagnoses are followed by additional medical report procedures in which behavioural disorders as a result of psychotropic substances are certified as a second diagnosis.

The medical reports allow identification of groups of (recognised) addicts with existing distinctive mental traits who are at particular risk. They can also provide information for the development of concepts for advisory services and assistance oriented to target groups. According to the medical reports, mental behavioural disorders as a result of psychotropic substances among the unemployed are primarily a problem of German men. A total of 86% of the medical reports containing that first diagnosis involved men, 96% of whom are German. Their average age is 41 years. In 44% of the medical reports, the subjects are hardly able to work or able to work only three hours per day; in 20% a change in their previous occupation is indicated.

Table 2: Diagnosis of “mental and behavioural disorders” among the unemployed in medical reports by BA physicians – 2001

	First diagnosis		Second diagnosis	
	absolute	%	absolute	%
Mental and behavioural disorders due to psychoactive substance use	27,519	35.5%	9,873	29.0%
<i>of these: by alcohol abuse</i>	21,420	27.7%	6,656	19.6%
<i>of these: by multiple substance abuse</i>	4,121	5.3%	1,431	4.2%
Anxiety, dissociative, stress-related, somatoform and other nonpsychotic mental disorders	18,625	24.1%	10,184	30.0%
Affective disorders	15,518	20.0%	7,243	21.3%
Other mental and behavioural disorders	15,778	20.4%	6,693	19.7%
Total	77,440	100.0%	33,993	100.0%

Source: Statistics St80 BA Medical Service, 2003 (Author’s calculations).

Results of the sub-group „mental and behavioural disorders“ of 310,054 medical reports indicating a ICD-10 diagnosis of a total of 391,826 examinations.

The second-largest group is the “Anxiety, dissociative, stress-related, somatoform and other nonpsychotic mental disorders”. It accounts for almost one-quarter of the medical reports. This group also includes the frequently reported stress- and adaptation-related disorders in response to an extraordinarily stressful life event or a particular change in a person’s life. This includes manic episodes and depressive disorders. The group of “affective disorders” takes third position with one-fifth of the diagnosed mental and behavioural disorders among the unemployed people who were examined

Functional diagnoses

The established health problems may impair the unemployed person’s capability and therefore lead to a functional diagnosis. Specific functional consequences depend on the type of disease and the field concerned (Table 3). For more than half of the unemployed people with “diseases of the musculoskeletal system and connective tissue”, a change in their previous activity or occupation was medically indicated. Among unemployed people with mental and behavioural disorders, that is the case for only one person in four. However, for almost one person in three those disorders impair the ability to spend time working to such an extent that they cannot handle a job subject to social security contributions (with an

average of more than three hours' working time per day). These medical report procedures then lead from unemployment to no gainful employment.

Table 3: Functional diagnosis of the capability of the unemployed in medical reports by BA physicians in 2001 broken down by disease groups

Functional diagnosis	Diseases of the musculoskel. sys. + connec. tissue		Mental and behavioural disorders		Other diseases		Total	
	absolute	%	absolute	%	absolute	%	absolute	%
Change required	70,798	54.5%	18,579	24.7%	43,527	43.9%	132,904	43.7%
Capable of working between 3 and 6 hrs	2,338	1.8%	3,590	4.8%	2,574	2.6%	8,502	2.8%
Capable of working less than 3 hrs	5,331	4.1%	23,880	31.8%	14,787	14.9%	43,998	14.5%
Previous occupation suitable with consideration of health condition	50,688	39.0%	28,610	38.1%	37,475	37.8%	116,773	38.4%
Fully capable and fit	757	0.6%	503	0.7%	817	0.8%	2,077	0.7%
Total	129,912	100%	75,162	100%	99,180	100%	304,254	100%

Source: Statistics St80 of the BA Medical Service, 2003 (Author's calculations).

Note: 304.254 of the 310.054 medical reports with ICD 10 diagnosis included a functional diagnosis as well.

Accidents as a cause of impairment

The cause of impairment was an accident in 4.6% of all medical report procedures. Impairment was caused by a disease in 93.9% of all medical report procedures, and a congenital health problem was involved in 1.6% of cases. An "injury" was the result of an accident in two-thirds of those medical report procedures, while a disease of the "musculoskeletal system or connective tissue" was established in one-quarter of cases. If the unemployed people who were examined are considered by occupational group, the highest proportion of medical report procedures with accidents involve carpenters (12%), scaffolding builders (11%), and roofers (11%) (Table A7 in the Annex).

Occupational major groups and diagnoses

Tilers have the highest proportion of "diseases of the musculoskeletal system and connective tissue" with 60% of the medical reports for that occupational major group (Table 4). Tilers are also the group for which the functional diagnosis "change of occupation indicated" is made most frequently, in two-thirds of all medical reports (Table A8 in the Annex). This pinpoints a numerically large target group for preventive measures among wage earners and possibly for occupational health and safety efforts among the unemployed. Under musculoskeletal diseases, tilers are then followed by butchers, sausage good makers, floor layers, stonemasons, and other makers of wooden and sports equipment. On average, this was the diagnosis for 43% of all medical reports for unemployed people.

Mental and behavioural disorders primarily affect managers of social institutions (homes) and social workers. That was the diagnosis in half of all medical reports for this occupational group, twice as high as the average for the medical reports of all unemployed people.

They are closely followed by scholars in the humanities and physicians. Only a few medical reports were prepared for those two groups, but a large portion of them showed mental and behavioural disorders. Teachers in elementary, secondary, and special schools and bank clerks occupy fourth and fifth places.

Table 4: First diagnoses in medical reports on the unemployed by BA's physicians broken down by occupational groups in 2001

Occupational major groups with the highest percentage of „diseases of the musculoskeletal system and connective tissue“								
Ranking	CODE/Major group	Musculoskeletal sys. + conn. tissue		Mental and behavioural disorders		Other diseases		absolute
		absolute	% for line	absolute	% for line	absolute	% for line	
1	483 Tilers	725	60%	141	12%	334	28%	1200
2	402 Butchers, sausage goods makers	190	60%	40	13%	88	28%	318
3	486 Floor layers	154	60%	28	11%	76	29%	258
4	101 Stonemasons	204	58%	44	12%	105	30%	353
5	504 Other makers of wooden or sports equipment	57	56%	14	14%	30	30%	101
	All major groups	129,107	43%	75,573	25%	98,823	33%	303,503

Occupational major groups with the highest percentage of „mental and behavioural disorders“								
Ranking	CODE/Occupation	Musculoskeletal sys. + conn. tissue		Mental and behavioural disorders		Other diseases		Total
		absolute	% for line	absolute	% for line	absolute	% for line	absolute
1	862 Managers of soc.inst. , social workers	218	25%	435	50%	219	25%	872
2	882 Scholars in the humanities	33	20%	79	49%	49	30%	161
3	841 Physicians	35	22%	77	49%	45	29%	157
4	873 Teachers of primary, secondary I, spec. schools	74	18%	190	46%	148	36%	412
5	691 Bank clerks	191	23%	373	46%	252	31%	816
	All major groups	129,107	43%	75,573	25%	98,823	33%	303,503

Source: Statistics St80 of the BA Medical Service, 2003 (Author's calculations).

Note: Only occupational groups for which at least 100 representatives had been examined were included in the ranking 1 to 5.

The proportion of respiratory diseases among unemployed bakers (13%) and confectioners (11%) is around four times higher than the average for all unemployed people (Table A6 in the Annex). They are followed at a distance by goods painters, speciality/silkscreen printers, and letterpress printers. Confectioners also experience a relatively high percentage of skin disorders. They follow in order after hairdressers, body care workers, and florists. Medical reports on hairdressers show that at 17% they have seven times more skin disor-

ders than the average. This also demonstrates an additional need for occupational health and safety and promotion of health in the workplace.

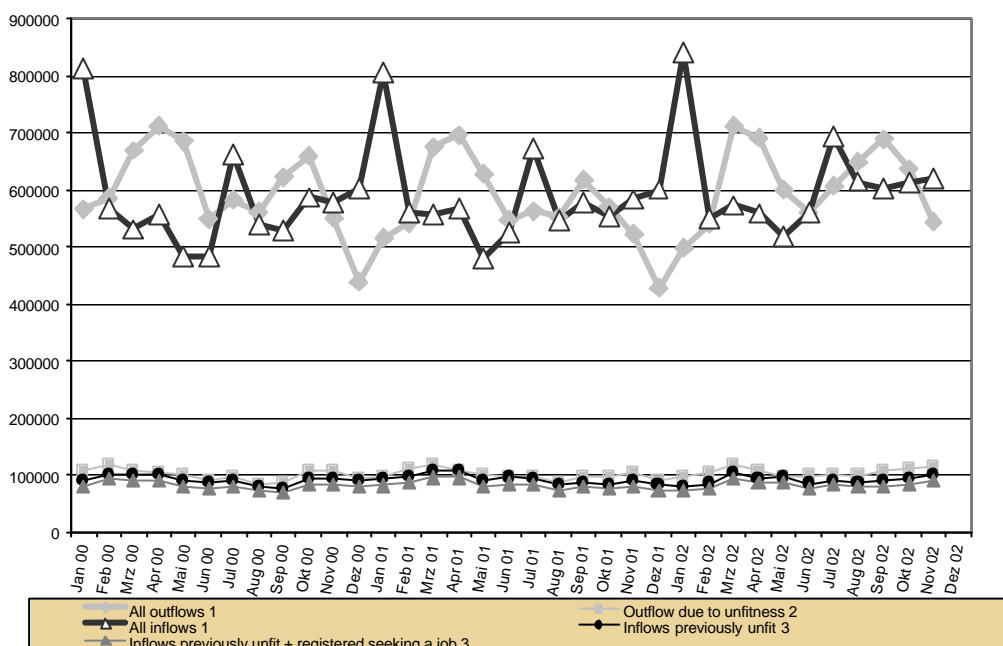
5 A second look at BA's health data

5.1 Outflows from the unemployment register due to unfitness for work

Administrative data from Bundesanstalt für Arbeit which has previously received hardly any attention includes cases of unfitness for work among the unemployed and the length of time they were unfit for work. That data includes relevant supplemental information on the health status of the unemployed as a group and individually and also influences official unemployment statistics. To be declared unfit for work or to establish a case of illness, social legislation specifies that an unemployed person must register immediately and within three days submit a medical certificate indicating that he is unfit for work and how long that situation is likely to last (§ 311 Social Security Code III). Submission of the medical certificate indicating unfitness for work then results in a change of statistical status for the unemployed person or the recording as an outflow from the register. The unemployed person becomes a “non-unemployed job seeker” [*nichtarbeitslos Arbeitssuchender*] as of the first day of registration of the illness or the first day on which his unfitness for work becomes known. The unemployment statistics system therefore removes him from the total number of unemployed. Over 1.2 million people were withdrawn from the total number of unemployed in 2002 for the reason that they were “unfit for work” (Bundesanstalt für Arbeit, 2003). That accounts for almost one-fifth of the recorded removals (Figure 2). If the sick person who is not receiving benefits is likely to be unfit for work for more than three months, he will no longer be counted in any of the statistics, including as a job seeker. The total number of entries can therefore not be considered equivalent to the number of affected people, because unemployed people may get sick several times in one year. After the period of unfitness for work ends, the person's status is readjusted to the new circumstances and an addition is recorded. In 2002 the additions to the number of unemployed include around 1.1 million movements of people who had had the status of unfit for work immediately before applying for unemployment (Bundesanstalt für Arbeit, 2003) (cf. Figure 2).

Due to this statistical counting method, the health problems of the unemployed are considerably underestimated in cross section analyses. Every count of the number of unemployed people excludes people who are unfit for work and sick (usually for a short time) at the respective time due to the previous recording as outflow. There is also another statistical artefact: if the person is unfit for work for more than six weeks after a new addition to unemployment, the originally recorded date of the registration as unemployed is overwritten with the new addition date and is treated like a new addition to unemployment. The official calculations of the length of unemployment are then based on the last addition date. At the micro level, this arrangement shortens the period of unemployment and reduces the rates of long-term unemployment in the national statistics on total unemployment.

Figure 2: Monthly movements in total unemployment from 2000 to 2002



1 Monthly inflows and outflows to/from the stock of unemployed people.

2 These include outflows due to 'unfitness for work' and

3 Inflows of 'previously unfit persons' (with and without consideration of the previous status as 'seeking employment').

Source: Bundesanstalt für Arbeit: Inflow to the unemployment statistics by structure of origin an selected groups of persons - 2000 to 2002.

Bundesanstalt für Arbeit: Outflow from the register by reasons and selected groups of persons - December 2000 to 2002.

5.2 Health data in special circumstances

The outflow statistics provide information on the number of cases of unfitness for work but not on the time volume and the effects on the annual average number of unemployed. Additional information on this can be obtained from statistics on people who receive benefits. Recipients of unemployment benefits or unemployment assistance who become unfit for work initially continue to receive their payments from the labour office for six weeks (§ 126 Social Security Code III). This phase is shown in the statistics on people receiving benefits. After that time the entitlement to benefits is suspended until the person is again fit for work. In the interim, the health insurance fund continues to pay the sickness benefit in the same amount as the unemployment benefit or unemployment assistance for a maximum of 78 weeks. In 2002, around 84,000 recipients of unemployment benefits or assistance continued to receive payments while they were ill (Bundesanstalt für Arbeit, 2003).

Based on an annual average totalling 3,608,965 recipients, it can be calculated that 2.3% were registered as ill in 2002. That rate is much lower than the rate for employed people with compulsory insurance who were registered as ill in 2002, which was 4% (German Federal Ministry of Health, 2003). However, systematic underestimations must be taken into account. For one thing, unemployed people have fewer cases of unfitness for work on average because when they have short-term illnesses they obviously do not seek medical treatment with “certificates of unfit for work” (GEK 1999, 2001). In addition, not all certificates of unfitness for work registered in the health insurance fund statistics are recorded in the file on recipients of benefits or reported to the labour offices. A comparison of the nearly 1.1 million cases of unfitness for work reported by unemployed people in 2000 or that were entered as outflows from unemployment with the health insurance fund statistics shows that more than twice as many certificates of unfitness for work – more than 2.7 million – were recorded at the health insurance funds (BMG KG 2 Statistics, 2002). BA’s data therefore offers only an incomplete picture for estimating the overall health situation of the unemployed at this juncture.

A series of special provisions has led to the existence of administrative data on the unemployed in special circumstances. At the same time, those special groups of people are also removed from the total number of unemployed. Looking only at statistics on total unemployment therefore causes health problems to be considerably underestimated. As a special form of the unemployment benefit, people with reduced capability that is not merely temporary pursuant to § 125 Social Security Code III are entitled to benefits if partial disability [*verminderte Erwerbsfähigkeit*] within the meaning of the statutory pension insurance scheme has not yet been established. A total of 35,051 people received that benefit in 2002 (Bundesanstalt für Arbeit, 2003). In addition, 291,525 people were subject to the arrangement in § 428 Social Security Code III, which is similar to early retirement in that recipients who are age 58 and older need no longer be fully available for job placement and therefore are no longer included in the total number of unemployed. The portion of people with health problems is naturally quite high in older people.

6 Fewer opportunities for re integration into the labour market

Unemployed people with health problems have far fewer opportunities for reintegration into the labour market. That is the conclusion of a representative IAB telephone survey² on the structure of unemployment in spring 2000. All individual data was collected on the time spent employed and unemployed during the careers of a representative sample of the total number of unemployed. Among other things, that allowed relationships to be established between health status and reintegration into the labour market or the duration of unemployment (Hollederer, 2003a). The results for the random sample of the total number of

² The study design and the surveyed variables are described in detail by Cramer, et al. (2002). The gross random sample included 21,007 unemployed people from the total number of unemployed, which was reduced to 17,019 unemployed people by neutral losses. A total of 10,236 computer-assisted telephone interviews were successfully conducted from that adjusted random sample of the total number of unemployed, corresponding to a 60% willingness to participate.

unemployed obtained in around 10,000 successful telephone interviews are relevant for the issues of interest here.

Around one-third of the surveyed unemployed respondents stated that they had health problems. For two out of three unemployed respondents with health problems, this made it “difficult to look for a position that corresponds to their last position”. This self-reported information correlates relatively well with the health problems relevant for placement which were registered by the job placement counsellors (Table 1).

An average of about three months elapsed between selection of the random samples and the interviews. Of the unemployed people with health problems affecting their occupational activity, only 6% were again gainfully employed on the first labour market at the time of the interview. That proportion rises to 13% for the people with other health problems and 23% for those without health problems. That reduced likelihood of transition to the first labour market is also confirmed for people with health problems using multi-variant analyses including age, sex, school and vocational training, or the duration of unemployment (Cramer, et al. 2002).

The survey shows that health problems are a major barrier to the search for a new job and that they impair or prevent job search activities by the unemployed. They have the greatest influence on the level of activity, including in multi-variant analyses (Cramer, et al. 2002). Search activities are lowest among people with health problems that are relevant for their occupation. Only one-third of them are very active in looking for a job. Half of people with other health problems are active, and somewhat more than half of all other unemployed people are active.

The rather passive unemployed people with health problems that are relevant to their occupation mentioned plausible reasons for the low level of job seeking activities: 42% have already planned or applied for transition to retirement. Three out of five pensions involve benefits for occupational unfitness or unfitness for gainful employment. Another 15% of this group of unemployed people are planning or will soon start retraining or continued or initial training. Others already have the prospect of a job, are planning to move house, or cite family reasons.

Twenty-three percent of unemployed people with health problems relevant to their occupation were not looking for work at all at the time of the survey. That percentage is almost twice as high as in the other groups. Almost all of them list “health reasons” as the cause. Among the unemployed with other health problems, more than half cite health reasons for not seeking employment. Of the other unemployed, one in ten cites health reasons for abandoning the search for employment.

7 Equal opportunity for the unemployed, too

Unemployed people with health problems are confronted with a vicious circle: their chances of reintegration into the labour market are lower than those of other unemployed people. They face multiple burdens from their health status, unemployment, and the threat

of poverty. In the IAB survey, more than one-third of all unemployed people stated that they were in debt. Societal stigmatisation with individual accusations can promote loss of social status and exclusion and also increase mental stresses.

The results of the survey indicate less job search activity by both unemployed people with health problems that are relevant to their occupation and those with other health problems. Although such problems are not relevant to a person's occupation at the moment, they do noticeably make the job search and reintegration into the labour market more difficult. Passivity in looking for a job can also be the expression of reduced capability resulting from health problems, diseases, accidents, and disabilities. The risk of long-term unemployment rises with such passivity. Moreover, current research indicates that prolonged unemployment can cause mental disorders or exacerbate existing illnesses, which in turn reduces opportunities on the labour market.

This vicious circle must be broken. For two decades now, the global strategy of "health for all" of the World Health Organisation and its member states has been aimed at achieving equal opportunities for health among countries and among population groups within countries. Equity in the health sector is a main aim and is intended to allow all people to live a socially and economically productive life. Poverty is considered to be the greatest risk factor for health. Therefore, in this century Target 2 of the European policy concept "Health 21" is primarily aimed at evening out income-related health differences within member states. A particularly high frequency of illness and a high mortality rate can be observed in the lower social strata and among poorer people in Germany, too. That is confirmed by the health report for Germany by the German Federal Statistical Office (1998). The first poverty and wealth report by the German federal government considers the main risk factor for poverty to be unemployment. Therefore, it is only logical to pay more attention to the relationships between unemployment and health. Good health is not only a fundamental right, it is also a major prerequisite for sustained economic growth. A "healthy place to do business" also needs healthy people.

Promoting health is a "key investment". The medical service of the Bundesanstalt für Arbeit most frequently diagnosed diseases of the musculoskeletal system among the unemployed, which to a great extent result in a cost-intensive change in occupation or occupational activities. In this case, preventive measures such as those to promote back health could counteract occupational unfitness. Specifically in the case of mental disorders, enhancing the mental health of the unemployed could help to increase resiliency. According to the German JobAQTIV Act, case managers could guide assistance and treatment processes among unemployed people with an increased need for supervision, such as those with drug addictions (Hollederer, 2003b). The described analysis of medical reports by BA physicians shows distinctive features that are typical of various occupations in the ranking of diseases suffered by the unemployed. It therefore indicates the preventive potential of promoting health in the workplace and of occupational health and safety. In accordance with the European agenda "Health 21", comprehensive treatment strategies and programmes and investments aimed at improving health are needed.

8 Literature

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9 Annex

Table A1: First diagnoses of unemployed persons in medical examinations by BA physicians by gender in 2001

Chapter ICD-10	Men		Women		Total	
	absolute	%	absolute	%	absolute	%
Diseases of the musculoskeletal system and connective tissue	81,568	42.1%	49,953	42.9%	131,521	42.4%
Mental and behavioural disorders	46,735	24.1%	30,702	26.4%	77,437	25.0%
Diseases of circulatory system	14,430	7.5%	5,684	4.9%	20,114	6.5%
Injury, poisoning and certain other consequences of external causes	11,301	5.8%	3,391	2.9%	14,692	4.7%
Neoplasms	4,519	2.3%	5,046	4.3%	9,565	3.1%
Diseases of the respiratory system	6,195	3.2%	3,353	2.9%	9,548	3.1%
Diseases of the nervous system	5,548	2.9%	3,601	3.1%	9,149	3.0%
Endocrine, nutritional, and metabolic diseases	5,692	2.9%	3,163	2.7%	8,855	2.9%
Diseases of the skin and subcutaneous tissue	3,482	1.8%	3,595	3.1%	7,077	2.3%
Diseases of digestive system	4,201	2.2%	1,736	1.5%	5,937	1.9%
Diseases of the eye and adnexa	2,883	1.5%	1,256	1.1%	4,139	1.3%
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	1,692	0.9%	1,454	1.2%	3,146	1.0%
Certain infectious and parasitic diseases	1,525	0.8%	621	0.5%	2,146	0.7%
Diseases of the ear and mastoid process	1,373	0.7%	724	0.6%	2,097	0.7%
Congenital malformations, deformations and chromosomal abnormalities	1,076	0.6%	814	0.7%	1,890	0.6%
Diseases of the genitourinary system	720	0.4%	814	0.7%	1,534	0.5%
Diseases of the blood and blood-forming organs, certain disorders involving the immune mechanism	301	0.2%	224	0.2%	525	0.2%
Factors influencing health status and contact with health services	156	0.1%	101	0.1%	257	0.1%
Pregnancy, childbirth and the puerperium	92	0.0%	120	0.1%	212	0.1%
Certain conditions originating in the newborn period	132	0.1%	71	0.1%	203	0.1%
External causes of morbidity	2	0.0%	2	0.0%	4	0.0%
Total	193,623	100.0%	116,425	100.0%	310,048	100.0%

Source: Statistics St80 of the BA Medical Service, 2003 (Author's calculations).

Note: Diagnosis of diseases according to the International Statistical Classification of Diseases and related health problems, 10th revision

Table A2: First diagnoses of unemployed persons in medical examinations by BA physicians by Federal Laender in 2001, in percent

Land	Muscu- loskele- tal sys- tem + conn. tissue	Mental and be- hav. di- sorders	Diseases of circula- tory sys- tem	Dis. of the respira- tory system	Skin diseases	Other disea- ses	Total	absol- ute
Baden-Wuerttemberg	38.5%	31.0%	6.1%	2.4%	1.9%	20.2%	100.0%	28,992
Bavaria	43.9%	25.1%	5.5%	3.1%	2.1%	20.3%	100.0%	40,484
Bremen	41.6%	27.1%	5.7%	2.7%	2.6%	20.3%	100.0%	3,852
Hamburg	36.8%	37.4%	5.0%	2.7%	1.5%	16.6%	100.0%	6,407
Hesse	41.0%	26.9%	6.8%	3.3%	2.1%	20.0%	100.0%	26,113
Lower Saxony	46.9%	25.7%	4.8%	2.9%	2.3%	17.4%	100.0%	27,692
North Rhine-Westphalia	42.8%	24.7%	7.0%	3.4%	2.0%	20.2%	100.0%	51,130
Rhineland-Palatinate	45.8%	25.0%	5.5%	3.1%	2.0%	18.6%	100.0%	13,759
Saar	39.1%	27.6%	7.2%	3.0%	2.2%	21.0%	100.0%	5,814
Schleswig-Holstein	44.1%	28.1%	4.7%	3.0%	2.3%	17.8%	100.0%	13,872
<i>West Germany</i>	<i>42.7%</i>	<i>26.7%</i>	<i>6.0%</i>	<i>3.1%</i>	<i>2.1%</i>	<i>19.5%</i>	<i>100.0%</i>	<i>218,115</i>
Berlin	44.2%	23.8%	6.1%	3.5%	3.0%	19.5%	100.0%	20,034
Brandenburg	47.4%	17.1%	7.2%	3.0%	2.6%	22.6%	100.0%	11,259
Mecklenburg-Vorpommern	44.8%	19.0%	8.3%	3.4%	3.0%	21.5%	100.0%	12,389
Saxony	40.9%	18.4%	7.8%	3.0%	2.8%	27.1%	100.0%	22,558
Saxony-Anhalt	38.2%	19.6%	10.3%	3.1%	2.8%	25.9%	100.0%	13,482
Thuringia	42.6%	18.7%	7.6%	3.2%	3.1%	24.8%	100.0%	9,307
<i>East Germany</i>	<i>42.8%</i>	<i>19.8%</i>	<i>7.8%</i>	<i>3.2%</i>	<i>2.9%</i>	<i>23.6%</i>	<i>100.0%</i>	<i>89,029</i>
Total	42.7%	24.7%	6.5%	3.1%	2.3%	20.7%	100.0%	307,144

Source: Statistics St80 of the BA Medical Service, 2003 (Author's calculations).

Note: Diagnosis of diseases according to the International Statistic Classification of Diseases and related health problems, 10th revision

Table A3: Number of medical reports for unemployed people by requesting agency in 2001

Requesting agency	absolute	%
Placement and career guidance service	263,459	81.7%
Service for the disabled	22,620	7.0%
Service for rehabilitation	14,556	4.5%
Career guidance for the disabled	2,442	0.8%
Other career guidance services	2,817	0.9%
Administration	42	0.0%
Complaints office	1,805	0.6%
Other	14,855	4.6%
Total	322,596	100.0%

Source: Statistics St80 of the BA Medical Service, 2003 (Author's calculations).

Note: Diagnosis of diseases according to the International Statistic Classification of Diseases and related health problems, 10th revision

Table A4: Number of medical reports for unemployed people by cause in 2001

Cause	absolute	%
Health impairment	258,334	80.1%
Failed in training	745	0.2%
Vocational rehabilitation	20,276	6.3%
Vocational training course	7,179	2.2%
Terminating/rejecting a job	12,638	3.9%
BA's medical examination prior to hiring	36	0.0%
Complaint/legal action	1,968	0.6%
Other causes	21,417	6.6%
Total	322,593	100.0%

Source: Statistics St80 of the BA Medical Service, 2003 (Author's calculations).

Note: Diagnosis of diseases according to the International Statistic Classification of Diseases and related health problems, 10th revision

Table A5: First diagnoses in medical reports on unemployed persons by BA physicians by occupational groups in 2001, in percent

CODE	Occupational group	Mus.skel. syst. + conn. tissue	Mental and behav. disorders	Diseases of circulatory system	Diseases of the respiratory system	Skin diseases	Other diseases	Total	absolute
1	Farmers	44.6%	19.8%	7.5%	3.9%	2.5%	21.7%	100.0%	359
2	Animal breeders, fishery occupations	41.4%	21.1%	8.8%	3.1%	2.3%	23.4%	100.0%	261
3	Managers, Advisors in agriculture and animal husbandry	42.1%	23.4%	8.4%	1.9%	0.9%	23.4%	100.0%	107
4	Farmhands, animal caretakers	41.7%	23.4%	8.7%	3.4%	2.1%	20.8%	100.0%	1,543
5	Landscapers	38.0%	30.1%	6.0%	3.3%	2.7%	19.9%	100.0%	8,429
6	Forestry managers, hunting occup.	43.0%	25.7%	7.6%	2.7%	1.4%	19.6%	100.0%	591
7	Miners	56.5%	19.2%	4.5%	2.9%	1.6%	15.3%	100.0%	485
8	Workers in mineral mines, oil and gas wells	52.1%	13.4%	5.0%	4.2%	0.8%	24.4%	100.0%	119
9	Mineral processors	37.4%	33.3%	6.1%	3.0%	2.0%	18.2%	100.0%	99
10	Stone workers	56.8%	12.0%	6.5%	3.4%	2.1%	19.1%	100.0%	382
11	Construction materials makers	49.5%	14.3%	7.9%	2.2%	1.6%	24.4%	100.0%	315
12	Ceramics workers	46.2%	18.5%	6.7%	3.1%	3.4%	22.1%	100.0%	357
13	Glass makers	43.8%	17.7%	8.1%	3.4%	3.1%	23.9%	100.0%	356
14	Workers in the chemical industry	40.4%	22.5%	9.7%	4.7%	2.4%	20.3%	100.0%	1,699
15	Plastics processors	43.6%	25.6%	6.3%	3.4%	2.1%	19.1%	100.0%	1,846
16	Paper makers and processors	42.8%	25.6%	5.7%	1.9%	2.5%	21.6%	100.0%	857
17	Printers	39.1%	27.8%	6.1%	4.2%	2.3%	20.6%	100.0%	1,420
18	Wood processors, makers of wooden products and related occupations	44.1%	23.5%	7.3%	3.2%	1.7%	20.1%	100.0%	954
19	Metal producers, mill workers	36.6%	23.3%	11.4%	4.1%	1.3%	23.3%	100.0%	317
20	Workers in moulding and die-casting	45.1%	18.7%	11.7%	4.2%	2.0%	18.4%	100.0%	648
21	Workers in non-cutting metal shaping	44.5%	23.5%	7.0%	3.8%	1.6%	19.6%	100.0%	868
22	Workers in cutting metal shaping	38.2%	26.0%	9.4%	3.0%	2.8%	20.6%	100.0%	2,358
23	Workers in metal surface finishing, processing, coating	46.5%	22.4%	7.1%	4.5%	2.0%	17.5%	100.0%	492
24	Metal joiners	43.9%	21.8%	9.0%	4.9%	1.5%	18.8%	100.0%	1,764
25	Smiths	53.7%	16.0%	7.5%	3.3%	0.3%	19.2%	100.0%	307
26	Sheet metal workers, plumbers	51.9%	16.4%	6.8%	3.5%	1.7%	19.6%	100.0%	5,237
27	Fitters	44.7%	22.2%	7.8%	2.9%	1.6%	20.9%	100.0%	9,227
28	Mechanics	46.3%	20.5%	5.9%	2.9%	3.5%	20.9%	100.0%	4,795
29	Tool makers	37.0%	26.5%	6.4%	2.5%	4.7%	22.9%	100.0%	559
30	Precision fitters + related occupations	33.8%	28.7%	5.7%	4.0%	7.1%	20.6%	100.0%	718
31	electrician	42.6%	23.0%	6.8%	3.2%	2.1%	22.3%	100.0%	6,198
32	Assemblers + metal occupations.	41.7%	28.3%	5.5%	3.5%	2.0%	19.0%	100.0%	8,100
33	Spinning occupations	44.8%	19.8%	5.4%	3.7%	2.3%	24.0%	100.0%	429
34	Textile manufacturers	45.2%	23.1%	7.2%	4.4%	2.6%	17.5%	100.0%	429
35	Textile processors	46.4%	22.1%	4.9%	3.3%	2.1%	21.3%	100.0%	1,900
36	Textile finishers	48.1%	19.4%	7.9%	1.9%	0.0%	22.7%	100.0%	216
37	Leather makers, processors of leather and fur	40.2%	23.5%	7.0%	3.8%	4.3%	21.2%	100.0%	584
39	Bakery/ confectionary goods makers	35.0%	19.3%	5.9%	12.7%	7.9%	19.2%	100.0%	2,036
40	Processors of meat and fish	48.4%	18.6%	5.9%	2.4%	2.8%	21.8%	100.0%	2,342
41	Cooks	43.2%	23.2%	6.3%	3.4%	4.2%	19.8%	100.0%	8,751
42	Preparers of beverages and tobacco goods	49.4%	22.3%	5.0%	1.9%	1.3%	20.1%	100.0%	318
43	Other food related occupations	46.2%	22.4%	6.5%	3.4%	2.3%	19.1%	100.0%	554
44	Bricklayers, concrete workers	52.0%	15.1%	6.3%	2.5%	2.0%	22.1%	100.0%	10,257
45	Carpenters, roofers, scaffolders	53.3%	16.0%	5.3%	2.3%	1.2%	21.8%	100.0%	4,985
46	Road builders, workers in construction engineering	49.3%	19.6%	7.3%	2.7%	1.2%	19.9%	100.0%	3,253
47	Construction assistants	41.2%	25.8%	7.8%	3.3%	1.4%	20.6%	100.0%	5,609
48	Building finishers	54.0%	15.7%	6.5%	3.1%	2.3%	18.5%	100.0%	4,355
49	Interior decorators, upholsterers	54.2%	16.4%	5.6%	3.6%	2.5%	17.7%	100.0%	976
50	Carpenters, model makers	47.7%	20.5%	5.6%	4.3%	1.6%	20.3%	100.0%	5,321

51	Painters, lacquerers and related occupations	42.2%	23.2%	5.6%	5.2%	3.2%	20.6%	100.0%	6,529
52	Inspectors and dispatchers of goods	45.9%	24.4%	5.9%	3.1%	1.7%	19.0%	100.0%	8,810
53	Unskilled assistant without further specification	35.9%	30.9%	5.0%	3.4%	2.0%	22.7%	100.0%	2,398
54	Machine operators and related occupations	47.2%	16.8%	9.5%	2.6%	1.0%	22.9%	100.0%	2,901
60	Engineers	25.7%	34.1%	11.3%	1.6%	0.9%	26.5%	100.0%	1,265
61	Chemists, physicists, mathematicians	27.5%	30.7%	10.5%	0.7%	0.7%	30.1%	100.0%	153
62	Technicians	37.2%	26.1%	10.7%	2.0%	1.4%	22.5%	100.0%	2,206
63	Technical specialists	33.4%	31.8%	4.7%	2.4%	3.2%	24.4%	100.0%	1,223
68	Traders in goods	45.2%	23.6%	6.4%	2.6%	2.7%	19.4%	100.0%	21,067
69	Bank, insurance clerks	26.4%	42.2%	6.3%	1.5%	0.9%	22.6%	100.0%	1,297
70	Other service clerks and related occupations	33.4%	33.1%	6.3%	2.7%	1.5%	23.0%	100.0%	1,294
71	Occupations in land transport	49.9%	15.7%	8.7%	2.8%	1.1%	21.8%	100.0%	13,915
72	Occupations in water and air transport	39.3%	21.8%	9.1%	3.2%	1.0%	25.6%	100.0%	308
73	Occupations in communications and telecommunications	44.8%	23.6%	5.9%	2.8%	1.2%	21.7%	100.0%	2,145
74	Warehouse managers, workers in warehousing and transport	41.9%	26.9%	6.9%	3.2%	1.5%	19.6%	100.0%	15,927
75	Entrepreneurs, managers, auditors	29.8%	32.3%	11.5%	2.7%	1.1%	22.6%	100.0%	1,490
76	Deputies, administrative decision-makers	34.0%	34.9%	9.4%	0.9%	0.9%	19.8%	100.0%	106
77	Accountants, data processing specialists	38.8%	30.9%	5.9%	2.6%	1.3%	20.6%	100.0%	3,404
78	Office clerks, office assistants	32.7%	34.5%	5.6%	2.2%	1.5%	23.6%	100.0%	19,453
79	Guards, watchmen	43.1%	21.2%	9.4%	3.2%	1.3%	21.8%	100.0%	8,706
80	Security personnel	42.0%	22.7%	3.8%	5.3%	3.6%	22.7%	100.0%	529
81	Occupations related to the law and legal advice	28.9%	42.1%	6.3%	1.9%	0.0%	20.8%	100.0%	159
82	Journalists, interpreters, librarians	27.5%	41.6%	4.6%	2.9%	0.7%	22.6%	100.0%	411
83	Artists and similar occupations	35.3%	32.3%	5.8%	2.4%	1.8%	22.4%	100.0%	1,139
84	Physicians, pharmacists	28.4%	42.8%	4.7%	1.6%	0.8%	21.8%	100.0%	257
85	Other health service-related occupations	40.9%	33.0%	3.4%	2.2%	3.3%	17.2%	100.0%	9,054
86	Nursing occupations + social workers	39.1%	36.1%	3.7%	2.2%	2.0%	16.8%	100.0%	8,370
87	Teachers	24.8%	37.7%	7.3%	3.3%	1.6%	25.2%	100.0%	1,047
88	Occupations in the humanities and natural sciences	22.3%	42.8%	5.0%	1.2%	0.8%	27.9%	100.0%	596
89	Religious ministers	30.1%	34.9%	4.8%	2.4%	0.0%	27.7%	100.0%	83
90	Body care occupations	41.0%	15.9%	3.7%	5.6%	16.5%	17.3%	100.0%	2,166
91	Hotel and catering occupations	44.2%	22.9%	5.9%	3.3%	3.3%	20.4%	100.0%	4,998
92	Housekeeping Occupations	44.4%	26.6%	5.1%	2.9%	3.0%	18.0%	100.0%	3,822
93	Cleaning occupations	47.3%	21.4%	6.2%	3.3%	2.8%	18.8%	100.0%	13,793
97	Helping family members other than agriculture	30.0%	20.0%	30.0%	0.0%	0.0%	20.0%	100.0%	10
98	Workers with occupations as yet undefined	36.6%	28.6%	6.6%	3.0%	2.3%	22.9%	100.0%	27,337
99	Workers w.o. specification of activity	31.9%	33.1%	6.2%	3.5%	2.0%	23.3%	100.0%	1,053
	Total	42.5%	24.9%	6.5%	3.1%	2.3%	20.7%	100.0%	303,503

Source: Statistics St80 of the BA Medical Service, 2003 (Author's calculations).

Note: Diagnosis of diseases according to the International Statistic Classification of Diseases and related health problems, 10th revision

Table A6: First diagnoses in medical reports on unemployed persons by BA physicians by major occupational groups in 2001

Occupational major groups with the highest incidence of respiratory diseases				
Ran-king	CODE/Occupation	Respiratory diseases	%	Total no. of reports
1	391 Makers of bakery goods	225	13.0%	1,727
2	392 Confectioners	34	11.0%	309
3	512 Goods painters, lacquerers	64	8.6%	742
4	175 Special printers, silkscreen printers	8	7.2%	111
5	173 Letterpress printers	9	6.6%	136
	All major groups	9,369	3.1%	303,503
Occupational major groups with the highest incidence of skin diseases				
Ran-king	CODE/Occupation	Skin diseases	%	Total no. of reports
1	901 Hairdressers	325	16.7%	1,947
2	902 Other body care occupations	32	14.6%	219
3	053 Florists	65	10.5%	622
4	392 Confectioners	32	10.4%	309
5	303 Dental technicians	42	9.8%	430
	All major groups	6,897	2.3%	303,503

Source: Statistics St80 of the BA Medical Service, 2003 (Author's calculations).

Note 1: Only occupational groups for which at least 100 representatives had been examined were included in the ranking 1 to 5.

Note 2: Diagnosis of diseases according to the International Statistic Classification of Diseases and related health problems, 10th revision

Table A7: Cause of health impairment according to the medical reports on unemployed people by BA physicians by selected occupational major groups in 2001

Occupational major groups with the highest incidence of accidents								
Ran-king	CODE/Occupation	Accident		Disease		Congenital		Total
		% for line	absolute	% for line	absolute	for line	absolute	absolute
1	451 Carpenters	12%	249	87%	1,826	1%	29	2,104
2	453 Scaffolders	11%	74	88%	592	1%	6	672
3	452 Roofers	11%	253	88%	2,019	1%	26	2,298
4	801 Soldiers, boarder guards, policemen	9%	24	89%	238	2%	4	266
5	876 Physical education teachers	9%	16	89%	151	2%	3	170
	All major groups	5%	14,250	94%	29,3190	2%	4,947	312,387

Source: Statistics St80 of the BA Medical Service, 2003 (Author's calculations).

Note: Only occupational groups for which at least 100 representatives had been examined were included in the ranking 1 to 5.

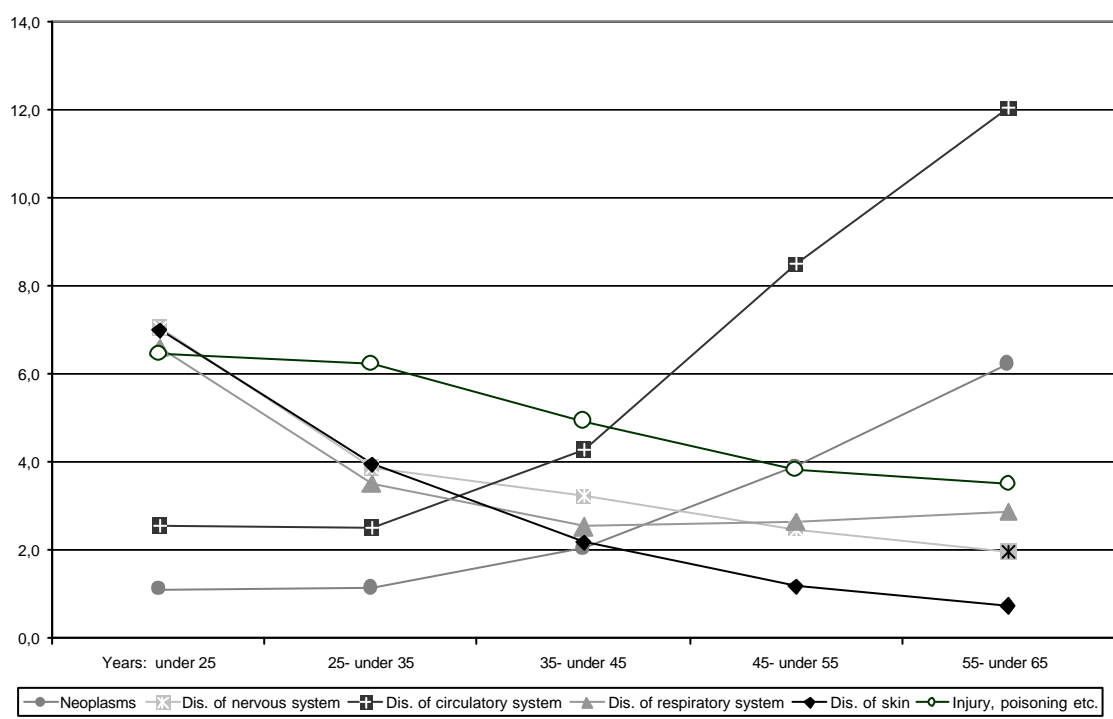
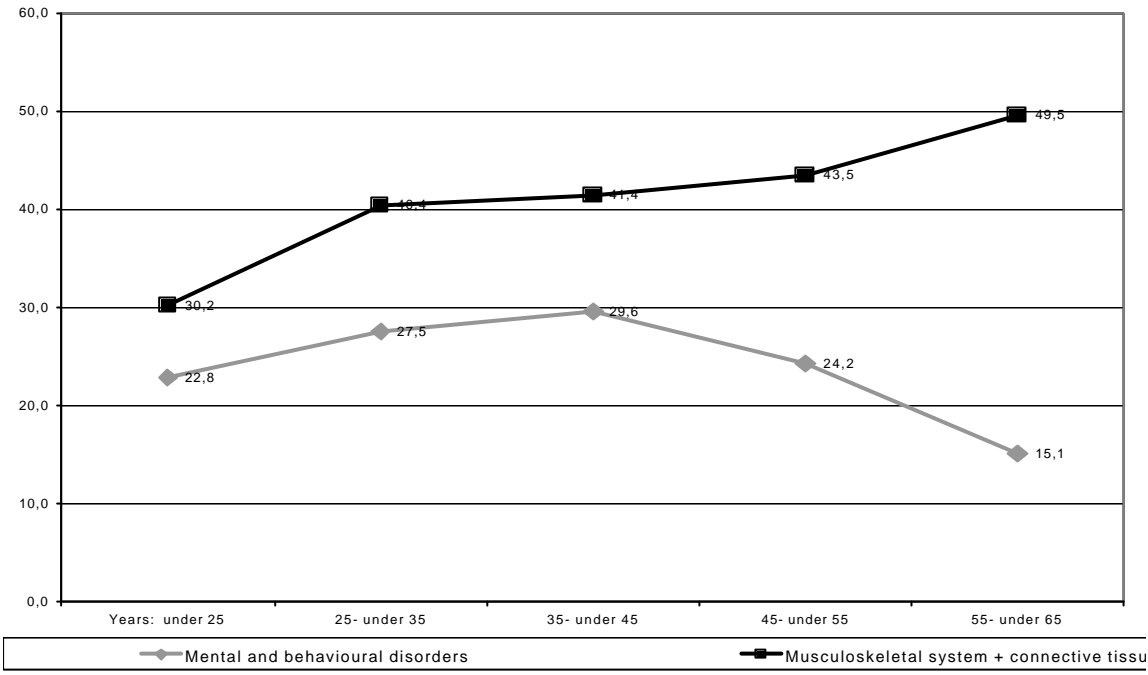
Table A8: Functional diagnosis „Change of occupation“ in medical reports on unemployed persons by BA physicians by selected occupational major groups in 2001

Occupational major groups with the highest incidence of functional diagnosis „Change of occupation indicated “				
Ranking	CODE/Occupation	absolute	% for line	Total
1	483 Tile setters	816	67%	1,220
2	452 Roofers	1,497	66%	2,281
3	101 Stonemasons	241	65%	370
4	442 Concrete workers	936	65%	1,443
5	461 Paviours	347	64%	538
	All major groups	135,208	44%	309,701

Source: Statistics St80 of the BA Medical Service, 2003 (Author's calculations).

Note: Only occupational groups for which at least 100 representatives had been examined were included in the ranking 1 to 5.

Figure A9: First diagnosis in medical reports on unemployed persons by BA physicians by age groups in 2001 (in %)



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