Unemployment, precarious work and health

In 2011 the unemployment rate in Germany stood at 7.1 percent – lower than at any other time since the country’s reunification. The fewer people are unemployed, the more this group risks disappearing from public awareness. From the perspective of the health sciences, however, unemployment and its individual consequences should remain a key topic for the fields of research and health promotion.

Many studies have shown that the unemployed in Germany are not as healthy as people in employment (Berth et al. 2008, Brenner 2006, Elkeles 1999, Hanisch 1999, Lampert et al. 2011, RKI 2003, Weber et al. 2007). As a rule, becoming unemployed has considerable effects on the lifestyle of the people affected. They lose a significant proportion of their income and are obliged to comply with the rules of the employment agency. Non-material losses can also have a serious effect, e.g. the loss of a fixed daily routine and other time structures, or the loss of contact with colleagues at the workplace (Brief et al. 1995, Creed, Macintyre 2001, Fryer 1986, Jahoda 1983, Janlert, Hammarstrom 2009, Warr 1987).

Moreover, the social prestige that is associated with a career declines, the longer the period of unemployment lasts. The pressures exerted by unemployment can generate psychosocial stress, encourage health-threatening behaviour and promote the incidence of illnesses. For example, it has been well documented that mental illnesses in particular – such as depression and anxiety – are more frequent among the unemployed (Hollederer 2003, RKI 2003). In addition, people in work who have chronic health problems have a higher risk of becoming unemployed, while unemployed people with health problems have a slimmer chance of finding work again (Arrow 1996, Voss et al. 2004, Weber et al. 2007).

As a consequence, social and health problems often accumulate for the long-term unemployed. This mechanism is of particular significance in times of economic recovery, when the long-term unemployed with health problems are frequently unable to find work despite favourable economic conditions. As a result, the subjective effect of unemployment on those affected is a particularly heavy burden during periods of growth (Novo et al. 2001, Scanlan, Bundy 2009). Avoiding the negative health consequences of unemployment is therefore an important task for prevention and health promotion in Germany and can help improve the unemployed’s chances of re-employment.

Alongside unemployment, the threat to secure employment has also moved into the focus of public attention. Despite the progress of the German labour market in recent years, the proportion of non-regular employment contracts has risen considerably (Bispinck, Schulten 2011). More and more people in Germany are employed in what are known as »precarious jobs« – defined as non-permanent jobs which are not subject to social insurance contributions or are regarded as endangered (Ferrie 2006). Men and women in precarious work often have temporary
contracts or work for temporary employment agencies – or for very low wages. These tendencies are also relevant for health research, since not only unemployment itself, but also the subjective threat of job insecurity can cause psychosocial stress (Dragano, Siegrist 2006, Ferrie 2006, Zok 2006). The results of longitudinal studies indicate that job insecurity has a negative effect on mental health, but also that the latter improves significantly once people return to secure employment (Ferrie 2006).

This issue of GBE kompakt presents topical findings on the interactions between unemployment, precarious employment and health. It draws on data from the 2010 study »German Health Update« (GEDA), which was carried out by the Robert Koch Institute within the framework of health monitoring (Kurth et al. 2009). The analyses are based on information from interviews with 14,693 men and women between the ages of 18 and 64 who were either employed or unemployed at the time of the survey. The data are supplemented with selected findings from official statistics and health insurance statistics.

**Unemployment influences life expectancy**

The findings of several national and international studies show that the experience of unemployment is associated with a greater mortality risk among both women and men (Grobe 2006, Martikainen, Valkonen 1996, Voss et al. 2004). In general, people who have experienced unemployment have a higher mortality rate and a greater risk of dying as a result of suicide or for unknown external reasons. The current findings are interpreted in such a way that the relationship between unemployment and mortality develops via a loss of social resources, rising psychosocial stress and the resultant development of anxiety- and depression-related disorders.

Figure 1 shows – at the level of all 96 planning regions (RORs) in Germany – that there is a connection between the unemployment rate and life expectancy at birth. RORs are regions within the federal states comprising several towns and rural districts. As a rule they consist of one major town as the economic centre and its rural environs. The data are received from the official regional database INKAR 2010 (BBR 2010). At the level of RORs there is a significant link between the rate of unemployment and the life expectancy of men and women. In the case of women, life expectancy falls by approximately one month for each percent point by which the unemployment rate increases. For men the corresponding figure is three months. There was a difference of 0.6 years for women and 2.4 years for men between the regions with the highest and lowest rates of unemployment.
The unemployed are more frequently ill
Unemployed women and men suffer from many disorders and illnesses more frequently than employed people of the same age (RKI 2003). The relevant information here comes, for example, from the occupational disability ("days off sick") statistics of the statutory health insurance companies. The 2010 health report of the company health insurance funds (Betriebskrankenkassen, BKK) shows that in 2009 unemployed women were much more frequently unfit for work than female employees – with an average of 22.8 compared to 12.4 days. For men the corresponding figures were 19.5 and 9.7 days.

Figure 2 shows the relation between registered days off sick among unemployed and employed women and men, differentiated according to diagnosis. It shows that the unemployed are more frequently affected by mental and behavioural disorders, nutritional and metabolic diseases as well as diseases of the musculoskeletal and the nervous system.

The unemployed and people in precarious employment have more health problems
The 2010 GEDA study records impairments of mental well-being and physical health – irrespective of whether the person concerned consulted a doctor – and the extent to which these impairments had an effect on the respective respondent’s everyday activities. As confirmed by the accounting data of the health insurance companies, it becomes clear that the unemployed are more frequently affected by such impairments than people in employment (Kroll, Lamper 2011a, Lange, Lamper 2005).

Figure 3 shows the average number of days on which people experienced impairments over the four weeks prior to the interview, differentiated according to the respondent’s employment status. The results clearly show that impairments of physical health, mental well-being

How GEDA 2010 measures unemployment and precarious employment
The assessment is based on the self-classification of respondents who were either employed or unemployed. People who were neither employed nor unemployed were excluded from the analyses (24.1% of the women and 13.1% of the men in GEDA 2010). The concept of subjective measurement takes into account the fact that people who are not registered as unemployed might be looking for full-time or part-time employment. The respondents were divided into four groups:

1) People in full-time or part-time employment who do not believe their security of employment is at risk (77.2% of the women and 82.8% of the men).
2) People who believe their security of employment is at risk (12.5% of the women and 9.7% of the men).
3) People who have been unemployed for less than 12 months (4.0% of the women and 3.8% of the men).
4) People who have been unemployed for 12 months or longer (6.3% of the women and 3.7% of the men).

Figure 2
Inability to work (no. of days) among the unemployed compared to employees in 2009 by gender
Data basis: BKK Gesundheitsreport 2010

![Bar chart showing the ratio of unemployed to employees in % for different health conditions.](chart.png)
The unemployed more often exhibit behaviour patterns which constitute a health risk

Findings on health-related behaviour indicate that unemployed men and women and people threatened by unemployment behave more often in a way that constitutes a risk to their health. They also take less care of their health than those employed in secure jobs. This must be seen in the context of the considerable psychosocial burden to which the unemployed are exposed. There are differences, for example, in health awareness, sporting activities and substance consumption (Hollederer 2011, Lampert et al. 2011, RKI 2003, Schunck, Rogge 2010).

Figure 5 shows the percentage of smokers and heavy smokers among men and women according to their employment status. Despite their difficult economic situation, the unemployed smoke much more frequently and more heavily than those employed in secure jobs. This must be seen in the context of the considerable psychosocial burden to which the unemployed are exposed. There are differences, for example, in health awareness, sporting activities and substance consumption (Hollederer 2011, Lampert et al. 2011, RKI 2003, Schunck, Rogge 2010).

After taking age differences into account, the current risk of being a smoker is 1.7 times higher respectively among short-term unemployed women and long-term unemployed women than among the comparison group of securely employed women. In the case of men the corresponding risks are 2.3 times and 2.1 times higher respectively. Tobacco consumption is not significantly higher among men and women in precarious employment when age differences are taken into account.

Illnesses are both a consequence and cause of unemployment

The connection between unemployment and health is influenced by the fact that women and men with health problems, chronic illnesses and handicaps become unem-
employed more frequently and find it harder to find a new job (Lange, Lampert 2005, RKI 2003, Thiede, Traub 1997). In the 2010 GEDA study, 15% of the women and 16% of the men with experience of unemployment over the previous five years reported that the loss of their job was partly connected to their state of health. At the same time, however, 19% of the women interviewed and 15% of the men believed that their state of health had deteriorated as a result of their unemployment.

The 2010 GEDA study makes it possible to compare the connections between a person’s current and former experiences of unemployment and their subjective health status. Self-rated health is measured using a five-step scale from «very good» to «bad». Table 1 shows the risk of a less than «good» self-rated health status in relation to the experience of unemployment in the last 5 years. We controlled for age differences among respondents. In line with comparable analyses based on the 1998 National Health Survey, the results suggest that current unemployment in particular has a negative impact on health (RKI 2003, Thiede, Traub 1997).

Past experiences also still have an effect on those who are currently employed, although this influence is smaller than the effect of current unemployment. Additionally, employed people who have experienced longer episodes of unemployment before are more at risk of assessing their own health status as less than «good» than those who had only little experience with unemployment. However, the
Analyses based on the 2004 European Social Survey suggested that unemployed women and men had a worse health status than employed people of the same age in all 23 participating countries. Comparisons of the various welfare regimes showed that the differences between the countries were relatively minor.

Initial findings on the development of health inequalities as a function of employment status are available for Germany (Kroll 2010, Kroll, Lampert 2011b). In the context of a disproportionately higher risk of poverty among the unemployed compared to the population average (Frick, Grabka 2008, Goebel, Richter 2007), health inequalities between unemployed and employed men have widened over the past two decades in Germany. In the case of women, by contrast, they have remained largely stable.

In view of the often documented connections with health, unemployment and precarious employment should remain prominently on the agenda of the health sciences and health policy – also in times when unemployment rates are declining. In the fields of prevention, health promotion and also medical interventions, the results presented illustrate once more the need to take steps to combat both the health-related consequences and the health-related causes of unemployment. To this purpose, it will be essential both for the social partners in the economy and for the stakeholders in healthcare to take effective and long-term measures (Morfeld et al. 2005).

### Table 1

<table>
<thead>
<tr>
<th>Current employment status</th>
<th>Experience of unemployment</th>
<th>OR (95 %-CI) Women</th>
<th>OR (95 %-CI) Men</th>
</tr>
</thead>
<tbody>
<tr>
<td>employed</td>
<td>none</td>
<td>Ref.</td>
<td>Ref.</td>
</tr>
<tr>
<td>1 to 5 month</td>
<td>0.83</td>
<td>(0.58-1.18)</td>
<td>1.24</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.94-1.65)</td>
<td>(0.87-1.87)</td>
</tr>
<tr>
<td>6 to 11 month</td>
<td>1.28</td>
<td>(0.87-1.87)</td>
<td>1.11</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.79-1.54)</td>
<td>(1.32-2.19)</td>
</tr>
<tr>
<td>1 year and more</td>
<td>1.98*</td>
<td>(1.43-2.75)</td>
<td>1.70*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(1.32-2.19)</td>
<td>(1.32-2.19)</td>
</tr>
<tr>
<td>unemployed</td>
<td>none</td>
<td>5.13*</td>
<td>2.23*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(2.56-10.24)</td>
<td>(1.28-3.87)</td>
</tr>
<tr>
<td>1 to 5 month</td>
<td>2.82*</td>
<td>(1.55-5.13)</td>
<td>2.56*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(1.41-4.64)</td>
<td>(1.41-4.64)</td>
</tr>
<tr>
<td>6 to 11 month</td>
<td>3.51*</td>
<td>(1.96-6.30)</td>
<td>1.97*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(1.38-3.31)</td>
<td>(1.38-3.31)</td>
</tr>
<tr>
<td>1 year and more</td>
<td>5.96*</td>
<td>(4.42-8.03)</td>
<td>3.40*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(2.67-4.34)</td>
<td>(2.67-4.34)</td>
</tr>
</tbody>
</table>

* p<0.05

risk of employed with experiences of unemployment is lower than the risk of men and women who are currently unemployed, even if the latter have no previous experiences with unemployment.

### Discussion

The findings indicate a stable relation between unemployment, precarious employment and health in Germany. The risk of mortality is higher among unemployed people, they have more mental illnesses and complaints, and they behave more often in a way that puts their health at risk. Current evidence for Germany leads to the conclusion that there is a causal relationship between an experience of unemployment and job insecurity on the one hand, and a deterioration of mental health on the other. Furthermore, health problems frequently also lead to unemployment. Therefore, the direct effects of unemployment on health are therefore underestimated if it is not taken into account, that diseases are a major cause of unemployment.

The findings on the extent of health differences between unemployed and employed people on the basis of the 2010 GEDA study are comparable with results from other data sources such as the micro-census of official statistics or the data of the statutory health insurance companies (Gross 2006, Hollederer 2011). All in all, it is shown that the unemployed generally have a poorer state of health than the employed, that this difference is partly due to the life situation of the unemployed, and that it is less pronounced among women than among men.

International comparative studies have also come to the conclusion that unemployment and health are closely associated in most European countries (Bambra, Eikemo 2009, Bartley 1994).
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