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Increasing illness among people out of labor market – A Danish register-based study

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ABSTRACT

In spite of decades of very active labor market policies, 25% of Denmark's population in the working ages are still out-of-work. The aim of this study was to investigate whether that is due to consistent or even increasing prevalence of ill health. For the period of 2002–2011, we investigated if i) the prevalence of four chronic diseases (cardiovascular disease, diabetes, cancer and mental disorders) among those out-of-work had changed, ii) the occurrence of new cases of those diseases were higher among those who were already out-of-work, or iii) if non-health-related benefits were disproportionately given to individuals recently diagnosed with a disease compared to those without disease. The study was register-based and comprised all Danish residents aged 20–60. During the study period, the prevalence of cardiovascular diseases and mental disorders increased among both employed and non-employed people. The increased prevalence for mental disorder was particularly high among people receiving means-tested benefits. Disease incidence was higher among people outside rather than inside the labor market, especially for mental disorders. Employed people with incident diseases had an unsurprisingly increased risk of leaving the labor market. However, a high proportion of people with incident mental disorders received low level means-tested benefits in the three years following this diagnosis, which is concerning. Men treated for mental disorders in 2006 had high excess probability of receiving a cash-benefit, OR = 4.83 (4.53–5.14) for the period 2007–2010. The estimates were similar for women.

1. Background

The sustainability of the Nordic welfare state model depends on a high employment rate (Dølvik et al., 2015). For many decades, social investment policies (Morel et al., 2012) placed a strong focus on education, health care and active labor market policies. As a result, the Danish employment rate among 20–60-year-olds has existed at 75–80% for more than three decades. An expansion of welfare services for children and the elderly, a focus on vocational rehabilitation, lifelong possibilities for education and gradually stronger economic incentives to work (Kangas and Palme, 2005) have helped Denmark sustain a relatively high employment rate compared to most other EU-countries even during economic shocks. However, though the proportion of people out-of-work whose families sustain them has declined, the proportion of different types of social security payments has increased from 5% to nearly 20% of the population aged 20–60. (Pedersen, 2014).

Denmark has a universal welfare policy in which coverage is intended to provide economic security during illness and unemployment. However, as in other welfare state regimes, it also tries to keep mobility and employment high. The Danish system is one of the Scandinavian welfare models (Esping-Andersen, 2015; Esping-Andersen, 1990), but differs from the other countries by the "flexicurity" (McAllister et al., 2015) policy which has low employment protection combined with relatively generous social security and active labor market policies. The social security benefits are divided

Abbreviations: ATC -codes, Anatomical Therapeutic Codes; CVD, Cardiovascular diseases; DM, diabetes mellitus; ICD-10, International Classification of Diseases, version 10; MPD, Danish Medical Prescription Registry; NPR, National Patient Register.

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into a number of different programs. Some of these benefits (sickness, absence, benefit, and disability pension) are "health-related", and the eligibility criteria for receiving them include medically certified reduced workability due to ill health. Other benefits (unemployment benefits, means-tested benefits) are labeled "non-health-related" benefits because no health related eligibility criteria exists for them, yet recipients are still expected to take available jobs.

According to the macro-economic business cycle, the number of people receiving health-related benefits has gradually increased, and the number of people receiving non-health related benefits has fluctuated (Kangas and Palme, 2005). (see Fig. 1). The unemployment rate dropped during the economic upturn from 2004 to 2007 and increased again after the start of the financial crisis in 2008. The proportion of people receiving a means-tested cash-benefit has been rather stable but dropped slightly during the economic boom. These different benefit types function as communicating vessels through which individuals flow from one type of benefit to another. However, very few people who are on disability pension go back to work or receive other benefits, but among those on long-term means-tested benefits, 15–20% will end up on disability pensions, which indicates substantial health problems in that group. (Hansen, 2008). If eligibility criteria for disability pensions are narrowed, more people will stay on means-tested benefits (Ankestyrelsen, 2014).

Labor market reform policies in the recent decades have focused on education and vocational rehabilitation. As a result, the policies are implementing stronger economic incentives to force people into employment. The reforms have been implemented through shorter duration of time limited unemployment benefits and lower means-tested benefits. However, they have had surprisingly little effect on the overall employment rate. Investigations suggest that the few persons who achieve permanent employment are primarily resourceful people.(Andersen et al., 2003) The active labor market policies at the macro-level have had surprisingly little effect on the overall employment rate, which raises the question: Have the workability and general health conditions among those who are out-of-work, and in particular those on the non-health related benefits, changed to make active labor market policies less effective. One contributing cause could be the unavailability of jobs. However, some studies indicate that an individual's health situation is one of the main barriers for getting a job among long-term unemployed people. (Müller et al., 2015). In Denmark, sick-leave benefits are limited to one year after which these benefits are converted to cash-benefits. In principle, people receiving cash-benefits are available for employment, independent of their disability status. If the prevalence of health problems among those outside of the labor market is rising, one explanation could be that the higher prevalence is generated by a higher incidence of health problems after workers leave the labor market compared to those who continue to work. Another possibility could be that those who are getting ill have a higher risk of getting non-health related benefits compared to those with better health. Policy implications will be different in the two cases. In the first case there will be reasons to be concerned with the social and economic stress of being out-of-work. In the second case, there could be issues related to increased work demands, or the criteria for health related benefits may be too strict. Identifying what type of health problems are particularly prominent within these patterns will also be relevant (Kim et al., 2012).

Employment conditions among those with self-reported long-term limiting illness or with specific diseases have been studied recently in Denmark and other countries (Blomqvist et al., 2014; Burstrom et al., 2000; Holland et al., 2009; Holland et al., 2011a; Holland et al., 2006; Holland et al., 2011b; Diderichsen et al., 2012), but the related question on how the disease occurrence develops among those who are not employed has not been addressed.

This paper therefore aims to answer the following questions:

i. Has the prevalence of major disease groups among those out-of-work changed over the last decade in Denmark?
ii. Is the incidence of those diseases higher among individuals out-of-work including those on non-health related benefits?
iii. Are non-health related benefits disproportionately given to individuals who were recently diagnosed with a disease compared to those without disease? This could indicate that people out-of-work are unable to work due to illness.

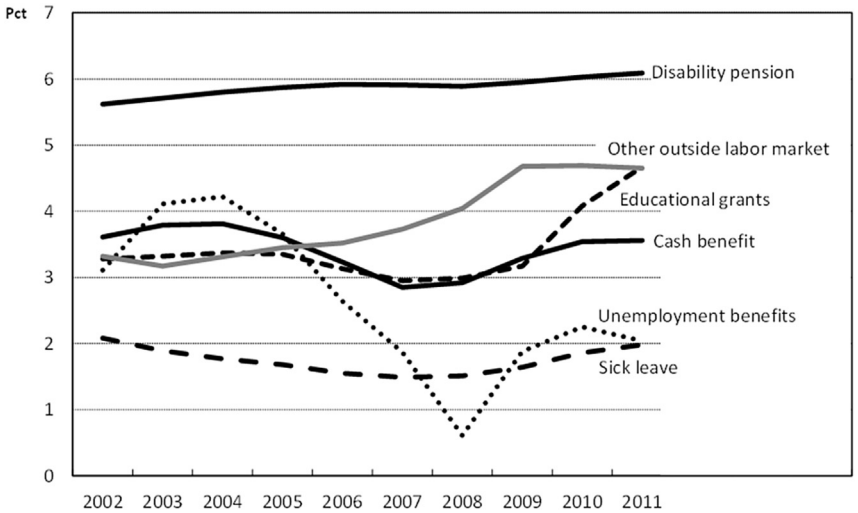

Fig. 1. The proportion of people aged 20–60 years receiving different types of social benefits* during the years 2002–2011. Source: Own calculations based on social and medical registers at Statistics Denmark. *The different types of social benefits are described in the textbox "The different types of social benefits in Denmark".