April 2014 DANISH MEDICAL JOURNAL

# Unemployment under the flex job scheme increases the risk of permanent social security benefits

Vibeke Jensen<sup>1</sup>, Birthe Lundager<sup>1</sup>, Anette Luther Christensen<sup>1</sup> & Kirsten Fonager<sup>1, 2</sup>

#### **ABSTRACT**

Dan Med J 61/4

**INTRODUCTION:** In Denmark, a flex job scheme was introduced in 1998 in the expectation that more people could remain in the workforce despite a reduced working capacity. The aim of this study was to characterise the group that did not obtain a flex job after having been included in the flex job scheme.

MATERIAL AND METHODS: Persons included in the flex job scheme from 1 January 2001 to 30 March 2008 were identified via the Ministry of Employment's DREAM register. Data were linked to Statistics Denmark and The Danish National Patient Registry. Among the individuals who did not obtain employment in a flex job within the first three months, we identified those who did not obtain employment before they were transferred to disability pension or flex benefit.

**RESULTS:** A total of 74,277 persons were included in the flex job scheme. Among these persons 33% received unemployment benefit for more than three months and the rest obtained a flex job within the first three months. Overall, 23% of the unemployment benefit recipients never entered the labour market, but were awarded early retirement pension or flex benefit. This percentage varied among different socio-demographic variables and regions.

**CONCLUSION:** The present study demonstrates that attention should be paid to the flex job scheme, especially for those who do not obtain employment within the first three months.

FUNDING: not relevant.

TRIAL REGISTRATION: not relevant.

In Denmark, a flex job scheme was introduced in 1998 as part of a more active employment policy. It was expected that more people could stay on the labour market although their working capacity had declined and that the scheme would thereby reduce the number of early retirees. The flex job and early retirement reform of 2003 was implemented to further support this ambition.

Employers hiring workers who have been approved for flex jobs are entitled to a partial wage subsidy equivalent to one half or two thirds of the agreed wage. To be eligible, the individual had to be below 65 years of age, have a working capacity permanently reduced by more than 50% and have exhausted all other avenues of

obtaining ordinary employment. A recent reform has now resulted in some changes to the scheme [1].

Flex jobs holders are entitled to both unemployment benefits (Danish: ledighedsydelse) and flex benefits (fleks-ydelse), which is comparable to the benefit received by members of the flexible pension contribution programme (efterløn).

Recipients of disability pension or flex job allowance totalled 270,000 persons in Denmark in 2000. By 2009, this number had grown to nearly 337,000 corresponding to a percentage rise of 25 [2]. Calculated as full-time workers, flex job holders make up 2.3% of the total work force (16-66-year-olds), recipients of disability pension 8.9% [3].

The annual number of disability pension new-comers remained fairly stable at around 14,000 during the 1998-2006 period, but rose to 16,500 in 2008 and 17,000 in 2009 [2]. Thus, the expectation of a decline in the annual number of persons awarded disability pension was not been met. Furthermore, since 1998 the average age of those who are awarded disability pension has dropped by 2.5 years to about 46 years, which, all things equal, means that early retirees receive disability pension for an average 2.5 years more than previously [4, 5].

Several descriptive studies have characterised subgroups of flex job holders at the level of municipality and in single years, but none of these studies have been long-term follow-up studies [6-18]. The impression in clinical social medicine is that a substantial part of flex job eligible persons never actually obtain employment, but the extent to which this is the case remains unexplored.

The present register-based study aims to characterise the group of persons who were awarded awarded a disability pension or a flex benefit without having obtained employment under the flex job scheme

#### **MATERIAL AND METHODS**

The present study is a register-based study drawing on data from the following registries: 1) The Ministry of Employment's DREAM database which contains data on all recipients of benefits in Denmark since 1991. Data specify the kind of benefit received and are updated on a weekly basis. 2) The Integrated Labour Market Research

# ORIGINAL ARTICLE

1) Department of Social Medicine, Centre for Cardiovascular Research, Aalborg University Hospital 2) Department of Health Science and Technology, Faculty of Medicine, Aalborg University

1

Dan Med J 2014;61(4):A4804

#### TABLE

Baseline characteristics of the 74,277 persons found eligible for the flex job scheme in Denmark, 2001-2008.

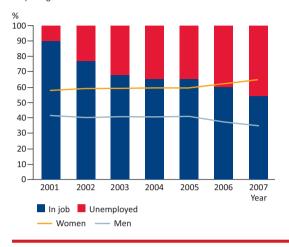
	Eligible for the flex job scheme, n (N = 74,277)	Flex job holders, %	Unemploy- ment benefit recipients, %
Gender			
Women	44,977	62	38
Men	29,300	74	26
Age, yrs			
≤ 29	5,587	72	28
30-39	14,985	64	36
40-49	24,245	65	35
50-59	28,041	69	31
≥ 60	1,419	75	25
Education			
Primary school	26,825	65	35
Supplementary primary education	2,560	69	31
Short-term education	32,575	67	33
Medium-term education	9,224	70	30
Long-term education	1,526	74	26
Socio-economic group			
Wage-earner/self-employed	47,308	74	26
Unemployed	11,734	40	60
Outside the labour force	12,882	71	29
On the labour market, yrs			
0	3,236	85	15
1-10	13,555	67	33
11-20	26,145	62	38
> 20	31,241	69	31
Marital status			
Single	23,423	68	32
Cohabiting/married	48,118	68	32
Home-dwelling children			
Yes	27,853	67	33
No	43,688	68	32
Diagnosis			
Somatic	62,681	67	33
Psychiatric	3,140	57	43
Both	424	55	45
Not hospitalised	8,031	69	31
Region			
Northern Jutland	8,807	65	35
Central Jutland	20,387	71	29
Southern Denmark	19,132	66	34
Zealand	11,150	63	37
Capital	14,780	69	31
Ethnic background			
Danish	68,668	67	33
Non-Danish	5,609	62	38

Database (IDA, Statistics Denmark), which contains social and demographic data. 3) The Danish National Patient Registry which contains data on all hospital admissions since 1977, including, since 1995, all out-patient visits.

The study population comprised all persons residing

# FIGL

Percentages of persons eligible for the flex job scheme from 2001 to 2007 by status after flex job assessment (in job within three months or not) and gender.



in Denmark who were declared eligible for the flex job schemes (identified via the DREAM Register) during the period from 1 January 2001 to 31 March 2008 with follow-up until 31 March 2009.

By use of the Danish Social Security number (the CPR number), which is a unique identification number given to all Danish citizens, data were linked to both the IDA and The Danish National Patient Registry.

For each individual, baseline data were extracted from the IDA for the calendar year before the individual was considered eligible for a flex job. We extracted data on gender, age, marital status (single or cohabitant/married), children living at home, socioeconomic status (wage earner/self-employed, unemployed or outside the work force (student, social security benefit, etc.)), number of years as a wage earner and educational level. Information about ethnic background and the individual's region of residence (Denmark is divided into five administrative regions) was obtained from the DREAM Register. Data on diagnoses during the three years before obtaining flex job benefits were retrieved from The Danish National Patient Registry. The diagnoses were subsequently categorised into four groups: somatic diagnosis, psychiatric diagnosis, both diagnoses or no diagnosis (no hospital contact). The choice of a three-year period was an arbitrary one, but this period was deemed appropriate in light of the often long period used for pre-screening, treatment and needs assessment before a person is found eligible for the flex job scheme. Baseline characteristics were further quantified by calendar year to describe changes over the years.

The study population was divided into two groups: flex job holders and unemployment benefit recipients.

The flex job holders were defined as persons who were employed in a flex job within three months after having been declared eligible for the scheme. The group unemployment benefit recipients comprised persons who received unemployment benefit for more than three months after having been declared eligible for the flex job scheme. From the group of unemployment benefit recipients, we identified those individuals who did not obtain employment under the flex job scheme before they were transferred to the early retirement pension or flex benefit.

#### **Statistics**

The associations between socio-demographic variables, hospital contact, region of residence and the risk of not gaining employment under the flex job scheme before being transferred to early retirement or flex benefit were assessed in a Poisson regression model. Crude incidence rate ratios were estimated for each explanatory variable along with incidence rate ratios adjusted for all other explanatory variables. Each estimate was reported along with the corresponding 95% confidence interval. Stata 11.1 software was used for the statistical analysis.

Trial registration: not relevant.

#### **RESULTS**

A total of 74,277 persons were found to be eligible for the flex job scheme during the period from 1 January 2001 to 31 March 2008. Among these, 24,547 (33%) received unemployment benefit for more than three months after having been declared eligible for the flex job scheme.

## **Baseline**

The baseline characteristics of the study population are shown in **Table 1**. A higher percentage of women than men joined the unemployment benefit recipients group.

### **Changes over years**

The proportion of unemloyment benefit recipients grew with time from 10% in 2001 to 46% in 2007. In the same period, the number of flex job eligible persons rose from 8,520 to 10,343. The gender distribution also changed during this seven-year period: women's percentage share rose from 58% to 65% (**Figure 1**).

#### Never entering the labour market

We identified 5,600 persons who did not obtain a flex job before being transferred to permanent social security benefit in the form of disability pension (n = 4,997) or flex benefit (n = 603). This corresponded to 23% of those who received unemployment benefit for at least three month after entering the flex job scheme and 8% of the

study population. The period on unemployment benefit spanned from one to 360 weeks (median 90 weeks).

**Table 2** shows the socio-demographic risk factors among unemployment benefit recipients for being transferred to permanent social security without having been employed under the flex job scheme. Men had a slightly higher risk than women. The risk increased with age: among 50-59-year-olds, 30% never obtained a job, whereas the corresponding share in the group of persons who were younger than 30 years of age was 12%. Long-term education and socio-economic group seemed to be important risk factors. However, labour market seniority did not influence the risk estimate when data were adjusted for the other variables. Having no children living at home was a risk factor when adjusted for the other variables. The risk of being transferred directly to a permanent social security benefit differed slightly according to diagnostic group with the lowest risk encountered among those who were not hospitalised in a three-year period before they were declared eligible for the flex job scheme. With regard to regions of residence, those residing in the Region of the capital had a significantly reduced risk of never obtaining a job.

#### **DISCUSSION**

One third of all persons who were found eligible for the flex job scheme during the study period did not get employment immediately and received unemployment benefit for more than three months.

Approximately one fourth of these persons were awarded a disability pension or flex benefit during the study period without entering the labour market.

Gender, age, education, socio-economic status and children living at home at baseline had a significant impact on never obtaining a job before being awarded a disability pension or a flex benefit.

A higher proportion of women than men received unemployment benefits for more than three months after entering the scheme. Still, these women had a lower risk than men of never achieving jobs before being awarded a disability pension or a flex benefit. The reason for this is unclear. Possibly, the men who did not get



Flex job allowance does not guarantee employment



#### TABLE:

Risk of receiving disability pension or flex benefit without prior flex job employment in the group of unemployment benefit recipients. Proportions and incidence rate ratios for different socio-demographic factors.

	Disability pension or flex benefit without obtaining employment		IRR, mean	Adjusted IRRª,
	yes, n (%)	no, n (%)	(95% CI)	mean (95% CI)
Gender				
Women	3,686 (22)	13,198 (78)	1	1
Men	1,914 (25)	5,749 (75)	1.28 (1.22-1.36)	1.20 (1.13-1.27)
Age, yrs				
≤ 29	193 (12)	1,363 (88)	1	1
30-39	888 (17)	4,503 (83)	1.25 (1.07-1.46)	1.38 (1.16-1.63)
40-49	1,807 (21)	6,627 (79)	1.57 (1.35-1.82)	1.64 (1.39-1.94)
50-59	2,639 (30)	6,710 (70)	2.36 (2.04-2.73)	2.22 (1.88-2.62)
≥ 60	73 (20)	284 (80)	3.87 (2.95-5.06)	3.32 (2.51-4.40)
Education				
Primary school	2,306 (25)	7,063 (75)	1	1
Supplementary primary education	149 (19)	646 (81)	0.80 (0.67-0.94)	0.86 (0.72-1.02)
Short-term education	2,295 (22)	8,370 (78)	0.98 (0.92-1.03)	0.95 (0.89-1.01)
Medium-term education	630 (22)	2,177 (78)	1.06 (0.97-1.16)	1.04 (0.95-1.13)
Long-term education	71 (18)	323 (82)	0.76 (0.60-0.97)	0.75 (0.58-0.96)
Socioeconomic group				
Wage-earner/self-employed	3,434 (28)	8,810 (72)	1	1
Unemployed	1,278 (18)	5,811 (82)	0.62 (0.58-0.66)	0.64 (0.60-0.69)
Outside the labour force	836 (23)	2,839 (77)	0.64 (0.59-0.69)	0.68 (0.63-0.74)
On the labour market, yrs				
0	90 (19)	394 (81)	1	1
1-10	890 (20)	3,601 (80)	0.89 (0.72-1.11)	0.90 (0.71-1.14)
11-20	2,404 (24)	7,606 (76)	1.04 (0.84-1.28)	0.90 (0.71-1.14)
> 20	2,215 (23)	7,333 (77)	1.24 (1.01-1.54)	0.81 (0.64-1.03)
Marital status				
Single	1,850 (25)	5,676 (75)	1	1
Cohabiting/married	3,730 (24)	11,694 (76)	0.98 (0.93-1.04)	0.96 (0.91-1.02)
Home-dwelling children				
Yes	1,757 (19)	7,354 (81)	1	1
No	3,823 (28)	10,016 (72)	1.42 (1.34-1.50)	1.14 (1.07-1.23)
Diagnosis				
Somatic	4,795 (23)	15,700 (77)	1	1
Psychiatric	274 (20)	1,064 (80)	0.92 (0.81-1.03)	0.99 (0.87-1.12)
Both	33 (17)	158 (83)	0.83 (0.59-1.16)	0.89 (0.62-1.27)
Not hospitalised	498 (20)	2,025 (80)	0.85 (0.77-0.93)	0.88 (0.80-0.96)
Region				
Northern Jutland	710 (23)	2,400 (77)	1	1
Central Jutland	1,509 (24)	4,830 (76)	1.04 (0.95-1.14)	1.07 (0.98-1.17)
Southern Denmark	1,461 (23)	4,969 (77)	1.05 (0.96-1.15)	1.04 (0.95-1.14)
Zealand	955 (23)	3,123 (77)	0.90 (0.82-1.00)	0.89 (0.81-0.98)
Capital	965 (21)	3,622 (79)	0.78 (0.71-0.86)	0.72 (0.65-0.80)
Ethnic background				
Danish	5,104 (23)	17,334 (77)	1	1
Non-Danish	496 (24)	1,613 (76)	0.91 (0.83-1.00)	0.94 (0.84-1.04)

CI = confidence interval; IRR = incidence rate ratios.

a job in the first three months tended more than women to belong to a marginalised group with complex problems. We were not surprised to learn that a low educational level increased the risk of never getting a job compared to long-term education as it is known that persons with a low educational level are overrepresented among those who are on long-term sick leave and, hence, risk marginalisation from the work force [19, 20]. However, it is surprising that the risk assessments for those with short- and medium-term educations were not statistically significant.

It is puzzling that unemployed people and people who were outside the labour market at baseline had a lower risk of not getting a job than persons who were registered as salaried workers or self-employed during the past year.

Having no children living at home increased the risk of receiving disability pension or flex benefit even after adjusting for other variables, including age. This may be explained by the need for people with dependants to focus more than others on maintaining their attachment to the labour market. It is also possible that they are more likely to have a supporting network.

For people living in the Region of the capital, we found a significantly lowered risk of never achieving a job before receiving disability pension or flex benefit. The reasons for this could lie in differences in allocation practices or better employment opportunities in the Capital area.

The strength of the present study lies in its register-based design with a uniform data collection method and a complete follow-up on all persons found eligible for the scheme during the study period. Because social security benefit recipients (*kontanthjælpsmodtagere*) who were eligible for the flex job scheme were not entitled to receive unemployment benefit, they remained on social security benefit and they could not be identified until after they had obtained a flex job. However, the number of such persons was believed to be low; in 2005 a ministerial report estimated that the figure totalled some 1,000-1,500 persons [6].

It gives cause for concern that every fourth person who became an unemployment benefit recipient never entered the labour market, but was transferred to disability pension or flex benefit. It should also be noted that this figure is underestimated because there were still persons at risk of not obtaining a job at the end of the study period. The unemployment benefit period spanned from a very brief period of one week up to seven years and it seems sensible to ask if allocation to the flex job scheme was made in conformity with the intentions of the scheme or if it rested on a wish to grant social benefit to persons who were not eligible for disability pension.

The intentions of the flex job scheme were good.

More people were to stay on the labour market despite

a) Adjusted for the other variables in the model.

their functional limitations, and the scheme would support them in their efforts to maintain as active and lead as normal a life as possible instead of becoming permanent, passive recipients of social security benefits with the possible economic, social and quality-of-life consequences of such a position.

The flex job scheme has by far exceeded the politicians' expectations. The number of persons who depend on the provision of public benefits exceeded the expected total of 50,000 in 2010 [6]. It can hardly be explained by economic fluctuations as unemployment decreased during the period [2].

Thus it may be that either the flex job scheme meets a current demand that was previously being met by the adaptation of jobs held under normal working conditions and by protected jobs set up in connection with the labour market's collective agreement bargaining. Or the flex job scheme may have created a new demand that serves the needs of citizens, employers and labour unions alike.

Systematic collection and analysis of data about the groups currently using the scheme is a precondition for the scheme to effectively target the intended target group. The present study demonstrates that particular attention should be paid to people eligible for unemployment benefit as a large proportion of these persons never enter the labour market.

CORRESPONDENCE: Vibeke Jensen, Socialmedicinsk Enhed, Kardiovaskulært Forskningscenter, Aalborg Universitshospital, Hobrovej 18-22, 9100 Aalborg, Denmark. E-mail: v.jensen@rn.dk

ACCEPTED: 21 January 2014

**CONFLICTS OF INTEREST:** Disclosure forms provided by the authors are available with the full text this article at www.danmedi.dk.

#### LITERATURE

- 1. www.retsinformation.dk (1 Jul 2013).
- 2. Statistics Denmark. www.statistikbanken.dk (Mar 2011).
- 3. Arbejdsmarkedsstyrelsen. Jobindsats. www.jobindsats.dk (10 Jan 2011).
- Redegørelse om udviklingen på pensionsområdet and det rummelige arbejdsmarked – en opdatering af hovedtallene. Note. Copenhagen: Pensionsstyrelsen, 2010. www.penst.dk.
- Elmer D, Hansen MB. Førtidspensionister slår ungdomsrekord. Agenda, arbejdspolitisk analyse 2010;6:5. www.da.dk (17 Jun 2011).
- Udviklingen i fleksjobordningen. Copenhagen: Finansministeriet, Beskæftigelsesministeriet, Socialministeriet, Økonomi and erhvervsministeriet & Kommunernes Landsforening. 2005.
- Redegørelse om udviklingen på førtidspensionsområdet og det rummelige arbejdsmarked. Copenhagen: Socialministeriet, Beskæftigelsesministeriet & Finansministeriet, 2007.
- Personer, der afventer fleksjob på ledighedsydelse eller kontanthjælp. www.discus.dk (27 May 2011).
- Undersøgelse af fleksjob i København med fokus på de afbrudte fleksjob. www.discus.dk (27 May 2011).
- 10. Afbrudte fleks job i Hjørring. www.discus.dk (1 Jul 2011).
- 11. Fleksjob i Hjørring www.discus.dk. (1 Jul 2011).
- 12. Dansk Arbejdsgiverforening. Arbejdsmarkedsrapport 2005. Copenhagen: DA Forlag, 2005.
- Dansk Arbejdsgiverforening. Førtidspension og fleksjob. Copenhagen: DA Forlag, 2009.
- Dansk Arbejdsgiverforening. Arbejdsmarkedsrapport 2010. Copenhagen: DA forlag, 2010.
- Morel JP. Bedre fastholdelse i formidlede fleksjob. Center for Aktiv Beskæftigelsesindsats. www.cabiweb.dk (25 Jan 2009).
- Analyse af fleksjobordningen. Copenhagen: Arbejdsmarkedsstyrelsen, 2010. www.ams.dk (16 May 2011).
- 17. Landsdækkende fleksjobanalyse. www.discus.dk (26 Aug 2011).
- 18. Ansatte i fleksjob. www.discus.dk (26 Aug 2011).

- Høgelund J, FilgesT, Jensen S. Langvarigt sygemeldte langvarigt sygefravær – hvad sker der og hvordan går det? Report 03:20. Copenhagen: Socialforskningsinstituttet, 2003.
- Viden om sygefravær. Report. Copenhagen: Arbejdsmarkedsstyrelsen, 2008. www.brnordjylland.dk (4 Sep 2011).

5