Summary of the thesis, Maja Bæksgaard Jørgensen Alcohol consumption and labour market participation- Two register-based studies and a pragmatic randomized controlled trial

## SUMMARY

**Introduction:** Harmful alcohol consumption is associated with adverse consequences on multiple levels and remains a key public challenge. Evidence suggests that alcohol consumption plays a leading role in producing health inequalities. From a public health and societal perspective, it is therefore relevant to generate knowledge about the complex relationship between alcohol consumption and labour market participation as it potentially affects an individual's socioeconomic position, health and well-being. The overall objective of this thesis was to add to the scientific evidence about alcohol consumption and labour market participation. The objectives of the four papers were:

- To test the hypothesis that heavy alcohol consumption increases risk of unemployment, sickness absence and disability pension. (Paper I)
- To test the hypothesis that heavy alcohol consumption increases risk of unemployment, sickness absence and other social benefits and decreases chance of return to work. (Paper II)
- To test whether referral to an alcohol treatment centre results in improvement of employment status and reduction of alcohol consumption among unemployed welfare recipients. (Paper III)
- To identify and investigate obstacles to implementation of the Alcohol and Employment Trial.
  (Paper IV).

**Methods and results of the thesis:** In **Papers I and II**, we establish relationship between alcohol consumption and labour market participation by using two large prospective cohort studies. **Paper I** was based on data from the Danish Health and Morbidity Survey in 2000, 2005 and 2010 (N=17,690) and **Paper II** was based on data from the Danish National Health Survey 2010 (N=84,417). In both papers, individual-level data was linked to administrative registers. The main statistical method used in the two papers was the Cox proportional hazard regression model adjusted for potential confounders. In **Paper I**, we found that alcohol abstinence and high alcohol consumption is associated with increasing risk of unemployment and sickness absence among men. In woman, abstainers were found to have an increased risk of unemployment, sickness absence and disability pension. Furthermore, in **Paper II** we found that high alcohol consumption and problem drink have adverse consequences on labour market participation as it increases the risk of transfer to unemployment, sickness absence and other social benefits, is a barrier to re-employment and effects the transitions between different social benefits.

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**Papers III** and **IV** evaluate the effect and implementation process of the two-arm randomised controlled Alcohol and Employment trial conducted in four Danish municipalities. **Paper III** was based on data from 113 unemployed welfare recipients with alcohol problems who were assigned to either intervention (referral to alcohol treatment) or control group. Follow-up data was collected 6 and 12 months after the intervention period by telephone interview. Compared to the control arm, no statistical improvement was observed. Referral to alcohol treatment did not result in improvement of employment status and lower alcohol consumption. In **Paper IV**, the process evaluation was conducted in the four participating municipalities during 2011-2012. Data for identifying factors important for the implementation were collected through observations and focus group interviews with job consultants (N=14). Three themes emerged as the main obstacles influencing the degree of implementation of Alcohol and Employment: 1) The job consultants' personal attitudes toward alcohol, 2) The job consultants' perception of their own roles and responsibilities in relation to the welfare recipients and 3) Shortage of time and resources among the job consultants.

**Conclusions:** Results from the two prospective cohort studies suggest that a high amount of alcohol consumption and problem drinking is associated with adverse labour market consequences as we found that it increases the risk of leaving the labour market, was a barrier to re-employment and affects the transitions between social benefits. Results from the Alcohol and Employment trial showed no significant effect on employment rate or alcohol consumption. However, findings indicated that the implementation of the Alcohol and employment trial was affected by the job consultants' personal attitudes towards alcohol, perception of their own roles and responsibilities and shortage of time and resources. The results highlight the need for preventions strategies that target harmful alcohol consumption both among individuals in- and outside the labour market. Thus, future interventions should consider these implementations barrier when preparing intervention in similar settings.