

Department of Clinical Neuroscience
Division of Insurance Medicine

Psychiatric health consequences of sickness absence and disability pension

This project aims to investigate the predictive value of patterns of sickness absence and disability pension for various mental health outcomes in the Swedish general population. These outcomes include inpatient care due to mental disorders and suicide attempt, suicide completion and disability pension due to mental disorders.

A cohort of all persons who lived in Sweden on the 31st of December 1994 (n= 5 512 611) will be followed prospectively up until the 31st of December 2010. To test eventual cohort effects also cohorts of all persons who lived in Sweden the 31st of December 1989, 1999 and 2004 will be formed with similar follow-up times. Register data is obtained for all individuals and their parents (where available) from Statistics Sweden, the National Board of Health and Welfare and the Social Insurance Agency.

The sparse literature to date suggests an association of sickness absence and disability pension with suicide completion, however often based on selected occupational cohorts. This project includes the so far largest cohort studies in this research area, covering a total population with long follow-up periods, and comprehensive information on potential confounders, like socio-economic factors. The study investigates unresolved issues like e.g. possible cohort effects, the influence of specific diagnoses and of parental factors, which will contribute extensively to the current knowledge base.

Financial support

The Swedish Research Council, The Centre for Health Care Science, Karolinska Institutet, KID funding, Karolinska Institutet

Project members

Ellenor Mittendorfer Rutz, Associate Professor, Project Leader
Kristina Alexanderson, Professor
Bo Runeson, Professor
Hugo Westerlund, Professor
Alexander Perski, Associate Professor
Maria Melchior, Associate Professor
Ulf Jonsson, Post-Doc
Mo Wang, Doctoral Student
Syed Rahman, Doctoral Student
Jenny Head, statistician
Linnea Kjeldgård, statistician
Ishtiak Kazi, MSc

Postal address
Karolinska Institutet
Division of Insurance Medicine
SE-171 77 Stockholm
Sweden

Visiting address
Berzelius väg 3, 6th floor
Solna

Telephone
+46 8 524 82025

E-mail ellenor.mittendorfer-rutz@ki.se
Webb address:
ki.se/im

Publications

- 1) Wang, M., Alexanderson, K., Runeson B., & **Mittendorfer-Rutz, E.** (2016). Morbidity and suicide mortality following sick leave in relation to changes of Page: 2 / 3 social insurance regulations in Sweden. *Eur J Public Health*. 2016 Jul 14. pii: ckw101.
- 2) Wang, M., Björkestam, C., Alexanderson, K., Runeson B., Tinghög, P., & **Mittendorfer-Rutz, E.** (2015). Trajectories of Work-Related Functional Impairment prior to Suicide. *Plos One*, 10 (10), doi: 10.1371/journal.pone.0139937.
- 3) Rahman SG, Alexanderson K, Jokinen J, **Mittendorfer-Rutz E.**(2016). Disability pension due to common mental disorders and subsequent suicidal behaviour: a population-based prospective cohort study. *BMJ Open* 2016;6: e010152. doi:10.1136/bmjopen-2015-010152
- 4) Wang M, Alexanderson K, Runeson B, **Mittendorfer-Rutz E.** Sick-leave measures, socio-demographic factors and health care as risk indicators for suicidal behaviour in patients with depressive disorders – a nationwide prospective cohort study. *Journal of Affective Disorders* 2015 Mar 1;173:201-10. doi: 10.1016/j.jad.2014.10.069.
- 5) Jonsson U, Alexanderson K, Kjeldgård L, **Mittendorfer-Rutz E.** Psychiatric diagnoses and risk of suicidal behaviour in young disability pensioners: Prospective cohort studies of all 19-23 year olds in Sweden in 1995, 2000 and 2005, respectively. *PLoS One*. 2014 Nov 3;9(11):e111618
- 6) Ishtiak-Ahmed K, Perski A, **Mittendorfer-Rutz E.** Risk markers of all-cause and diagnosis-specific disability pension—a prospective cohort study of individuals sickness absent due to stress-related mental disorders. *BMC Public Health* 2014 Aug 7;14:805. doi: 10.1186/1471-2458-14-805.
- 7) Rahman S, Alexanderson K, Jokinen J, **Mittendorfer-Rutz E.** Risk factors for suicidal behaviour in individuals on disability pension due to common mental disorders – a nationwide register-based prospective cohort study in Sweden. *PLoS One* 2014 May 28;9(5):e98497. doi: 10.1371/journal.pone.0098497. eCollection 2014
- 8) Wang M, Alexanderson K, Runeson B, Head J, Melchior M, Perski A, **Mittendorfer-Rutz E.** Are All-Cause and Diagnosis-Specific Sickness Absence, and Sick-Leave Duration Risk Indicators for Suicidal Behavior? - A Nationwide Register-Based Cohort Study of 4.9 Million Inhabitants of Sweden. *Occupational and Environmental Medicine* 2014 Jan;71(1):12-20
- 9) Ishtiak-Ahmed K, Perski A, **Mittendorfer-Rutz E.** Predictors of suicidal behaviour in 36,304 individuals sickness absent due to stress-related mental disorders - a Swedish register linkage cohort study. *BMC Public Health*.2013,13:492.
- 10) Jonsson U, Alexanderson K, Kjeldgård L, Westerlund H, **Mittendorfer-Rutz E.** Diagnosis-specific disability pension predicts suicidal behaviour

and mortality in young adults: a nation-wide prospective cohort study. *BMJ Open*, 2013 Feb 8;3(2). e002286.

- 11) **Mittendorfer-Rutz E**, Kjeldgård L, Runeson B, Perski A, Melchior M, Head J, Alexanderson K. Sickness absence due to specific mental diagnoses and all-cause and cause-specific mortality: a cohort study including 4.9 million inhabitants of Sweden. *PLoS ONE*, 2012;7(9):e45788.