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# **Suicidal behaviour among young adults on disability pension: a nation-wide prospective cohort study**

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interest to declare**

Disability pension (DP) has increased  
much in young adults in Sweden  
– especially DP due to mental diagnoses

# Aim

To investigate if disability pension due to specific mental diagnoses or somatic diagnoses predicts suicidal behaviour among young adults

# Methods

Study design:

A nation-wide prospective cohort study

**Included in the cohort:**

**All people aged 19-23 who lived in Sweden in  
2005 N = 525 276**

**followed for 5 years (2006-2010) regarding  
suicidal behaviour (= suicide attempt or suicide)**

**Compared risk of suicidal behaviour among  
those not on DP with those on DP**

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2005

# Information about:

- Sex
- Country of birth
- Previous suicide attempts
  
- Parental education and suicidal behaviour

# All-Sweden data base

- **Statistics Sweden:** sex, age, birth country, parents educational level
- **Board of Health and Welfare:** Inpatient care due to suicidal attempt, date & cause of death
- **National Agency of Social Insurance:** DP diagnoses



## Disability pension with a mental diagnosis in 2005

- Schizophrenia, schizotypal and delusional disorders (F20-F29)
- Bipolar affective disorder (F30-F31)
- Unipolar depression (F32-F33)
- Neurotic, stress-related and somatoform disorders (F40-F49)
- Personality disorders (F60-F61)
- Mental retardation (F70-F79)
- Pervasive developmental disorder (F84)
- Hyperkinetic disorder (F90)
- Other mental disorders (F00-F19, F34-F39, F50-F59, F62-F69, F80-F83, F85-F99)

## Disability pension with a somatic diagnosis in 2005

All other ICD-codes + missing information



## Methods: outcome (2006-2010)

### *Suicide attempt*

Intentional self-harm (X60-X84)

Event of undetermined intent (Y10-Y34)

### *Completed suicide*

Intentional self-harm (X60-X84)

Event of undetermined intent (Y10-Y34)

**Cox proportional hazard regression analyses**

## Suicide attempts within five years

DP diagnosis	N	Suicide attempt (%)	Crude HR (95% CI)	Adjusted HR* (95% CI)
Not on DP	513 231	0.87	1	1
DP with somatic diagnosis	3 975	1.76	2.05 (1.62-2.60)	1.78 (1.41-2.26)
DP with mental diagnosis	8 070	4.82	5.66 (5.11-6.28)	3.32 (2.98-3.69)

\*Adjusted for sex, country of birth, previous suicide attempts, parental education, & parental suicidal behaviour

## Suicide attempts within five years (cont.)

Disability pension diagnosis	N	Suicide attempt %	Crude HR (95% CI)	Adjusted HR* (95% CI)
Mental retardation	2 868	2.09	2.42 (1.87-3.12)	2.03 (1.57-2.62)
Pervasive developmental disorder	1 542	2.79	3.23 (2.39-4.36)	2.68 (1.98-3.62)
Hyperkinetic disorder	684	5.70	6.66 (4.86-9.13)	3.99 (2.90-5.47)
Neurotic	676	9.76	11.99 (9.4-15.28)	5.00 (3.91-6.39)
Schizophrenia	320	9.06	10.95 (7.60-15.77)	4.87 (3.37-7.03)
Personality disorder	299	17.73	22.94 (17.5-30.07)	3.97 (3.01-5.24)
Unipolar depression	297	7.07	8.48 (5.52-13.01)	2.60 (1.69-4.00)
Bipolar disorder	75	17.33	22.16 (12.86-38.20)	6.00 (3.47-10.37)

\*Adjusted for sex, country of birth, previous suicide attempts, parental education, & parental suicidal behaviour

## Completed suicide within five years

Disability pension diagnosis	N	Suicide %	Crude HR (95% CI)	Adjusted HR* (95% CI)
<b>Not on DP</b>	<b>513 231</b>	<b>0.08</b>	<b>1</b>	<b>1</b>
<b>DP with somatic diagnosis</b>	<b>3 975</b>	<b>0.08</b>	0.64 (0.16-2.50)	0.54 (0.14-2.19)
<b>DP with mental diagnosis</b>	<b>8 070</b>	<b>0.52</b>	<b>6.74</b> (4.92-9.23)	<b>3.92</b> (2.83-5.43)

\*Adjusted for sex, country of birth, previous suicide attempts, parental education, & parental suicidal behaviour

## Conclusions

- DP with mental diagnoses as well as somatic diagnoses in young adulthood is associated with an excess risk of suicidal behaviour
- The excess risk is observed in a wide range of mental disorders – from mental retardation to bipolar disorder
- There is a need for improved treatment and follow-up

# Thanks!

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