

A nested case-control study of the risk for suicide attempts after discharge from psychiatric and somatic hospital

**Statistician Børge F. Jensen, MSc
Statistician Erik Christiansen, MSc**

Centre for Suicide Research, Odense, Denmark

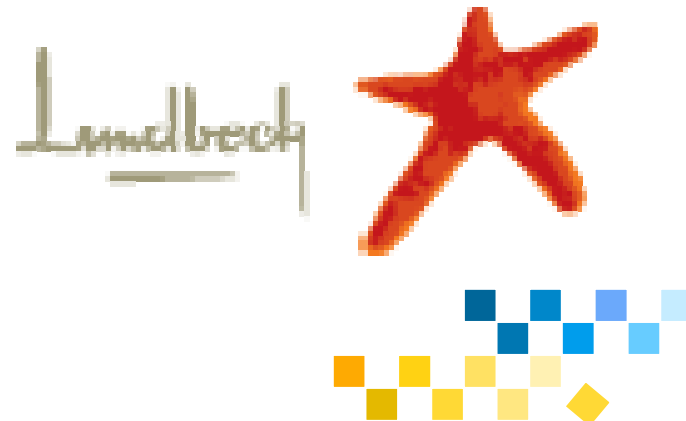


RISC

”An Epidemiological study on risk factors for suicide attempts by the use of Danish Register Data”

The research project was supported by:

H. Lundbeck A/S
Ottiliavej 9
DK-2500 Copenhagen Valby

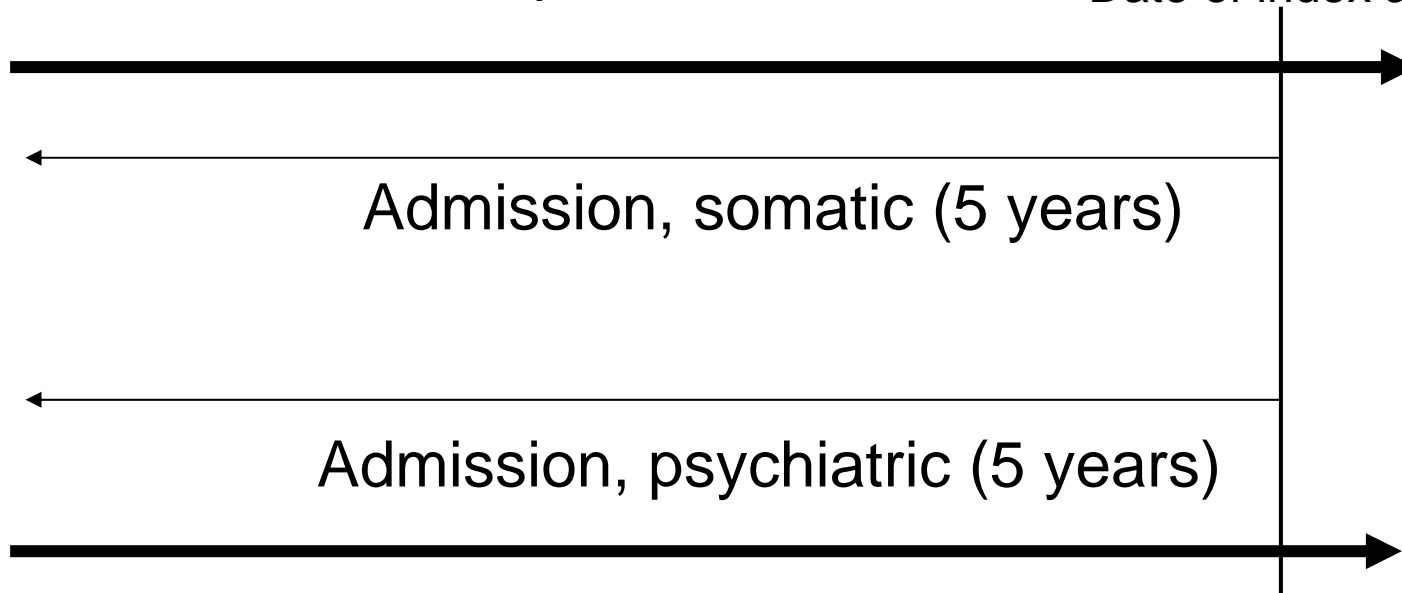


Study design

Nested Case-Control Study

Cases: suicide attempters

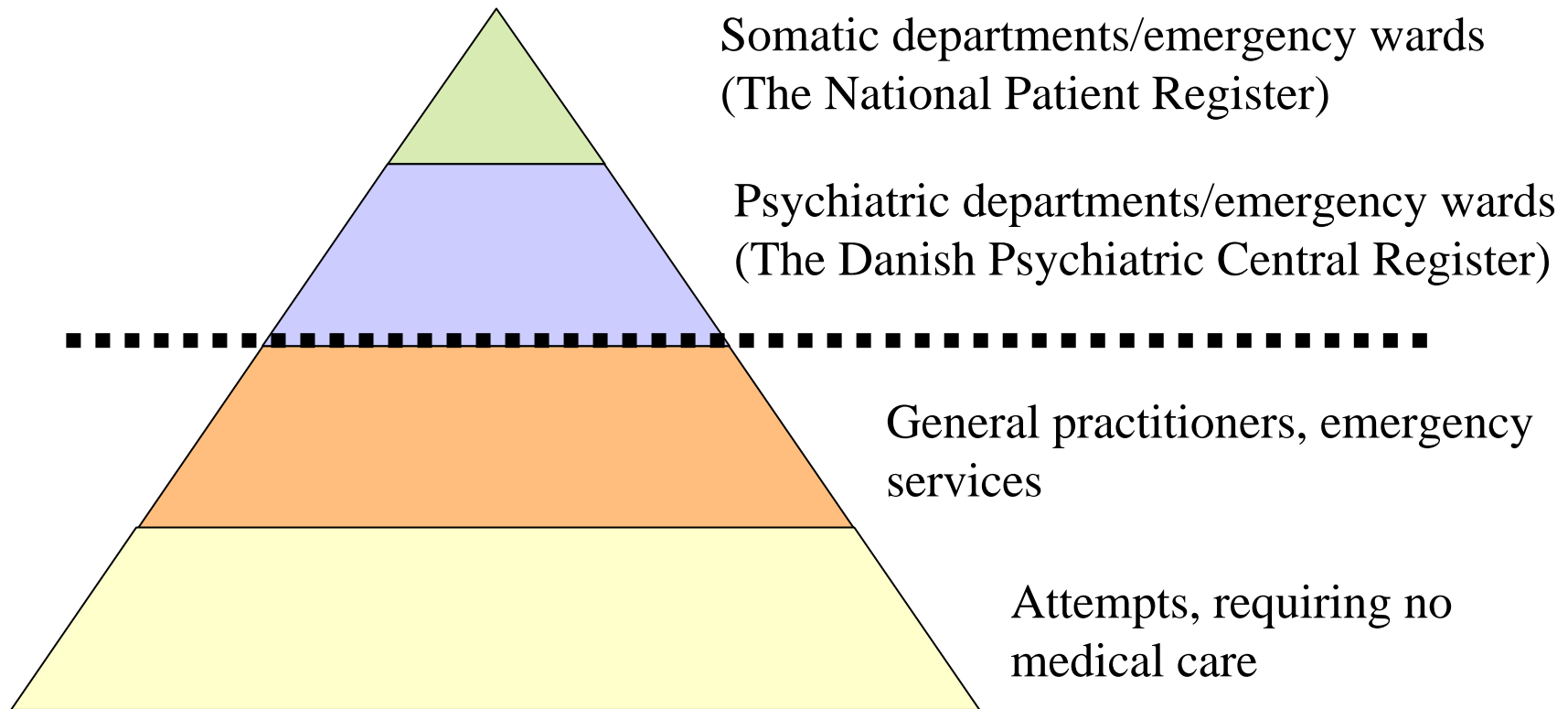
Date of index attempt



Period of study: individuals with a first registered suicide attempt in the period 1995-2001



Top of the iceberg



Time since last discharge from psychiatric hospital

<i>Time since last discharge</i>	<i>attempters</i>	<i>non-attempters</i>
0-7 days	3.9 %	0.1 %
8-14 days	1.4 %	0.1 %
15-30 days	1.8 %	0.1 %
31-90 days	4.0 %	0.1 %
91-180 days	3.3 %	0.1 %
181-365 days	4.8 %	0.1 %
1-2 years	4.1 %	0.2 %
> 2 years	6.5 %	0.5 %
Not discharged	70.2 %	98.9 %



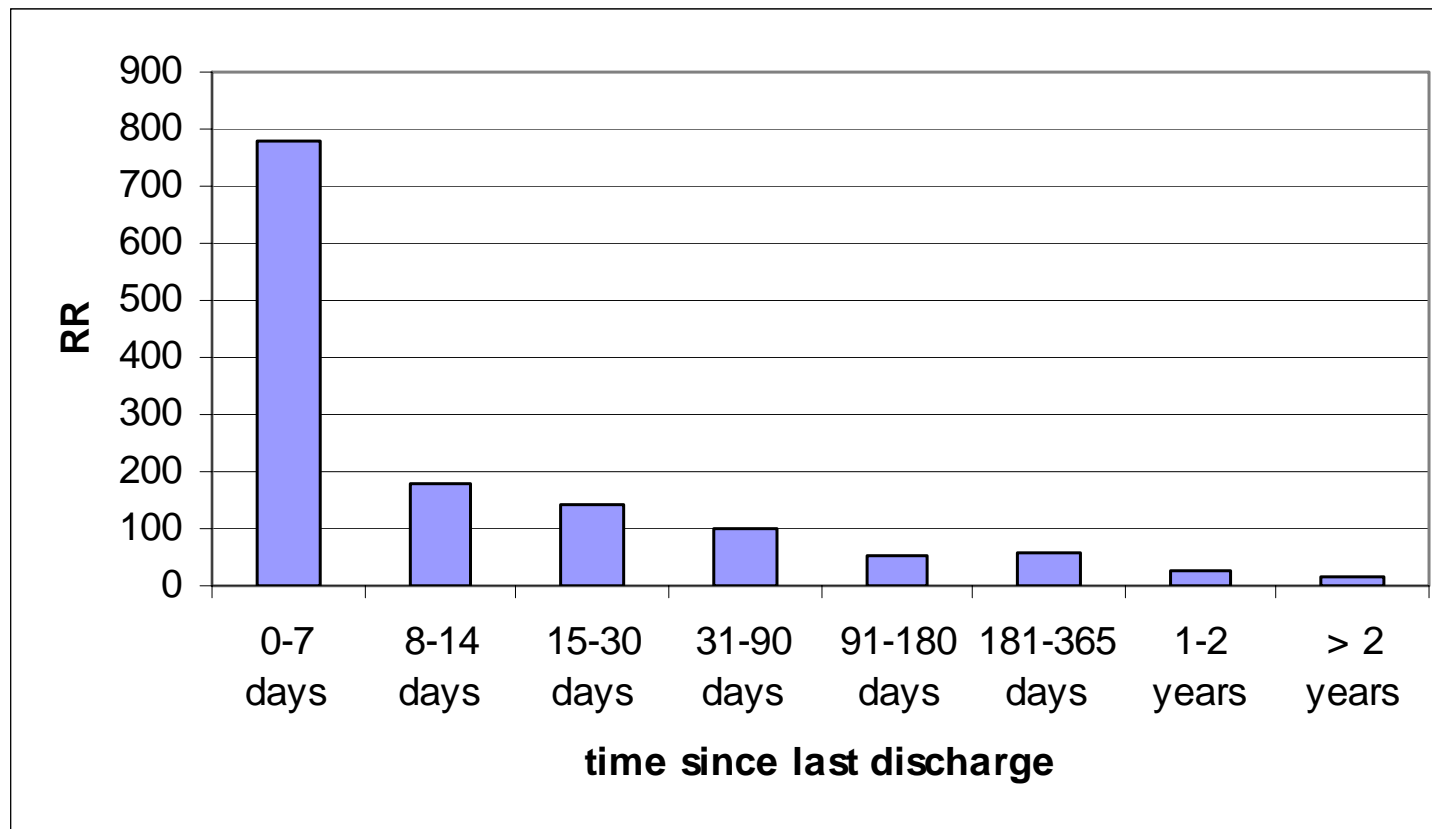
Time since last discharge from somatic hospital

<i>Time since last discharge</i>	<i>attempters</i>	<i>non-attempters</i>
1-7 days	6.5 %	1.0 %
8-14 days	4.2 %	1.1 %
15-30 days	4.9 %	1.8 %
31-60 days	7.5 %	3.1 %
61-90 days	5.8 %	2.7 %
91-180 days	11.6 %	6.6 %
181-365 days	17.8 %	10.3 %
1-2 years	13.9 %	13.7 %
> 2 years	12.1 %	18.1 %
Not discharged	15.6 %	41.6 %



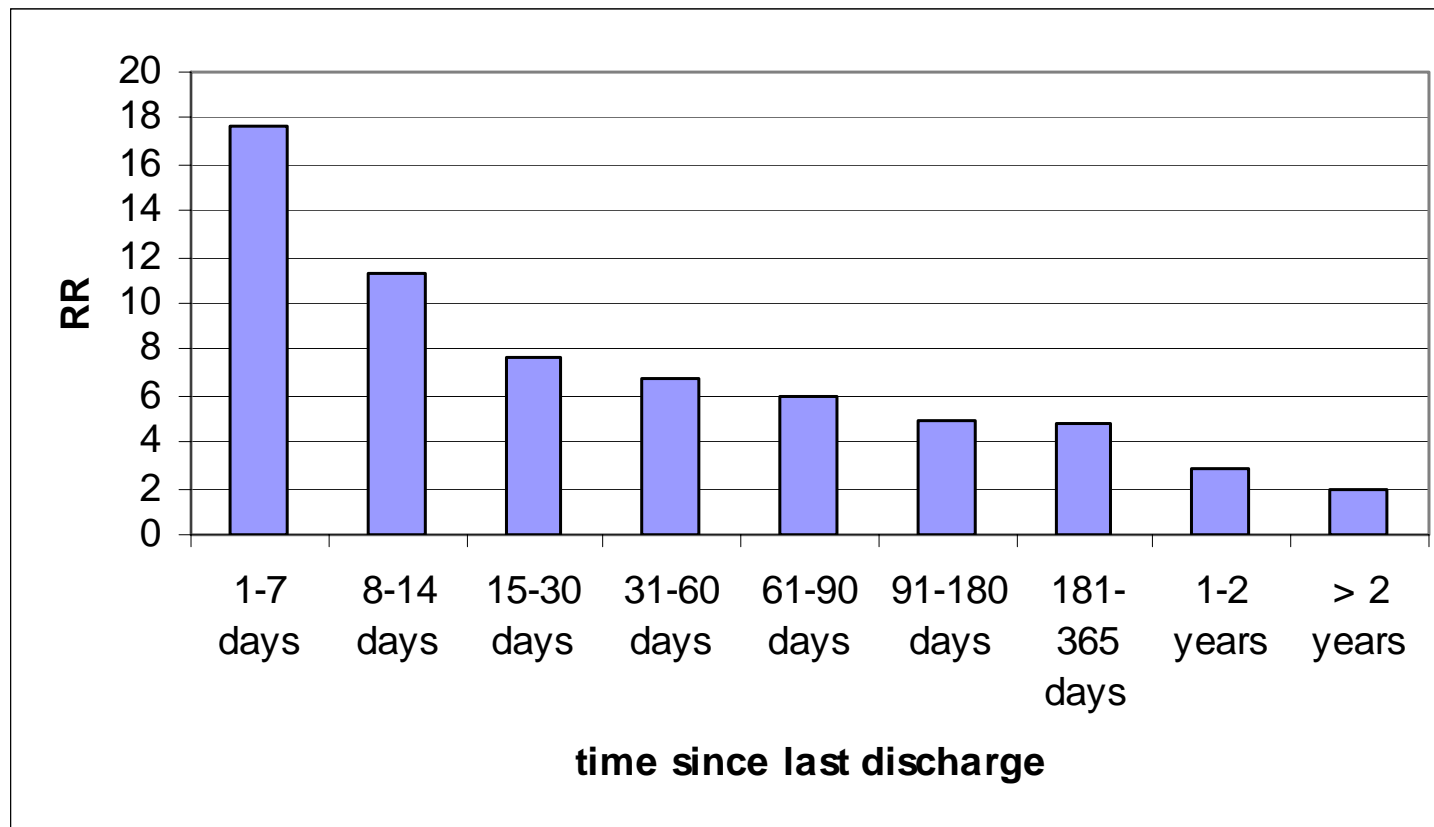
Time since last discharge from psychiatric hospital

Baseline: not discharged from psychiatric hospital last five years



Time since last discharge from somatic hospital

Baseline: not discharged from somatic hospital last five years



Number of previous psychiatric hospitalizations

<i>Number</i>	<i>attempters</i>	<i>non-attempters</i>
1 time	11.2 %	0.6 %
2-5 times	12.7 %	0.4 %
6-20 times	5.4 %	0.1 %
> 20 times	0.5 %	0.1 %
Not hospitalized	70.2 %	98.9 %



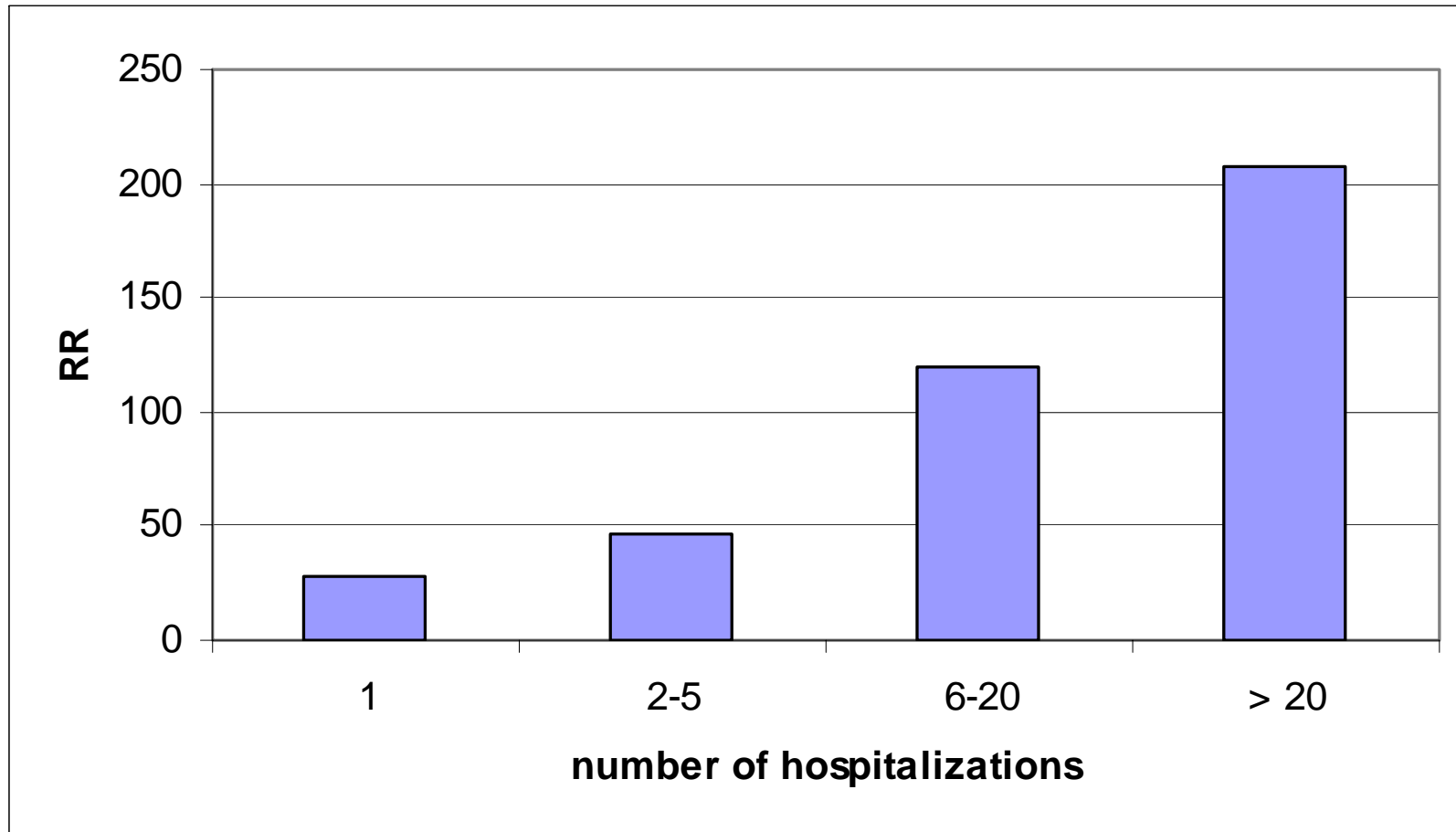
Number of previous somatic hospitalizations

<i>Number</i>	<i>attempters</i>	<i>non-attempters</i>
1-3 times	33.9 %	39.1 %
4-10 times	34.9 %	16.7 %
11-20 times	11.3 %	2.3 %
> 20 times	4.4 %	0.3 %
Not hospitalized	15.6 %	41.6 %



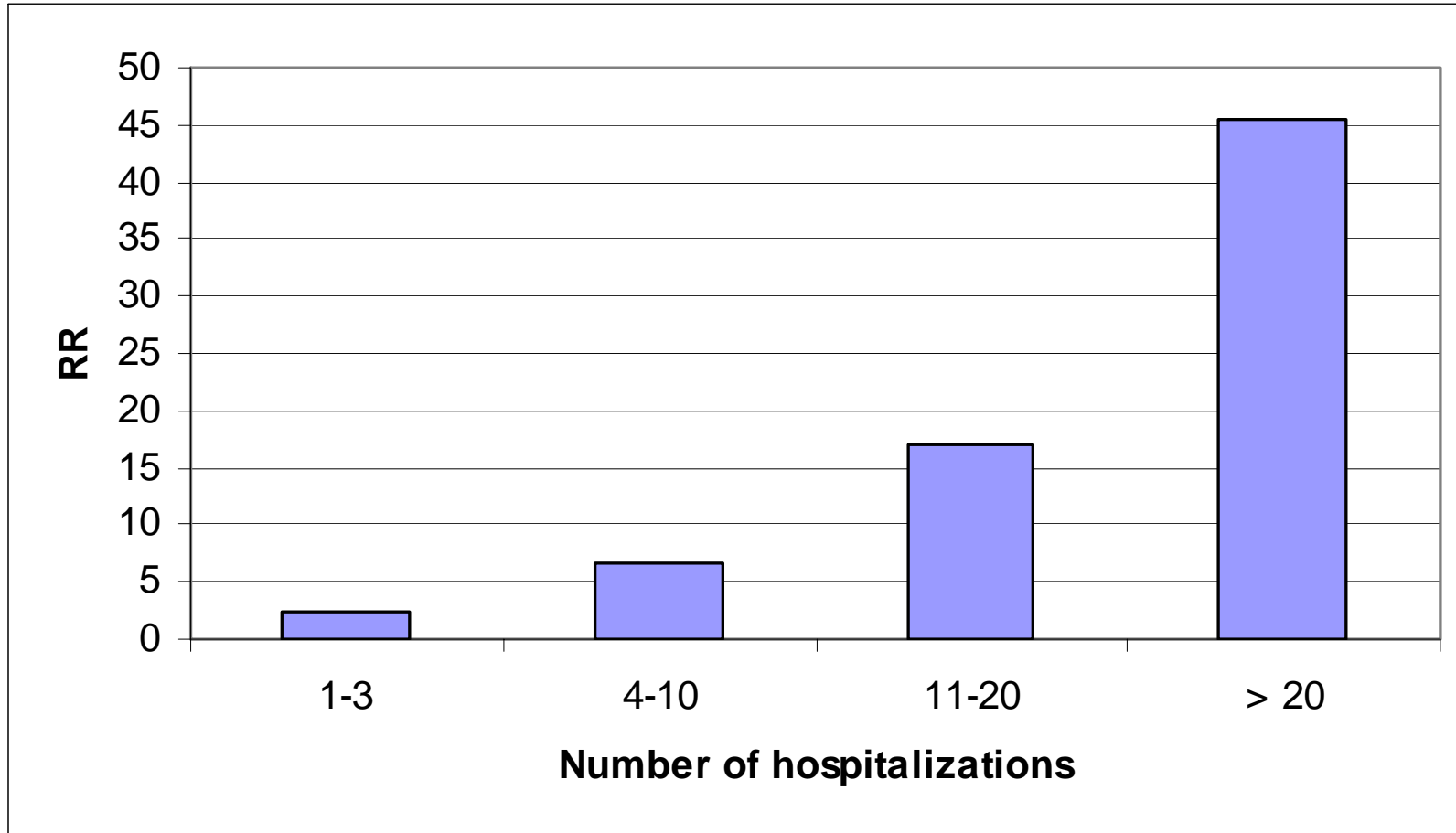
Number of previous psychiatric hospitalizations

Baseline: No previous psychiatric hospitalizations last five years



Number of previous somatic hospitalizations

Baseline: No previous somatic hospitalizations last five years



Data Sources

The Danish Psychiatric Central Register, diagnoses

Diagnosis	ICD-10	ICD-8
Schizophrenia	F20-F29	295, 297, 298.2, 298.3, (298.8), 298.9, 299
Affective disorder	F30-F39	296, 298.0, 298.1, 300.4, 301.1
Anxiety/stress	F40-F43	300.0, 300.2, 300.3, 307
Personality disorder	F60-F61, F69	301.0, 301.2, 301.3, 301.4, 301.5. 301.6, 301.7, 301.8, 301.9
Residual group (excl. alcohol/drug)		
Alcohol abuse	F10	291, 303
Drug abuse	F11-F19 (excl. F17)	304, 294.3



One single psychiatric diagnosis (abuse included)

<i>Diagnosis</i>	<i>attempters</i>	<i>non-attempters</i>
Schizophrenia	3.2 %	0.3 %
Affective disorder	3.4 %	0.2 %
Anxiety/stress related disorder	5.4 %	0.2 %
Personality disorder	0.8 %	0.1 %
Residual group	0.5 %	0.1 %
Alcohol abuse	3.7 %	0.2 %
Drug abuse	1.1 %	0.1 %



A psychiatric diagnosis combined with alcohol abuse

<i>Diagnosis</i>	<i>attempters</i>	<i>non-attempters</i>
Schizophrenia	0.4 %	0.1 %
Affective disorder	0.7 %	0.1 %
Anxiety/stress related disorder	2.1 %	0.1 %
Personality disorder	0.5 %	0.1 %
Residual group	0.1 %	0.0 %
Drug abuse	0.7 %	0.1 %



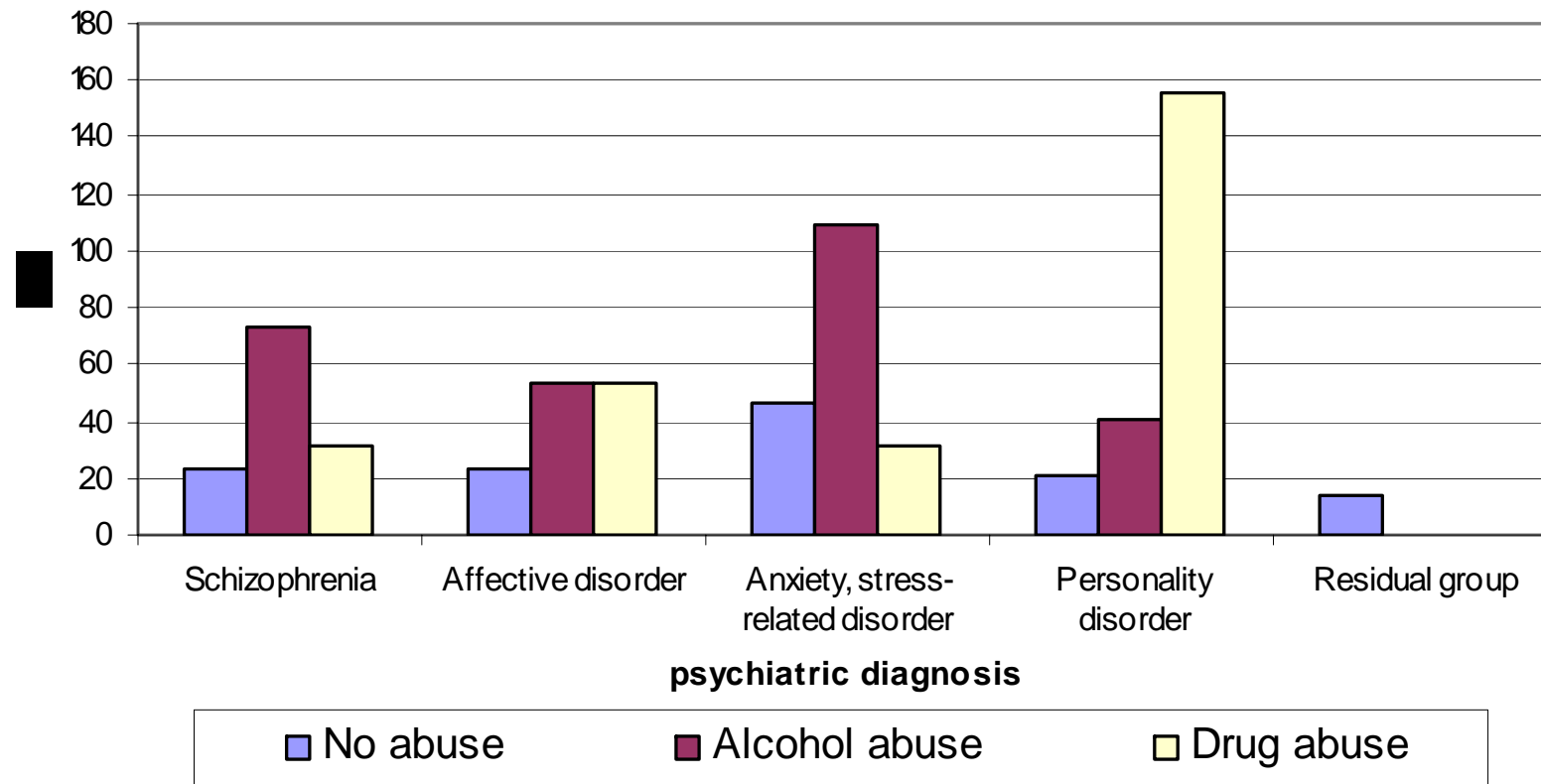
A psychiatric diagnosis combined with drug abuse

<i>Diagnosis</i>	<i>attempters</i>	<i>non-attempters</i>
Schizophrenia	0.3 %	0.1 %
Affective disorder	0.2 %	0.1 %
Anxiety/stress related disorder	0.3 %	0.1 %
Personality disorder	0.4 %	0.1 %
Residual group	0.0 %	0.0 %
Alcohol abuse + psychiatric diagnosis	6.1 %	0.1 %



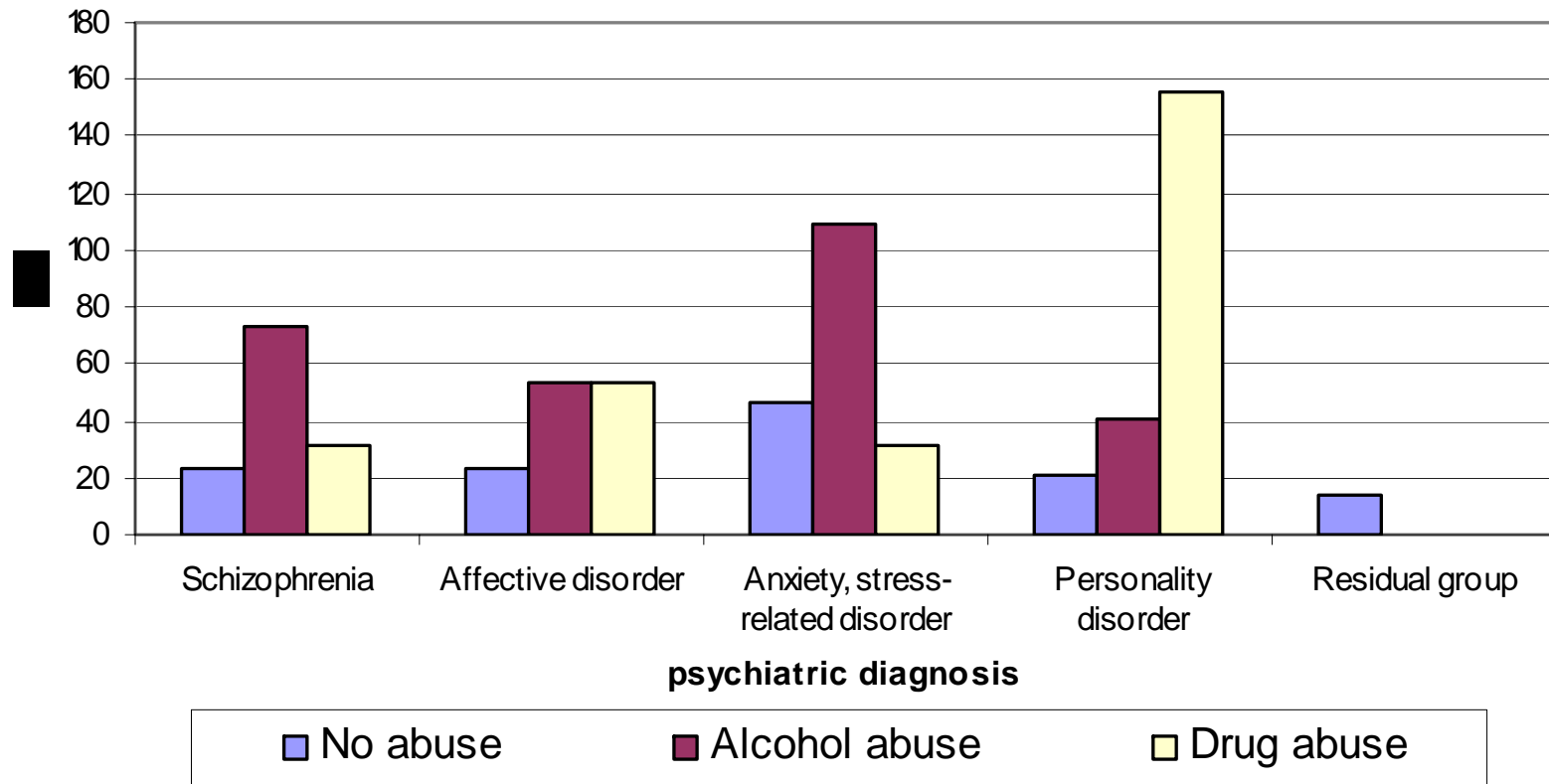
A psychiatric diagnosis + alcohol/drug abuse

Baseline: No psychiatric diagnosis last five years



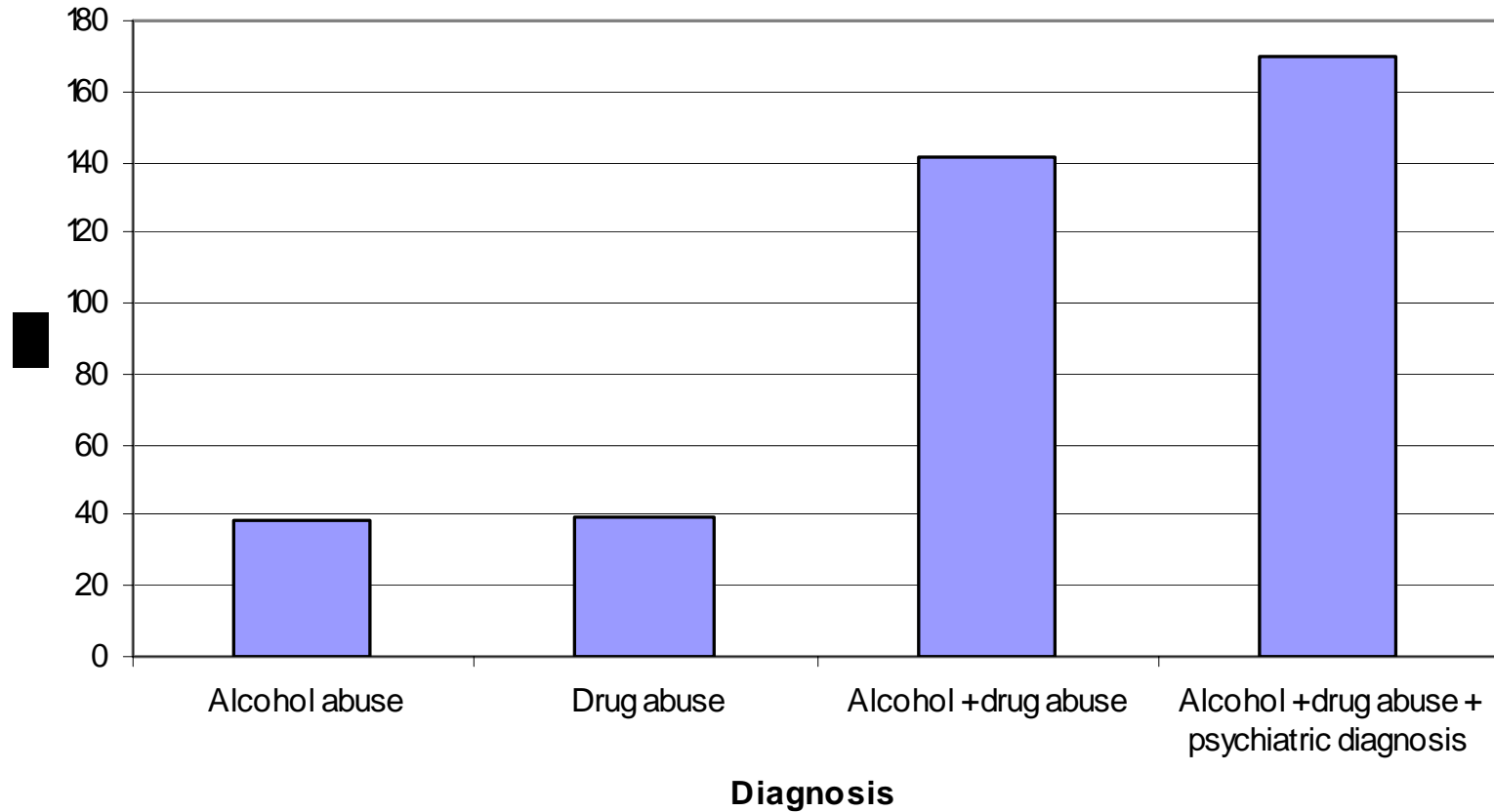
Alcohol/drug abuse

Baseline: No psychiatric diagnosis last five years



Alcohol/drug abuse

Baseline: No psychiatric diagnosis last five years



A somatic diagnosis

<i>Diagnosis</i>	<i>attempters</i>	<i>non-attempters</i>
Malignant neoplasm	2.2 %	1.6 %
Mental and behavioral disorder	19.9 %	1.4 %
D. of the nervous system	4.5 %	1.1 %
D. of the circulatory system	10.2 %	6.3 %
D. of the respiratory system	8.7 %	3.9 %
Childbirth	4.3 %	6.5 %
Pregnancy with abortive outcome	6.5 %	3.2 %
Injury	51.5 %	28.1 %
Poisoning	14.6 %	0.8 %
Other disease	65.7 %	41.5 %



Somatic diagnoses

Baseline: No somatic diagnosis last five years

