



Mortality and non-use of antipsychotic drugs after acute admission in schizophrenia: A prospective total-cohort study

Maria Fagerbakke Strømme, Liv Solrunn Mellesdal, Christoffer Bartz-Johannessen, Rune Andreas Kroken, Marianne Krogenes, Lars Mehlum, Erik Johnsen

Background

- It is debated whether use of antipsychotic drugs is associated with increased or decreased mortality among patients with schizophrenia
- Large register studies have demonstrated an increased mortality risk associated with non-use of antipsychotic drugs, but prospective studies are missing.

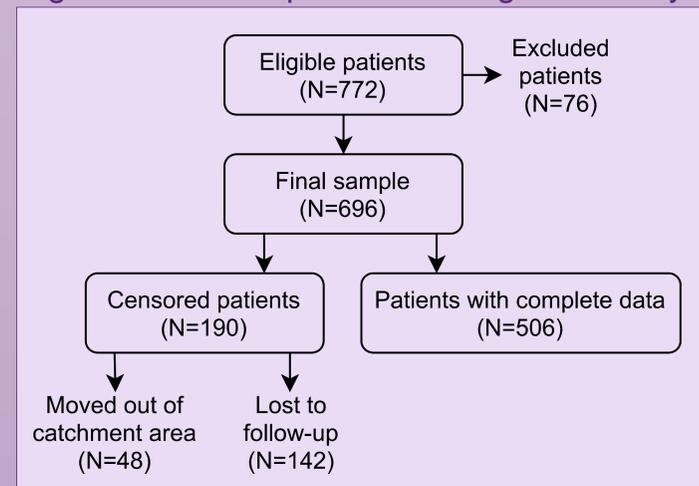
Aim

- To investigate the association between mortality and non-use of antipsychotics in patients with schizophrenia.

Methods

- Open cohort study included and followed all patients with a discharge-diagnosis of schizophrenia consecutively admitted to a psychiatric acute unit at Haukeland University Hospital, Bergen, Norway during a 10 year period (n = 696).
- Cox multiple regression analyses were conducted with use of antipsychotic drugs as a time dependent variable, and periods of use and non-use were compared within individual patients. Adjustments were made for gender, age at index admission, number of acute psychiatric hospital admissions, excessive use of alcohol and illicit substances and use of benzodiazepines and antidepressants.

Figure 1: Flow of patients through the study



Results

- A total of 68 (9.8%) deaths were registered during follow-up.
 - 40 (59%) had natural causes
 - 26 (38%) had unnatural causes
- Non-use of antipsychotics was associated with 2.15 (p = .01, CI: 1.24–3.72) times higher mortality risk compared to use of antipsychotics.
- The difference in mortality risk between use and non-use of antipsychotic drugs was age dependent, with the largest risk difference in young patients.

Table 1: Predictors of death

	Multivariate analysis			Univariate analyses		
	AHR	95% CI	P	HR	95%CI	p
Age at index admission, per year	1.05	1.04-1.07	<.001	1.05	1.03-1.06	<.001
Gender (male gender =1)	0.5	0.30-0.87	0.01	0.68	0.40-1.15	0.15
Non-use of antipsychotic drugs (use=1)	2.15	1.24-3.72	0.006	2.31	1.36-3.94	0.002
Acute psychiatric hospital admission (no=1)	1.37	0.71-2.65	0.34	1.25	0.66-2.38	0.49
Excessive use of alcohol * (no=1)	0.87	0.44-1.74	0.69	1.02	0.58-1.79	0.94
Excessive use of illicit substances ** (no=1)	1.99	0.98-4.05	0.06	1.19	0.69-2.07	0.53
Use of benzodiazepines (no=1)	1.27	0.68-2.35	0.45	1.35	0.74-2.47	0.33
Use of antidepressants (no=1)	0.59	0.27-1.31	0.2	0.48	0.22-1.05	0.07

AHR= Adjusted hazard ratio

* AUS ≥ 3

** DUS ≥ 3

Conclusion

- Non-use of antipsychotic drugs was associated with twofold increased mortality risk in patients with schizophrenia



Bergen
Psychosis
Research
Group



Corresponding author:
Maria Fagerbakke Strømme
Phone: 0047 41428017
E-mail: maria.stromme@helse-bergen.no