

COMPARISON OF LONG-TERM ANTIPSYCHOTIC USE DATA FROM MEDICAL RECORDS AND NATIONAL PRESCRIPTION REGISTER

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Background and aims

- Prescription registers are increasingly applied to study long-term use of psychiatric medications. Information on drugs used during hospital care is missing from the registers.
- The aim of the current study was to compare cumulative amount of antipsychotics estimated from medical records and prescription register and effect of psychiatric hospital care on these estimates.

Methods

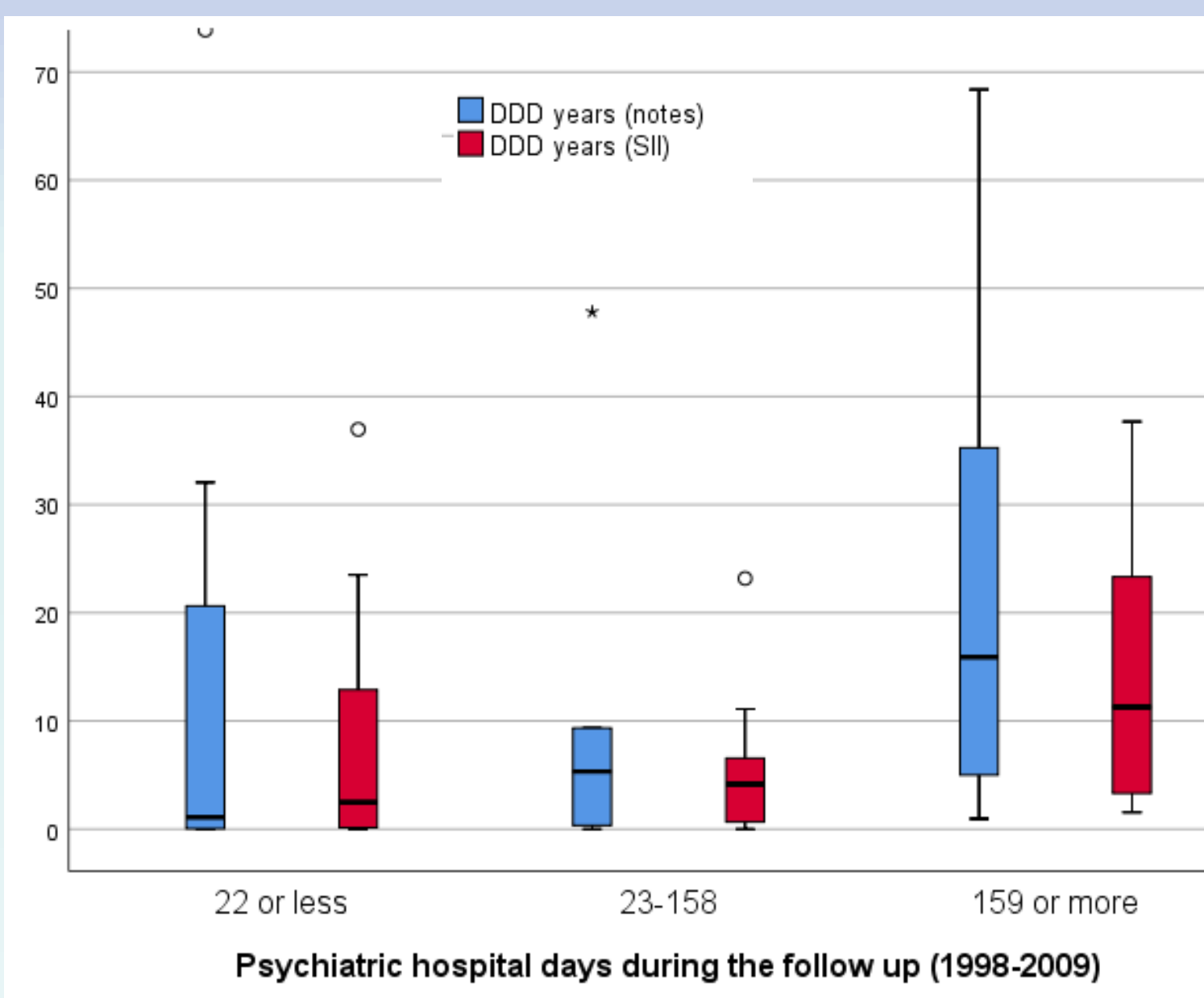
- The sample was based on the Northern Finland Birth Cohort 1966 including 54 individuals with psychoses.
- The data on defined daily dose years (DDy) of antipsychotics was calculated for years 1998-2009 independently from medical records and nationwide prescription register.
- Sample was divided in two ways based on psychiatric inpatient care during follow-up: for statistical test to two groups (0-99 days vs. 100 or more days) and for figure based on tertiles.

Results

- In the prescription database median (maximum) DDy was 5.1 (37.7) and in medical records 6.2 (329.0).
- The median DDy among those who had at least 100 days psychiatric treatment days during the follow-up (n=21) was 8.8 in prescription register and 15.0 in medical records (Mann-Whitney U test, p=0.004). Corresponding figures for those with less hospital days (n=33) were 3.6 in prescription register and 2.0 in medical records (p=0.002).
- The effect of hospitalization is shown also in the Figure, where box plots of DDy are shown for tertiles by psychiatric hospital days.
- The Spearman's rank correlation for the two DDy variables was 0.77 for those who had been hospitalized at least 100 days and 0.86 for others.

Conclusions

- This was the first study comparing prescription register and medical records regarding psychiatric medication use.
- Prescription register lack substantial amount of antipsychotics among those who have had long periods in psychiatric hospitals, whereas among those with less hospital days medical records lack information.
- Constructing accurate estimates of lifetime antipsychotics use require data both from medical records and prescription registers.



Medians for DDD years

	<u>Notes</u>	<u>Register</u>
1st tertile	1.1	2.5
2nd tertile	5.3	4.2
3rd tertile	15.9	11.3

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