

Repeated hospitalization for intentional poisoning among older adults. A Swedish national register-based study

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Conclusions

- Poisoning repetition occurs in over 1/10 cases
- The new incident is most often intentional by far and within occur within a few days
- Mental health conditions are a risk factor
- Gender differences are minimal

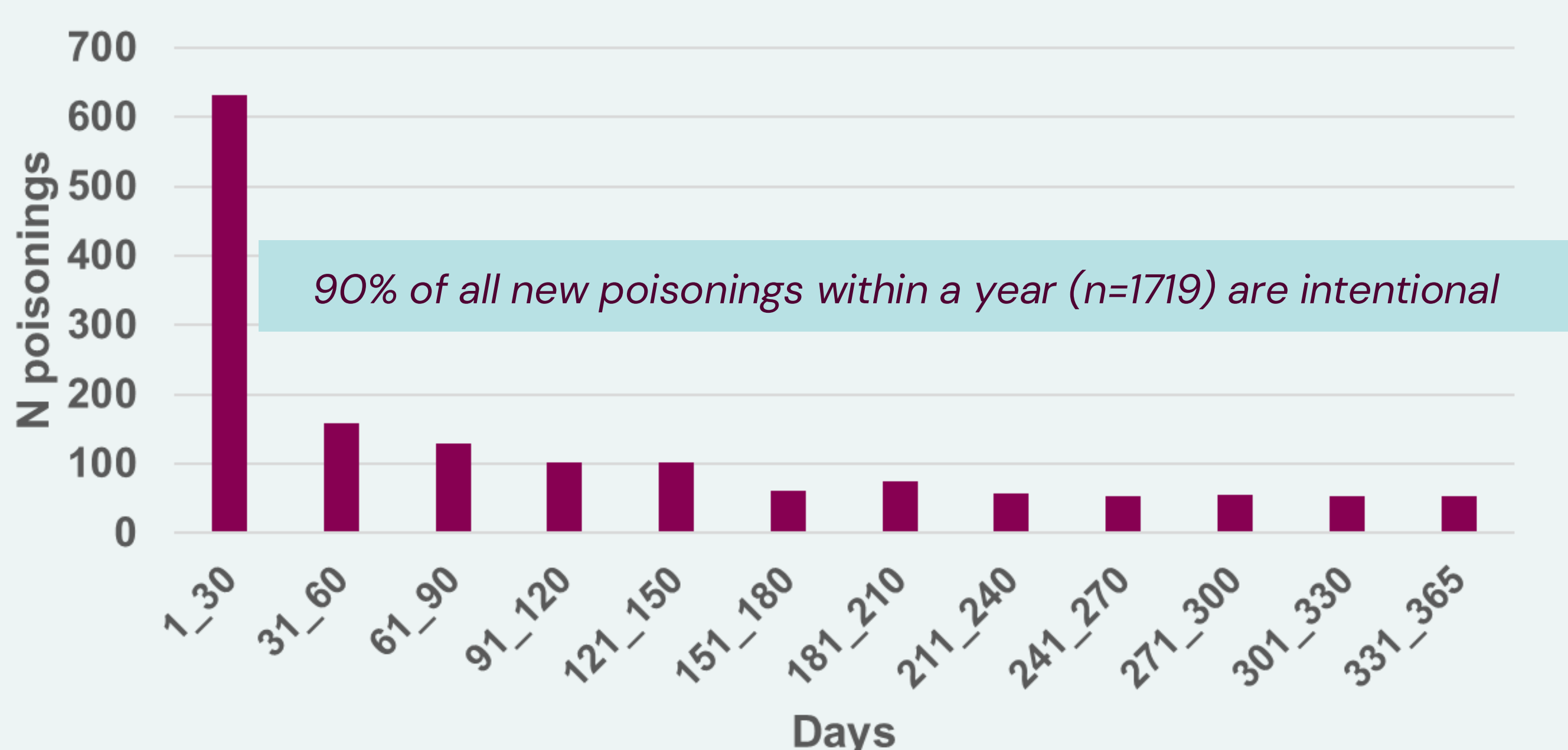


Figure 1: Monthly distribution (30-days interval) of re-hospitalization for intentional poisoning (n=1719)

Introduction

Intentional poisoning is by far the most common method of deliberate self-harm among older adults, for whom it is more lethal.

Older people who survive a first incident are likely to relapse, typically within a short while.

Studies on recent cohorts of older people are lacking.

Aim

This study sheds light on the burden, pattern, and health-related risk factors of repeated intentional poisoning leading to hospitalization/death among Swedish adults aged 50+ years. Focus is placed on the year following a first incident.

Methods

National register-based open cohort study of individuals 50 – 100 yrs.

Individuals residing in Sweden 2005 – 2016; followed up 2006 – 2017.

Approximately 3.4 million individuals; 15,219 with a first intentional poisoning

Repeated poisonings compiled in 30-day intervals.

Sex-specific adj odds ratios to assess poisoning repetition association with co-morbidities.



Medication is the most frequent cause of intentional and unintentional poisonings among older adults

Table 1: Association between health condition and prescribed medications and re-hospitalization (yes/no) within 365 days for intentional poisoning

Health conditions	Odds ratios adjusted for age and marital status	
	Men; n=642	Women; n=892
	OR (95% CI)	OR (95% CI)
Comorbidity (1 – 30 days)		
Psychiatric illness	1.70 (1.45–2.01)	1.89 (1.60–2.19)
Disease of the circulatory system	1.45 (1.10–1.94)	1.18 (0.85–1.63)
Musculoskeletal disease	1.14 (0.75–1.74)	1.27 (0.90–1.76)
Previous illness (1 – 365 days)		
Psychiatric illness	1.90 (1.59–2.26)	2.29 (1.98–2.66)
Disease of the circulatory system	1.17 (0.97–1.41)	1.26 (1.06–1.51)
Musculoskeletal disease	1.28 (1.04–1.57)	1.27 (1.08–1.50)
Alcohol abuse	1.62 (1.35–1.94)	1.90 (1.58–2.29)
Substance abuse	1.70 (1.35–2.14)	2.45 (1.98–3.02)
Intentional injury other than poisoning	1.85 (1.56–2.20)	1.85 (1.60–2.13)
Number of prescribed medications (1 – 365 days)		
0	1.0 (REF)	1.0 (REF)
1	0.97 (0.71 – 1.33)	1.25 (0.91 – 1.70)
2–4	1.12 (0.86 – 1.42)	1.51 (1.16 – 1.94)
5–9	1.44 (1.12 – 1.87)	1.97 (1.52 – 2.55)
≥ 10	1.49 (1.07 – 2.07)	2.30 (1.71 – 3.10)

Results

11.2% are re-hospitalized for poisoning within a year after an intentional poisoning, 90% because of a new intentional poisoning.

Re-hospitalization occurs typically within days (median = 4 days).

Current or past year mental health issues and polypharmacy are significant risk factors among both men and women.

Recently published:

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Our research group has initiated studies on deliberate self-harm and the repetition of intentional poisoning among young people.