

# Alcohol and drug use in patients younger than 60 years with hip fracture measured by validated instruments and the clinical eye

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REGION

## CONCLUSION and TAKE HOME MESSAGES

- Alcohol and substance use disorder are more common in the young hip fracture patients than in the general population
- Still “only” one fourth had harmful use or alcohol use disorder, hence gainsaying the belief that most hip fractures in younger adult life are caused by hazardous alcohol and/or drug use
- The clinician must be aware that the validated questionnaires and the clinical eye did not identify the same individuals
- A deeper understanding of screening methods is needed to identify those at risk, and to provide individualized care and rehabilitation

## BACKGROUND

It is a common preconception that young individuals suffering hip fracture have alcohol- and/or substance use disorder (AUD/SUD). In previous studies, alcohol and drug use were generally poorly defined, and merely a few used validated questionnaires for alcohol use only. The sufficiency of “standard” clinical screening methods has not been investigated.

## AIM

- to describe the alcohol and drug consumption in young hip fracture patients using the validated AUDIT (Alcohol use disorder test) and DUDIT (Drug use disorder test) scores.
- to investigate the agreement between the scores and the physicians’ standard reporting of usage (“clinical eye”)

| AUDIT; n=194   | Women n=76   | Men n=118  |
|--|--|--|
| Alcohol use disorder (AUDIT ≥6 for women, ≥8 for men)  | 19 (25%)   | 37 (31%)   |
| AUDIT min–max  | 0–40   | 0–36   |
| AUDIT mean (SD)  | 5.5 (7.21)   | 7.3 (7.85)   |
| Clinical evaluation of alcohol use; n=218  | Women n=90   | Men n=126  |
| Categorized as individuals with obvious alcohol use disorder   | 23 (25%),<br>11 with AUDIT ≥6<br>7 with AUDIT <6<br>[5 did not answer AUDIT] | 33 (26%),<br>24 with AUDIT ≥8<br>4 with AUDIT <8<br>[5 did not answer AUDIT] |
| Number of individuals with AUD defined by AUDIT that was clinically categorized as “normal or non-users” | 8  | 13   |
| DUDIT; n=190   | Women n=79   | Men n=111  |
| Substance use disorder (DUDIT score ≥2 for women, ≥6 for men)  | 4 (5%)   | 11 (10%)   |
| DUDIT min–max  | 0–8  | 0–36   |
| DUDIT mean (SD)  | 0.27 (1.15)  | 1.53 (4.63)  |
| Clinical evaluation of drug/substance use; n=218   | Women n=90   | Men n=126  |
| Categorized as individuals with obvious substance use disorder   | 4 (4%),<br>0 with DUDIT ≥2<br>2 with DUDIT <2<br>[2 did not answer DUDIT]    | 13 (10%),<br>7 with DUDIT ≥6<br>4 with DUDIT <6<br>[2 did not answer DUDIT]  |
| Number of individuals with SUD defined by DUDIT that was clinically categorized as “non-users”           | 4  | 4  |

  = individuals identified with both methods

## RESULTS

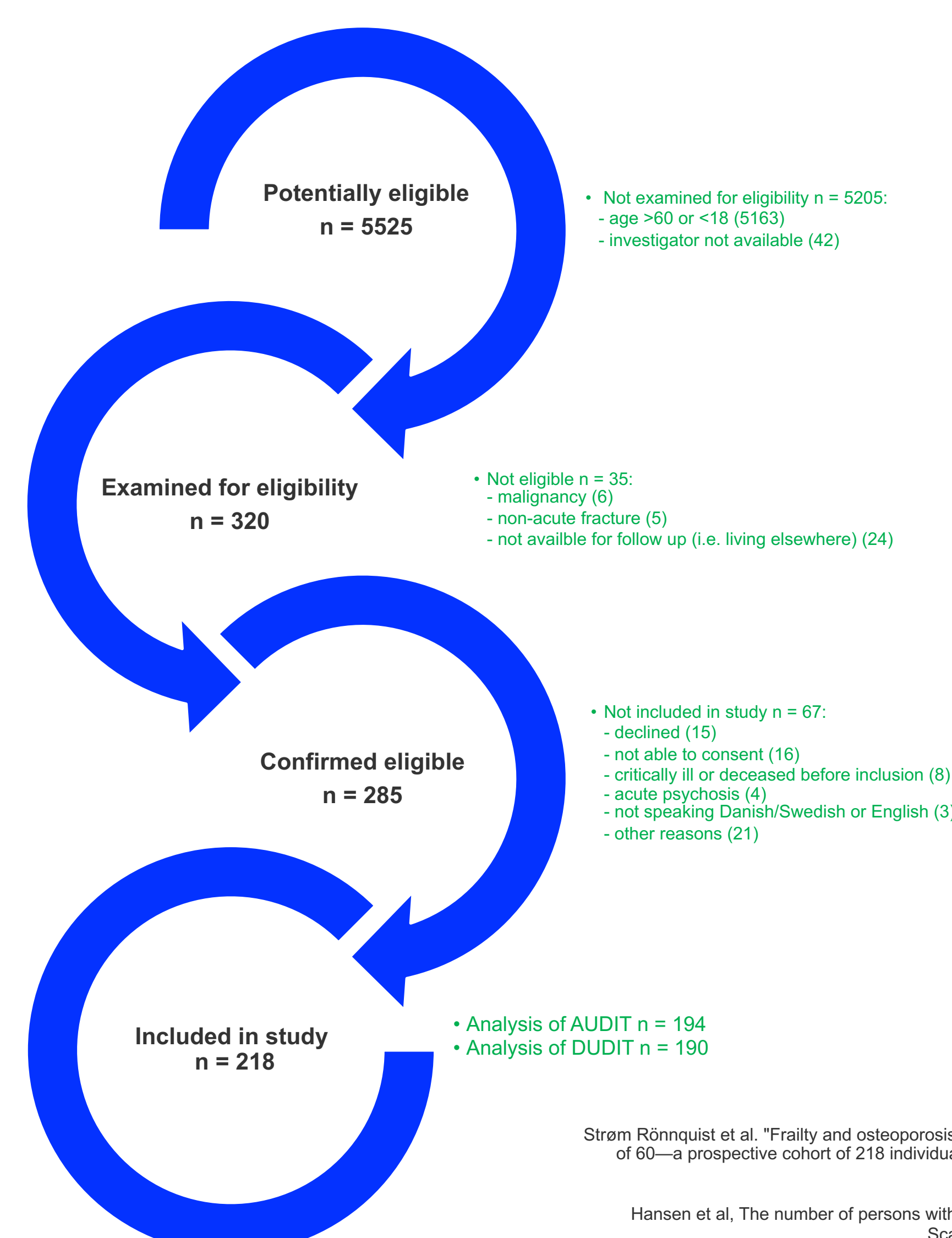
- 25% of the women and 26 to 31% of the men had hazardous / harmful alcohol use (see table). For comparison, general population studies in Denmark and Sweden show AUD in 11 and 18% in women and men, respectively (Hansen et al; Bergman et al).
- 4 to 5% of the women and 10% of the men had SUD (see table). Corresponding national prevalence has been reported to be 2% in Denmark and 3% in Sweden (Sørensen et al; Berman et al).
- There was a discrepancy between the scores and the clinical eye.
  - 8 of 19 women and 13 of 37 men with AUDIT scores indicating hazardous/harmful use were undetected by the clinical evaluation.
  - Also, all 4 women and 4 of 11 men with DUDIT indicating SUD were overlooked by clinical evaluation.



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## PATIENTS AND METHODS

A prospective multicenter cohort study of Danes and Swedes aged 18-59 years who have suffered a non-pathological fracture of the hip. 218 patients included at 4 hospitals 2015-2018 (see flowchart). Patients filled in the AUDIT and DUDIT questionnaires at baseline. The clinician based his/her evaluation on clinical appearance and medical records (Strøm Rönquist et al).



## References:

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