Epidemiology, risk factors and outcome of concurrent use of alcohol and benzodiazepines

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1

Research Team

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2

Aim

- To describe the phenomenon of concurrent use of alcohol and benzodiazepines using a longitudinal general population-based Northern Finland Birth Cohort 1966 with nationwide register linkages for ICD-10 disorders

3

Research questions

1. How prevalent is concurrent use of alcohol and benzodiazepines in Finnish general population?
2. What are the associated risk factors of adult alcohol use, alcohol use disorder and benzodiazepine use in Finland?
3. Is concurrent use of alcohol and benzodiazepines associated with excess mortality?
4. Is there comorbidity between concurrent use of alcohol and benzodiazepines and psychiatric disorders?

4

Why is this important?

- Harmful use of alcohol is a significant contributor of disease burden worldwide (WHO 2018)
  - Causal factor in more than 200 disease and injury conditions
- Benzodiazepine misuse is a growing public health problem (Votaw 2019)
  - Overdoses, prescription numbers
  - Psychiatric comorbidity (depression, anxiety)
- Benzodiazepines and alcohol share similar pharmacological properties
  - Introducing potential and unpredictable interactions that can be fatal (Calhoun, 1996)

5

Knowledge gap

- There is abundance of studies examining independent outcomes of either alcohol or benzodiazepine use
- Only a few studies have examined the long term outcomes of concurrent use (Votaw et al. 2019)
- So far we have limited understanding of subgroups that are the most vulnerable to harmful outcomes

6

Methods: Population

- NFBC 1966 included all mothers with expected date of delivery between 1st of January to 31st December 1966
- Children: 12 231
- 96 % of all births

7

Methods

- Data for this study was obtained from the 31- (1997) and 46-year (2012) follow up studies
- Postal questionnaires were sent to all participants
  - Sosiodemographic factors, general wellbeing
  - Various questions on alcohol and prescription medication use
- Other linkage data from nationwide registers:
  - Care register for health care and primary health care visits
  - Finnish Centre for Pensions (disability pensions)
  - Medication reimbursement register of the Social Insurance Institution of Finland
- We can use register + questionnaire data to form and compare alcohol and benzodiazepine use – variables (DDD, recreational use, consistent use, binge drinking, heavy drinking)

8

Results

Yet to come

9

References

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10