Epidemiology research using a practice based research network:

a case–control study embedded in a historical cohort about low back pain and comorbidities.

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Background

- LBP in clinical practice
  - Common worldwide condition
  - Pain and disability

- LBP in literature
  - Associated comorbidities
    - Psychosocial
    - Musculoskeletal
    - Somatoform disorders
  
  But
  - Different setting
  - Different tools
Research question

- Primary care setting
- Chronic or Acute LBP

Comorbidities
  - Psychological
  - Social
  - Musculoskeletal
  - Somatoform disorders (PHQ-15)
Database

Transition Project

- Since 1985
- Practice-based research network (PBRN)
- 9 GPs
- 4 practices
- 15,000 patients
- ICPC
Fit the database

- Most of the work
- Every term is important

- LBP (code, duration)
- Age
- Period (1 y before, 2 y after)
- Which episode? 1st only

- Patient scale or episode scale?
- Discussion with technician: possible?
Historical cohort embedded case–control study

- >18 yo
- LBP between 1 January 1996 and 1 February 2013
- Non specific LBP <90 days or ≥90 days
- 1st episode
- No–LBP matched controls
  - Gender, age, practice, index date

- Comorbidities
  - 1y before index date, 2y after
Population

Acute: 3285 patients

Chronic: 1511 patients

Figure 1: Sex/age repartition in frequency of the cases with an acute episode of low back pain

Figure 3: Sex/age repartition in frequency of the cases with chronic episode of low back pain
Results

Figure 5: Odds ratio with 95% CI for ICPC-2 chapters in each new episode per time period compared between cases and controls. L = musculoskeletal, P = psychological, Z = social, _S = acute episode, _L = chronic episode.
Discussion

- Psychological
- Social
- Somatoform disorders

\[ \text{not more often} \]

- More musculoskeletal issues

\[ \rightarrow \text{consider all musculoskeletal complaints} \]
\[ \rightarrow \text{no systematic screening of others} \]
\[ \rightarrow \text{but keeping aware of all complaints} \]
En conclusion

- PBRN :
  - Utilisation :
    - Grande population
    - Variété des données
    - Facilité d’emploi
    - Difficulté : critères d’inclusion
  - Participation :
    - DPC
    - Continuité pratique clinique–recherche
Merci !