Comorbidity and temporal ordering of anxiety, mood and substance use disorders in the Australian general population: Which come first and what does this tell us?

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Background and rationale

- Comorbidity is the presence, either simultaneously or in sequence, of two or more mental or substance use disorders
- It is the norm amongst people with any mental or substance use disorder
- Understanding the lifetime patterns and sequences of comorbid disorders has the potential to guide the timing and targeting of prevention efforts
- Many studies only investigate individual pairs of comorbid disorders (e.g. alcohol dependence and major depression)
- Fewer studies have examined comorbidity among anxiety, mood and substance use disorders at the same time

Aim

- To use nationally representative epidemiological survey data to:
  1. describe the prevalence and patterns of comorbidity of the common anxiety, mood and substance use disorders
  2. describe the onset and temporal sequencing of these groups of disorders, by sex

Method

Sampling and response rate

- Data came from the Australian National Survey of Mental Health and Wellbeing
- Nationally representative household survey
- Conducted by the Australian Bureau of Statistics (ABS) between August and December 2007
- Number of people approached = 14805
- Number of people interviewed = 8841
- Response rate of 60%:
  - Non-response follow-up survey showed small under-estimations of prevalence in young males

Interview

- World Mental Health Survey Initiative version of Composite International Diagnostic Interview (WMH-CIDI)
- Adapted for Australian context (e.g. small language edits and substantial changes to service use module)
- Lifetime timeframe – *"Have you ever…"*
- Onset age based on retrospective recall
  - All data are weighted to represent the Australian population

Method

Interview content

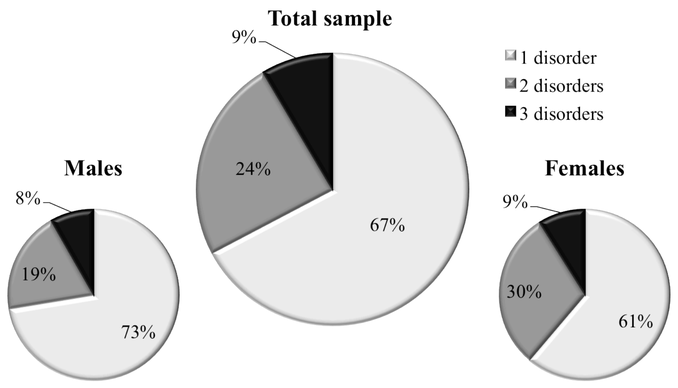
- Separate modules were used to assess:
  - Anxiety disorders (panic disorder, agoraphobia, social phobia, generalized anxiety disorder, posttraumatic stress disorder, obsessive-compulsive disorder)
  - Mood disorders (major depressive disorder, dysthymia, bipolar I/II disorder)
  - Substance use disorders (abuse and dependence on alcohol and illicit drugs – cannabis, stimulants, sedatives and opioids)
- Analysis focussed on classes of mental and substance use disorders

Results

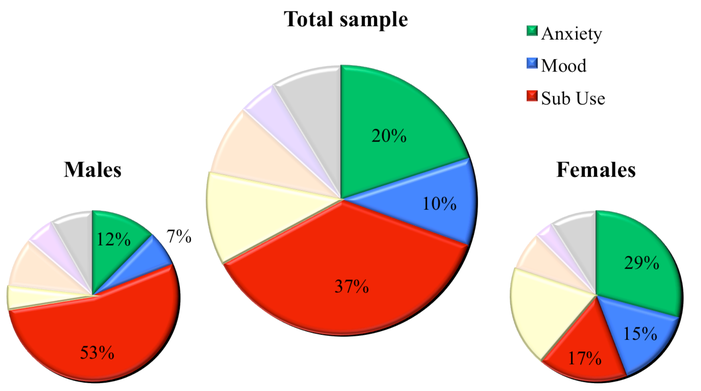
What is the lifetime prevalence of anxiety, mood and substance use disorders?

	Males (%)	Females (%)	Total (%)
Anxiety disorder	15.6	24.3	20.0
Mood disorder	11.2	17.5	14.4
Substance use disorder	34.7	13.9	24.2

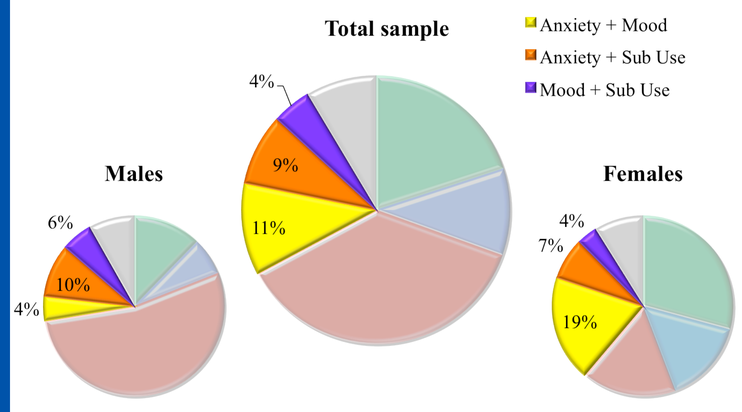
How many disorders do people have over their lifetime?



When people have 1 disorder which disorder do they have?

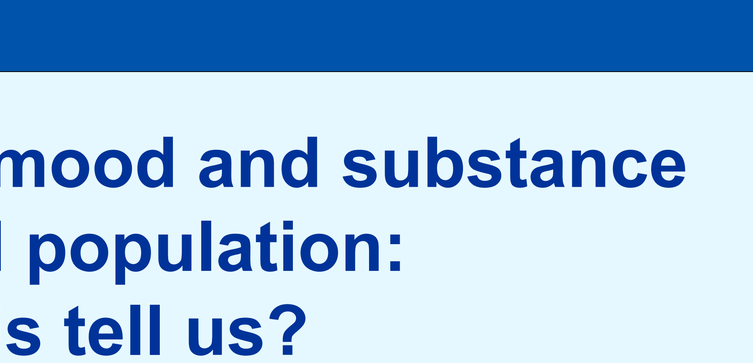


When people have 2 disorders what disorders do they have?

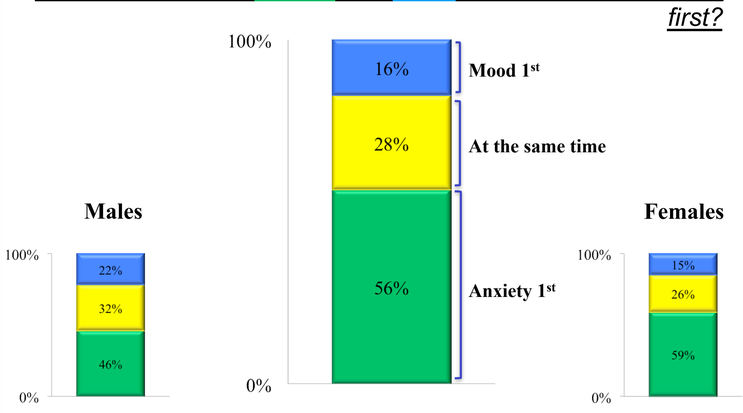


Results (continued)

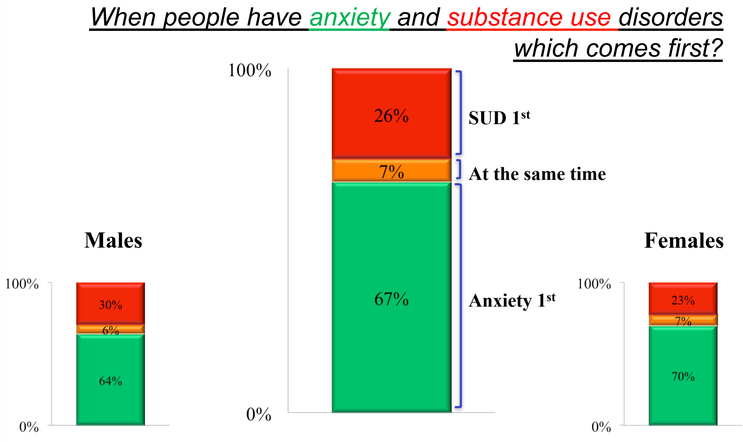
What is the typical age of onset of anxiety, mood and substance use disorders?



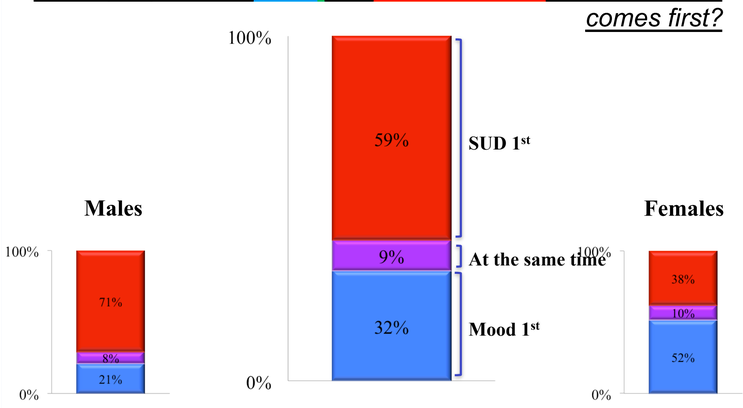
When people have anxiety and mood disorders which comes first?



When people have anxiety and substance use disorders which comes first?



When people have mood and substance use disorders which comes first?



Conclusion

- Comorbidity is more common than chance
- Higher prevalence of comorbidity in females explained by:
  - Higher prevalence of both mood and anxiety disorders in females, AND
  - Higher prevalence of comorbidity of mood and anxiety disorders
- Anxiety disorders are typically primary when they are comorbid, but there are important sex differences in sequencing of comorbidity
- These findings have implications for:
  - Prevention - tells us who and when to target
  - Etiology – tells us about potentially common vulnerabilities to both individual and comorbid forms of disorder
  - Nosology – reveals ways of structuring mental disorders in our classification systems