Generalized Anxiety Disorder
Epidemiology

1 year prevalence: 3 – 8 %
Lifetime prevalence: 5 %
Ratio of women to men = 2 : 1
Prevalence in the elderly: 7%
Comorbidity:
Up to 90 % of GAD patients have another psychiatric disorder
25 % develop panic disorder
Comorbidity with anxious – avoidant PD
GAD

- Age of onset: “For as long as I can remember.”
  - Usually seek treatment in 20s
  - Only 1/3 seek psychiatric help
    - Often seen by family GP’s and specialists for somatic complaints of disorder
- Can be chronic and managed over a lifetime
- Better prognosis with later onset and intact personality
- Development of Major depression or Panic disorder often reason for initial presentation
How does GAD present?
Video GAD

- Charles Story vimeo
Generalized Anxiety Disorder: Diagnostic Criteria (DSM)

- Excessive anxiety or worry occurring more days than not for at least 6 months about a number of events or activities
- Difficulty controlling worry
- 3 of 6 symptoms are present for more days than not: restlessness, easily fatigued, difficulty concentrating, irritability, muscle tension, sleep disturbance
Somatic symptoms

- sweating, dry mouth, palpitations, urinary frequency,
- epigastric discomfort and frequent and/or loose bowel motions

- Hyperventilation may result in feelings of shortness of breath and dizziness

- Increased muscle tension
- restlessness, inability to relax, headaches and aching pains, particularly in the shoulders and back (Gelder et al., 2006)
Comorbidity

- The rates of comorbidity vary between studies with estimates of between 68 and 93%
- Comorbid disorders that are particularly common include depressive disorders, other anxiety disorders and somatoform disorders
- There is also significant comorbidity with substance misuse especially among men
Physical Health

- GAD also often co-occurs with physical health problems such as arthritis and gastrointestinal and respiratory disorders and may mimic the presentation of some physical conditions (for example, hyperthyroidism) (Culpepper, 2009; Roy-Byrne)

- Care may emphasise somatic problems or sleep disturbance central to GAD and physical comorbidities
Prognosis

- Chronic condition with low rates of remission over the short and medium-term
- Evaluation of prognosis is complicated by the frequent comorbidity with other anxiety disorders and depression

- The mean age of onset of GAD was in the Harvard-Brown Anxiety Research Program was 21 years

- The average duration of illness in this group was about 20 years and

- Despite treatment the outcome over 3 years was relatively poor, with only one in four showing symptomatic remission from GAD (Yonkers et al., 1996)
Depersonalisation/Derealisation

**Depersonalisation**
- Disturbing sense of being ‘separate from oneself’, observing oneself as if from outside, feeling like a robot or automaton

**Derealisation**
- Threatening sense of unfamiliarity or unreality in the environment, perceptual anomalies may be present, other people may feel like actors in a play
What are the longterm consequences of GAD?
Impairment and Economic Cost

- 30% of GAD patients show annual reduction in productivity > than 10%

- Increased numbers of visits not only to primary care doctors but also to hospital specialists, particularly gastroenterologists (Kennedy & Schwab, 1997; Wittchen, 2002)

- 30% never marry U?E rates are higher

- Suicide attempts and risk significantly increased

- Estimated total cost of all anxiety disorders in Europe is > Euro 41 billion (2004 prices)
Suicide Risk

- Suicidal ideation and suicide attempts are significantly increased in GAD compared with the general population, particularly in women, and this increase is still greater in the presence of comorbid major depression (Cougle et al., 2009)
Aethiology of GAD
Evidence of genetic inheritance

Biological models

Environmental factors

Social learning
Genetic Factors

- Familial studies (15% of the relatives of those with GAD display it themselves-base rate is 4% in general population)

- Risk of GAD was greater for monozygotic female twin pairs than for dizygotic twins.

- The tendency to be anxious tends to be inherited rather than GAD specifically

- Heritability estimate of about 30%
Biological Models

- Activation of the amygdala can occur prior to conscious appreciation of threat but there are strong connections between the amygdala and areas of prefrontal cortex.

- Another structure involved in anxiety is the hippocampus, which is important in relating fearful memories to their environmental context.

- Brain imaging studies of individuals with high trait anxiety and people with GAD have shown exaggerated responses in both the amygdala and prefrontal cortex during presentation of emotionally threatening stimuli.

  (Bishop *et al.*, 2004; Nitschke *et al.*, 2009)
Neurotransmitters

- Adversity experienced in childhood and current stresses can alter the pattern of cortisol secretion in adult life.

- Well known is the role of HPA axis dysfunction in depression (Pariante & Lightman, 2008).

- There is some evidence that GAD is also associated with excessive glucocorticoid secretion (Mantella et al., 2008).

- Serotonin, Noradrenaline and GABA receptors show clear evidence of response to drug treatments.
Environmental/Psychological Factors

- Parenting
- Parental anxiety
- Separations
- Premorbid personality
- Traumatic Experiences
- Physical and mental health problems
Environmental/Psychological Factors

Parental styles characterised by overprotection and lack of emotional warmth (Silove et al., 1991)

- Kendler and colleagues (2003) showed that stressful life events characterised by loss increased the risk of both depression and GAD

- Life events characterised by ‘danger’ (where the full import of the event was yet to be realised) were more common in those who subsequently developed GAD

- People who lack a sense of control of events and personal effectiveness, perhaps through early life experiences, are more prone to anxiety disorders (Barlow, 2000)
Research into psychological factors

- Individuals with GAD show higher than normal sensitivity to threat

- EEG studies show activity in left frontal lobe:
  - individuals engage in frantic, intense thought processes without accompanying images (different from obsessional thoughts/images or flashbacks)
Bio Psychosocial Model

A.
- No stressor
- Normal function
- Normal function

B.
- No stressor
- Slowing of function
- Breakdown

risk gene 1
risk gene 2
risk gene 3
risk gene 4
mild stressor
severe stressor
GAD : A cognitive model and treatment
Psychological interventions

- CBT: moderate to large improvement good quality evidence
- Applied Relaxation: clinical evidence for CBT is more robust and CBT has a larger magnitude of effect
- Psychodynamic Psychotherapy: Evidence that CBT is more effective in the short term
Generalised Anxiety Disorder

Excessive anxiety & worrying, more days than not re a number of events or activities, for at least 6 months. Subjectively difficult to control and leads to: (3 or more needed)

- Muscle tension
- Restlessness/keyed up/on edge
- Easily Fatigued
- Irritability
- Sleep disturbance (falling, staying or restless sleep).
- Difficulties Concentrating or mind going blank

MR FISC
GAD Diagnostic Issues

- Relatively common, but often under detected or disregarded (as worry is a normal process)

- Disregard of condition further fuels problem; diagnosis can provide validating message & encourage engagement
  - High co-morbidity with other Axis I disorders
  - Depressive symptoms normal in moderate to severe GAD

- Themes of worry are the same as non-GAD people, but process more stuck. Typically developmentally relevant concerns about events in the person’s life
GAD Diagnostic Issues

- The main problem people will notice is that they feel anxious and worried most of the time. Initial subjective focus may therefore be on life-events rather than self.

- Worry not constrained to one area (e.g. social phobia).
What is worry?

Worry is a chain of thoughts and images, negatively affect-laden and relatively uncontrollable; it represents and attempt to engage in mental problem-solving on an issue whose outcome is uncertain, but contains the possibility of one or more negative outcomes; consequently, worry relates closely to the fear process. (Borokovec et al., 1983:10)
Central cognition in GAD - what is the threat?

- ‘The world is potentially dangerous and I may not be able to cope with whatever comes from the future, so I must anticipate all bad things that might happen so that I can avoid them or prepare for them. (Sibrava and Borkovec, 2006:239)
What is worry?

- About things where the outcome is uncertain.
  - Kicked off by what if’s or equivalent.
- A strategic process (goal directed) that aims to help deal with uncertainty
- A method of solving problems and planning ahead
- A chain of (mostly) thoughts & (some) images experienced as a stream of doubts
- Thoughts and images feel very real
- Problematic when difficult to interrupt or end
- A mental behaviour rather than a feeling-state
- Rarely shared
- Worry means living in an imagined future; loss of here and now
- Others…………..
What do people worry about?

- **Everyday events frequent**
  - (i.e. late for work, late payment on a bill)
  - Chain into more serious events

- **Everyday events that are less frequent**
  - Losing your job, losing a loved one, health worries

- **Themes are**
  - Social (friends, family), work, finances, illness, and consequences of these (often social)
  - Worry about worry (all this worry will make me ill, will make me lose control of my mind)

- **What you been worrying about this week?**
Helpful Assessment Questions

- Nature, frequency and intensity of worry
- Is there a current stressful situation?
- How does patient describe an episode of their worry? Can they give you a typical example?

- Have you always been a worrier?
- If there is nothing to worry about, do you still find yourself worrying?
- Do minor everyday things spiral into major concerns?
- Once it starts, is your worry hard to stop?
- Does worry stop you enjoying your life?
- If you were not worrying about x, would you worry about something else?
Exercise 1: what have we worried about this week? 15 min one-way-pairs

Choose one thing you’ve been worrying about

- What were you worrying about? What was it about the situation that led you into worry?
- Can you spot what triggered your worry?
- Talk about your experience of worry, describe the content and the process.
- Be curious about the phenomenology. What is the immediate emotional consequence of worry?
- What might be the longer term emotional consequence of worry?
- How does it impact on your behaviour?
- How did your worry impact on the thing you worried about?
Treatment for GAD

- Assessment and formulation - understanding a basic model
A basic model of GAD, after Dugas et al.

- **Situation**
- **What if...?**
- **Worry**
- **Anxiety**
- **Demoralisation Exhaustion**

Intolerance of uncertainty

- Intolerance of uncertainty can be understood as negative emotional, cognitive and behavioural reactions to uncertain situations and events.
- People with IU find uncertainty upsetting and stressful, think it is something to be avoided, and have difficulty functioning in uncertain situations.
- Intolerance of uncertainty is not unique to GAD but
- Research has shown that clients with GD have higher levels of IU compared to people in the general population, and also compared to people with other types of anxiety disorders.
Intolerance of uncertainty

- One way to manage uncertainty is to consider as many possible negative outcomes as possible.

- Advantages:?

- Disadvantages: increase number of hypothetical scenarios, increases the uncertainty, keeps attention on potentially worrying hypothetical events.
Positive beliefs about worry are important to identify and understand.

Allows you to explore them.

What would life be like if you never worried again?
Worry is useful because……

- Shows I care
  - if I don’t worry I am a terrible parent
- Prepares me to cope
- Solves problems
- Motivates me
- It show that I am serious or organised.

- If I worry about the worst it will not happen
- If I don’t worry I’ll miss something important
What if...?

Positive Beliefs About Worry

Worry

Anxiety

Demoralisation

Exhaustion

Types of worry

- Real event worry
- Hypothetical event worry
Real event worry- negative problem orientation

- People with GAD have good problem solving skills
- However research has shown they have negative ‘problem orientation’
  - Beliefs about the nature of problems e.g., problems are threatening or unfair
  - Appraisals of themselves as problem solving agents, e.g. doubt their ability to solve problems
  - Expectations about the outcome of the problem solving process e.g. pessimistic about the outcome
Intolerance of Uncertainty

What if...?

Positive Beliefs About Worry

Worry

Negative Problem Orientation

Anxiety

Life events

Demoralisation

Exhaustion

Hypothetical event worry

- Research has shown that high worry is related to cognitive avoidance

- E.g.
  - Suppressing worrying thoughts
  - Substituting neutral or positive thoughts for worries
  - Using distraction as a way to interrupt worrying
  - Avoiding situations that can lead to worrisome thinking
Cognitive avoidance in worry

- Cognitive avoidance is like other forms of avoidance
- Short term decrease in anxiety through not facing your fear (in this case thinking about the uncertain situation)

However likely to:

- Consolidate negative beliefs about worry
- May get enhancement effects- trying not to think about something makes it harder not to think about it, and rebound effects. ‘Pink elephant’ and ‘monsters under the bed’
Intolerance of Uncertainty

What if...?

Positive Beliefs About Worry

Worry

Negative Problem Orientation

Anxiety

Cognitive Avoidance

Demoralisation

Exhaustion

Life events

Mood states

General Treatment Aims

- To demonstrate the problem is not the object of worries, but the propensity to worry.

- This shift is captured by the following;
  - ‘my problem is that there are lots of things in my life that make me worry’ (the problem is the things I worry about) to
  - ‘my problem is that I worry a lot about the things in my life.’ (the problem is the worry).

- To be able to shuttle between the process of worry and its content.

- To enable clients to do this as well.
Treatment of GAD- (Laval model)
Outlined in CBT for worry and generalised anxiety disorder- Wilkinson, Meares and Freeston

- Assessment and development of formulation
- 1) Worry awareness training
- 2) Recognising and overcoming intolerance of uncertainty
- 3) Recognising and overcoming positive beliefs about worry
- 4) Dealing with real event worry
- 5) Dealing with hypothetical event worry
- 6) Relapse prevention
Treatment: 1) Worry Awareness

- Psychoeducation;
  - About CBT/Worry
    - Traffic Analogy: how many individual cars would we need to focus on to remedy traffic-flow problems?
    - What other factors would we need to understand?
    - What attitudes to problem solving would help or hinder progress?
  - Explaining the diagnosis
  - Worry as a continuum
    - An everyday process that can become “locked in” under certain circumstances
Treatment: 1) Worry Awareness

- Also beginning to think critically about the type of worry.
  - Current Problem or Hypothetical Situation
    - Current Problem = Problem Solving
    - Hypothetical Situation = Imaginal Exposure
  - Note: not always neat categories, but this is part of process of helping patients live with uncertainty

- Important to recognise when worry happens
  - Diary: Date/Time, Description of Worry, What tells me I’m worrying, The level of anxiety and the worry type
Treatment: 2) Recognising and overcoming intolerance of uncertainty
Exercise: Reflecting on uncertainty

- In pairs working one way then the other using this exercise and the following one.

**Exercise 2**
- Think of a current situation in which the outcome is uncertain – one you are willing to share.
- In pairs discuss the following:
  - How does this situation make you feel?
  - How do you tolerate the uncertainty?
  - Is there anything useful/good or positive about the experience of uncertainty?
  - What kinds of beliefs and thoughts do you experience in the face of uncertainty?
  - What does the situation/affect/thoughts lead you to do?
    - What do you do more of/less of?
    - What is helpful and unhelpful?
  - Are there any costs associated with the way you deal with this uncertainty?
  - What does this tell you about uncertainty/certainty in general?
Exercise 2: Reflecting on Certainty

Exercise 3

Reflect on why certainty is important to you.

In pairs discuss the following;

- How does certainty make you feel?
- How do you tolerate the certainty?
- Is there anything unhelpful or negative about the experience of certainty?
- Would you like more certainty in your life? If so how much? Total certainty or moderate certainty? What would it be like to have total certainty?
- What kinds of beliefs and thoughts do you experience in the face of certainty?
- What does feeling certain lead you to do?
  - What is helpful and unhelpful about this?
- Are there any costs associated with the way you deal with this certainty?
- What does this tell you about the importance of certainty in general?
Treatment Aims 3: Intolerance of Uncertainty

- **Allergy Analogy**
  - Once allergy present, dose is less important than presence of allergen.

- **Worriers prefer a negative outcome than an uncertain one.**
  - At least then I’ll *know* what to do.

- **Beliefs about uncertainty:**
  - stressful, dangerous, bad, unpleasant, to be avoided, etc....
  - “Uncertainty makes life intolerable”*
  - “I always want to know what the future holds for me”*
  - “The smallest doubt can stop me from acting”*

*Items from the Intolerance of Uncertainty scale. Buhr & Dugas, 2002*
Intolerance of Uncertainty

- Strong possibility that client & therapist will not share initial goals:

  Intolerance of Uncertainty

  Therapist: Increase tolerance

  Client: Increase certainty
Influence of IoU on behaviours...

Limits ‘growth’ with a sting in tail....

- Avoid investing in relationships....
- Find reasons not to do things
  - I’m really not ready for that promotion
  - I’m happy with the way things are
  - I’ve got other things that need my attention....
- Procrastinate
  - delay decisions & actions while seeking certainty
  - Look for max info before proceeding (same info from different people)
  - Questioning decisions until certain it’s right
  - Over planning
- Don’t delegate
  - I know (it’s certain) it’s done right if I do it
Improving tolerance of uncertainty

- Spotting it

- Discussion of certainty vs. uncertainty
  - Drive towards knowing; survival value?
  - Quotes…. *To be absolutely certain about something, one must know everything or nothing about it*
    - *Olin Miller Author, 1918 - 2002*

- Aim to gently increase cognitive and behavioural flexibility by taking risks
  - Buying a present without asking reassurance seeking questions.
  - Make a minor decision without asking for reassurance (making dinner, buying a dress).
  - Delegating something small
  - Only looking for a little info before making a decision.
Treatment: 3) Recognising and overcoming positive beliefs about worry
Worry is useful because....

- Shows I care
  - if I don’t worry I am a terrible parent
- Prepares me to cope
- Solves problems
- Motivates me
- It show that I am serious or organised.

- If I worry about the worst it will not happen
- If I don’t worry I’ll miss something important
Testing Worry Promoting Assumptions

- Identify worry-promoting assumption in self or other
  - May be difficult until you pose the kind of situation in which you are really likely to worry

- Questions aim to focus on process
  - E.g. *Supposing you didn’t worry about that what would that say about you, what would happen?*
  - *Have you ever prepared and not worried as much, what difference did that make?*

- Express this in “If…then” terms
  - If I *do* worry, then… (+ve outcome)
  - If I *don’t* worry (-ve outcome)

- “Outcome” be
  - expected consequence (prediction - *It will go wrong, I won’t do it*)
  - personal meaning (the kind of person I’d be - *uncaring, unprepared, thoughtless and so on*).
  - If your assumption is of the latter kind, you will need to operationalise the personal meaning

- Back to your personal examples; can you spot the worry rule?
  - How could you test this out?
Treatment: 4) Dealing with real event worry

- Review their problem orientation: what do they do when faced with a problem

- E.g’s
  - Avoiding or delaying problem solving
  - Trying not to think about it
  - Asking others to solve the problem
  - Impulsive problem solving
  - Trying to solve everything at once
  - Approach-avoidance
  - Negatively prejudicing the outcome
  - Overanalysing
Some strategies

- What is a problem
- Seeing problems as part of normal life
- Recognising problems before it’s too late
- Re-framing problems: opportunities vs threats
- Review problem- solving skills (D’Zurilla and Nezu 1999)
Treatment 5) Dealing with hypothetical event worry
Worry-Appraising judgments

- **Increasing Anxiety – turbo charge worry**
  - I have no control over my worry
    - I am out of control (now)
  - If I worry like this then I will go crazy
    - I am losing my mind (now)

- **Other Emotions – exacerbate problems**
  - If I worry like this (or how it makes me feel) then I will damage my health (more slow burn anxiety)
    - I am going to die
  - If I worrying like this then this just goes to show how stupid I am
    - Negative appraisals leading to low self-esteem, depression
  - If I worry like this and other people knew then what would they think
    - Shame, guilt and so on.
Other Examples of turbo charging thoughts

I am out of control
I will be overwhelmed
I will go crazy
I will be unable to focus or work or perform
I will be condemned to a life of anxiety
I am on the downward slide to depression
I will become ill
I lack confidence
I am weak
I will be stuck forever in worry
I am not in control
Exercise: Testing Appraisals of worry

- Identify a worry of your own or other (client, friend, spouse…)
- What kind of judgement or appraisal of this worry and the related feeling might this provoke?
- What behaviour (overt or mental) might derive from this appraisal?
- Consider a way of changing the behaviour so that the judgement is tested.
GAD summary

- The key characteristic of GAD is excessive worry.
- Worry is an attempt to reduce uncertainty by identifying potential threats.
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