Background

- Lifetime prevalence of Anxiety Disorders: 33%
- Gender ratio, Women > men 2:1
- Early onset: median age 11 years (as young as 7 years and for GAD 31 years; Panic Disorder in the 40’s – 50’s).
- Etiology
- High overlap: amongst anxiety disorders other mental disorders
# Pathological Anxiety vs Normal Anxiety

<table>
<thead>
<tr>
<th>Criteria for Differentiation</th>
<th>Pathological Anxiety</th>
<th>Normal Anxiety</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intensity</td>
<td>Relatively high and/or out of proportion to the situation/circumstances</td>
<td>Relatively low and/or proportionate to the situation/circumstances</td>
</tr>
<tr>
<td>Duration</td>
<td>Generally longer lasting/recurrent</td>
<td>Generally shorter lasting</td>
</tr>
<tr>
<td>Preoccupation with Anxiety</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Quality of the Experience</td>
<td>Distressing, Overwhelming, Incapacitating</td>
<td>Unpleasant, but not too distressing/not distressing for a long time</td>
</tr>
<tr>
<td>Effects on behavior and functioning</td>
<td>Causes long-standing changes in behavior, impairs functioning</td>
<td>Generally does not affect behavior more than temporarily, does not impair functioning</td>
</tr>
</tbody>
</table>
Anxiety Disorders

Include disorders that share features of excessive fear and anxiety and related behavioral disturbances

<table>
<thead>
<tr>
<th>Fear</th>
<th>Anxiety</th>
</tr>
</thead>
<tbody>
<tr>
<td>emotional response to real or perceived imminent threat</td>
<td>anticipation of future threat</td>
</tr>
<tr>
<td>More often associated with surges of autonomic arousal necessary for fight or flight, thoughts of immediate danger and escape behaviors</td>
<td>More often associated with muscle tension and vigilance in preparation for future danger and cautious or avoidant behaviors</td>
</tr>
</tbody>
</table>
Disorders included under the Diagnostic and Statistical Manual (DSM) V

- Specific Phobia
- Social Anxiety Disorder (Social Phobia)
- Panic Disorder (Panic Attack Specifier*)
- Agoraphobia
- Generalized Anxiety Disorder
- Substance/Medication-Induced Anxiety Disorder
- Anxiety Disorder Due to Another Medical Condition
- Other Specified/Unspecified Anxiety Disorder
Removed: Obsessive Compulsive Disorder

While the person has recurrent anxious thoughts – these are intrusive and distressing (*not excessive worry or apprehension*)

Accompanied by compulsive ritualised behavior designed to relieve the anxiety
Diagnosing Generalized Anxiety Disorder

• **Excessive anxiety and worry** (apprehensive expectation) occurring more days than not, about a number of events or activities. Six months. (*intensity, duration, frequency, effect on functioning)

• **Difficulty controlling** the worry

• **Accompanied by:** restlessness
  feeling keyed up/on edge
  easily fatigued
  difficulty concentrating/mind going blank
  irritability
  muscle tension
  disturbed sleep
Panic Disorder

• Recurrent unexpected panic attacks – abrupt surge of intense fear or intense discomfort
• Associated with: Palpitations,
  Sweatings
  Trembling/shaking
  Sensations of SOB/smothering
  Feelings of choking
  Chest pain, discomfort
  Nausea, abdominal distress
  Feeling dizzy, light-headed, faint
  Chills/heat sensations
  Paresthesias
  Derealization
  Fear of losing control/‘going crazy’
  Fear of dying

• Persistent concern or worry about additional panic attacks
• A significant maladaptive change in behavior related to the attacks

*situationally bound and free floating*
In the other disorders with panicky feelings: situationally bound and …

• Avoids the situation because there is fear of being negatively evaluated: **Social Anxiety Disorder**

• Avoids specific object: **Specific Phobia**

• Avoids situations where escape is difficulty/help unavailable: **Agoraphobia**
# Diagnostic Challenges: Anxiety and Depression

<table>
<thead>
<tr>
<th>Anxiety</th>
<th>Common to Both</th>
<th>Depression</th>
</tr>
</thead>
<tbody>
<tr>
<td>Difficulty initiating sleep</td>
<td>Sleep disturbances</td>
<td>Early-morning awakening</td>
</tr>
<tr>
<td>Phobic avoidance behavior</td>
<td>Appetite changes</td>
<td>Diurnal variation</td>
</tr>
<tr>
<td>Rapid pulse, other evidence of psychomotor &amp; autonomic hyperactivity</td>
<td>Nonspecific CVS or GIT complaints</td>
<td>Sad, downcast facial expression</td>
</tr>
<tr>
<td>Breathing disturbances</td>
<td>Difficulty concentrating</td>
<td>Psychomotor retardation (*agitation)</td>
</tr>
<tr>
<td>Apprehensive expectation, feelings of dread</td>
<td>Irritability</td>
<td>Chronic or recurrent nagging pain</td>
</tr>
<tr>
<td>Tremors, palpitations</td>
<td>Fatigue, lack of energy</td>
<td>Feelings of sadness, guilt, hopelessness and worthlessness</td>
</tr>
<tr>
<td>Sweating, hot or cold spells</td>
<td>Thoughts of death or suicide</td>
<td>Loss of interest in usual activities</td>
</tr>
<tr>
<td>Faintness, light-headedness, dizziness</td>
<td></td>
<td>Anhedonia</td>
</tr>
<tr>
<td>Depersonalization</td>
<td></td>
<td>Difficulty making decision</td>
</tr>
<tr>
<td>Derealization</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Five Steps to Diagnosing an Anxiety Disorder

Step 1: Listen
(listen to the patients’ description of the pattern of complaints)

Step 2: Inquire
(if pattern of complaints is consistent with an anxiety disorder, inquire about the presence of other common symptoms of anxiety – look for clusters of symptoms. Meds/Drugs/medical conditions)

Step 3: Evaluate
(Note appearance, behavior, mood and affect, flow and content of speech and thoughts, insight into illness, degrees of disability and social adjustment)

Step 4: Examine
(PE to look for other disorders/concomitant medical problems; Lab Ix)

Step 5: Inform
(Review all facts and establish a specific diagnosis. Inform patient and explore attributions and beliefs)
The Need for a Psychiatric Consult

**When:** there is a serious risk of suicide,
there are psychotic symptoms,
co-occurring drug/alcohol problems exist,
symptoms are severe/complex
or if symptoms fail to improve on initial treatment and follow-up
Diagnosis of anxiety disorder

Need psychiatric referral?

Yes
Refer Psychiatrist

No

Psycho-education of patient, including identifying patient’s treatment preferences

Pharmacotherapy

Response?
Yes: Maintenance
No: Refer Psychiatrist

Psychological therapy

Response?
Yes: Refer Psychiatrist
No: Maintenance
Pharmacotherapeutic Strategies

• Treatment of Choice
• Switching
• Augmentation
• Other options (off-label)
• SSRIs Selective Serotonin Reuptake Inhibitors: Fluoxetine, Fluvoxamine, Sertraline, Paroxetine, Escitalopram

• SNRIs Serotonin Noradrenergic Reuptake Inhibitors: Venlafaxine, Desvenlafaxine, Duloxetine
## Management of GAD

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>Grade, Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>SSRI/SNRI (Venlafaxine) should be used as first-line in GAD</td>
<td>Grade A, level 1++</td>
</tr>
<tr>
<td>Imipramine may be considered second-line (poor tolerability, danger of fatal overdosage)</td>
<td>Grade A, Level 1+</td>
</tr>
<tr>
<td>Mirtazapine, second-line, anxiolytic effects</td>
<td>Grade A, Level 1+</td>
</tr>
<tr>
<td>Pregabalin – more rapid acting; risks with substance abusers</td>
<td>Grade B, level 2++</td>
</tr>
<tr>
<td>Hydroxyzine may be used as adjunctive treatment with anxiolytic agents</td>
<td>Grade C, Level 2+</td>
</tr>
<tr>
<td>Medication for GAD needs to be continued for at least 32 weeks as high relapse rates were reported after discontinuing medications</td>
<td>Grade A, level 1+</td>
</tr>
<tr>
<td>Benzodiazepines should not be used for long-term treatment</td>
<td></td>
</tr>
<tr>
<td>Propanolol not recommended for long-term treatment</td>
<td></td>
</tr>
</tbody>
</table>
Predictors of Pharmacotherapy Response in GAD

• Presence of depressive symptoms and subclinical depression (prioritise treatment with antidepressants)

• Longer duration of untreated symptoms

• Presence of personality traits
### Management of Panic Disorder

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>SSRIs or Venlafaxine (SNRI) as first line</td>
<td>Grade A, level 1+</td>
</tr>
<tr>
<td>Imipramine and Clomipramine effective, may be used as second-line treatment</td>
<td>Grade A, level 1+</td>
</tr>
<tr>
<td>Benzodiazepines* may be added to antidepressants in the short-term for a more rapid therapeutic response. *addictive potential</td>
<td>Grade A, level 1+</td>
</tr>
<tr>
<td>Cognitive Behavioral Therapy (patient preference/availability of resource) or combination CBT and SSRIs/SNRI</td>
<td>Grade A, level 1++</td>
</tr>
</tbody>
</table>
## Management of Social Anxiety Disorder (SAD)

<table>
<thead>
<tr>
<th>Pharmacotherapy/Psychotherapy alone may be used as first-line (patient preference, available resources, cost)</th>
<th>Grade A, level 1++</th>
</tr>
</thead>
<tbody>
<tr>
<td>Either SSRIs or Venlafaxine should be used as first-line pharmacotherapy for SAD</td>
<td>Grade A, level 1+</td>
</tr>
<tr>
<td>Moclobemide may be used if SSRIs/SNRI has not been effective</td>
<td>Grade A, level 1+</td>
</tr>
<tr>
<td>Benzodiazepines may be used short-term for temporary anxiety relief pending other treatment</td>
<td>Grade A, level 1+</td>
</tr>
<tr>
<td>Beta-blockers NOT recommended as they are ineffective for SAD. But can be used for treatment of performance anxiety</td>
<td>Grade B, level 2++</td>
</tr>
<tr>
<td>Cognitive Behavior Therapy should be used as first-line psychotherapy treatment of SAD</td>
<td>Grade A, level 1+</td>
</tr>
<tr>
<td>Continue Pharmacotherapy at least 12 months to prevent relapse</td>
<td>Grade B, level 2++</td>
</tr>
</tbody>
</table>
Management of Specific Phobia

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognitive Behavior Therapy</td>
<td>A, level 1++</td>
</tr>
<tr>
<td>Benzodiazepines</td>
<td>B, level 1+</td>
</tr>
</tbody>
</table>

Cognitive Behavior Therapy should be used as first-line treatment of specific phobia

Benzodiazepines may be used on a short-term basis for temporary anxiety relief in specific phobia, pending resolution of symptoms with other forms of treatment
Management of Anxiety Disorders in Pregnancy

• Anxiety symptoms relatively common during pregnancy; typically undiagnosed and undertreated.

• A recent study found that 9.5% of women (N=2793) meet criteria for GAD at some point during their pregnancy. Highest rates observed in the first trimester (7%); Only 2% in the second trimester, and 3% in the third trimester.

• A history of GAD prior to pregnancy was the strongest predictor of GAD during pregnancy; women with 4 or more episodes of GAD were about 7 times more likely to experience GAD during pregnancy than women with no history of GAD.

• Common for women with histories of anxiety disorder to discontinue anti-anxiety medications during pregnancy. However, many experience recurrence of their anxiety symptoms during pregnancy; the first trimester may be particularly difficult.

• Anxiety during pregnancy is not necessarily a benign event.
• Women with clinically significant anxiety symptoms more likely to have preterm labor and low birth weight infants, as well as other complications, including pre-eclampsia.

• Crucial that women with anxiety disorders be monitored carefully during pregnancy.
Management of Anxiety Disorders in Pregnancy

- CBT and relaxation techniques may be very useful. Studies have demonstrated the effectiveness of yoga, massage therapy, and acupuncture in this setting. (but does it help in women with pre-existing anxiety disorders).

- Most information on the reproductive safety is for SSRIs and tricyclic antidepressants.
- No increase in risk of major congenital malformation in infants exposed to these medications in utero or of any serious complications during pregnancy.

- Data regarding benzodiazepines (such as Valium, and Ativan) during pregnancy is somewhat controversial. Early reports suggested an increased risk of cleft lip and palate associated with first trimester exposure to these medications; however, recent studies have shown no such evidence.

- Symptoms of toxicity infrequently reported in newborns: sedation, decreased muscle tone (floppiness), and breathing problems (more common in women taking higher med dosages).

- Some reports of benzodiazepine withdrawal in newborns exposed to benzodiazepines in utero: irritability, sleep disruption, and, less commonly, seizure.
Measuring Treatment Response and Outcomes

Clinical assessment: subjective reports
objective mental state examination

Use of rating scales (baseline and follow-up):
HADS, GAI
Nonpharmacologic Treatment Approaches

• Patient Education

• Supportive Counseling

• Relaxation Techniques, Mindfulness Practice

• Behavior Therapy (exposure, social skills training, systematic desensitization)

• Cognitive Restructuring

• Exercise

• Addressing complicating psychosocial problems

• Mobilise family and social resources as needed
Elements of Personality Functioning

**Personality:** Individual style of experiencing, reacting and functioning

**Self**

**Identity:** Experience of oneself as unique, with clear boundaries between self and others; stability of self-esteem and accuracy of self-appraisal; capacity for and ability to regulate a range of emotional experience

**Self-direction:** Pursuit of coherent and meaningful short-term and life goals; utilization of constructive and prosocial internal standards of behavior; ability to self-reflect productively

**Interpersonal**

**Empathy:** Comprehension and appreciation of others’ experiences and motivation; tolerance of differing perspectives; understanding the effects of one’s own behavior on others

**Intimacy:** Depth and duration of connection with others; desire and capacity for closeness; mutuality of regard reflected in interpersonal behavior
Managing Patients with Personality Problems

Observe personality styles during assessment of any anxious patient.

Consider the possibility of a personality disorder as a complicating factor, especially when treatment fails to produce the expected response.

Revise your expectations regarding treatment outcome if one or more personality disorder diagnoses apply.

Treat the primary psychiatric condition vigorously. Many symptoms and characteristics that appear to be personality problems will improve or disappear with proper treatment.

Consider psychiatric consultation or referral if indicated.
# Levels of Evidence

<table>
<thead>
<tr>
<th>Level</th>
<th>Type of Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>1++</td>
<td>High quality meta-analysis, systematic reviews of randomized controlled trials (RCTs), or RCTs with a very low risk of bias</td>
</tr>
<tr>
<td>1+</td>
<td>Well conducted meta-analyses, systematic reviews of RCTs, or RCTs with a low risk of bias</td>
</tr>
<tr>
<td>1-</td>
<td>Meta-analyses, systematic reviews of RCTs, or RCTs with a high risk of bias</td>
</tr>
<tr>
<td>2++</td>
<td>High quality systematic reviews of case control or cohort studies. High quality case control or cohort studies with a very low risk of confounding or bias and a high probability that the relationship is causal</td>
</tr>
<tr>
<td>2+</td>
<td>Well conducted case control or cohort studies with a low risk of confounding or bias and a moderate probability that the relationship is causal</td>
</tr>
<tr>
<td>2-</td>
<td>Case control or cohort studies with a high risk of confounding or bias and a significant risk that the relationship is not causal</td>
</tr>
<tr>
<td>3</td>
<td>Non-analytic studies, eg. case reports, case series</td>
</tr>
<tr>
<td>4</td>
<td>Expert opinion</td>
</tr>
</tbody>
</table>
# Grades of Recommendation

<table>
<thead>
<tr>
<th>Grade</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>At least one meta-analysis, systematic review of RCTs, or RCT rated as 1++ and directly applicable to the target population; or A body of evidence consisting principally of studies rated as 1+, directly applicable to the target population, and demonstrating overall consistency of results</td>
</tr>
<tr>
<td>B</td>
<td>A body of evidence including studies rated as 2++, directly applicable to the target population, and demonstrating overall consistency of results; or Extrapolated evidence from studies rated as 1++ or 1+</td>
</tr>
<tr>
<td>C</td>
<td>A body of evidence including studies rated as 2+, directly applicable to the target population and demonstrating overall consistency of results; or Extrapolated evidence from studies rated as 2++</td>
</tr>
<tr>
<td>D</td>
<td>Evidence Level 3 or 4; or Extrapolated evidence from studies rated as 2+</td>
</tr>
<tr>
<td>GPP</td>
<td>Good Practice Points: recommended best practice based on the clinical experience of the guideline development group.</td>
</tr>
</tbody>
</table>
Personality Disorders (PD)

- Paranoid
- Schizoid
- Schizotypal
- Antisocial
- Borderline
- Histrionic
- Narcissistic
- Avoidant
- Dependent
- Obsessive-compulsive
- Personality change due to another medical condition
- Other (personality pattern meets criteria for one PD and traits of several different PDs present; OR not listed in DSM eg. passive-aggressive PD)