

# Obsessive- Compulsive Spectrum Disorders

# Outline

- Concept
- Classification
- BDD
- Hypochondriasis
- Eating disorders
- Hoarding disorder
- Trichotillomania
- Excoriation disorder
- ICDs
- Tourette's syndrome

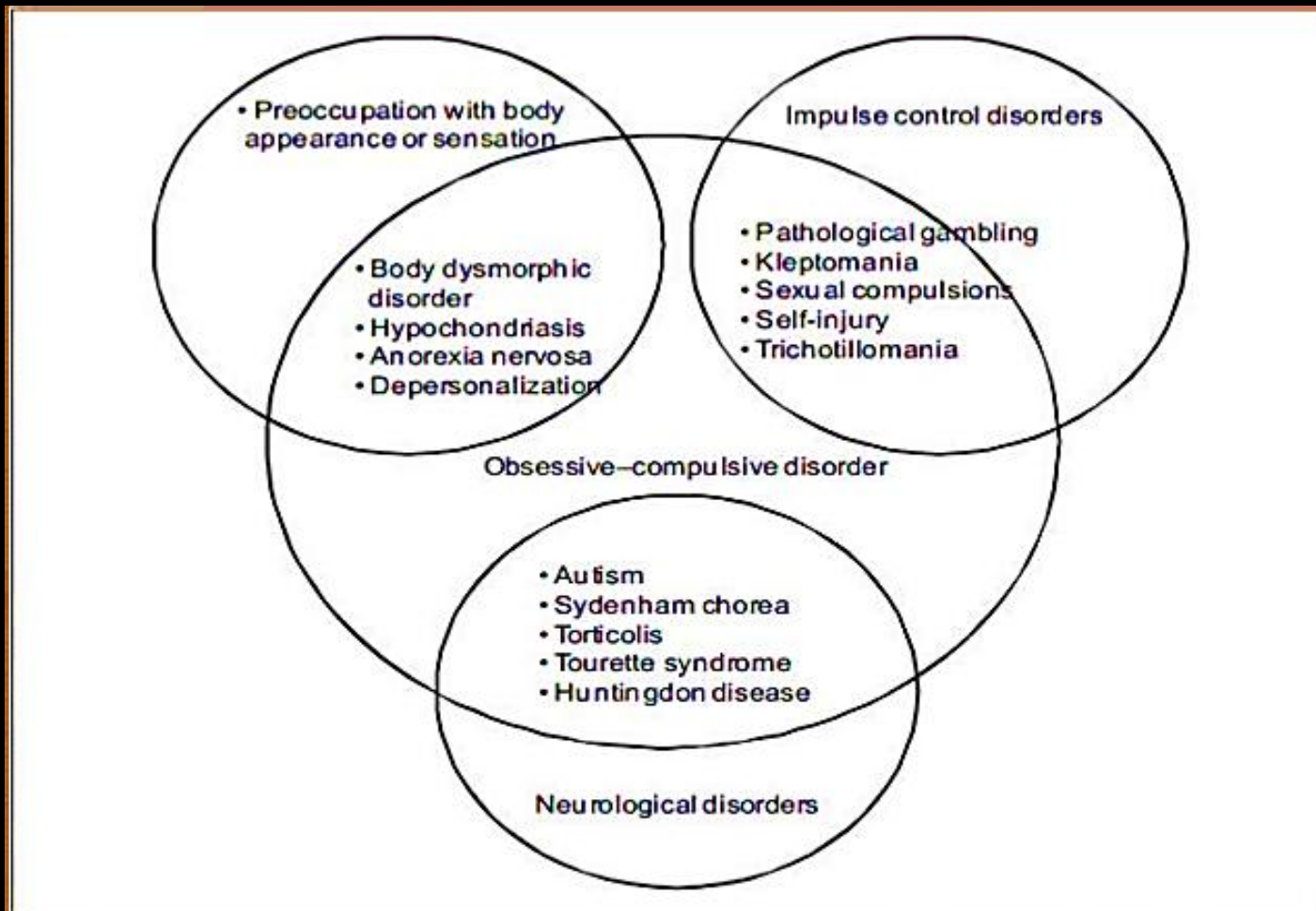
# Concept of OC Spectrum

- Broad notion of OCD: repetitive thoughts and behaviour
- Disorders that are posited to be linked to OCD, based on their similarities with OCD in a variety of domains, are referred to as 'OC spectrum disorders.'

# Concept of OC Spectrum

- Important evidence supporting the “spectrum” concept comes from bi-directional comorbidity patterns.
- These disorders can also be viewed as being on a continuum of compulsivity to impulsivity
  - Harm avoidance- Compulsive
  - Risk seeking- Impulsive (conceptual overlap with addictions)

# Classification of OCSD



# Classification of OCSD

DSM-V Research Planning Conference 2006

- **Strong evidence:** body dysmorphic disorder (BDD), Tourette's disorder, and hypochondriasis
- **Some evidence:** hoarding, obsessive–compulsive personality disorder (OCPD), eating disorders, PANDAS
- **Incomplete evidence:** trichotillomania (TTM), other grooming/habit disorders such as pathological skin picking.
- Based on presented evidence, it was recommended that ICDs not be considered OCSDs.

# Classification of OCSD

- 187 OCD experts survey
  - BDD (72%)
  - TTM (71%) and tic disorders (61%)
  - Hypochondriasis (57%)
  - OCPD (45%)
  - ICDs (33%)
  - Eating disorders (28%)
  - Autism (9%)
  - Addictions (5%)

# DSM 5 OCRD

- OCD
- BDD
- Hoarding disorder
- Trichotillomania
- Excoriation
- **ICD-11 OCRD** include OCD, BDD, olfactory reference disorder, hypochondriasis and hoarding disorder



# Body Dysmorphic Disorder

- Disorder of body image in which preoccupations focus on a belief that some aspect, or aspects, of one's body is malformed or misshapen, when in fact the 'deformity' is minimal or non-existent.

# Body Dysmorphic Disorder

Domain	Similarities to OCD	Differences from OCD
<b>Phenomenology</b>	<ul style="list-style-type: none"><li>• Recurrent, intrusive, distressing thoughts</li><li>• Compulsive acts: mirror checking, camouflaging, reassurance seeking</li><li>• Avoidance: social situations</li></ul>	<ul style="list-style-type: none"><li>• Poorer insight</li><li>• Less anxiety reduction</li><li>• Core beliefs: self focussed</li></ul>
<b>Etiology</b>	<ul style="list-style-type: none"><li>• Comorbid OCD (32%)</li><li>• OFC, Caudate nucleus,</li><li>• lower platelet 5-HT transporter binding density</li><li>• Temperamental: harm aviodance</li></ul>	<ul style="list-style-type: none"><li>• 5-HT1D-beta</li><li>• Exaggerated left hemisphere and amygdala activation</li></ul>
<b>Course</b>	Chronic	Slightly earlier onset
<b>Treatment</b>	SSRI, CBT	Pimozide ineffective

# Hypochondriasis

- A psychiatric disorder involving preoccupation with fears of having or idea that one has serious disease based on misinterpretation of bodily symptoms despite appropriate medical evaluation and reassurance.

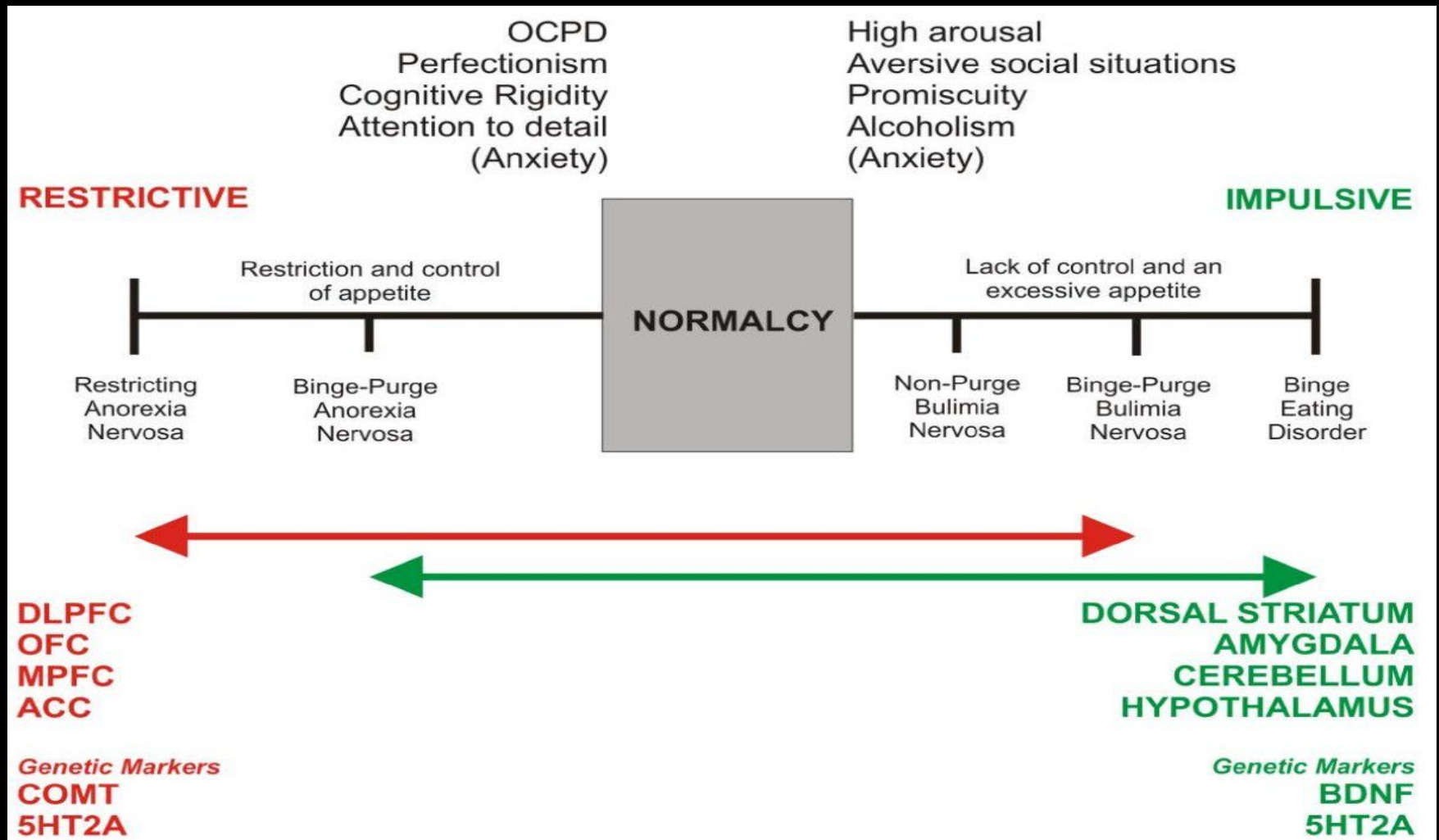
# Hypochondriasis

Domain	Similarities to OCD	Differences from OCD
<b>Phenomenology</b>	<ul style="list-style-type: none"><li>• Illness fears similar to somatic obsessions</li><li>• Compulsive acts: reassurance seeking, checking</li><li>• Anxiety</li><li>• Intolerance of uncertainty</li></ul>	<ul style="list-style-type: none"><li>• Poorer insight</li><li>• Less compulsivity</li><li>• Greater avoidance</li><li>• Greater somatic fear</li></ul>
<b>Etiology</b>	<ul style="list-style-type: none"><li>• More common among first-degree relatives of OCD versus control</li></ul>	<ul style="list-style-type: none"><li>• Comorbidity with OCD not significant.</li><li>• Different cortical activation pattern</li></ul>
<b>Course</b>		Better 5 yr remission rates
<b>Treatment</b>	SSRI, CBT	

# Eating Disorders

- Persistent disturbances in feeding and eating behaviors that significantly interfere with the afflicted individual's life.
- Six diagnoses in DSM 5:
  - Anorexia nervosa,
  - Bulimia nervosa,
  - Binge eating disorder (BED),
  - Avoidant/restrictive food intake disorder (ARFID),
  - Pica
  - Rumination disorder.

# Eating Disorders



# Eating Disorders

Domain	Similarities to OCD	Differences from OCD
<b>Phenomenology</b>	<ul style="list-style-type: none"><li>• Repetitive thoughts and preoccupations about a certain feared stimulus (food/ image/weight)</li><li>• Anxiety/fear</li><li>• Compensatory behaviors: restriction, binge/purge, compulsive exercise</li></ul>	<ul style="list-style-type: none"><li>• Poorer insight</li><li>• Ego syntonic</li></ul>
<b>Etiology</b>	<ul style="list-style-type: none"><li>• Blunted fenfluramine-mediated prolactin responses (OCD, OCPD)</li><li>• Increased activity in caudate and inferior prefrontal area</li><li>• Co-morbid- inconclusive</li></ul>	
<b>Treatment</b>	CBT	SSRI

# Hoarding Disorder

- HD is characterized by the persistent and profound difficulty discarding with or parting from one's possessions.
- Significant congestion and clutter causing impairment.
- DSM-IV-TR: hoarding one of the eight diagnostic criteria for OCPD
- DSM 5: separate disorder in OCDRD



# Hoarding Disorder

## Etiology:

- Deficits in executive functioning, attention, memory, and categorization
- Neuroimaging studies: partial circuit overlap with OCD
- Dopaminergic system involvement
- Family & twin studies: genetic susceptibility
- Higher risk in family history of OCD
- Co-morbid: OCPD in 1/3<sup>rd</sup> hoarders

# Hoarding Disorder

Phenomenology and clinical features:

- No associated obsession; wish to retain saved items and distress by the thought of discarding them.
- Compulsive excessive acquisition- similarity to both OCD and ICD
- Avoidance behaviour- no discarding

# Hoarding Disorder

- “Clutter avalanches” and “Domestic squalor”
- Associated symptoms: indecisiveness and procrastination, difficulty planning and organizing tasks, and distractibility and avoidance

# Hoarding Disorder

## Epidemiology and course

- 1.5% prevalence
- Although onset similar to OCD, distress and treatment seeking in mid-thirties
- Chronic course
- Also unlike OCD, where symptom intensity can wax and wane, hoarding appears to have a very stable course

# Hoarding Disorder

## Treatment

- SSRI- first line pharmacotherapy in clinical practice
- Poorer response to SSRI as compared to OCD
- CBT- adapted to HD. ERP elements common with OCD. Skills training and motivational interviewing also included.

# Trichotillomania

- An irresistible urge to pull out their hair.
- DSM- IV: Impulse control disorder
- DSM 5: OCRD
- ICD 11: body focused repetitive behavior disorders (BFRBDs)

# Trichotillomania

- Epidemiology
  - Age of onset is typically at menarche
  - F:M ratio- 9:1
- Etiology
  - CSTC circuits
  - Reward processing and affect regulation
  - Family and twin studies: genetic susceptibility, as well as a relationship to OCD and other BFRBDs.
  - Co-morbid with OCSD
  - Elevated risk in ICDs

# Trichotillomania

## Phenomenology and clinical features

- Hair-pulling resulting in noticeable hair loss, repeated attempts to decrease or stop, clinically significant distress or impairment
- Commonly from scalp, eyebrows, and eyelashes
- Trichophagy
- Hyperarousal (e.g., stress) and hypoarousal (e.g., boredom)
- Gratification/relief after pulling



# Trichotillomania

- Similarities :
  - Repetitive ritualistic approach
  - Attempts to resist
- Differences :
  - No prominent cognitions.
  - Hair pulling is gratifying in trichotillomania
- Variable course

# Trichotillomania

- Treatment
  - Psychoeducation
  - Early studies: clomipramine response
  - SSRI and venlafaxine: less effective
  - Dopamine receptor blockers
  - NAC: positive clinical trials
  - Habit reversal therapy : awareness training, competing response training, and social support

# Excoriation (Skin picking) Disorder

- Recurrent skin-picking, resulting in skin lesions.
- DSM IV: “impulse control disorder not otherwise specified”
- DSM 5: OCRD
- ICD 11: BFRBDs

# Excoriation (Skin Picking) Disorder

- Epidemiology:
  - Point prevalence : 1.4 to 5.4 %
  - Mean age of onset: 12 years
  - Primarily females
- Etiology:
  - motor impulsivity similar to OCD
  - CSTC circuit involvement
  - Animal studies: precipitated by dopaminergic stimulants
  - Genetic linkage and co-morbidity with BFRBDs and OCD

# Excoriation (Skin Picking) Disorder

- Clinical features:
  - Skin-picking resulting in skin lesions, repeated attempts to decrease or stop skin-picking, clinically significant distress or impairment
  - Most commonly: face, followed by the hands, fingers, arms, and legs. Multiple sites likely
  - Associated habits/rituals: stroking or playing with the skin, choosing a particular scab to pick, and mouthing the scab once it is pulled
  - No associated obsession, body image concern
  - Chronic fluctuating course

# Excoriation (Skin Picking) Disorder

## Treatment :

- Pharmacotherapy: SSRI, Dopamine blockers, NAC
- Psychotherapy: HRT, Manualized CBT

# Impulse Control Disorders

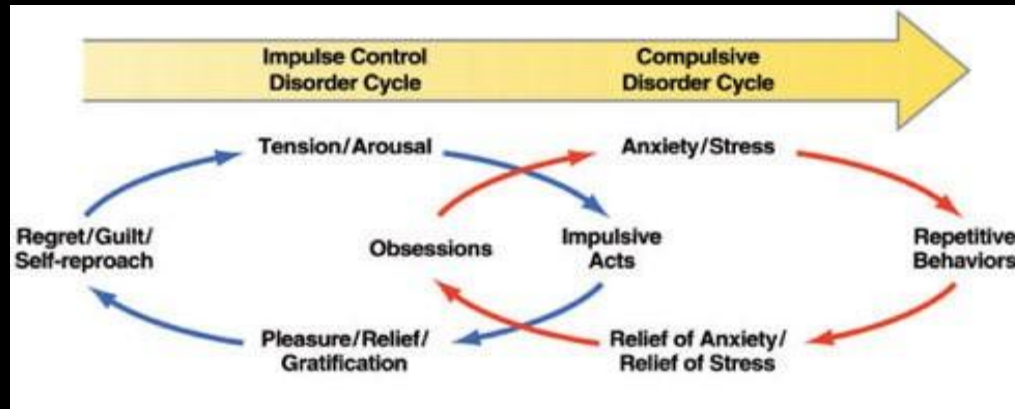
- The failure to resist an impulse, drive, or temptation to perform an act that is harmful to the person or to others.
- Characterized by:
  - Repetitive engagement in behavior despite adverse consequences
  - Diminished control over problematic behavior
  - Urge/ craving prior to behavior
  - Hedonic quality experienced while performing act/behavior

# Impulse Control Disorders

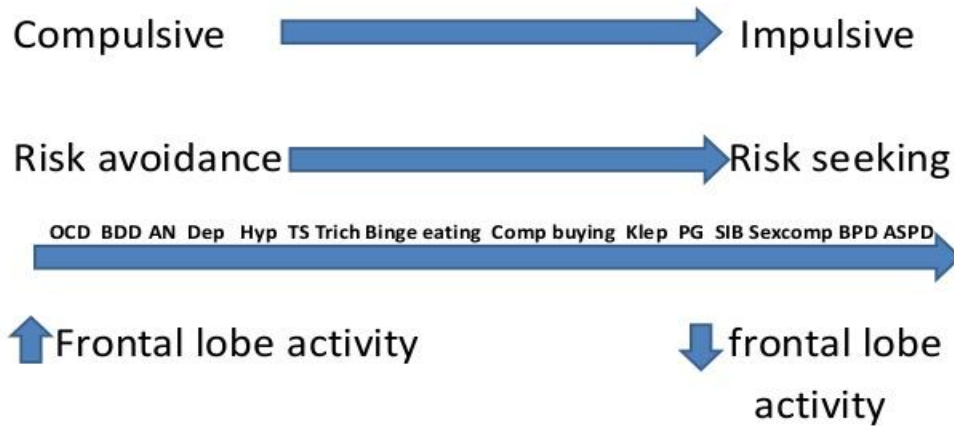
Disorder	Characteristics
Pathological gambling	PG is a disorder of impulse control characterized by recurrent gambling behavior that is maladaptive (ie, loss of judgment or excessive gambling)
Sexual compulsivity	Paraphilias and related disorders: sexual compulsions, excessive time or distress with out of control behavior
Kleptomania	Pattern of stealing items not needed for personal use, monetary value or in response to vengeance/anger
Pyromania	Pattern of deliberate setting of fires for pleasure or relief from urge/tension state experienced.
Intermittent explosive disorder	recurrent, problematic, reactive (i.e., affective or impulsive), aggressive outbursts (not premediated)



# Impulse Control Disorders



## Conceptually,



(Hollander and Wong 1994)

# Tourette's Syndrome

- Tics are stereotyped, rapid, recurring motor movements (motor tics) or vocalizations (phonic or vocal tics) that are nonrhythmic, involuntary or semivoluntary, and sudden in onset.
- Most well known: Tourette's syndrome

# Tourette's Syndrome

- Similarities:
  - Stimulus precedes a largely habitual response.
  - Just right phenomena
  - Suppression induces anxiety/distress
  - High comorbidity with OCD
  - Familial genetic link with OCD
  - frontostriatal circuit abnormality

# Tourette's Syndrome

- Differences:
  - Stimulus more sensory than cognitive
  - Sensorimotor cortex more than OFC
  - Neuroleptics and HRT
  - The median age of onset is 5.5 years

# PANDAS

- Paediatric Autoimmune Neuropsychiatric Disorders Associated with Streptococcal infection (PANDAS)
  - Obsessive-compulsive disorders and tics
  - Acute-onset in prepubertal age
  - Relapsing-remitting course
  - Association with neurological abnormalities (mainly choreiform movements and motor hyperactivity)
  - Temporal relationship with group A streptococcal infections.

# Autism

- OC spectrum traits: Repetitive behaviors and restricted interests include ritualistic behaviors and compulsive behaviors, rigid adherence to routine, a marked resistance to change, and needing things to be “just so.”
- Hypothesis: Dysregulation of the serotonin system
- Genetic linkage: OCD more common in relatives of autistic probands.

# OCPD

- OCPD is defined as preoccupation with orderliness, perfectionism, and mental and interpersonal control, at the expense of flexibility, openness, and efficiency
- Similarities in neurocircuitry, neurocognitive profiling, temperament, genetic link to OCD and some evidence of SSRI response
- Ego syntonic

# Criticism of the concept

- Overly inclusive without definitive construct
- Insufficient evidence of common pathogenesis
- Over-reliance on co-morbidity and treatment similarities
- Reflects debate between categorical and dimensional approach



# Summary

- OC spectrum controversial concept
- Evidence based on symptoms, genetic links, co-morbid OCD and treatment response
- Inconclusive evidence for etiopathogenesis
- Maximum evidence for BDD, trichotillomania, excoriation disorder, hoarding disorder and hypochondriasis.
- Psychotherapeutic approach primary treatment for most OCSDs

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*Thank You*