Body Dysmorphic Disorder

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Teaching Points

- Body dysmorphic disorder (BDD) is a common but underrecognized disorder
- BDD is associated with high rates of suicidality and markedly poor psychosocial functioning
- SRIs and CBT that is tailored to BDD's unique clinical features appear to often be efficacious for BDD

Questions

- What class of medications appears efficacious for BDD?

A. MAOIs
B. Tricyclics (excluding clomipramine)
C. SRIs
D. Neuroleptics

Questions

- What class of medications appears efficacious for delusional BDD (i.e., patients with delusional beliefs regarding their perceived appearance flaws)?

A. Typical antipsychotics

B. Atypical antipsychotics

C. SRIs

D. Benzodiazepines

Questions

- What type of psychotherapy appears efficacious for BDD?

  A. Supportive psychotherapy

  B. Exposure/behavioral experiments, response prevention, cognitive restructuring, perceptual retraining, plus other CBT techniques that are tailored to BDD

  C. Psychodynamic psychotherapy

  D. Relaxation techniques

Questions

- Cosmetic treatment (for example, surgery, dermatologic treatment) for BDD appears to be:

  A. Always effective

  B. Usually effective

  C. Rarely effective

Questions

- The following behaviors are symptoms of BDD:

  A. Excessive mirror checking
  B. Compulsive grooming
  C. Skin picking (to remove perceived blemishes)
  D. Seeking reassurance about one's appearance
  E. All of the above

Outline

- Diagnostic criteria
- Prevalence
- Clinical features
- Some translational research findings that are relevant to treatment
- Treatment
- Diagnosis

Body Dysmorphic Disorder (BDD)
DSM-IV Criteria

A. Preoccupation with an imagined defect in appearance. If a slight physical anomaly is present, the person's concern is markedly excessive.

B. The preoccupation causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.

C. The preoccupation is not better accounted for by another mental disorder (e.g., dissatisfaction with body shape and size in Anorexia Nervosa).

Prevalence of BDD

- **Nationwide epidemiologic studies** 1.7-2.4%
  (N = 2,048 – 2,552)
- **Inpatient psychiatry (U.S.)**
  - » Adult 13-16%
  - » Adolescent 7%
- **Students** (non-clinical) 2-13%
- **Dermatology** 9-14%
- **Cosmetic surgery** 3-53%

Kelly and Phillips, 2011

BDD Is Underdiagnosed

- In 6 studies in which adults were systematically screened for BDD, no patient with BDD had the diagnosis in their medical record
- In 2 adolescent samples, only 1 of 17 adolescents with BDD had the diagnosis in their medical record
- Reasons BDD is underdiagnosed:
  - » Embarrassment and shame
  - » Fear of being misunderstood or negatively judged
  - » Patients don't know it's a treatable disorder
  - » Patients aren't asked

Phillips et al, *Am J Psychiatry,* 1993; Phillips et al, *J Nerv Ment Dis,* 1996; Zimmerman and Mattia, *Compr Psychiatry,* 1998; Grant et al, *J Clin Psychiatry,* 2001; Dyl et al, *Child Psychiat Hum Dev,* 2006; Conroy et al, *Gen Hosp Psychiatry,* 2008, Grant et al, *Int J Eat Dis,* 2002

Demographic Features

- Age: 32.1 ± 11.7 (range, 6 to 80)
- Sex:

Female	61%
Male	39%

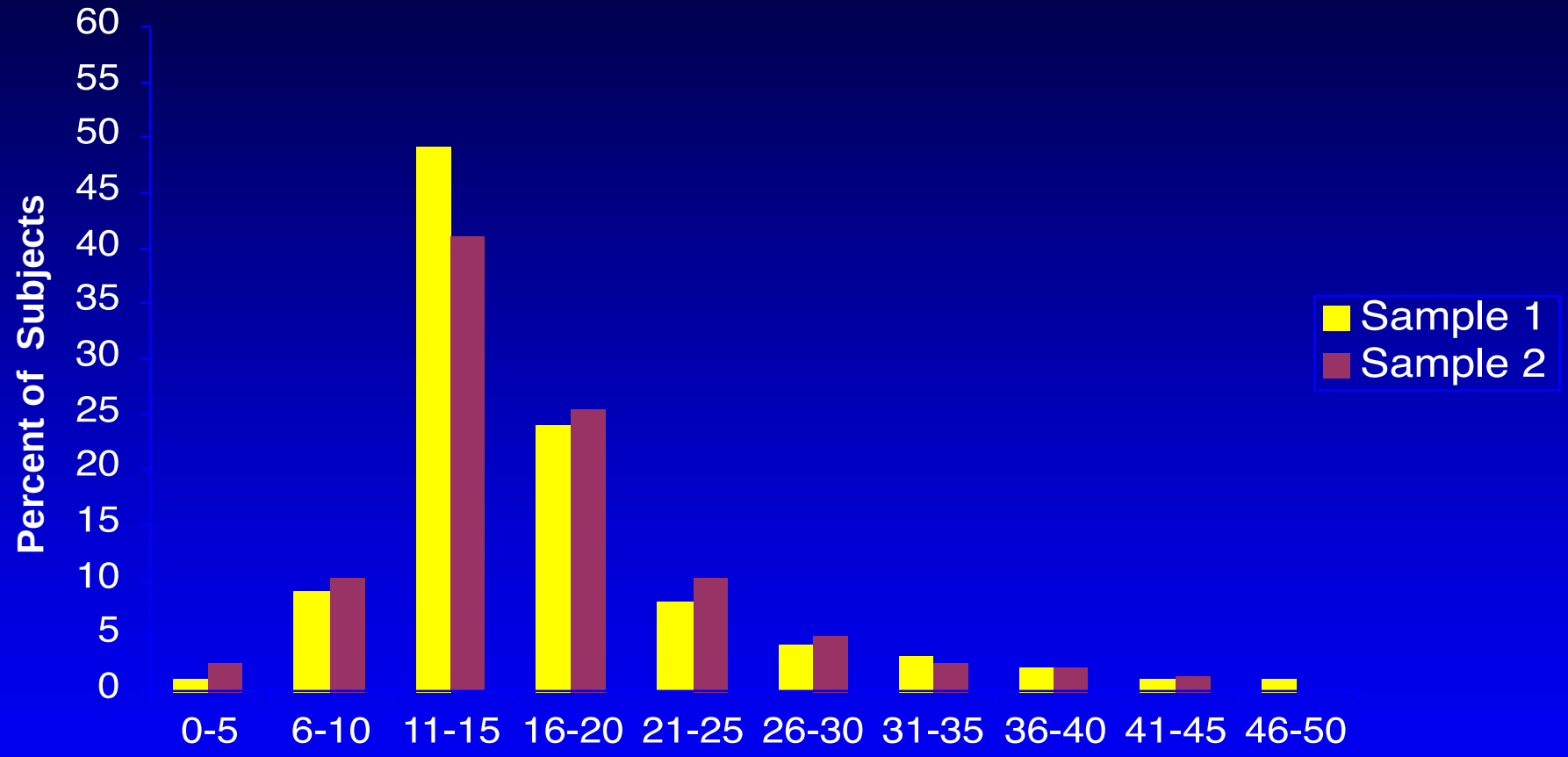
- Marital status:

Single	66%
Married	22%
Divorced	12%

N=507

Phillips et al, *J Nerv Ment Dis,* 1997; Phillips et al, *Psychosomatics,* 2005

BDD Age of Onset



67% of patients have onset of BDD before age 18

N=428

Phillips, 2005

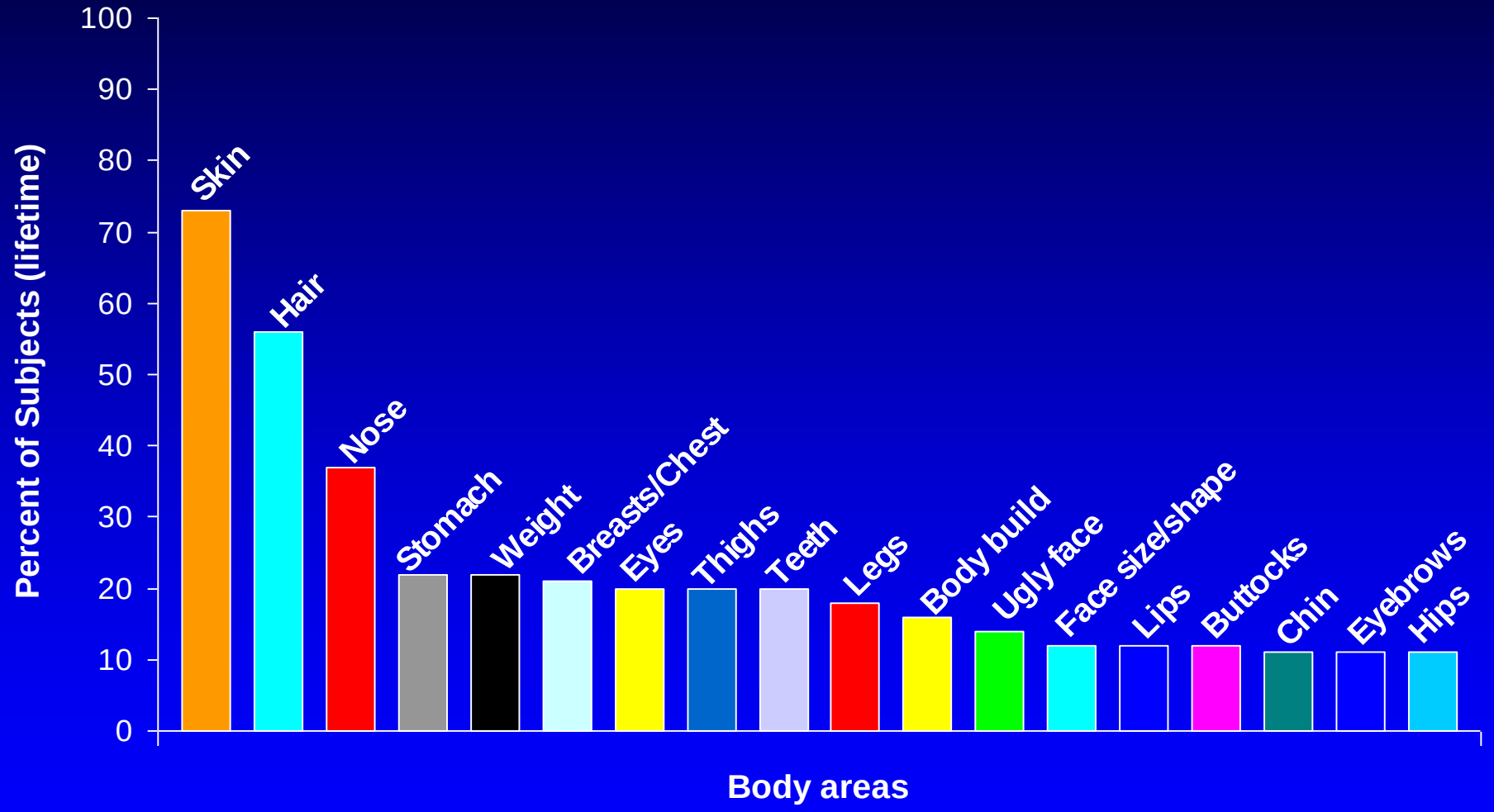
BDD Cognitions

- Obsessional, distressing preoccupations about perceived defects in appearance (involving any body area)
- Difficult to resist or control
- Time consuming (average 3-8 hours a day)
- Insight is usually absent or poor (~35% currently have delusional BDD beliefs – for example, “I look deformed”)
- BDD-related ideas or delusions of reference are common

N=507

Phillips et al, *Am J Psychiatry,* 1993; Eisen et al, *Compr Psychiatry,* 2004; Phillips et al, *Psychosomatics,* 2005

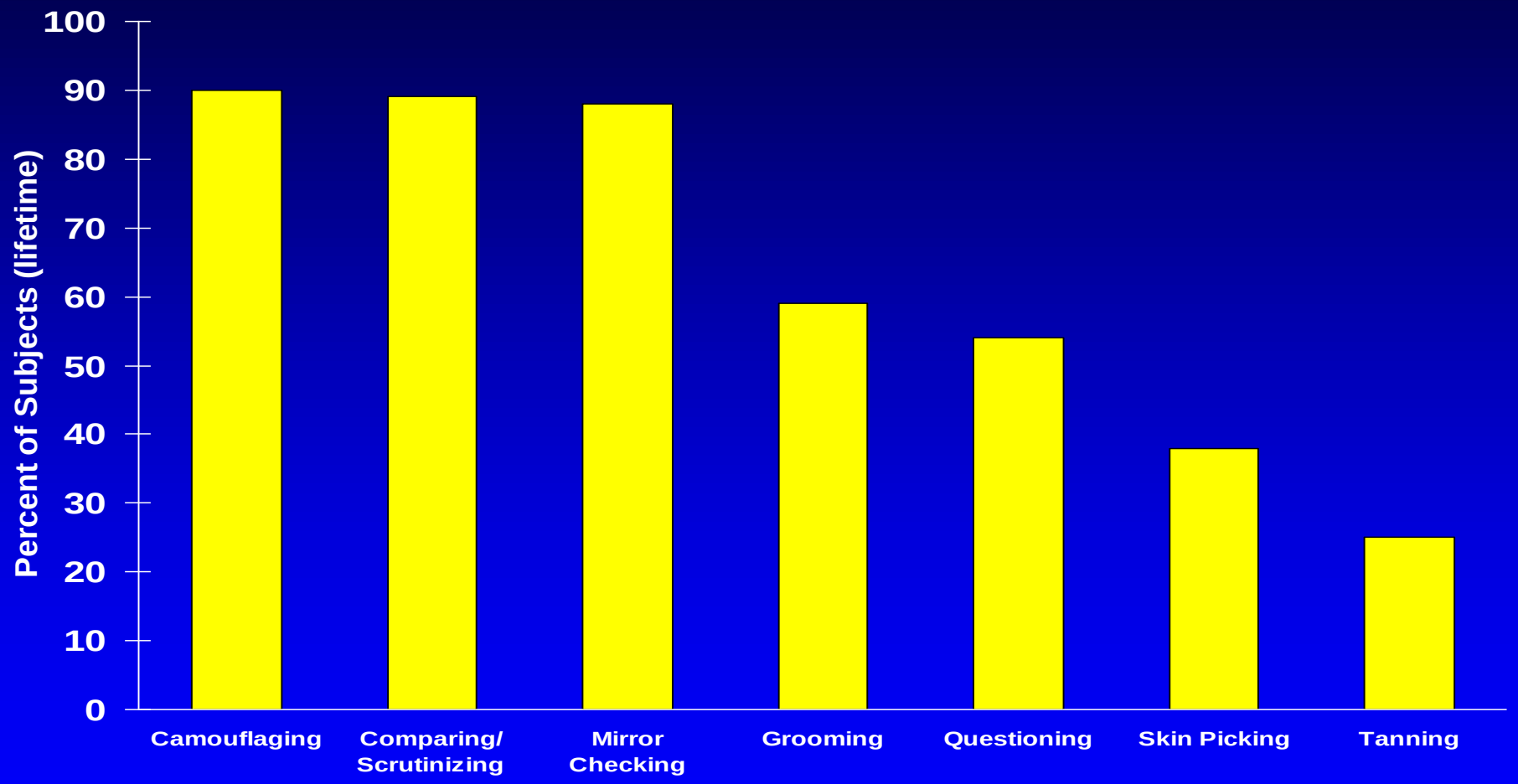
Body Areas of Concern



Phillips and Diaz, *J Nerv Ment Dis,* 1997; Phillips et al, *Psychosomatics,* 2005

N=507

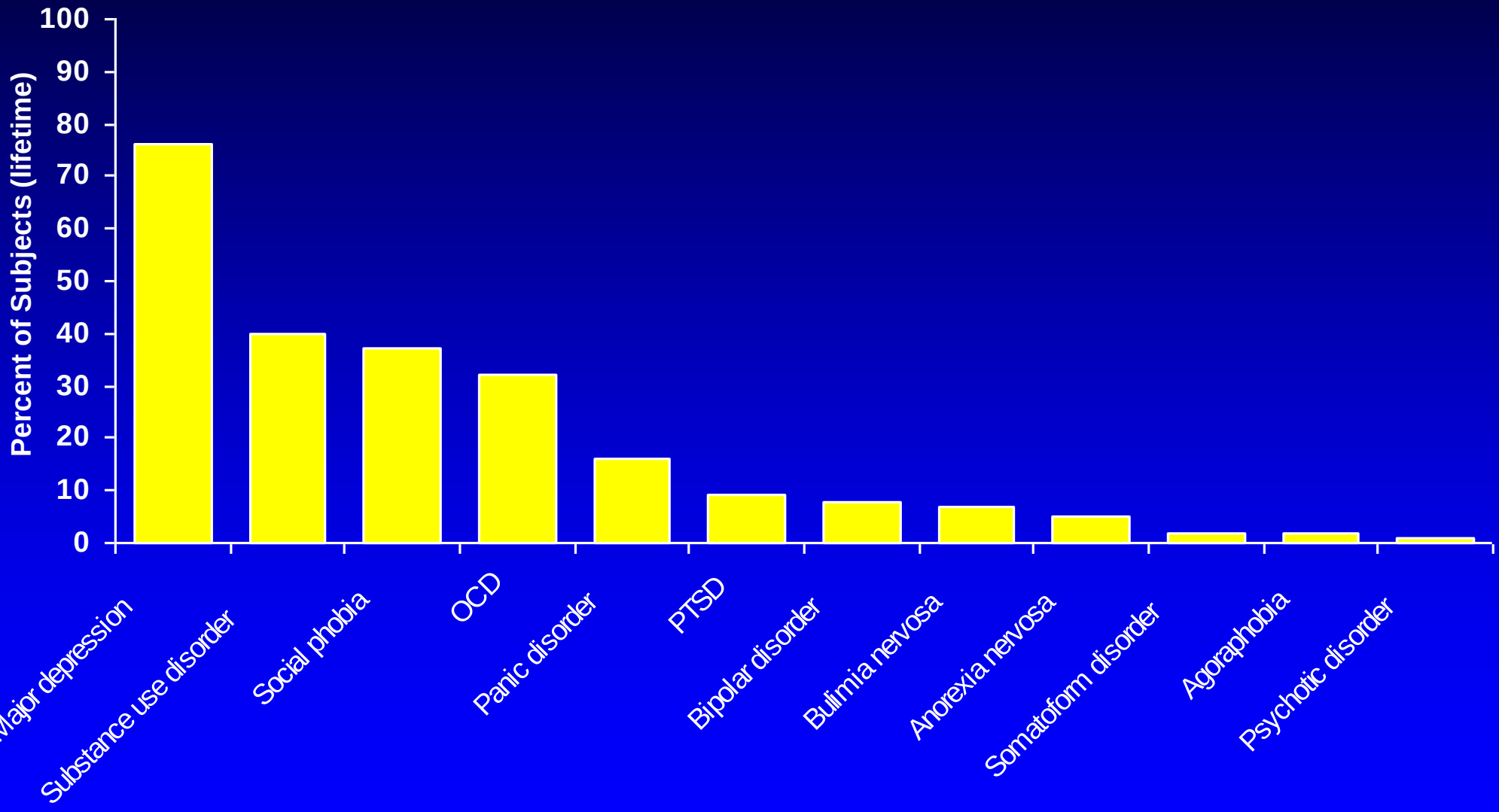
Compulsive Behaviors in BDD



Phillips and Diaz, *J Nerv Ment Dis,* 1997; Phillips et al, *Psychosomatics,* 2005

N=507

Comorbid Disorders



Gunstad and Phillips, *Compr Psychiatry,* 2003; Phillips et al, *Psychosomatics,* 2005

N=493

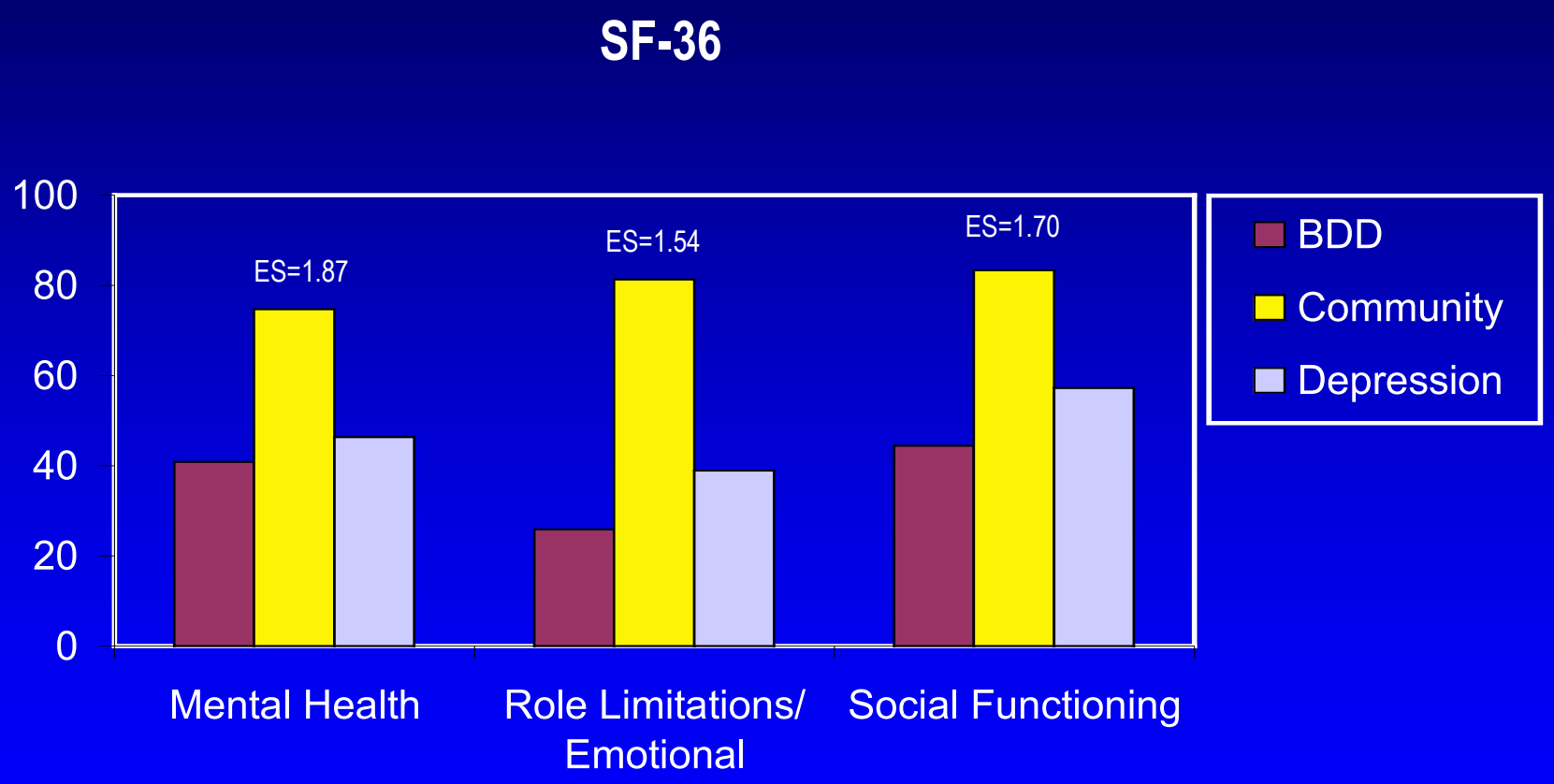
Functional Impairment

- Not working due to mental illness (current) 39%
- Receiving disability payments (current) 23%
- Dropped out of school because of BDD 25%
- Housebound due to BDD (lifetime) 29%
- Psychiatrically hospitalized (lifetime)
  - » Any reason 38%
  - » Primarily for BDD 26%

N=141, N=507

Didie et al, *Compr Psychiatry,* 2008; Phillips and Diaz, *J Nerv Ment Dis,* 1997; Phillips et al, *Psychosomatics,* 2005

Quality of Life



N=176

Phillips et al, *Compr Psychiatry,* 2005

Lifetime Suicidal Ideation and Suicide Attempts

Suicidality Variable	United States (n=307)	United States (n=200)	Italy (n=58)	England (n=50)	Germany (n=42)*	Germany (n=45)*
Suicidal ideation	81%	78%	—	—	—	—
Suicidal ideation due to BDD	68%	55%	45% (current)	—	19%	31%
Attempted suicide	24%	28%	—	24%	—	—
Attempted suicide due to BDD	15%	13%	—	—	7%	22%

* Epidemiologic samples

Phillips and Diaz, 1997; Phillips et al., 2005; Perugi et al., 1997; Veale et al., 1996; Rief et al., 2007; Buhlmann et al, 2010

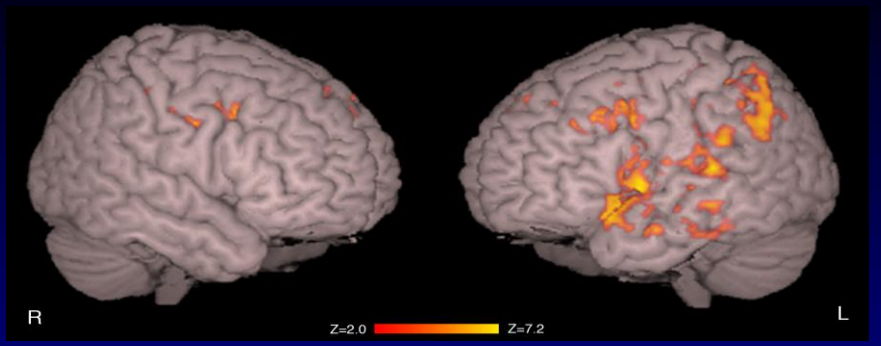
BDD fMRI Study

- Compared brain activation of BDD subjects to healthy controls when visually processing others' faces (N=25)
- Matching task of photos of others' faces that were unaltered, high spatial frequency (high detail), or low spatial frequency (low detail)



Feusner at al, *Arch Gen Psychiatry,* 2007

fMRI while performing matching tasks of face stimuli



Brain activation for low-detail faces relative to controls

- Controls: left hemisphere activity (detail/analytic) only for high-detail faces
- BDD subjects: predominant left hemisphere activity (detail/analytic) for *all* face types, including low-detail faces
- Thus, BDD subjects processed faces in a way that inappropriately extracted details – rather than in a global, "holistic," and "big picture" way
- BDD subjects: abnormal amygdala activation for low- and high-detail faces

Feusner et al, *Arch Gen Psychiatry*, 2007

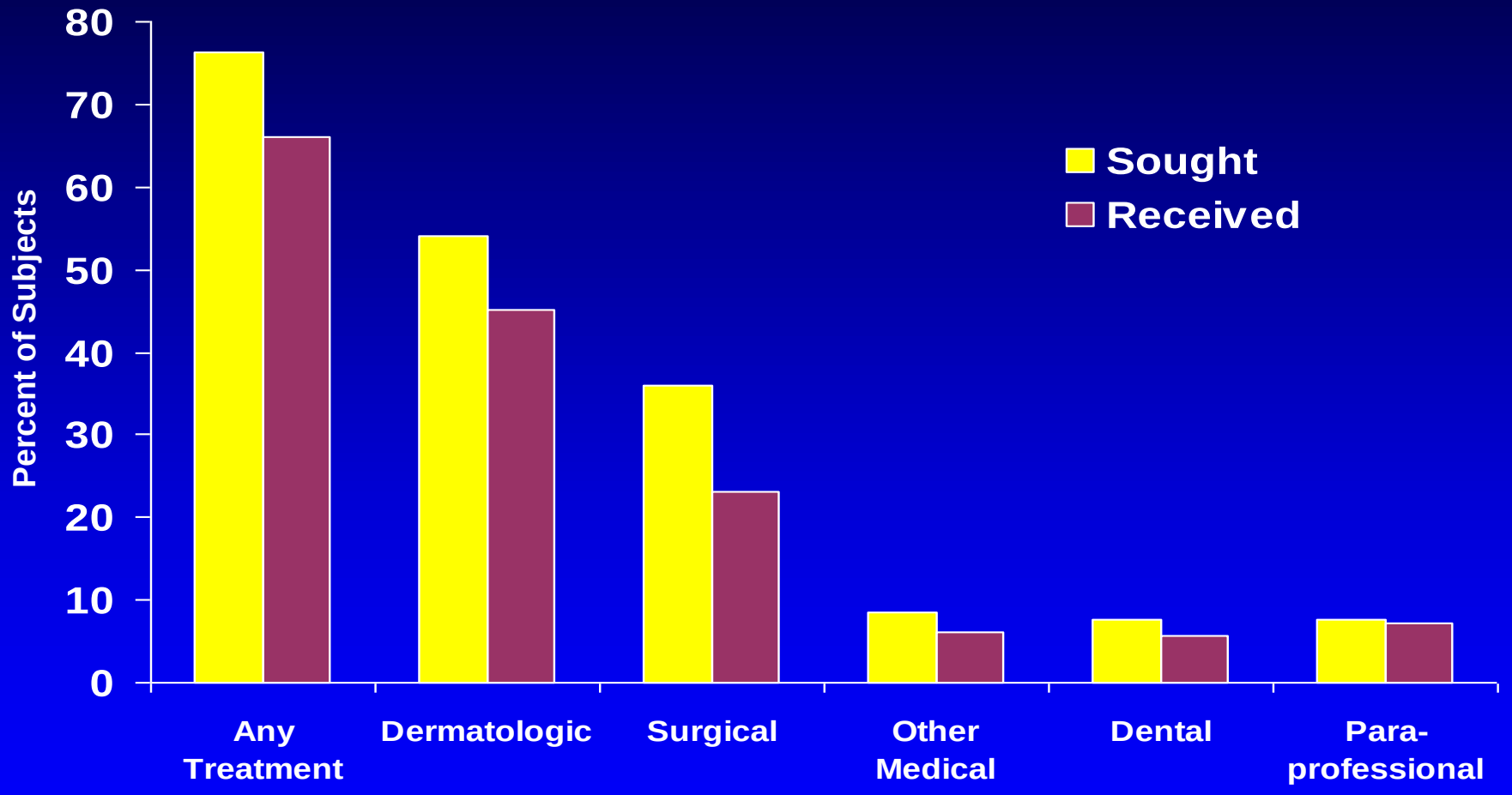
Other Neurocognitive Deficits

- Abnormal visual processing of ***non-face stimuli*** as well (houses and complex figures): bias for encoding and analyzing ***details*** rather than holistic visual processing ⇒ may possibly contribute to distorted perceptions in BDD

- Bias for ***threatening interpretations*** of facial expressions and ambiguous scenarios ⇒ consistent with BDD-related ideas/ delusions of reference

Feusner et al, 2011; Deckersbach et al, 2000; Feusner et al, 2010; Buhlmann et al, 2002; Buhlmann et al, 2005

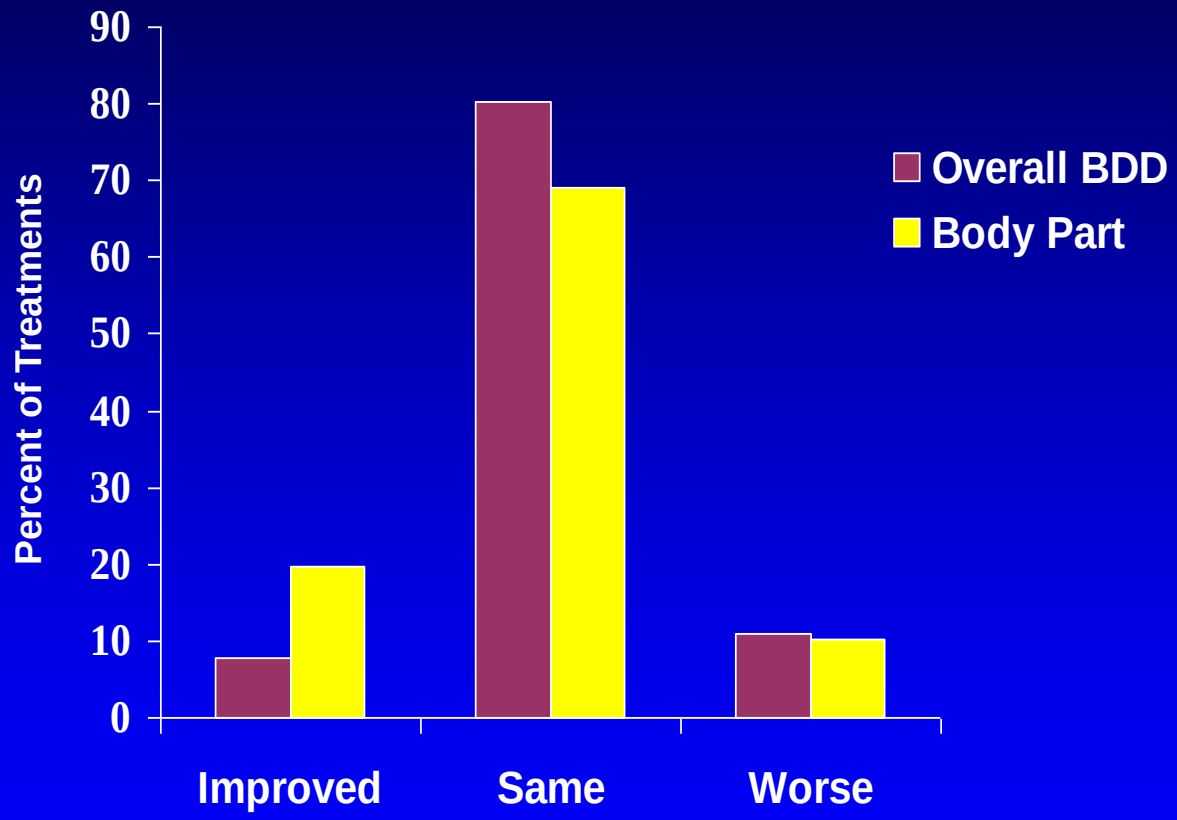
Cosmetic Treatment for BDD



Phillips et al, *Psychosomatics,* 2001; Crerand et al, *Psychosomatics,* 2005

N=450

Outcome of Cosmetic Treatment for BDD



Total number of treatments = 890

N=450

Phillips et al, *Psychosomatics,* 2001; Crerand et al, *Psychosomatics,* 2005

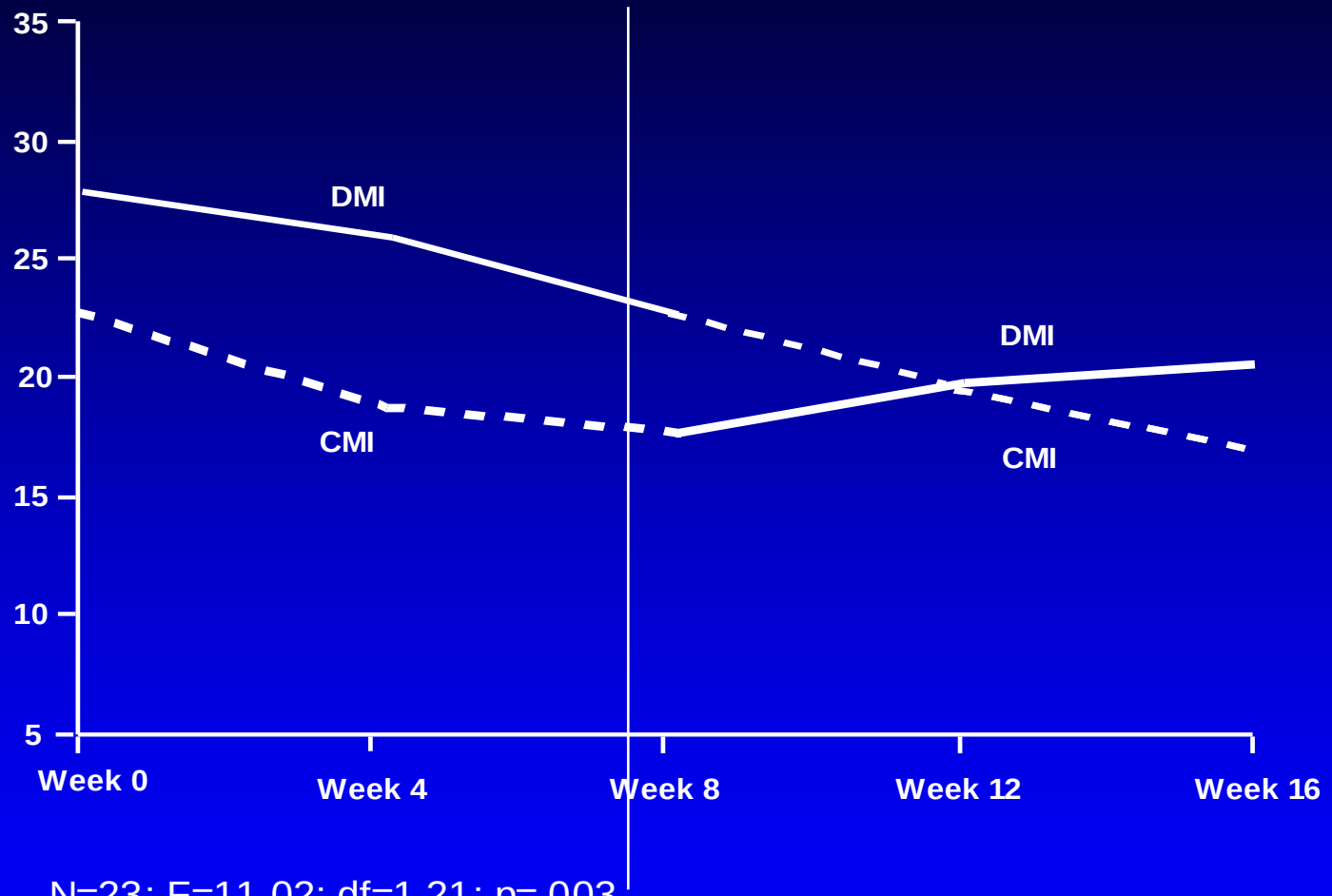
SRIs for BDD

- **Case series:** SRIs appear more effective than other medications (n=5-130)
- **Open-label trials:**
  - » Fluvoxamine (Luvox): Response in 83% and 63% (n=15 and 30)
  - » Citalopram (Celexa): Response in 73% (n=15)
  - » Escitalopram (Lexapro): Response in 73% (n=15)
- **Controlled cross-over trial:** SRI clomipramine (Anafranil) is more efficacious than the non-SRI antidepressant desipramine (n=29)
- **Placebo-controlled trial:** Fluoxetine (Prozac) is more efficacious than placebo (n=67)

No medication is FDA-approved for the treatment of BDD

Hollander et al, 1989; Phillips et al, 1993; Phillips 1996; Perugi et al, 1996; Phillips et al, 1998; Phillips and Najjar 2003; Phillips 2006; Hollander et al, 1999; Phillips et al, 2002

Clomipramine vs Desipramine Cross-Over Trial



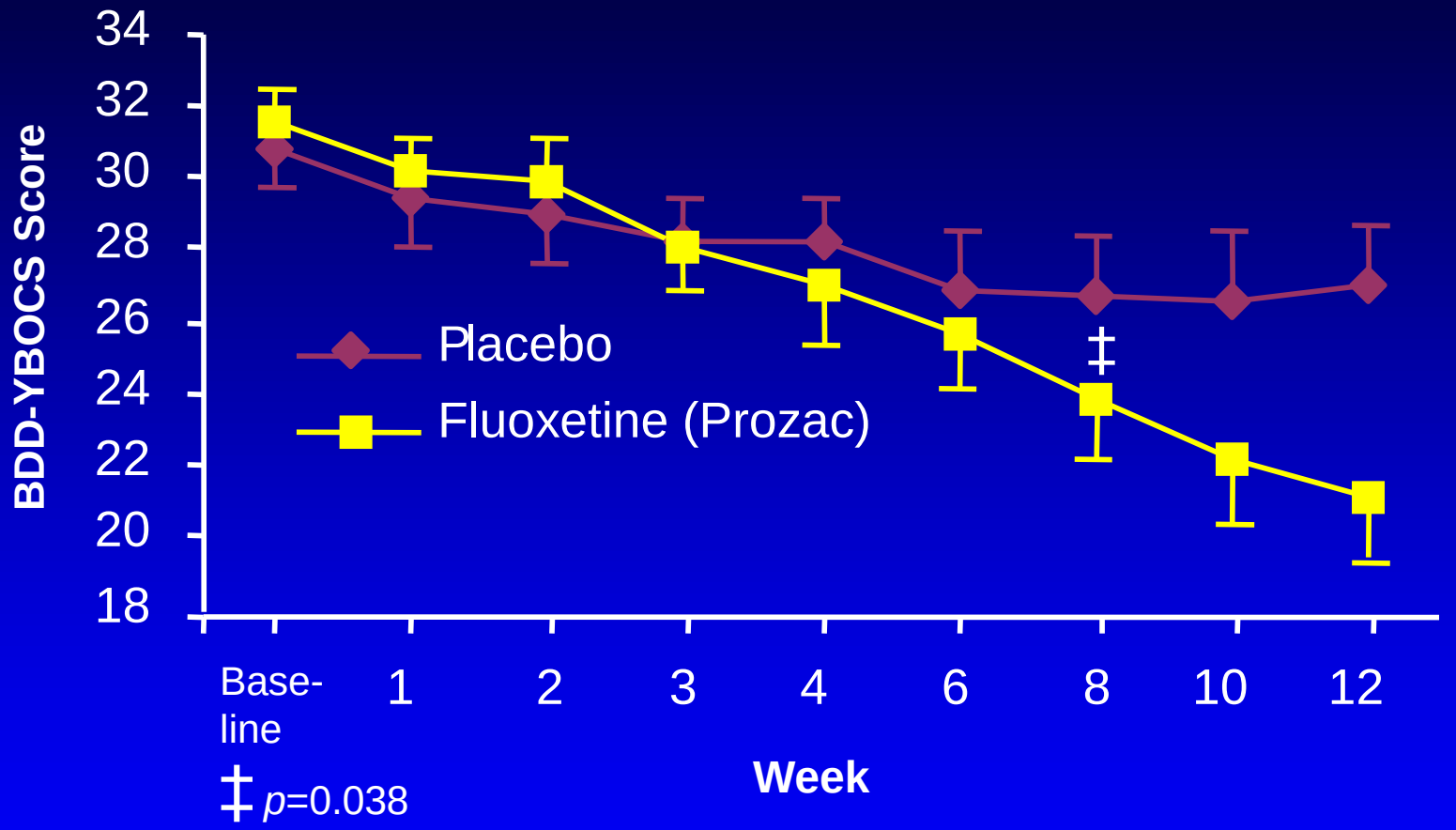
N=23; F=11.02; df=1,21; p=.003

N=29

Greater efficacy of CMI is consistent with case series data suggesting greater efficacy for SRI than non-SRI antidepressants

Hollander et al, 1999

Fluoxetine vs Placebo



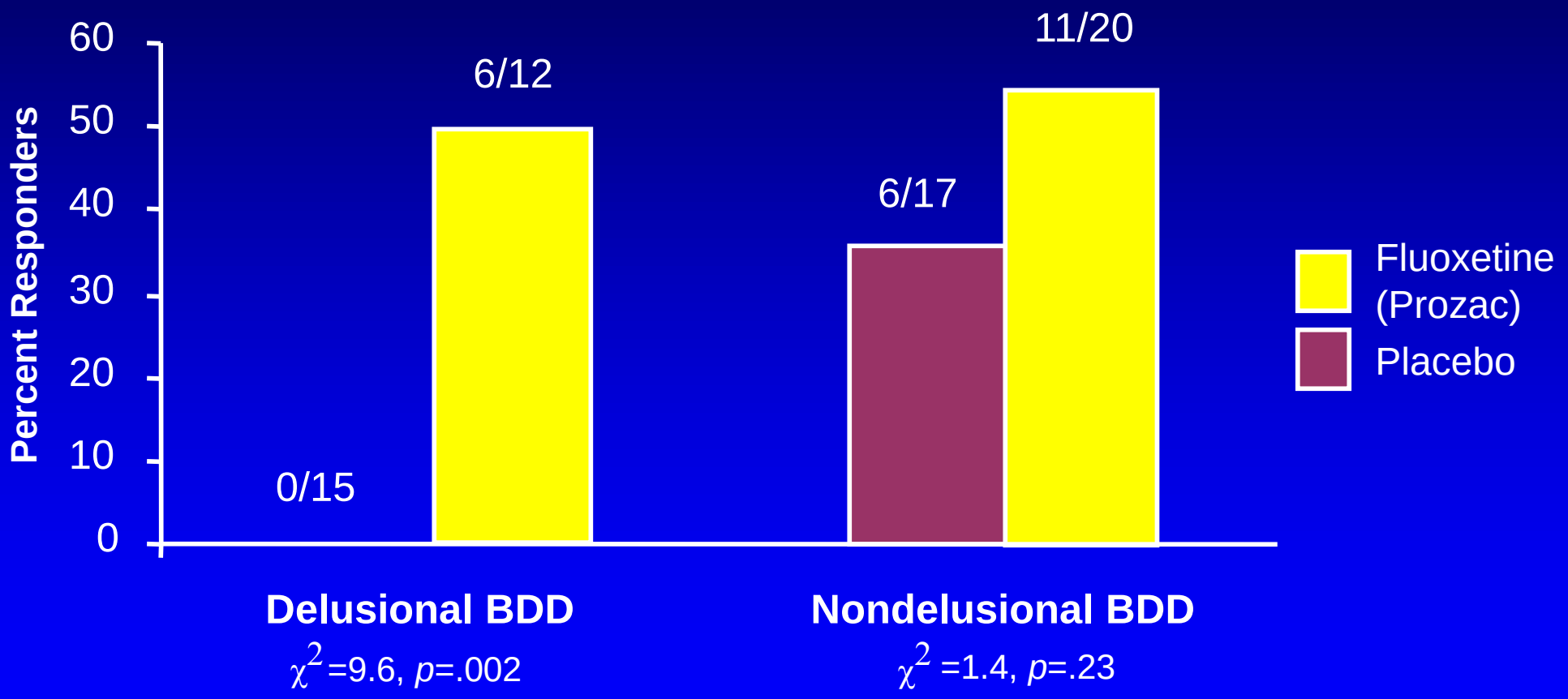
53% responded to fluoxetine vs 18% to placebo

(χ^2 =8.8, *p*=.003; F(1,64)=16.5, *p*<.001)

N=67

Phillips et al, *Arch Gen Psychiatry,* 2002

Response of Delusional vs Nondelusional BDD



Fluoxetine monotherapy was as efficacious for delusional BDD as for non-delusional BDD

N=64

Phillips et al, 2002

SRIs for BDD

- Studies support SRIs as the first-line medication treatment – for patients with delusional BDD, too; recommended in a National Collaborating Centre for Mental Health (NICE) practice guideline and a Cochrane review of BDD
- No studies have compared SRI doses. However, relatively high SRI doses appear to often be needed for BDD.
- To determine if a particular SRI is efficacious, a total trial duration of 12-14 weeks, while reaching a high dose if needed and tolerated, is recommended
- If no response or partial response to an optimal SRI trial after 12-14 weeks → switch SRIs or add another medication to the SRI (augment)

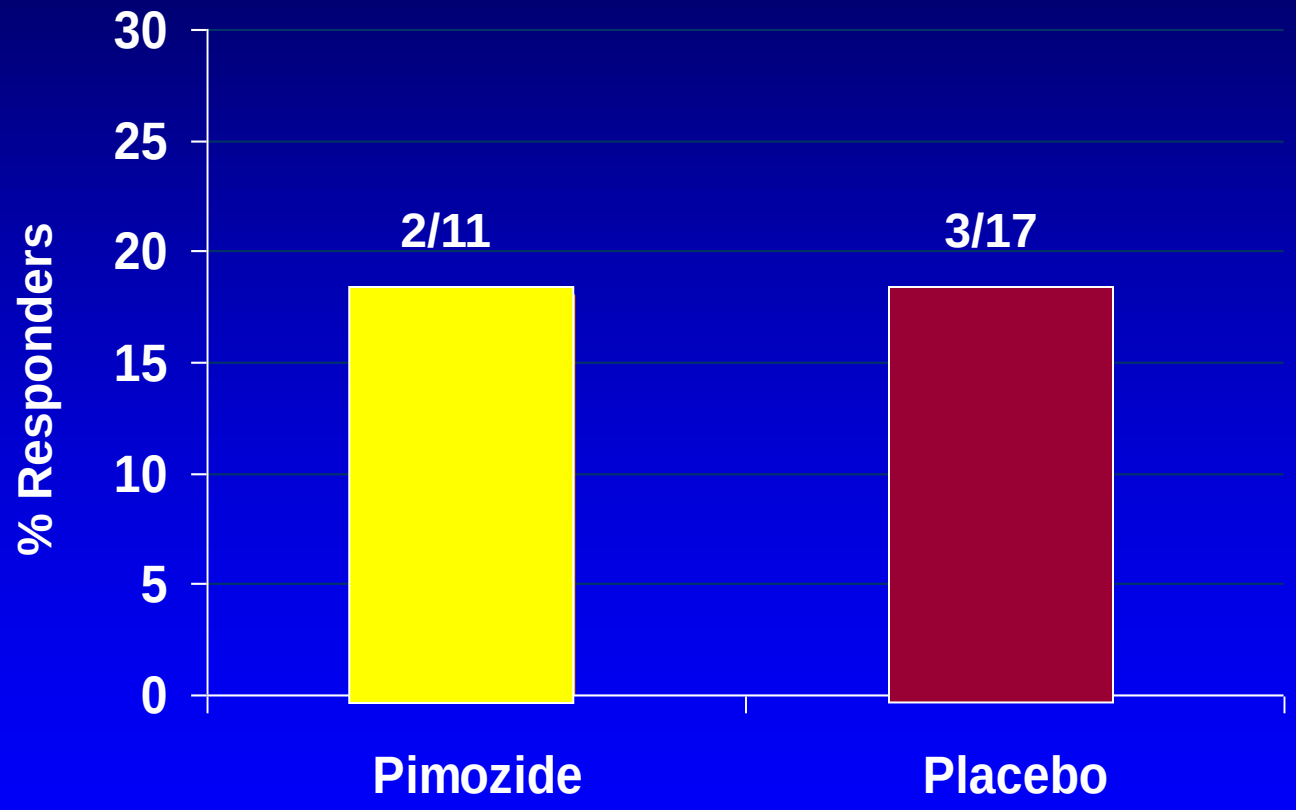
Ipser et al, 2009; National Collaborating Centre for Mental Health, 2006; Phillips and Hollander, 2008; Phillips et al, 2001; Phillips, 2005; Phillips, 2009

Other Monotherapy for BDD

- Only very limited data available
- Positive open-label trials for:
  - » Venlafaxine (Effexor) (n=17)
  - » Levetiracetam (Keppra) (n=17)
- Because data on these medications is so limited, they are not currently recommended as first-line treatments

Allen et al, 2008; Phillips, 2005; Phillips, 2009; Phillips and Hollander, 2008; Phillips and Menard, 2009

Pimozide vs Placebo Augmentation of Fluoxetine



N=28

Chi-square=.001, df=1, p=.97

Phillips, *Am J Psychiatry*, 2005

SRI Augmentation

- **Antipsychotics:** Only minimal data (negative pimozide study), although clinical experience suggests possible efficacy for atypicals

- **Buspirone:** Small case series support use (average 50-60 mg/day)

- **Other medications:** Data are extremely limited; some positive outcomes in clinical series with SSRI augmentation with clomipramine, venlafaxine, lithium, stimulants, levetiracetam, bupropion

Phillips, *Psychopharm Bull,* 1996; Phillips et al, *J Clin Psychiatry,* 2001; Phillips, *Am J Psychiatry,* 2005; Phillips, *Am J Psychiatry,* 2005; Phillips and Menard, *CNS Spect,* 2009

Cognitive-Behavioral Therapy for BDD

- CBT helps patients modify self-defeating thoughts and behaviors – needs to be modified to specifically target BDD's unique symptoms
- Case series (N=5-17): Positive outcomes with CBT for BDD
- In three studies that compared CBT to a no-treatment waiting list control condition (N=54, N=36, N=19), CBT was more efficacious than no treatment

McKay et al, *Behav Res Ther,* 1997; Neziroglu and Yaryura-Tobias, *Behav Ther,* 1993; Rosen et al, *J Consult Clin Psychol,* 1995; Veale et al, *Behav Res Ther,* 1996; Wilhelm et al, *Behav Res Ther,* 1999, Wilhelm et al, *Behav Ther* 2011; Wilhelm et al, unpublished data

Core CBT Strategies for BDD

- **Psychoeducation and Case Formulation:** Sets the stage for treatment
- **Cognitive Restructuring:** Identify unrealistic negative thoughts about appearance, "cognitive errors" (e.g., mind reading), and threatening interpretations → develop more accurate and helpful beliefs
- **Exposure:** Gradually face feared and avoided situations (often social); test beliefs by doing behavioral experiments as part of exposure
- **Ritual Prevention:** Stop excessive compulsive behaviors

Wilhelm et al, 2011

Core CBT Strategies for BDD *(continued)*

- **Perceptual Retraining/Mindfulness:** Do mirror exercises to learn to see one's body non-judgmentally and "holistically" (not focusing on details)
- **Advanced Cognitive Strategies:** Modify deeper-level negative core beliefs (for example, "I am worthless")
- **Motivational Interviewing:** Many BDD patients (especially those with delusional BDD beliefs) need MI
- **Relapse Prevention:** Prepare for the end of treatment

Optional CBT Approaches

(for patients with relevant symptoms)

- **Habit Reversal:** For compulsive skin picking and hair plucking
- **Weight, Shape, and Muscularity:** For muscle dysmorphia (preoccupation with body build and muscularity) and other weight/body shape concerns
- **Cosmetic Treatment:** For patients receiving or planning cosmetic treatment
- **Emotion Management:** For patients with more severe depression

Usually, to diagnose BDD you have to ask specifically about BDD symptoms

Diagnosing BDD

- **Appearance concerns**: Are you very worried about your appearance in any way? (*OR:* Are you unhappy with how you look?) *If yes*, Can you tell me about your concern?

- **Preoccupation**: Does this concern preoccupy you? Do you think about it a lot and wish you could think about it less? (*OR:* How much time would you estimate you think about your appearance each day – at least an hour a day?)

- **Distress or impairment**: How much distress does this concern cause you? Does it cause you any problems -- socially, in relationships, or with school or work?

Clues to the Presence of BDD

- Behaviors such as mirror checking, reassurance seeking, skin picking, excessive grooming, tanning, or camouflaging (for example, with a hat)
- Ideas/delusions of reference (believing others take special notice of the appearance “defects”)
- Avoidance of activities; being housebound
- Depression, social phobia, OCD, substance abuse/dependence
- Excessive seeking or lack of improvement with cosmetic treatment – for example, surgical, dermatologic, dental

Summary

- BDD is a common disorder
- Suicidality rates appear very high, and functioning and quality of life are markedly poor
- SRIs and CBT appear to often be efficacious
- Additional research is greatly needed!

Questions

- What class of medications appears efficacious for BDD?

A. MAOIs

B. Tricyclics (excluding clomipramine)

C. SRIs

D. Neuroleptics

Questions

- What class of medications appears efficacious for delusional BDD (i.e., patients with delusional beliefs regarding perceived appearance flaws)?

A. Typical antipsychotics

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C. SRIs

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Questions

- What type of psychotherapy appears efficacious for BDD?

A. Supportive therapy

B. Exposure/behavioral experiments, response prevention, cognitive restructuring, perceptual retraining, plus other CBT techniques that are tailored to BDD

C. Psychodynamic psychotherapy

D. Relaxation techniques

Questions

- Cosmetic treatment (e.g., surgery, dermatologic treatment) for BDD appears to be:

  A. Always effective

  B. Usually effective

  C. Rarely effective

Questions

- The following behaviors are symptoms of BDD:

  A. Excessive mirror checking
  B. Compulsive grooming
  C. Skin picking (to remove perceived blemishes)
  D. Seeking reassurance about one's appearance
  E. All of the above

Answers to Questions

1: C. SRIs

2: C. SRIs

3: B. Exposure/behavioral experiments, response prevention, cognitive restructuring, perceptual retraining, plus other CBT techniques that are tailored to BDD

4: C. Rarely effective

5: E. All of the above