# Psychiatric aspects of patients with the ICD

*Post  Implantable Defibrillator Shock Psychology Counselling*

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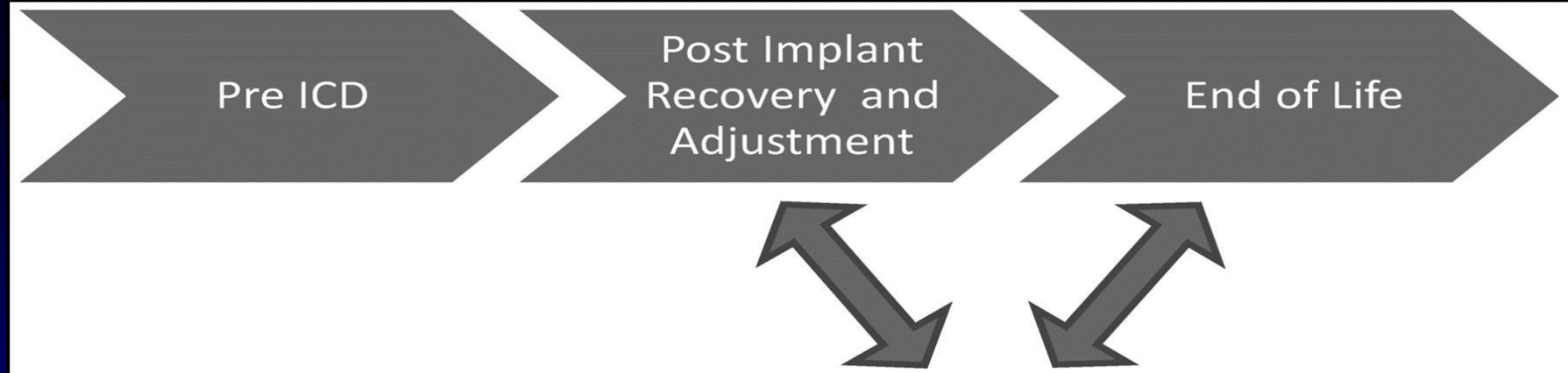


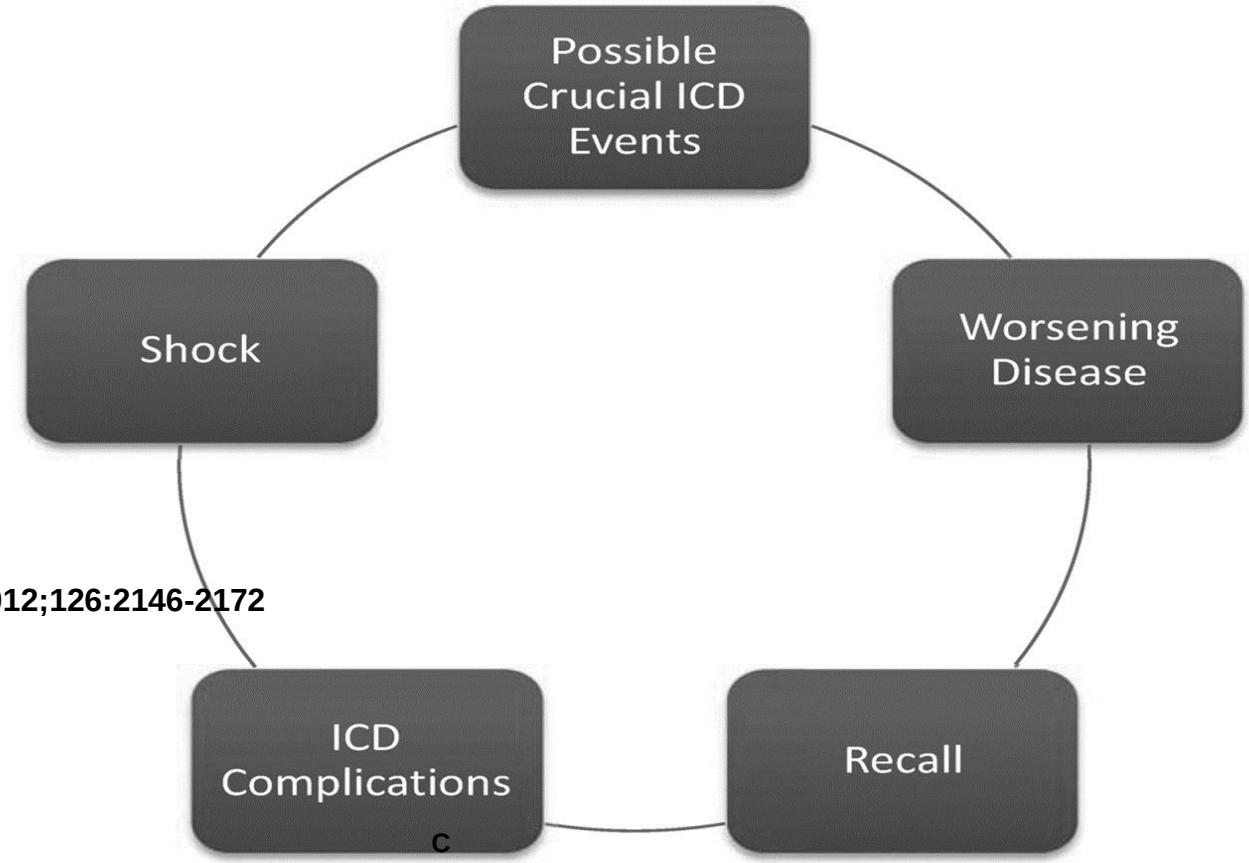


Dunbar S B et al. Circulation. 2012;126:2146-2172

American Heart Association

# Psychological aspects of ICD shocks

## Choose the false statement

- ICD shocks are unpredictable, uncontrollable, painful and socially intrusive.
- Anxiety is a common psychiatric symptom
- Depression is a common psychiatric symptom
- Psychosis is a common psychiatric symptom
- Post traumatic stress disorder is a possible outcome

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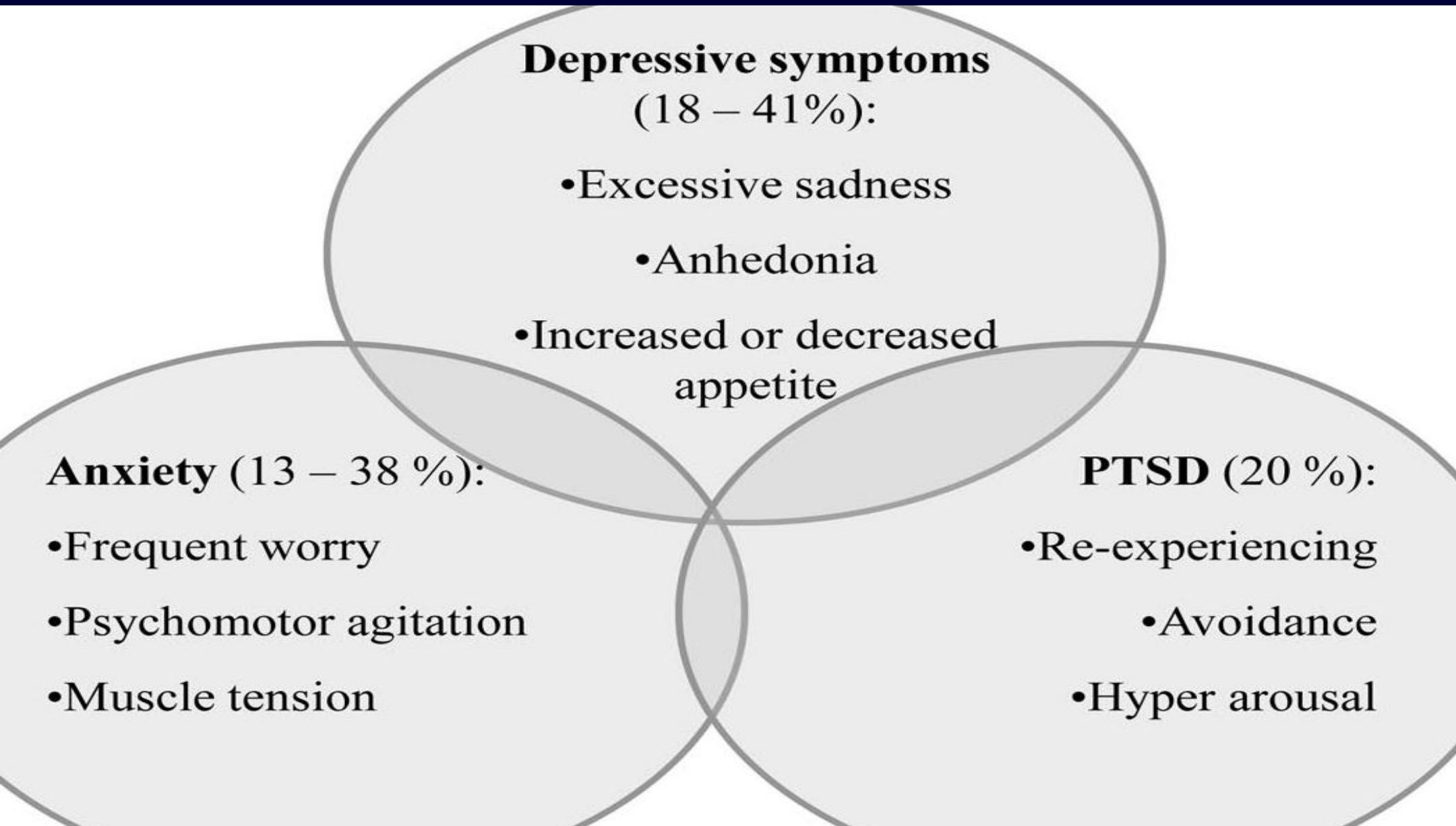
# Pts with ICD presenting to the psychiatrist

- About 50% no significant persistent problems
- Remainder have post-traumatic symptoms mostly due to multiple shocks(PTSD level 20%)
- anxiety syndromes
- maladaption to device due to local side effects
- dysphoria, depression; a few don’t want it

# Potential presentation of psychosocial distress



# Most impact on quality of life in the ICD patient : Which is correct?

- Sense of security
- Supportive EP team
- Fear of shocks
- Number of shocks
- Energy level

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# Quality of Life Issues with the ICD

## Benefits

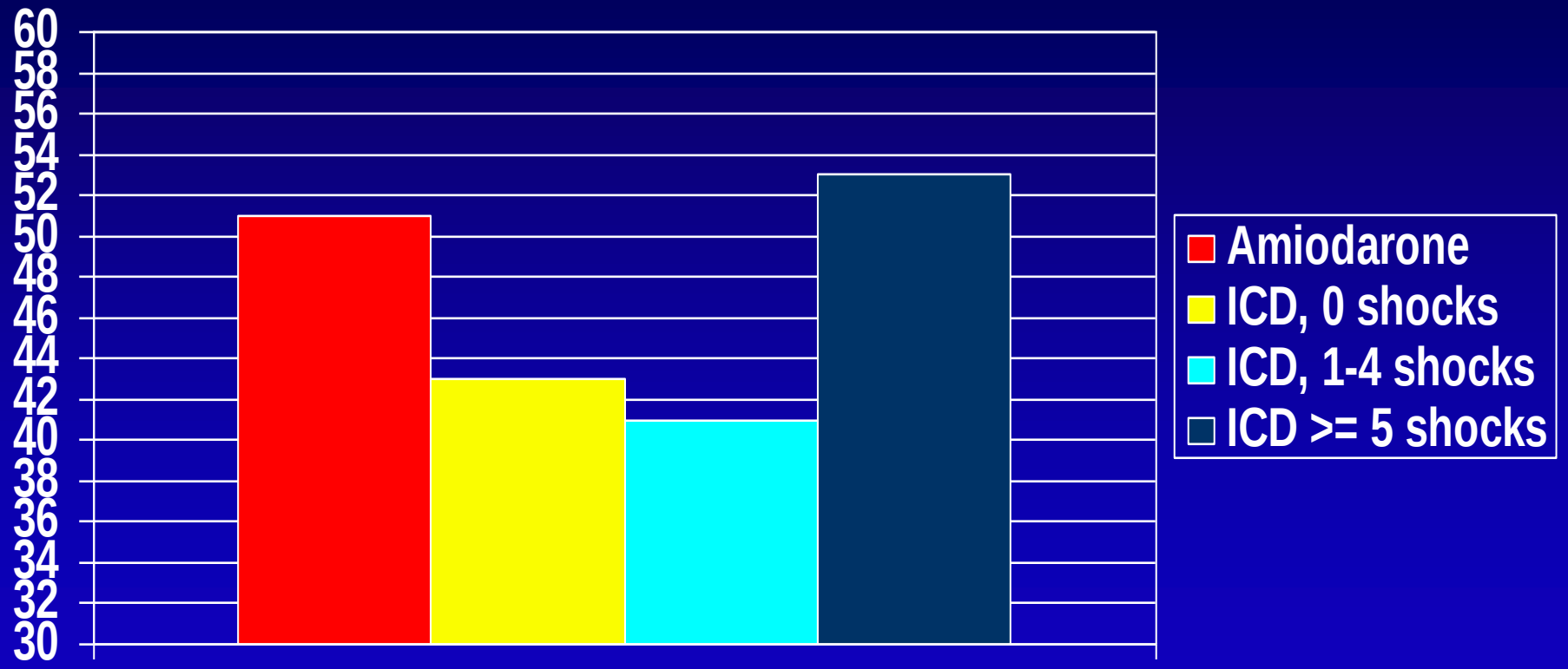
- Source of security
- Greater independence with activities
- “Lifesaver”
- ICD vital to the patients’ well-being

## Costs

- Fear of shocks
- Fear ICD won’t work
- Avoidance behaviour (e.g., sexual activity) because afraid of shocks
- Worry about battery failure
- Increased reliance on medical services

# Relationship Between Shocks and Psychological Adjustment

*Shocks & MHI - Psychological Distress at 12-months*




ANCOVA = $p < 0.0001$; Univariate planed contrasts - Amiod. > 0 shocks and 1-4 shocks; >= 5 shocks > 0 & 1-4 shocks

# Psychological Distress Predicts Arrhythmias

- Number of studies from different countries demonstrated that patients with higher symptoms of depression/anxiety at time of ICD implant experience higher incidence of shock therapy over first year of follow-up.

- Largest study was of 645 patients and reported a hazards ratio of 3.3 (C.I. 1.1-86) for predicting time to first shock (*Whang, 2005*).

# Common post traumatic symptoms in the ICD patient include: Which are incorrect?

- Hypervigilance, startle response
- Repeated recall of event
- Sleep more than usual
- Increased concentration
- Phantom shock

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## Criterion A: Exposure

All

- Cardiac event, sudden cardiac arrest, ICD implantation, shock, or storm are perceived as deadly or threatening.
- There is a perception of fear, helplessness, or horror.
- Symptoms must be present for at least one month. Specify "acute" if symptoms have lasted fewer than three months and "chronic" if greater than three months.

## Persistent Re-experieneing

One or more

- Recalling the cardiac event over and over.
- Dreaming about getting shocked
- Truly believing or feeling shock is recurring (e.g. phantom shock)
- Exposure to cues that remind them of the event (e.g. couch they were on when shocked) creates psychological distress
- Exposure to cues that remind them of the event (e.g. heart racing) causes body to react.

## Persistent Avoidance

Three or more

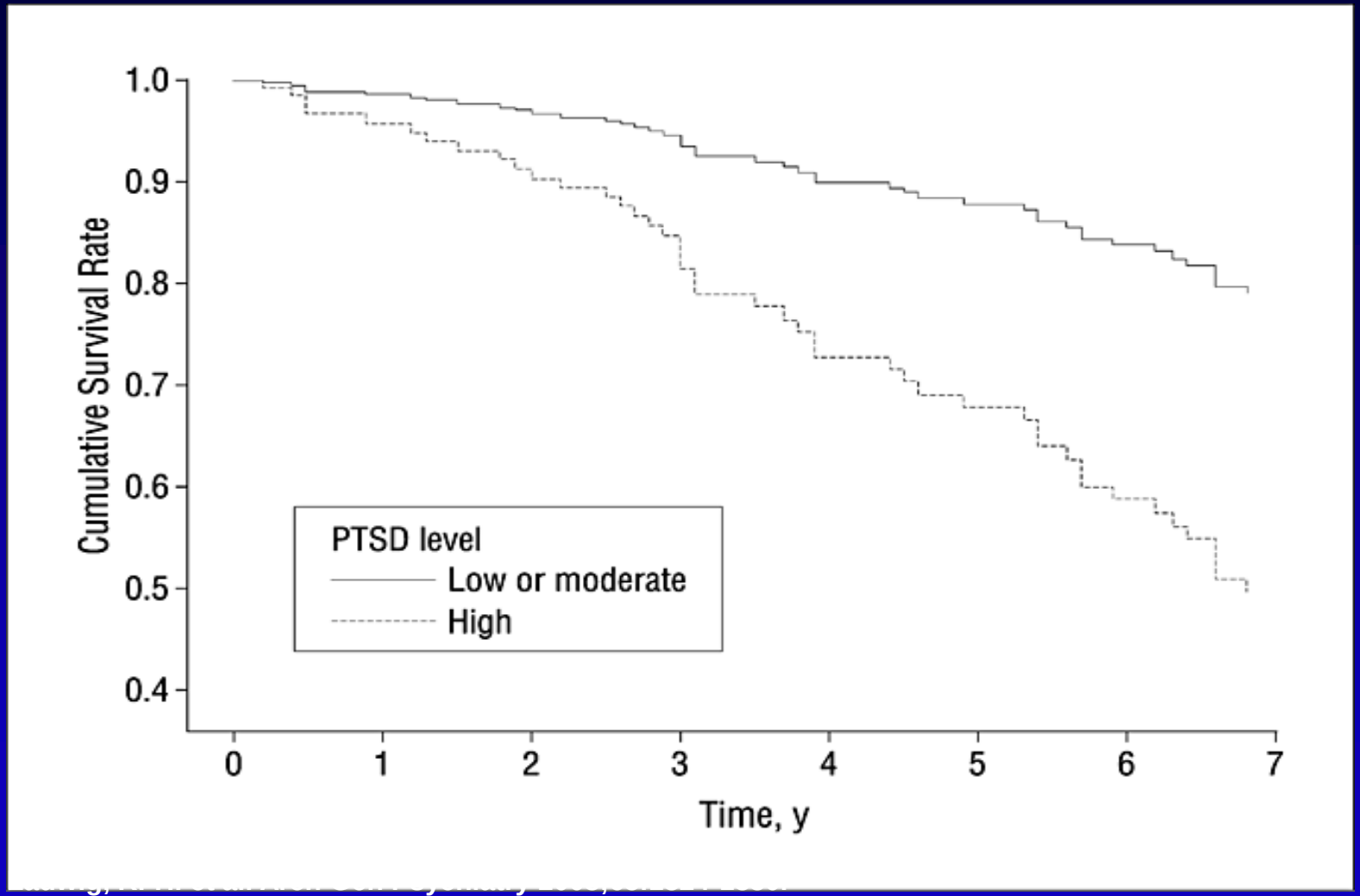
- Avoidance of discussing the event (this may include avoidance of office visits or repeated no-shows)
- Cannot remember the event (e.g. SCA or shock)
- Avoid engagement in activities due to fear of shock
- Feeling estranged from family or friends following cardiac trauma
- Restricted range of affect (not able to express a range of emotions) following SCA or shock
- Belief that shock is an indicator of cardiac health and foreshortened future.

## Increased Arousal

Two or more

- Following cardiac trauma (e.g. surgery, SCA, shock, storm):
  - Trouble falling or staying asleep
  - More irritable and angry
  - Difficulty concentrating
  - Exaggerated startle response
- Hyper-vigilant: preoccupied with heart rate, gastrointestinal and chest pain, and other bodily sensations

**Long-term mortality risk in patients with an implantable cardioverter-defibrillator stratified for posttraumatic stress disorder (PTSD) symptoms** ***(adjusted survival curve)*** *adjusted for age, sex, survey, PTSD, anxiety, depression, prior resuscitation, number of shocks, left ventricular ejection fraction, and time of implantation before enrollment* ***Ladwig 2008***

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# Risk markers for Psychosocial Distress in ICD patients

*Sears et al Circ Arrhythm Electrophysiol 2011*

- <50 yrs of age
- Female
- Premorbid psychiatric diagnosis
- Low social support
- >5 defibrillations(appropriate or inappropriate)

# Which approach is preferable?

- Screening questions and questionnaires for depression and anxiety, mental health collaboration
- Anxiety, depression, PTSD and ICD questionnaires
- Screening questions for depression, anxiety and PTSD, mental health collaboration
- Anxiety, depression, PTSD and ICD questionnaires and mental health collaboration
- Screening questions and questionnaires for depression,anxiety and PTSD, mental health collaboration

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## Suggested Questions for Use in Electrophysiological Clinics to Establish Patient Need for Mental Health Care

- Depressive disorder
- Have you been feeling depressed, down or hopeless, for most of the past month?
- Do you find that you no longer enjoy activities you used to look forward to?
- General anxiety/panic symptoms
- Do you feel nervous or jittery most of the time?
- Do you find that you cannot stop worrying about the potential for future shock?
- Do you have periods of intense anxiety or panic that occur out of the blue?

## Suggested Questions for Use in Electrophysiological Clinics to Establish Patient Need for Mental Health Care

- Post traumatic stress disorder
- During shock/arrest did you fear loss of security or safety, bodily injury, or death?
- Do you have nightmares or flashbacks as if you are having the shock/arrest again?
- Have you been avoiding things that remind you of the shock, such as activities that increase heart rate or places where you were shocked?
- Do you find that you are always on the lookout for an increased or irregular heart beat?

## Suggested Brief Screeners for Use in Electrophysiological Clinics to Establish Patient Need for Mental Health Care

- General Screeners
- Beck Depression Inventory, 2nd edition
- *Centers for Epidemiological Studies Depression Scale*
- Beck Anxiety Inventory
- *Zung Self-rating Anxiety Scale*
- Impact of Events Scale, revised
- *Posttraumatic Stress Disorder Checklist*
- ICD specific screeners: *Florida Patient Acceptance Scale Florida Shock Anxiety Scale, ICD and Avoidance Survey, Cognitive Appraisal of ICD Discharges ,The ICD Concerns Questionnaire, The Implanted Device Adjustment Scale*

# Supportive communication: Which statements are incorrect?

- What are your concerns about having an ICD?
- “Sometimes patients start to change what they do because of the shocks.’’ “Is this something you have done?”
- “It’s unusual to feel stressed about the ICD“
- “Can we discuss your feelings about the ICD?
- “We want you to take a passive role in your care.”

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# Supportive Communication

1. Define the problem
   - “What are your concerns about having an ICD? “
2. Provide information
   - “Sometimes patients start to change what they do because of the shocks.’’ “Is this something you have done?”
3. Create team support
   - “We want you to work with your treatment team to help you adjust to the ICD as quickly as possible.”

# Supportive Communication

4. Normalize fears
   - “It’s a normal reaction to feel stressed about the ICD“
5. Elicit emotional release
   - “Can we discuss your feelings about the ICD?”
6. Instill hope
   - “Over time, you will get used to the ICD”
7. Encourage patient to take action
   - “We want you to take an active role in your care.”

# Cognitive therapy for ICD patients with psychological distress: Which statement is incorrect?

- Education
- Relaxation techniques
- Deal with cognitive distortion
- Perceived control is a key concept
- None is incorrect

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# Cognitive-Behaviour Therapy (CBT) for Psychological Distress in ICD Patients

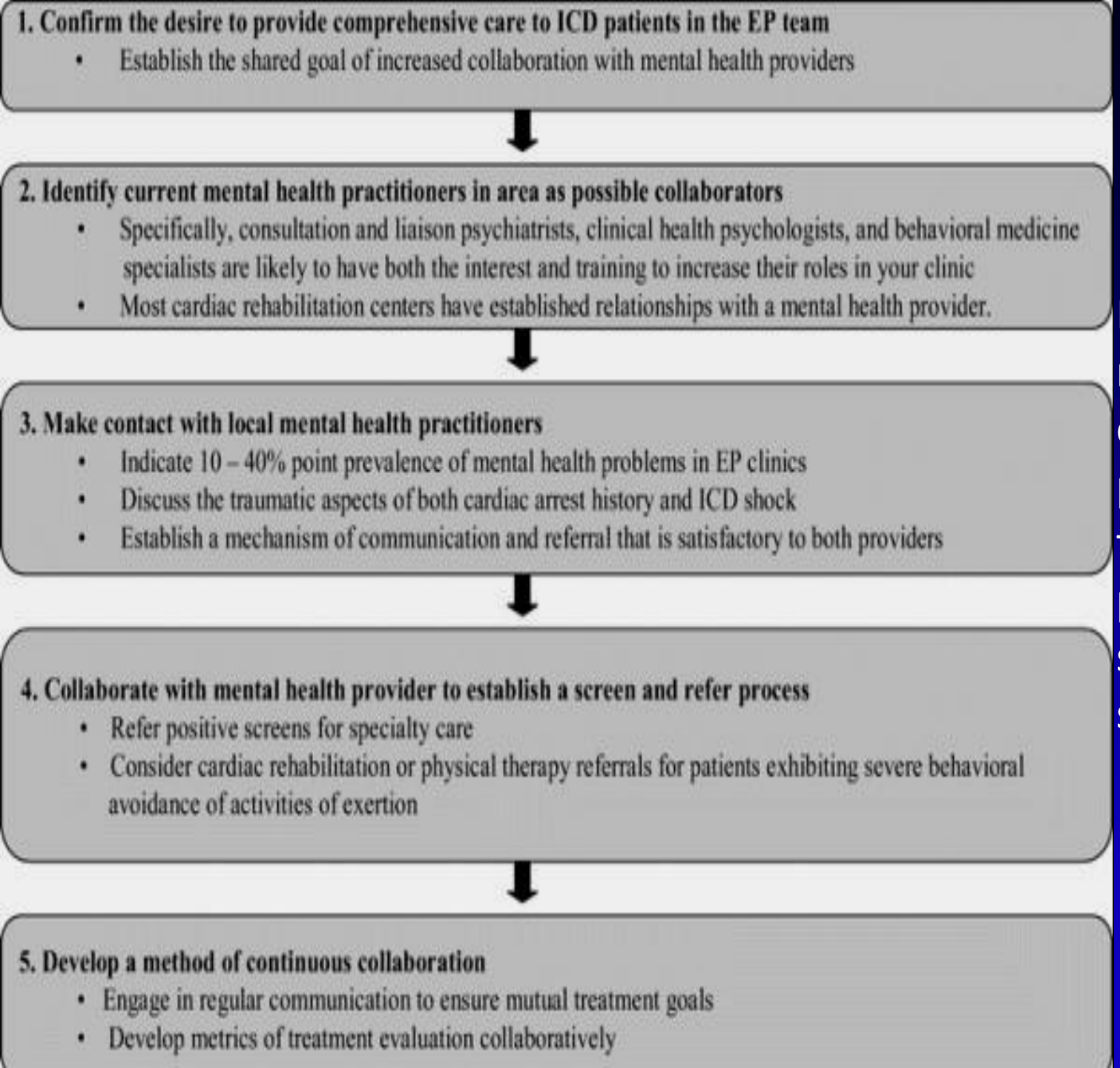
- Improvement in depression and anxiety in the CBT group vs usual care group at follow-up .
- Subgroup who benefited the most were those who received shocks.
- Women scored worse than men on all psychological and QOL variables ($p < .05$) but improved more in depressive symptoms and Mental Component Summary of SF-36.
- Greater improvement with CBT on PTSD total and avoidance symptoms for men and women combined ($p < .05$)
- *Kohn et al, PACE 2000; Chevalier et al., Am Heart J 2006 Irvine et al ,Psychosomatic Med 2011*

# How multiple shocks cause serious distress

- Characteristics of the event that increase stress:
  - Controllability – behavioural and cognitive
  - Predictability
  - Severity of threat
  - Embarrassment
  - Degree of adversity (e.g. pain)
  - Inescapable

# CBT for ICD Recipients

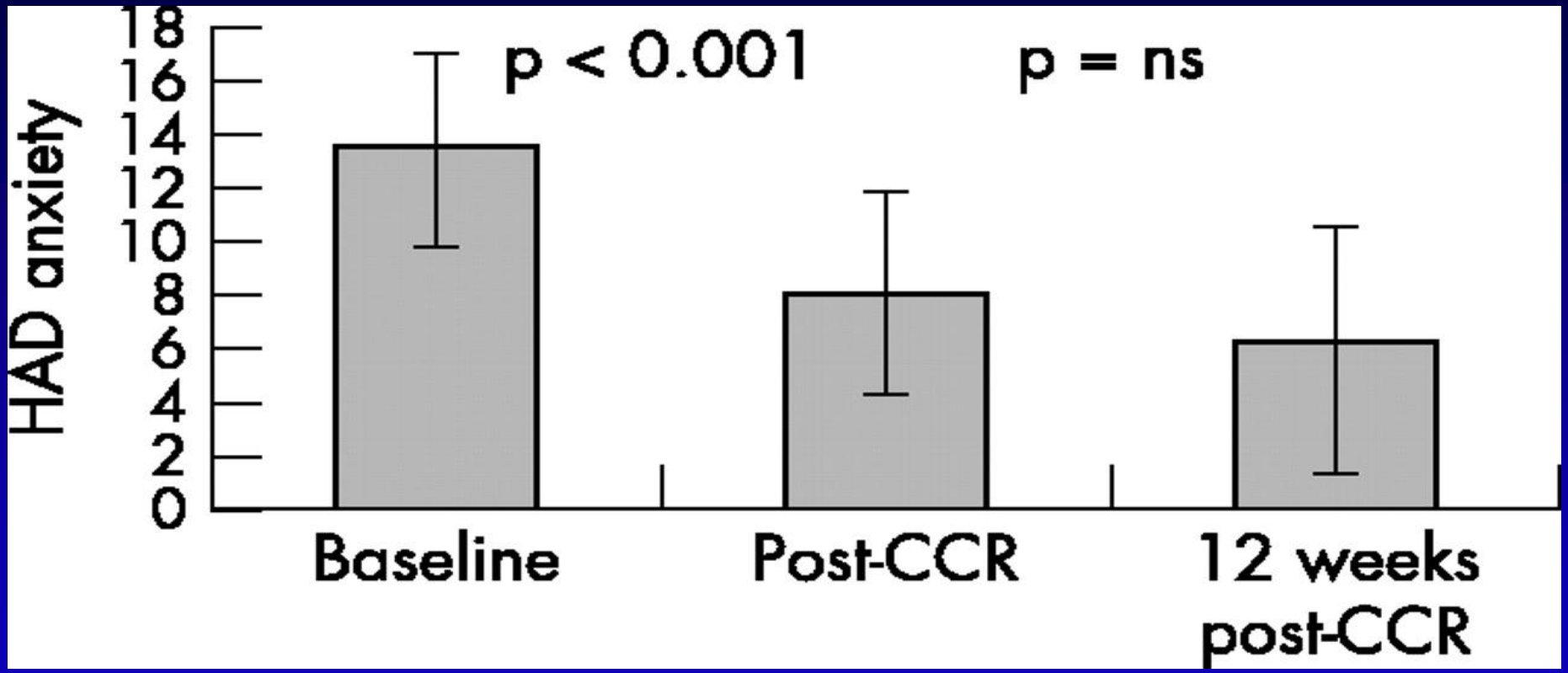
- Education about panic symptoms with focus on distinguishing panic symptoms from arrhythmia symptoms per se.
- Learn diaphragmatic breathing
- Learn muscle relaxation
- Avoid escape response when feeling anxious or having palpitations (practice relaxation instead).
- Challenge catastrophic thinking (“The ICD won’t work!”)
- Cognitive interventions to control worry.




Establishing and using mental health collaboration for ICD patients presenting to the EP clinic with psychological distress such as posttraumatic stress disorder.

***Sears et al Circ Arrhythm Electrophysiol 2011***

# Hospital anxiety and depression (HAD) scores for anxiety in the ICD patient.




Fitchet A et al. Heart 2003;89:155-160

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