Samuel Sears, Ph.D.

- Nationally recognized expert in the care of ICD patients.
- Published over 150 research articles in the medicine literature.
- Completing 24th year of collaborations in academic medicine and psychology.
- Regularly appears in PBS TV series, *Second Opinion*.
- Founded “ICD Coach” to produce first ICD patient mobile phone app
- 2013 O. Max Gardner Award Winner-Highest Honor in UNC System
FIVE TAKEAWAYS FROM HANGING OUT WITH A CARDIAC PSYCHOLOGIST

Samuel F. Sears, Ph.D.
East Carolina University
Greenville, NC
Coping & Adjustment: You be you!

Serenity to accept what I cannot change

Courage to change the things I can

Wisdom to know the difference.

— Senecah Walker —

Fingerprint
• GOAL:
  – Activate 1 new strategy

• OUTLINE FOR TALK:
  – News from ICD Patient Research
  – 5 Takeaways
"There is no Cardiology without Psychology"

- CARDIOLOGY IS WINNING!
  - But Hearts are attached to people!

- HIGH TECH Needs HIGH Humanity.

- Virtually All Models of Health:
  - Link Mind-Body
    - Continuous process of adjustment
  - Link Power of Social Connection
    - Family as a Unit of Coping
New News 2019

- Distress is still common
- Distress Manifests as:
  - Hypervigilance
  - Non-reassurance
- ICD Pts feel uninformed & want more!
- Psychological treatment helps
- Tracking activity in ICD patients

Key Psychological Pursuit: SAFE
# ICD Patient Distress

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The implantable cardioverter-defibrillator (ICD) is the premier treatment for patients at risk for sudden cardiac arrest. The successes of clinical trials in reducing mortality allow us to gain a greater understanding of the psychological and patient-related outcomes following implantation with an ICD. Anxiety and/or depressive symptoms are relatively common (ranging from 13% to 48%) of patients with ICDs. Psychological morbidity is often related to their chronic cardiac condition, implantation of the ICD, experience or anticipation of device-related complications, and mortality concerns. At present, a major focus of patient-centered ICD research is to reduce these negative psychological effects by educational, supportive, and cognitive-behavioral treatments.

### Table 1
Risk and resiliency factors in patients with implantable cardioverter-defibrillators

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<th>Risk Factors</th>
<th>Resiliency Factors</th>
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<tr>
<td>Age &lt;50 years</td>
<td>Optimism/positive health expectations</td>
</tr>
<tr>
<td>Female gender</td>
<td>Problem focused coping orientation</td>
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<tr>
<td>Shocks, especially if &gt;5</td>
<td>Low appraisal of threat of the ICD</td>
</tr>
<tr>
<td>Premorbid psychological difficulties</td>
<td>Social Support</td>
</tr>
<tr>
<td>Low social support</td>
<td>○ Patient-provider relationship</td>
</tr>
<tr>
<td>Poor understanding of condition and device</td>
<td>○ Family/caregivers</td>
</tr>
<tr>
<td>More severe medical condition</td>
<td>○ Faith in ICD and doctor</td>
</tr>
<tr>
<td></td>
<td>○ Informed about cardiac condition and device</td>
</tr>
<tr>
<td></td>
<td>○ Active lifestyle of work/recreation</td>
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Psychology of Cardiac Events

- Cardiac Events
- Psych. Support & Psych Hx
- Catastrophic Thinking
- Avoidance Behavior
- Hypervigilance
- Fear/Anxiety
- QOL & Function

Reassurance and Hypervigilance

Rosman...Sears, 2015. IJC
N=188 SCA survivors
- 18% persistent worry even with normal test results.
- 53% “pay attention to my heartbeat” often or always

Bunz...Kinderman, 2016
N=110 ICD pts
- Significant Heart Focused Anxiety: 48.6%
- General Anxiety: 33.9%
- Depression: 14.7% - 30.3%
What is important to ICD pts?

Top rated anxieties **ICD pts**
- Fear of Exercise
- Fear of Heart Beating Fast

Top rated goals for **CHF pts**
- Dyspnea 44%
- Physical capacity 18%
- Exhaustion - mental activities 13%
- Fear due to HF 13%

Perini, Kutyifa, Veazie, Daubert, …Moss, 2017) AHJ

Pisa, Eichmann, Hupfer, 2015
ICD Patient Needs Analysis

- Studied 389 ICD Patients in Denmark
  - Information Needs & General Satisfaction

- Top 3 INFORMATION Topics of Need:
  - Psychological support (39.9%)
  - Psychological support for family (43.1%)
  - Deactivation of ICD EOL (47.8%)

Pedersen, Knudsen, Dilling, et al., 2016
What is important to ICD/CHF pts?

Top rated anxieties **ICD pts**
- Fear of Exercise
- Fear of Heart Beating Fast

Top rated goals for **CHF pts**
- Dyspnea 44%
- Physical capacity 18%
- Exhaustion - mental activities 13%
- Fear due to HF 13%
N=193 ICD patients
Randomly assigned: CBT vs. UC:
BL, 6 and 12 mos Focus: PTSD sx;

Does therapy help vs. usual care?
Yes for depression and anxiety

Does therapy help if you have PTSD?
Yes, particularly if you have more PTSD sx
1) How much activity is average for ICD pts in an international sample?
2) Does ICD shock reduce activity? Yes, For how long?
2) What about anxiety and QOL?

Studied N= 2,770 patients with ICDs F/u over 22 ± 9 months.
Repeated Measures:
Activity = Accelerometer
Shock Anxiety
EuroQol 5-D

Sears, Rosman, et al., 2018 Heart Rhythm
Results

- Avg daily activity: 185.3 ± 119.4 min / day.

- Activity dropped s/p ICD shock (p<0.0001) & recovered to a normal level after approximately 90 days.

- Activity also dropped with ATP but to a much lesser degree.
Results

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• Activity also dropped with ATP but to a much lesser degree.
Results

- ICD shock - decreased quality of life (EQ5D Health Score) and increased EQ5D anxiety scores.
- No effects for mobility, self-care, activity, or pain.
- Shock anxiety - increased in shocked patients and remained significantly elevated at 24 months, regardless of appropriate or inappropriate shock delivery.
Psychology of Cardiac Events

Psych. Support & Psych Hx

Fear/Anxiety

QOL & Function

Catastrophic Thinking

Avoidance Behavior

Hypervigilance

Cardiac Events

“There is no QOL, without attention to Psychology”

PURPOSE OF THIS MEETING:

- FEEL SAFER
- LEARN SOME NEW STUFF
- CONNECT
- BE ENCOURAGED
• GOAL:
  – Activate 1 new strategy

• OUTLINE:
  – News from ICD Patient Research
  – 5 Takeaways
Outline for Talk

- News from ICD Patient Research
- 5 Takeaways
  - Ambiguity = Anxiety.
  - ICDs are a team sport.
  - Limitations stink.
  - No one gets skates.
  - Trust safety nets.
“AMBIGUITY = ANXIETY”

ACTION: ENGAGE IT
All “men” by nature are driven to know” - Aristotle
CASSANDRA: Obsessed with the future
AMBIGUITY AVERSION

• Ambiguity is part of medicine.
  – MUS: medically unexplained symptoms
    • 25% of general practice pts have MUS (Neuroscience and Biobehavioral Reviews, 2017)

• AMBIGUITY triggers ALARM.

• ALARM triggers ATTENTION.
  
  THREAT DETECTION: Automatic
  SAFETY DETECTION: Deliberate
HOUSTON I HAVE SO MANY PROBLEMS
ACTION: Engage It (psyche)

• DELIBERATE REASSURANCE:
  • “I am safe and strong.”
  • “I know this has been hard, but you are coping.”
  • “I encourage you to focus on Survivorship vs. Victimhood.”

• DELIBERATE RE-ENGAGEMENT
  • “I want you to get back in the swing of things (activities of daily life) now.”
ACTION: Set Goals

- DELIBERATE ACTIONS

- Celebrate Small Victories

- Positive Actions brings Positive Feelings

- Evidence for effectiveness vs. depression
Team

“Living with an ICD is a TEAM sport.”

ACTION: ENGAGE TEAM
Patient+Partner vs. Patient Comparison in RCT

Studied 301 ICD pts and partners provided state-of-the-art education, coaching and 24/7 access to a nurse.

Pts were mostly male (73.8%) and Caucasian (91%)

At 3 month check:

- Pt+Partner was better: Less symptoms, Less depression, more self-efficacy, better expectations
- Partners reported less caregiver burden, more self-efficacy, and more ICD knowledge
- However, Partner anxiety and depression were stable across 12 months with no differences between groups

Dougherty, Thomposon, & Kudenchuk, 2019. Heart Rhythm
Teams vs. Heroes
“Counter-heroism”

• Shifts action from Individual pilots to Team dynamics
• Prevents “flying by seat of pants” –not heroic
• Mission planning & Problem solving

VS.
ACTION: Engage Team

• “Who’s on the Roster?”  Build your Team

• Providers
• Services
• Medications
• Devices
• Personal strengths
• Family and Faith
Limitations Stink!

“Limitations are unfair and frustrating.”

ACTION: ENGAGE FEELINGS
Grief

How we want grief to work

How grief actually works
Broad Psychological Principle:

Most of us **under-rate** our ability to cope and **over-rate** the impact of problems.
Grief

– Dual Process Model of Bereavement (Stroebe)(Bonanno)

  – *Dynamic Volleying*

– Coping with Loss + Building a New Future

– “Give and Take of Change”
ACTION: “Grief and Goals”

- Grief: Emotional ventilation
- Increase Focus on Functional goals:
  - “Git R Done”
- Long term teamwork
Universal Experience

“No one gets skates”
(There are no perfect people)

ACTION: ENGAGE STRATEGIES
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A Patient’s Guide to Living Confidently With Chronic Heart Failure

Samuel F. Sears, PhD; Lawrence Woodrow, MA; Katherine Cutitta, MA; Jessica Ford, MA; Julie B. Shea, MS, RNCS; John Cahill, MD

Chronic heart failure (CHF) refers to the ongoing condition of your heart’s inability to pump sufficient blood to meet your body’s demands. The name of any medical condition that includes the word “failure” can be intimidating, particularly when it concerns your heart. After all, failure implies there is no hope, right? Wrong! The medical term “failure” can be demoralizing, but patients can identify ways to increase the chances of living longer and living well with CHF. To live successfully with CHF, it is important to develop confidence. For heart patients, confidence can refer to self-assurance, positive and healthy actions, and expectations that desirable health outcomes can be achieved. CHF is challenging because it requires patients and families to understand and monitor CHF symptoms, manage distress, accept the value of the implantable cardioverter-defibrillator (ICD), and pursue quality of life (QoL). For

Disease Confidence

Disease confidence is a way of thinking and feeling about your disease that results in a greater sense of personal security and empowerment. Disease confidence can be developed by taking appropriate self-care in managing your CHF. Self-care involves a level of understanding about your medical condition, as well as making informed decisions about your care to minimize symptoms and/or to respond effectively to symptoms that may occur.¹

Symptom Monitoring

CHF is a disease that may result in shortness of breath, excessive fluid and weight gain, and poor exercise tolerance. Table 1 displays common symptoms that you may experience with CHF. Sudden weight gain (3 pounds in 24 hours) may indicate that you are building up or retaining extra fluid. This symptom may be a sign of your heart’s trouble in circulating blood adequately. Weighing yourself daily provides information to prevent CHF through early intervention with medications such as diuretics (water or fluid pills). Elevated blood pressure and heart rate can also signal a change in your heart’s function and prompt a medication adjustment. Checking your daily blood pressure and heart rate enables you to monitor for significant changes that should be reported promptly to your
Mind Strategies

- Check your stress level
- **Acknowledge changes and challenges**
- **Find personal coping assets**
- Reflect on coping history
- Set goals
- Think positively
- Get heart smart
Body Strategies

- Plan pleasant events
- Remain physically active
- Get good sleep
- Relax and care for yourself
- **Involve friends and family**
- **Pay attention to how you feel**
- Ask for help when you need it
“Trust Safety Nets”

ACTION:
Confident Thinking, Behavior, & Relationships
ACTION: Confidence MANTRAS

• Confident Thinking
  – Feel Safe, Looking ahead with Hope
  – Acknowledge Stress

• Confident Behavior
  – Active in care
  – Active in daily life

• Confident Relationships
  – Engaged team and family
Outline for Talk

• News from ICD Patient Research

• 5 Takeaways
  – Ambiguity = Anxiety.
  – ICDs are a team sport.
  – Limitations stink.
  – No one gets skates.
  – Trust safety nets.
Goal > One new strategy
Quality of life is an achievement, not an entitlement.
Strength comes from struggle
Thanks for hanging out with me!