

# Adult Congenital Heart Disease and Mental Health

Dr Jenny Paton

Consultant Clinical Psychologist

Cardiothoracic Transplantation,

Freeman Hospital, Newcastle u Tyne

## What is mental health?

Mental health is more than the absence or presence of mental disorders

WHO



## What is mental health?

“Mental health is an integral part of health; indeed, there is no health without mental health”. WHO



**There is no health  
without mental health...**

(Department of Health, 2011)

# Mental health in adults with congenital heart disease : What do the facts tell us?

- Anxiety ACHD 29% (general population 8%)
- Depression ACHD 16% (general population 6%)

(Andonian et al 2018)

# Mental health in patients with ACHD – what do the facts tell us ?

- 57% recalled a traumatic incident
- 11% Clinically significant levels of PTSD using the Impact of Events Scale (IES) (estimated 3% in general population).
- Demographics, severity or complexity was not a factor in PTSD
- Also had higher levels of anxiety and depression
- Significantly lower QOL scores on the Satisfaction with Life Scale (SLS)
- Greater risk for morbidity

(2016 Deng *et al*)

# PTSD: What is it and why is it important for our patients that we know about it?

- Post-traumatic stress disorder is a mental health condition caused by exposure to an upsetting traumatic experience.
- This could be through experiencing it directly or vicariously through others.
- Those with PTSD will experience life changing intense and disturbing thoughts and feelings which persist (and indeed likely to grow in intensity) long after the event itself.

# PTSD: What is it and why is it for important for our patients that we know about it?

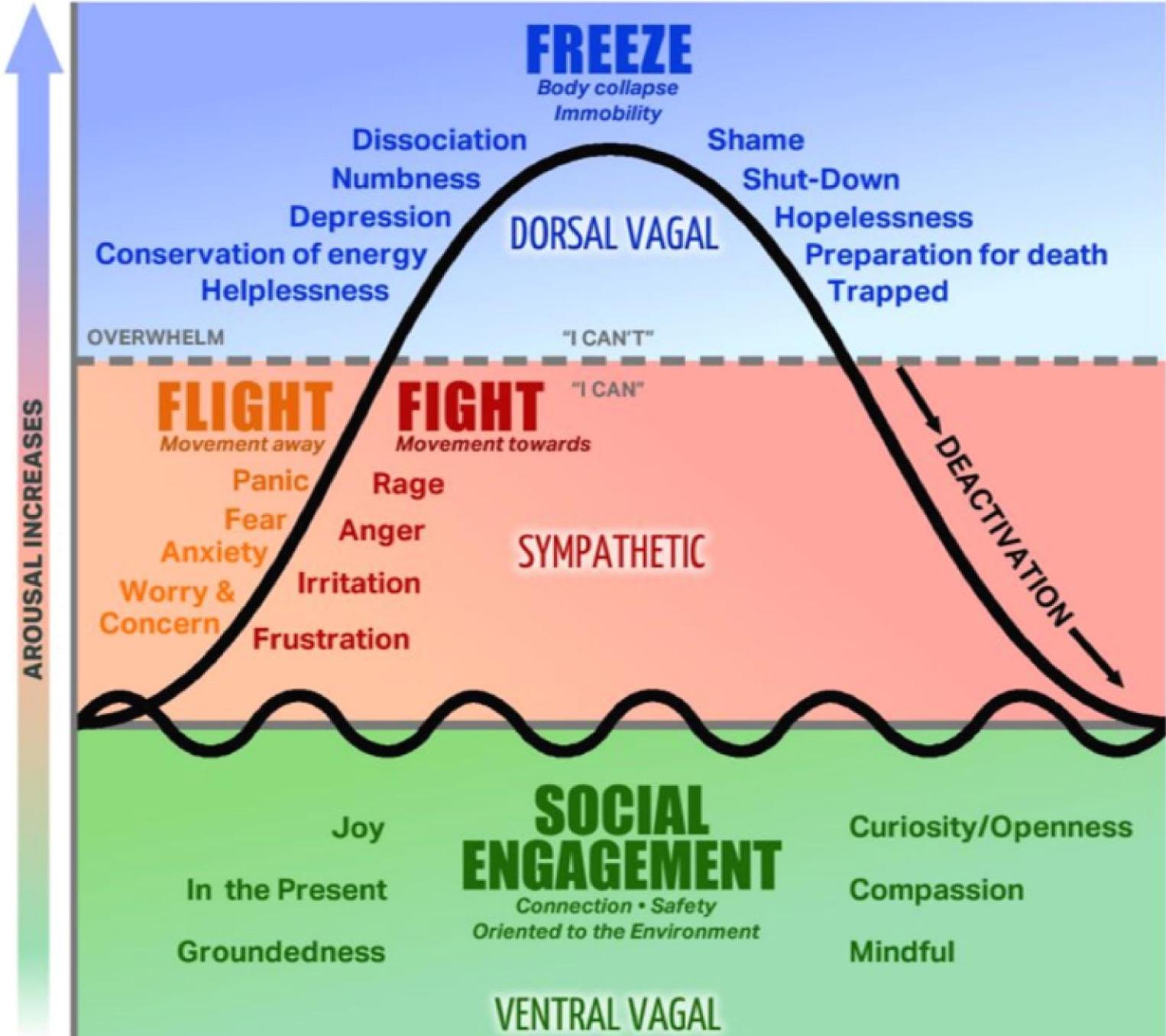
- They may relive the event through flashbacks or nightmares.
- They may feel intense sadness, fear or anger.
- They may feel detached or estranged from other people.
- They may avoid situations or people that remind them of the traumatic event.
- They may have strong negative reactions to something as ordinary as a loud noise or an accidental touch.

(APS, 2020)

# PTSD what are the symptoms?

- **Intrusive thoughts** such as repeated, involuntary memories; distressing dreams; or flashbacks of the traumatic event. Flashbacks may be so vivid that people feel they are re-living the traumatic experience or seeing it before their eyes.
- **Avoiding** reminders of the traumatic event may include avoiding people, places, activities, objects and situations that bring on distressing memories. People may try to avoid remembering or thinking about the traumatic event. They may resist talking about what happened or how they feel about it.
- **Negative thoughts and feelings** may include ongoing and distorted beliefs about oneself or others (e.g., “I am bad,” “No one can be trusted”); ongoing fear, horror, anger, guilt or shame; much less interest in activities previously enjoyed; or feeling detached or estranged from others.
- **Arousal and reactive symptoms** may include being irritable and having angry outbursts; behaving recklessly or in a self-destructive way; being easily startled; or having problems concentrating or sleeping.

(APS, 2020)



**PARASYMPATHETIC NERVOUS SYSTEM**  
DORSAL VAGAL - EMERGENCY STATE

**Increases**  
Fuel storage & insulin activity  
Endorphins that help numb and raise the pain threshold.

**Decreases**  
Heart Rate • Blood Pressure  
Temperature • Muscle Tone  
Facial Expressions • Eye Contact  
Intonations • Awareness of the H  
Voice • Social Behavior • Sexual Responses • Immune Response

**SYMPATHETIC NERVOUS SYSTEM**

**Increases**  
Blood Pressure • Heart Rate  
Fuel Availability • Adrenaline  
Oxygen circulation to vital organs  
Blood Clotting • Pupil Size

**Decreases**  
Fuel Storage • Insulin Activity  
Digestion • Salvation  
Relational Ability  
Immune Response

**PARASYMPATHETIC NERVOUS SYSTEM**  
VENTRAL VAGAL

**Increases**  
Digestion • Intestinal Motility  
Resistance to Infection  
Immune Response  
Rest and Recuperation  
Circulation to non-vital organs (extremities)  
Oxytocin (neuromodulator involved in bonds that allows immobility without fear)

**Decreases**

# What can we do as a team to help?

- Routinely ask about mental health
- Standardised questionnaires like GAD7 and the PHQ9
- Free online mental health courses for example:  
<https://www.talkinghelpsnewcastle.org/resources/>  
<https://www.recoverycollegeonline.co.uk/>
- For those with complex mental health needs consider PTSD as a possible explanation, IES good screening questionnaire
- Refer/consult for specialist assessment and intervention for PTSD like EMDR.

CPD model for mental health

CONNECT

PROTECT

DIRECT

# CONNECT

- Ask people how they are feeling, let them know that you are there for them to talk about their mental health
- Use questionnaires routinely
- Listen and give them space to talk
- Don't try to fix or dismiss/minimise
- Support people to connect with friends, family, local community
- If socially shielding or isolating consider reconnecting online
- Don't under estimate the impact of connecting

# PROTECT

- Is there an acute need? (e.g., are they having a panic attack?)
- Are they safe? (e.g., eating/taking medication? Are they suicidal?)
- Do they need anything practical in place? (e.g., do they need to be accompanied, seen at home, do they need to attend at a quieter time of the day?)
- Do they need an intervention plan in place to allow for a procedure to go ahead? (e.g., a surgical procedure being avoided requiring an inpatient stay?).

# DIRECT

- Keep CALM and normalise responses, don't rush to fix, provide space to talk, speak calmly and listen.
- Provide a clear plan to manage mental health
- Support resilience, own resources and sense of control
- Direct to helpful resources, offer follow-up or refer on to specialist services

- **CONNECT-PROTECT-DIRECT**

**Thank you**

**Dr Jenny Paton**

Consultant Clinical  
Psychologist

Jennifer.Paton@NHS.NET

