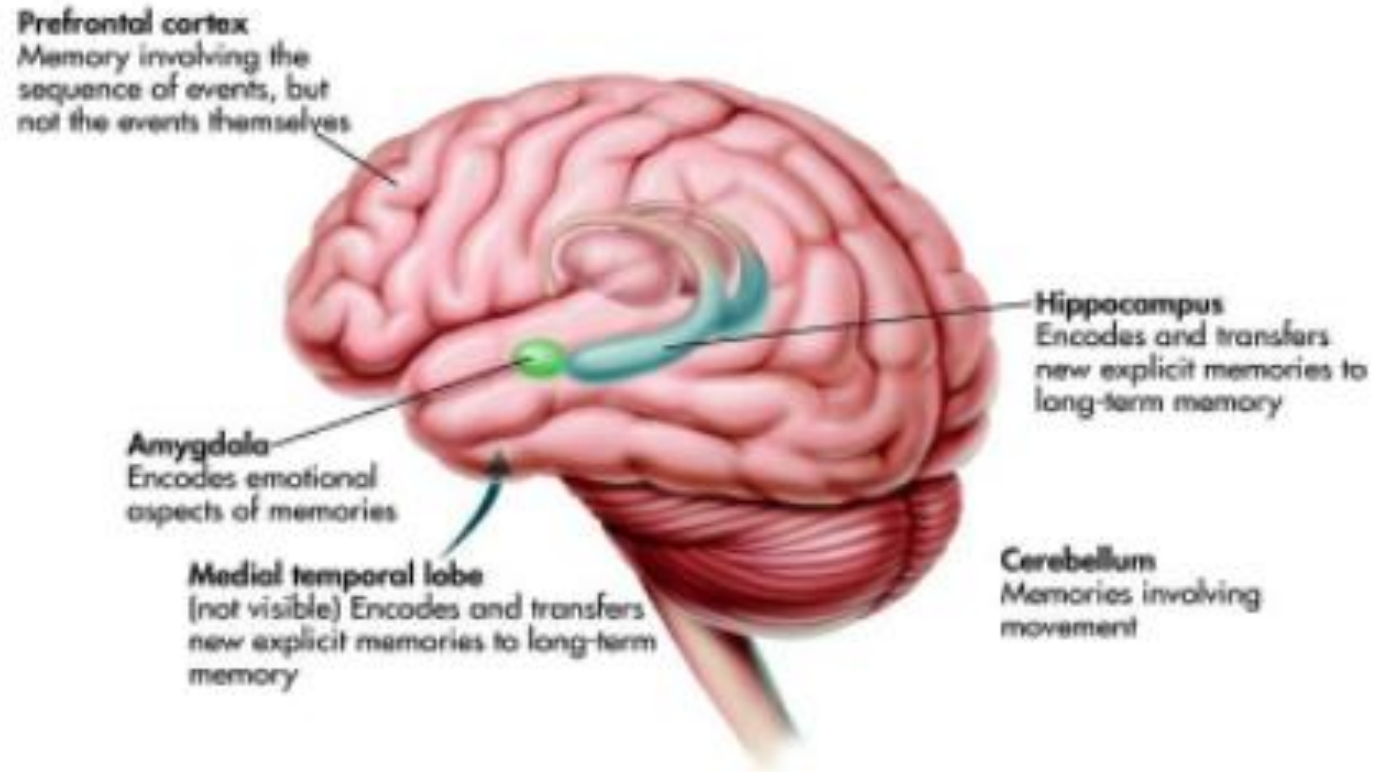


Trauma-focused psychological therapy targeting PTSD following critical illness

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Brain
structures
involved in
memory
processing

Impact of Trauma and Stress on Information Processing

Neurobiological Disruption

- **Amygdala Overactivation:** Trauma heightens the amygdala's response, intensifying fear and emotional reactions.
- **Prefrontal Cortex Suppression:** Chronic stress reduces the prefrontal cortex's ability to regulate emotions and make decisions.
- **Hippocampus Impairment:** Stress impacts the hippocampus, leading to memory disruptions and impaired learning.
- **HPA Axis Overload:** The hypothalamic-pituitary-adrenal (HPA) axis becomes over-activated, resulting in a prolonged stress response.



Photo by Robina Weermeijer on Unsplash

History of psychotraumatology Crocq and Crocq 2000



THE STUDY OF SHELL SHOCK.

FEB. 13, 1915

A CONTRIBUTION TO THE STUDY OF
SHELL SHOCK.

BEING AN ACCOUNT OF THREE CASES OF LOSS OF
MEMORY, VISION, SMELL, AND TASTE, ADMITTED
· INTO THE DUCHESS OF WESTMINSTER'S WAR
HOSPITAL, LE TOUQUET.

BY CHARLES S. MYERS, M.D., Sc.D. CAMB.,
CAPTAIN, ROYAL ARMY MEDICAL CORPS.

THE LANCET
Volume 185, Issue 4772, 13 February 1915, Pages 316-320



Images used with permission

Scale and Nature of the Problem

Mental Health Outcomes in ICU Survivors

- **PTSD:** 20% to 25% of ICU survivors develop PTSD within 6 months of discharge.
- **Anxiety & Depression:** Up to 50% of ICU survivors suffer from anxiety and depression post-discharge.
- **Delirium Impact:** Delirium during ICU stay increases the risk of long-term cognitive impairment.



Photo by Karlon Unsplash

Impact

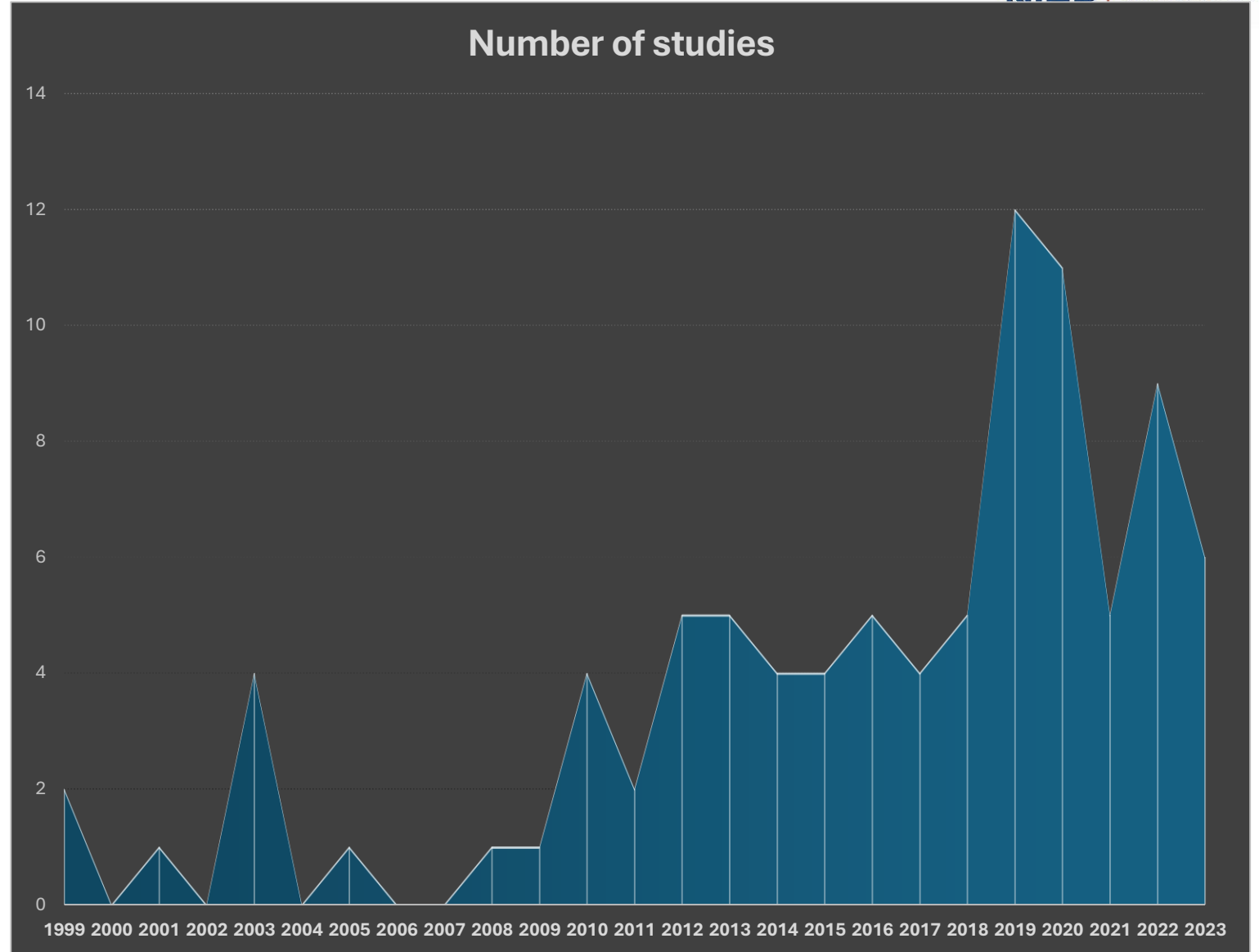
- Quality of life
- Return to work
- Social support
- Suicide

**Mental health morbidity, self-harm,
and suicide in ICU survivors and caregivers**

Shannon M. Fernando^{1,2*} , Otavio T. Ranzani^{3,4} and Margaret S. Herridge^{5,6,7}

Non-pharmacological interventions to reduce the mental health burden in ICU

Wade et al 2016
Bates et al 2025





International Society
for Traumatic Stress Studies

AMERICAN
PSYCHIATRIC
ASSOCIATION



Medical leadership for mind, brain and body.



*National Institute for
Health and Clinical Excellence*



**World Health
Organization**

Systematic Reviews and National Guidelines for Treating PTSD

Eye movement desensitisation and reprocessing EMDR



*National Institute for
Health and Clinical Excellence*






**World Health
Organization**




Original article



A randomised pilot feasibility study of eye movement desensitisation and reprocessing recent traumatic episode protocol, to improve psychological recovery following intensive care admission for COVID-19

Andrew Bates^{1,2}, Hannah Golding¹, Sophie Rushbrook³,
Elan Shapiro⁴, Natalie Pattison⁵, David S Baldwin^{2,6},
Michael P W Grocott^{1,2} and Rebecca Cusack^{1,2}

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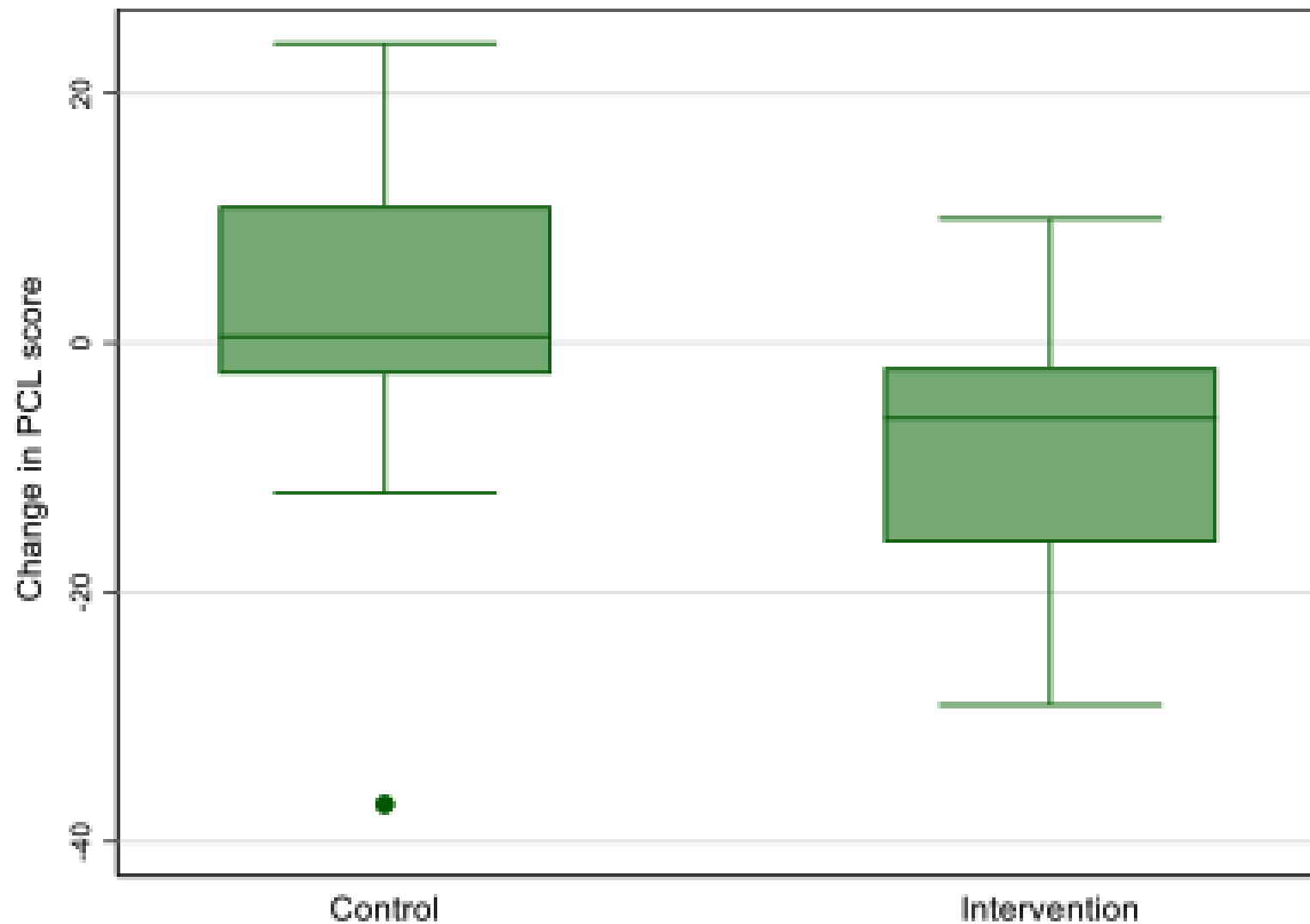


Figure 1. Box-plot of change in PTSD symptoms (PCL-C) from baseline to 6-months post-hospital discharge for control group and EMDR intervention group

Limitations:

- Variable response
- Single-centre
- Too soon
- Limited to COVID

Research implications

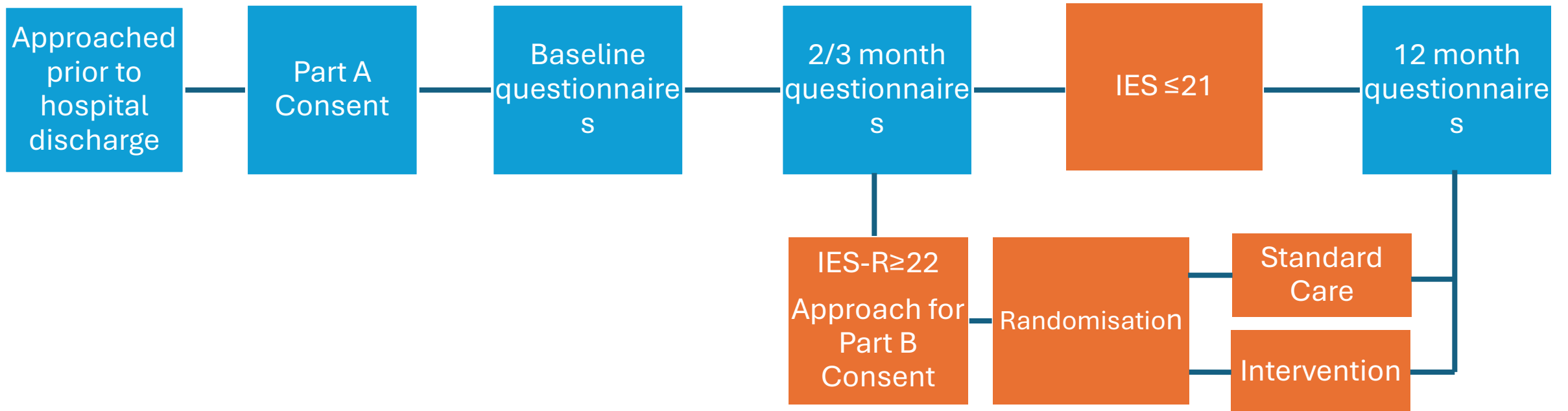
EMERALD

- Screen for trauma
- Timing
- Scalability
- Process evaluation



- Part A: Recruiting Site
- Part B: CI/Intervention Sites

Participant Pathway



Summary

Problem

- Survivors of critical illness commonly experience long-lasting cognitive, mental health and physical impairments.
- Clinically significant symptoms of anxiety, depression, and post-traumatic stress disorder (PTSD) may occur in 40%, 34% and 20% of ICU survivors respectively.

What we know

- EMDR is effective for a wide range of traumatised survivors of life-threatening events.
- EMDR is a recommended PTSD treatment by NICE.

What we don't know

- Does EMDR improve the mental health of traumatised survivors of intensive care admission?
- Can we test EMDR within a well-designed RCT, consistent with NHS clinical pathways?

The future?