

# Enhancing Post-injury Psychological Intervention and Care (EPPIC) Study

## KEY FACTS

*Including:*

The incidence, risk factors and impact of post-injury psychological problems

Effective means to improve post-injury psychological intervention and care

**Kate Beckett (2<sup>nd</sup> edition 2021)**

Visiting Research Fellow  
University of the West of England  
Contact: [EPPIC@uwe.ac.uk](mailto:EPPIC@uwe.ac.uk)

CONTENTS	PAGE NO
ACCIDENTAL INJURIES	1
THE PSYCHOLOGICAL IMPACT OF INJURY	2
RISK FACTORS	3
PSYCHOLOGICAL REACTIONS TO INJURY	4
IMMEDIATE CARE	5
EARLY PSYCHOLOGICAL INTERVENTION	6
LATER INTERVENTION	7
CURRENT NHS PROVISION	8
INDICATIVE READING	9
ACKNOWLEDGEMENTS & DISCLAIMERS	9

## ACCIDENTAL INJURIES

- A leading cause of disability worldwide.
- In 2019-20 > 800,000 people (aged 16-69) were admitted to English hospitals following an accidental injury
- In 2010-2013 English Clinical Commissioning Groups spent > £1.53 billion/year treating unintended injuries (in adults aged 16-70)
- Advances in emergency care have improved survival following accidental injury; but recovery is still frequently prolonged and incomplete.
- Post-Traumatic Stress Disorder (PTSD) can add 50% to individual and societal costs of injury.
- Increased focus (resources, training, and research) on mitigating post-injury psychopathology could potentially lead to further gains, for trauma recovery and costs.

## THE PSYCHOLOGICAL IMPACT OF INJURY

- Approx. 50% of physically injured adults experience no major or lasting psychological distress
- But > 30% experience a clinically significant psychological disorder e.g. PTSD or depression within 12 months.
- More experience sub-clinical psychological distress which can also be debilitating and last decades after physical healing.
- The proportion of injury survivors with pre-existing mental health issues is slightly higher than in the general population; but 22% of post-injury psychological disorders are new-onset.
- PTSD is the major focus of post-injury psychopathology treatment, and research, however depression, anxiety and substance use disorders are also common; these disorders are frequently comorbid.
- Post-injury psychological disorders significantly impact on the duration and extent of recovery and on NHS costs

# RISK FACTORS\*

\* Multiple risk factors have been identified this is a list of those considered key

## Pre-traumatic

- Childhood or previous trauma
- Family or personal history of mental health issues
- Personality
- Female gender
- Greater deprivation and lower pre-injury QoL are associated with higher risk of depression and anxiety post-injury

## Peri-traumatic

- Fear, horror, helplessness, and/or loss of control
- Actual, or perceived threat to life
- Disassociation - numbing or disconnect from thoughts, feelings, and memories

## Post-traumatic

- Social support is key to recovery
- Some experiences can act as secondary stressors e.g.
  - *Persistent pain, or flares in pain and discomfort*
  - *Dealing with the consequences of the injury, e.g. financial hardship, occupational and relationship problems, loss of dependence and physical limitations.*
  - *Involvement in litigation*
  - *Some aspects of NHS care can accentuate stress e.g. the pre/peri-operative period, discharge, poor or inconsistent communication*

**Note: injury severity is not a good predictor of who will develop psychological problems; individuals with the above risk factors who experience a lesser injury are also at risk.**

## PSYCHOLOGICAL REACTIONS TO INJURY

- Normal responses vary
- Most people initially show signs of physiological and emotional stress
- These frequently persist for 7 – 10 days after the event
- If more prolonged, or worsening the following symptoms may suggest a more serious psychological response:

*Insomnia*

*Anxiety*

*Tearfulness*

*Poor appetite*

*Excessive and/or unresolved pain*

*Flashbacks and irritability*

*Avoidance (of thoughts, behaviours and reminders)*

*Hypervigilance (increased sensitivity towards risk & danger)*

- Some individuals develop late onset or delayed psychological reactions or disorders such as PTSD

## IMMEDIATE SUPPORT

### **Aim**

- To support psychological wellbeing
- To help the individual recover and adapt (physically, emotionally and practically)

### **How**

The best means to support emotional wellbeing in the immediate aftermath of traumatic events/injury remains the 'holy grail'. However, expert consensus suggests an approach which promotes:

### **the 5 principles of psychological first-aid**

*Hope*

*Calm*

*Safety*

*Connectedness*

*Self and community efficacy  
(ability to control behaviour, environment, outcomes)*

## EARLY PSYCHOLOGICAL INTERVENTION & CARE

### Aim

- To support emotional wellbeing and promote positive coping strategies
- To detect individuals experiencing significant psychological distress
- To provide early targeted support
- To avoid or mitigate those NHS care experiences known to accentuate stress
- To educate patients about normal reactions to trauma, and how and when to get support

### How

- Watchful waiting to allow 'normal' stress symptoms to resolve
- Consider early symptom screening e.g. at discharge and 1 month
- Treatment targeted at clinical presentation not diagnostic threshold
- Early trauma focussed CBT: -  
**from 2 weeks** for individuals with acute traumatic stress symptoms  
**from 1 month** for PTSD.
- Pharmacological management of symptoms such as insomnia
- Signpost patients and families to sources of support



## LATER PSYCHOLOGICAL INTERVENTION & CARE

### **Aim**

- To support emotional wellbeing and independence
- To identify & support those with ongoing or late onset psychological problems
- To prevent debilitating chronic psychological disease

### **How**

- Equip community and out-patient practitioners with knowledge, skills and resources to identify and refer those struggling or at risk e.g. repeat A&E or GP attendance.
- PTSD of 3 months duration or longer, the evidence base for trauma-focused cognitive-behavioural therapy is still strong
- Eye Movement Desensitisation and Reprocessing (EMDR) has also been shown to be effective.
- If initiated later than 1-month post-event the duration of treatment is likely to be longer and similar to that for chronic PTSD.
- Depression and PTSD are frequently comorbid; guidelines suggest initial treatment as per PTSD.

## CURRENT NHS PROVISION

Psychological services are integrated into specialist services caring for specific disorders e.g. burns.

Psychological support and services for general injury populations are frequently haphazard and/or absent.

Clinicians lack direct access to psychological services and have little time or training to address psychological needs.

50% of patients who need counselling or additional support do not receive it and psychological disorders often go undetected.

A retrospective study of NHS trauma patients' medical notes found; known risk factors, e.g., signs of dissociation and peri-traumatic emotionality were frequently recorded. However, only 3.25% of patients were referred to mental health services

Practitioners, such as physiotherapists attempt to fill the gap in psychological support but can feel out of their depth.

Current provision may lead to under recognition or delayed diagnosis; thus, contributing to poorer outcomes and increased costs.

## Indicative reading:

1. Muscatelli S, Spurr H, O'Hara N, O'Hara L, Sprague S, Slobogean G. (2017) The prevalence of depression and PTSD following acute orthopaedic trauma: a systematic review and meta-analysis *J Orthop Trauma*. 2017 Jan;31(1):47-55.
2. O'Donnell M, Varker T, Holmes, A, Ellen S, Wade D, Creamer M, Silove D, McFarlane A, Bryant R and Forbes D. (2013) Disability after injury: the cumulative burden of physical and mental health. *The Journal of Clinical Psychiatry* [online]. 74 (2), pp.e137-e143.
3. Bryant R, O'Donnell M, Creamer M, McFarlane A, Clark C, Silove D (2010).The psychiatric sequelae of traumatic injury *Am J Psychiatry*. Mar;167(3):312-20. doi: 10.1176/appi.ajp.2009.09050617. Epub 2010 Jan 4.
4. Wiseman T, Foster K, Curtis K.(2013) Mental health following traumatic injury: an integrative literature review *Injury*. 2013 Nov;44(11):1383-90. doi: 10.1016/j.injury.2012.02.015. Epub 2012 Mar 10.
5. Vincent H, Horodyski M, Vincent K, Brisbane S, Sadasivan K.(2015) Psychological distress after Orthopaedic trauma: Prevalence in patients and implications for rehabilitation *PM R*. 2015 Sep;7(9):978-89. doi: 10.1016/j.pmrj.2015.03.007. Epub 2015 Mar 12.10.1097/BOT.0000000000000066
6. O'Donnell M, Bryant R, Creamer M, Carty J. (2008). Mental health following traumatic injury: Toward a health system model of early psychological intervention. *Clinical Psychology Review*, 28(3), 387–406. doi:10.1016/j.cpr.2007.07.008. i: 10.1002/jts.21677.

Note: there is a huge body of evidence on this topic these articles are intended as introductory reading.

## Acknowledgements and disclaimers

We would like to thank the many patients, practitioners, researchers and organisations who have contributed to this research.

This booklet was compiled by Kate Beckett (EPPIC project lead) and reviewed by members of the EPPIC study team. It is based on research conducted within the EPPIC study including; a literature review (encompassing research evidence and relevant guidelines) and qualitative research among key stakeholders in trauma care (patients, NHS practitioners and experts in the field of post-injury psychopathology). It is not exhaustive and was designed as an introduction only. It does not represent the views of EPPICs two organisational hosts (UWE and UHBristol Foundation trust).

This booklet is a summary of independent research funded by the National Institute for Health Research (NIHR)'s Knowledge Mobilisation Research Fellowship Programme (Ref: KMRF-2015-04-005). The views expressed are those of the author and not necessarily those of the NHS, the NIHR or the Department of Health.