

Psychological Injuries in Road Traffic Collision Cases

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About this presentation: Mental Health Aspects of RTA

A clinician's perspective

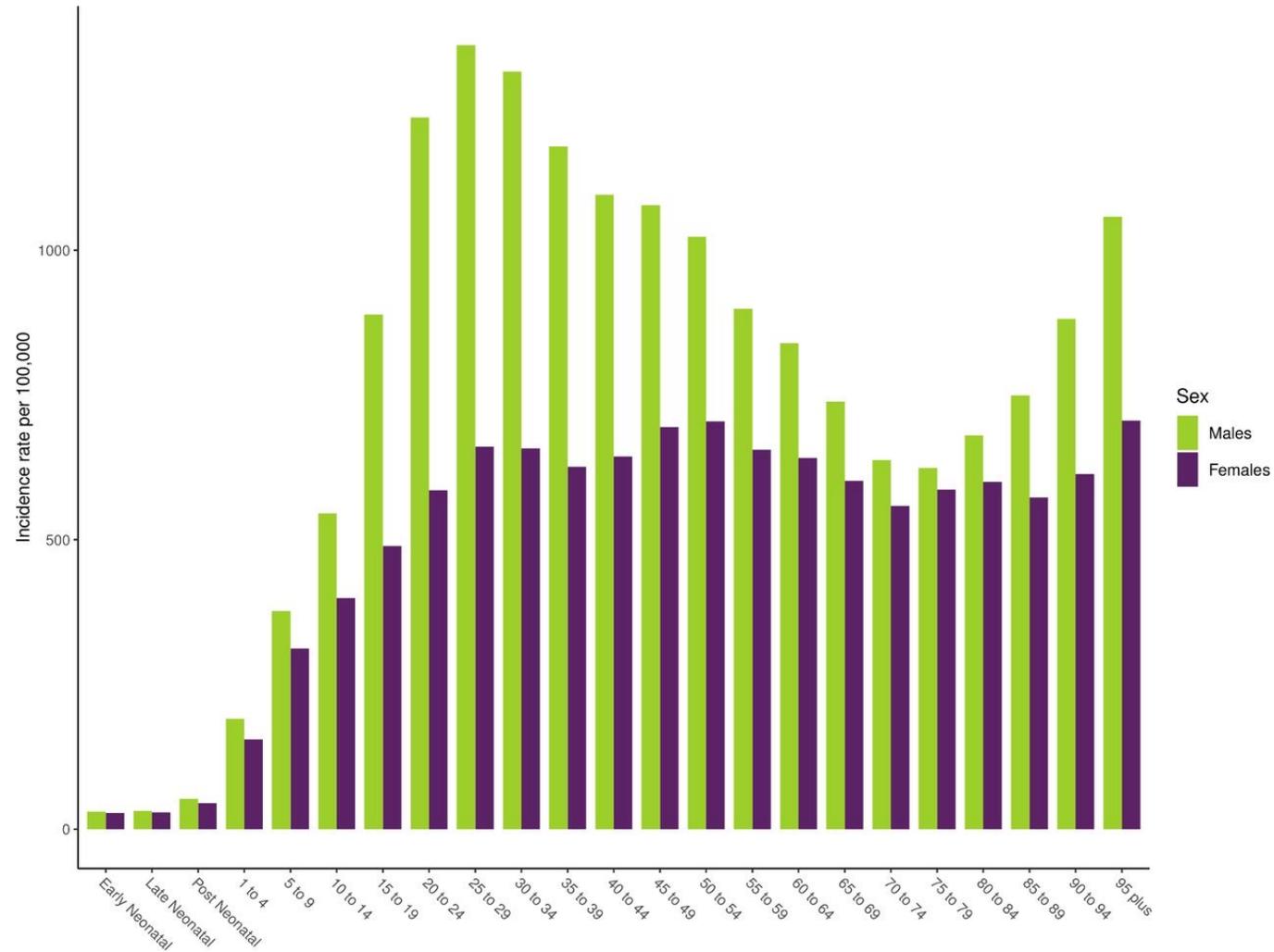
Impact of physical injury on mental health

Stress related conditions – as it applies in RTAs

Longer term psychological damage
(sometimes, less obvious)

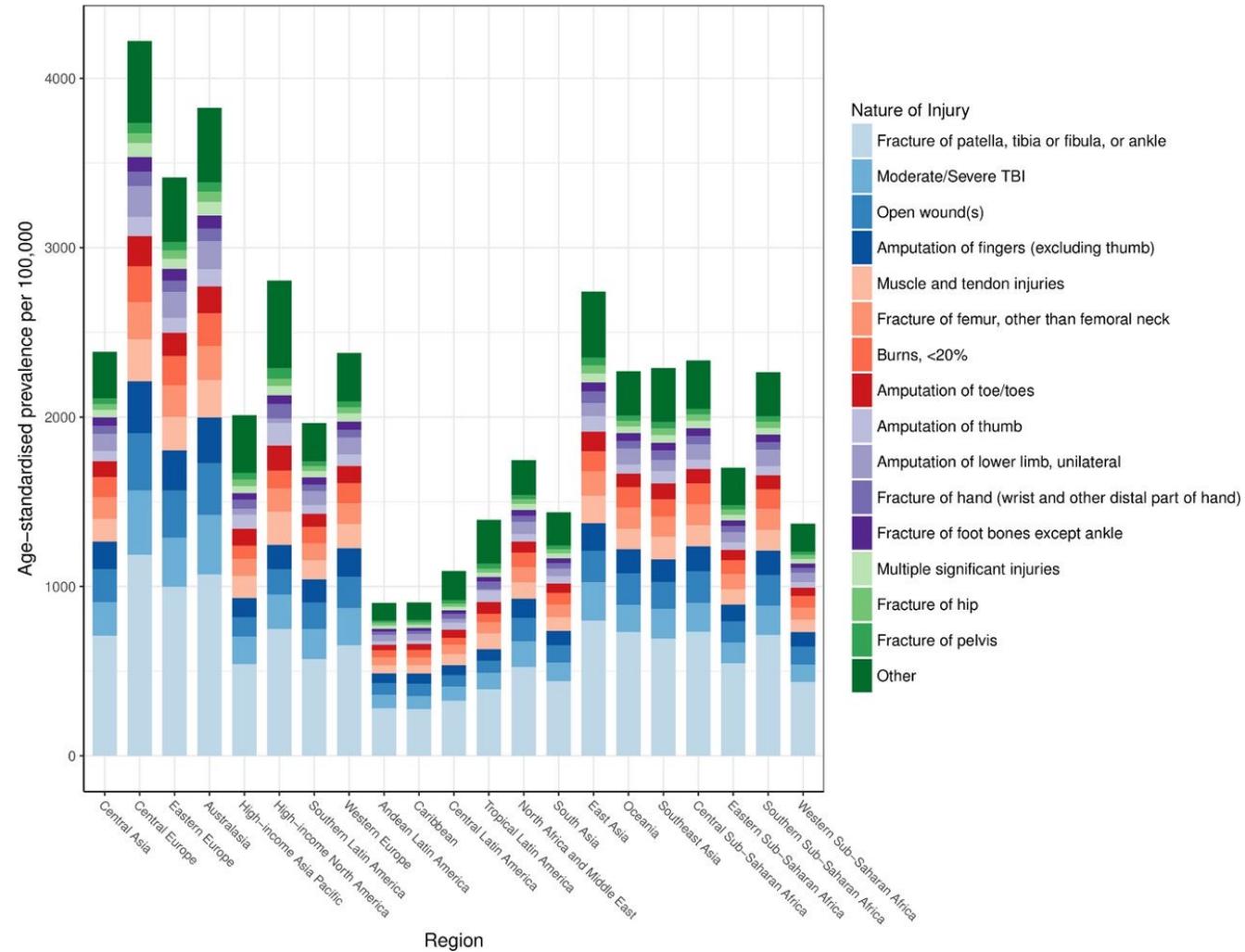


Age-specific and sex-specific incidence of road injuries globally in 2017.



Spencer L James et al. *Inj Prev* 2020;26:i46-i56

Distribution of most severe nature of injury sustained in road injuries by region in 2017.



Spencer L James et al. *Inj Prev* 2020;26:i46-i56

Physical
Injuries
following RTA
can lead to
greater
psychological
distress

Rehabilitation medicine
Research

Psychological impact of injuries sustained in motor vehicle crashes: systematic review and meta-analysis

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Abstract

Objective The aim of this meta-analysis was to determine the psychological impact associated with motor vehicle crash (MVC)-related physical injuries.

Design Systematic review and meta-analysis.

Data sources Multiple search engines included MEDLINE (via OVID), PsycINFO and Embase, and studies were sourced from scientific journals, conference papers and doctoral theses.



PDF



XML

Psychological distress is believed to be prevalent following a Motor Vehicle Crash.

- 21–67% of MVC survivors experience depressive mood,
- up to 47% experience elevated anxiety and driving phobia, and
- 20% to 40% suffer post-traumatic stress disorder (PTSD).
- Elevated rates of depressed mood and anxiety in people with TBI and SCI
- high levels of pain and fatigue, leading to reduced quality of life
- elevated psychological distress in Musculoskeletal Injuries
- when MVC-related injury results in psychological distress, medical and rehabilitation costs have been found to double.

Summary of the study

- In three major types of injury associated with an MVC, levels of psychological distress were **elevated** when compared to people with no injury.

=>effect sizes were large for WAD and SCI and small to medium for people with minor to moderate TBI



- A consequence of the physical injuries
- Aggravates the impact of physical injuries
- Treatment can be harder or longer
- Affects the client's attitude and behaviour
(including contact with their legal team)

Recovery and rehabilitation needs to include mental health treatment and support

=> Effect on Mental Health can be the only Injury

Psychological response to a stressful experience

- **Response to stress: part of the human condition**
 - Deal with it+ its consequences: Psychological adaptation
 - Experiences of Loss, humiliation, or threat
- **F43 chapter in ICD-10**
 - Worth reading if never done so!
 - Things **can** go wrong
 - Types of **pathological** psychological responses to a stressful event
 - Some of them, serious, long term, debilitating

Types of events

- Exceptionally severe stress
 - Significant life change
 - Continued unpleasant circumstances
-
- A clear etiological connection can be established.

Types of pathological responses to severe stress and trauma

Maladaptive responses to severe or continued stress

- Acute Stress Reactions
- PTSD
- Adjustment Disorders
- Other reactions, including suicide attempts

=> Note: importance of latency: time after the event

Additional psychological responses – triggered by severe stress

- Depression
- Anxiety
- Substance Misuse

RTA as a traumatic event

- Traumatic events are not rare ~ 40% of at least 1 in their lifetime
 - Breslau et al 1991

Most common: **Sudden injury or serious accident (9.4%)**

followed by physical assault, witnessing serious injury or violent death, or news of a sudden death, etc

Elements of severity

- Catastrophic nature
- Possibility of death,
- Witnessing or hearing about other people's death in it
- Serious injury

Psychological injury following a serious RTA – Acute Stress Reaction

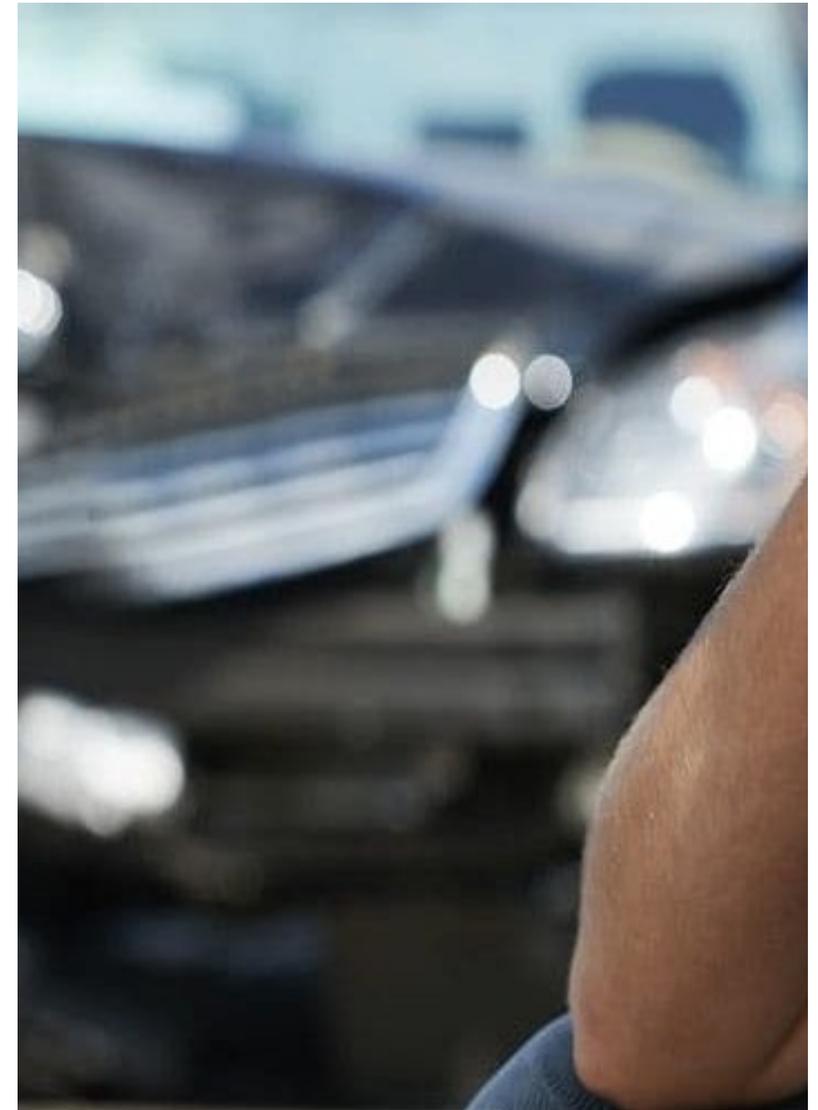
Transient, Severe, without apparent previous mental disorder, in response to the experience of an RTA

Subsides within days

Individual vulnerability plays a role

Daze, narrowing of attention, inability to comprehend stimuli, disorientation, withdrawal, agitation, panic, acute anxiety, depressed mood, anger, despair, overactivity, partial amnesia etc,

Various types



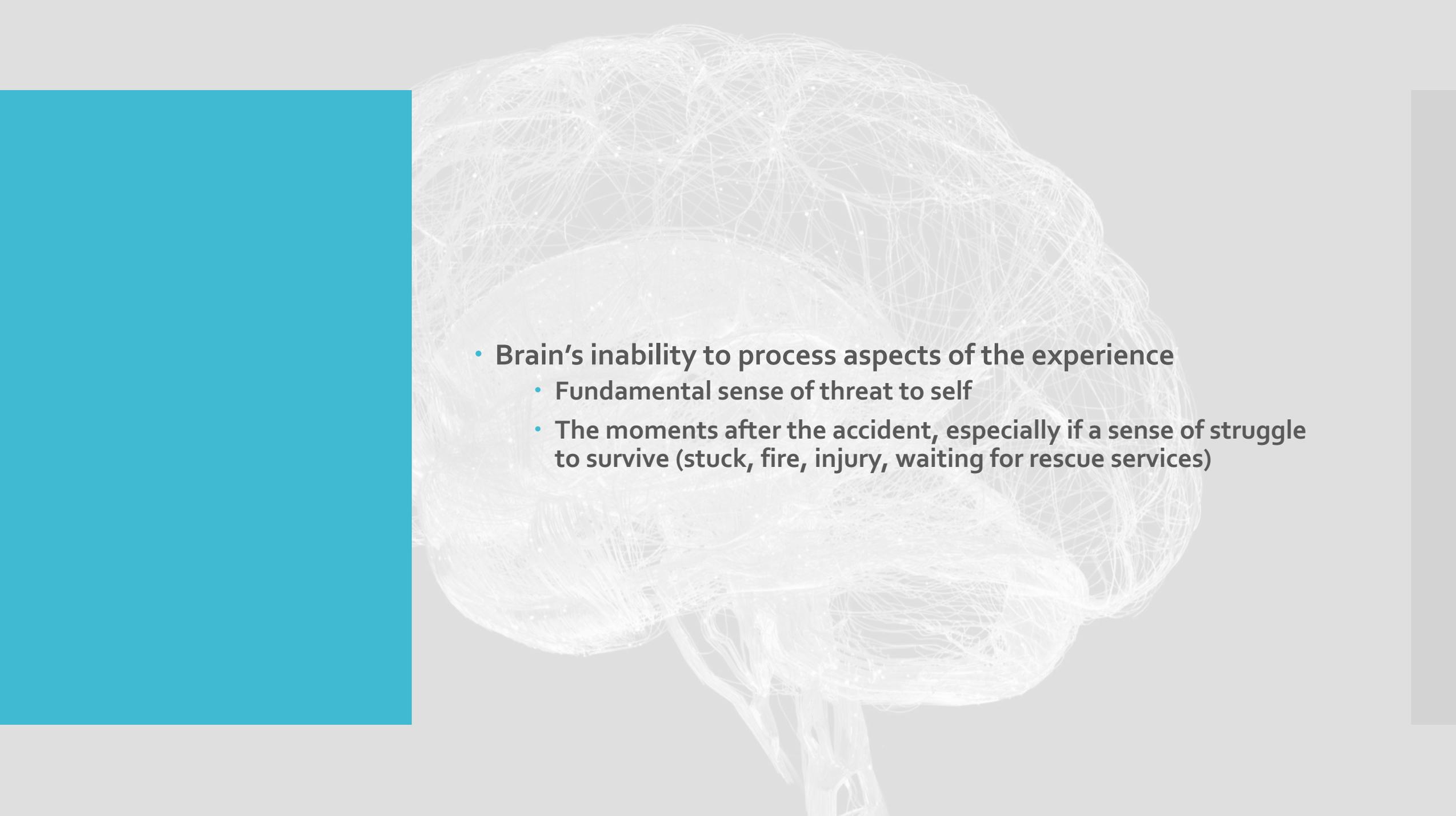
Adjustment Disorders

- States of subjective distress and emotional disturbance
- Arise within 1 month, can last up to 2 years.
- In the period of adaptation to a life change or the consequences of a severe stress (inc RTA) and might not have arisen without them in first place.
- Various types: depressed, anxious, unable to cope or plan ahead, disruption in daily routines, overdramatised behaviour, proneness to aggressive outbursts, reduction in work performance
- Can easily be missed or ignored!!!

Psychological injury following a serious RTA –PTSD

- Delayed, and protracted maladaptive response to the trauma of a serious MVC
- The more catastrophic the accident, the higher the incidence and the severity (eg seat and number of carriage in the same train)
- Rates from 6% to 57% of survivors, depending on criteria and methodology
- There are predisposing factors, but can arise without them too
- Onset from a few weeks, to 6 months following the accident

*RTA not the commonest cause of PTSD- rape, physical assault, combat exposure, molestation, more likely

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- A white wireframe brain is centered on a light grey background. To the left of the brain is a solid teal vertical bar. The brain is composed of a dense network of white lines and dots, representing neural connections. The text is overlaid on the brain's surface.
- **Brain's inability to process aspects of the experience**
 - Fundamental sense of threat to self
 - The moments after the accident, especially if a sense of struggle to survive (stuck, fire, injury, waiting for rescue services)

Risk factors for PTSD

- Female
 - Childhood behaviour problems
 - Childhood poverty
 - Family mental illness
 - Child abuse, parental divorce before age 10
 - Separation from parents as a child
 - Chronic environmental stressors before age 11
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- Afifi et al in DJ Nutt, MB Stein, J Zohar PTSD Diagnosis Management and Treatment, Informa 2011

PTSD – clinical presentation

- Repeated reliving of the events of the accident
- Flashbacks
- Dreams
- Numbness, emotional blunting, detachment, reduced responsiveness to surroundings,
- Fear and avoidance
- Bursts of fear, panic, aggression triggered by stimuli that remind of the accident, then flashbacks

=> Depression, substance misuse

=> Can be chronic, or even lead to personality change

You might notice in your clients

- feelings of anxiety,
- irritability,
- nervousness,
- despondency,
- vulnerability following a road traffic incident,
- nightmares,
- numbness,
- flashbacks,
- avoidance behaviours, and
- interruptions to their previous lifestyles and routine

PTSD- Patient profile in Ψ services

- Withdrawal
- Avoids contact with services- talking about the problem
- Suffer in silence
- Self-injurious or catastrophic behaviour (15 times higher to attempt)
- Survivor's guilt

- Poor historians

=> Struggle to recall, or be reminded of experiences around the event

Treatment

- It works in most cases
- The sooner the better
- Medication and Psychological therapies
- Prolonged legal battles can aggravate treatment
 - Stuck in a patient role to achieve higher compensation**

Other psychiatric consequences of severe RTAs

- **Depression**
- **Anxiety Disorders**

=>triggered by, or consequences of the sequelae and the losses suffered following the accident

- Low mood
- Inability to experience pleasure
- Low energy
- Constant worry
- Poor sleep
- Worthlessness, helplessness
- Reduced efficacy at work

Vignette

- 24 yo female
- National Squad for Rugby
- Hit (and abandoned) by a car while cycling
- Abandoned by then partner in A&E!!

- 2 years in a patient role
- Hopelessness, low self esteem- awaiting conclusion of legal battle
- Could not overcome anger at the way it had happened, plus the loss – complete **external locus of control (passive)**

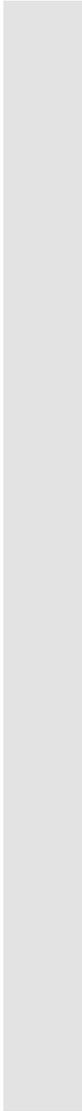
- **Resisted getting better, as a way of maximising revenge to the perpetrator – needs to be recognised**
- **Dilemma of what she really needed to move on**

Coping Strategies after RTA

- relaxation exercises, journaling, engaging in hobbies, and seeking social support.
- importance of self-compassion and seeking professional help when needed.

Summary points

- Psychological injury is very common, even as the sole injury
- Also, related to loss of function, pain and disability from physical injury
- Not just PTSD, though this is the most highlighted
- Adjustment disorders, depression and anxiety also important impact
- Prolonged legal battles can have an adverse effect for the patient's recovery
- Seeking help early should be encouraged, even at the possibility of reducing size of compensation

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- Questions- Discussion



- Thank you very much!

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