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## Double Trauma & Its Consequences in Spinal Cord Injury

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1<sup>st</sup> National Festival of Advocacy and Prevention of Spinal  
Cord Injuries & the 4th National Congress on Spinal Injuries

# SCI

- SCI results from trauma when cord is lacerated, bruised, severed or damaged.
- The level of impairment resulting from the injury depends upon factors such as the level and completeness of the lesion.

Craig, Tran, Lovas, Middleton (2008), Spinal Cord Injury and its Association with Negative Psychological States, *The Journal of Psychological Rehabilitation*. 12 (2), 115-121



SCI

1. Permanent paralysis of voluntary muscles below the lesion
2. Reduced mobility
3. Impairment of social and vocational activities
4. Negative impact on body systems (respiratory, cardiovascular, urinary, gastrointestinal, reproductive, sensory)
5. **PSYCHOLOGICAL DISORDER**

# SCI & psychological disorder

- SCI: traumatic & life threatening
- 20% have negative psychological states typical of a psychiatric disorder.
- Recent researches → SCI is associated with raised risk of negative psychological outcomes that should not be considered a normal response to injury

# Negative psychological states after SCI

Tension & anxiety

PTSD

Depression / suicide

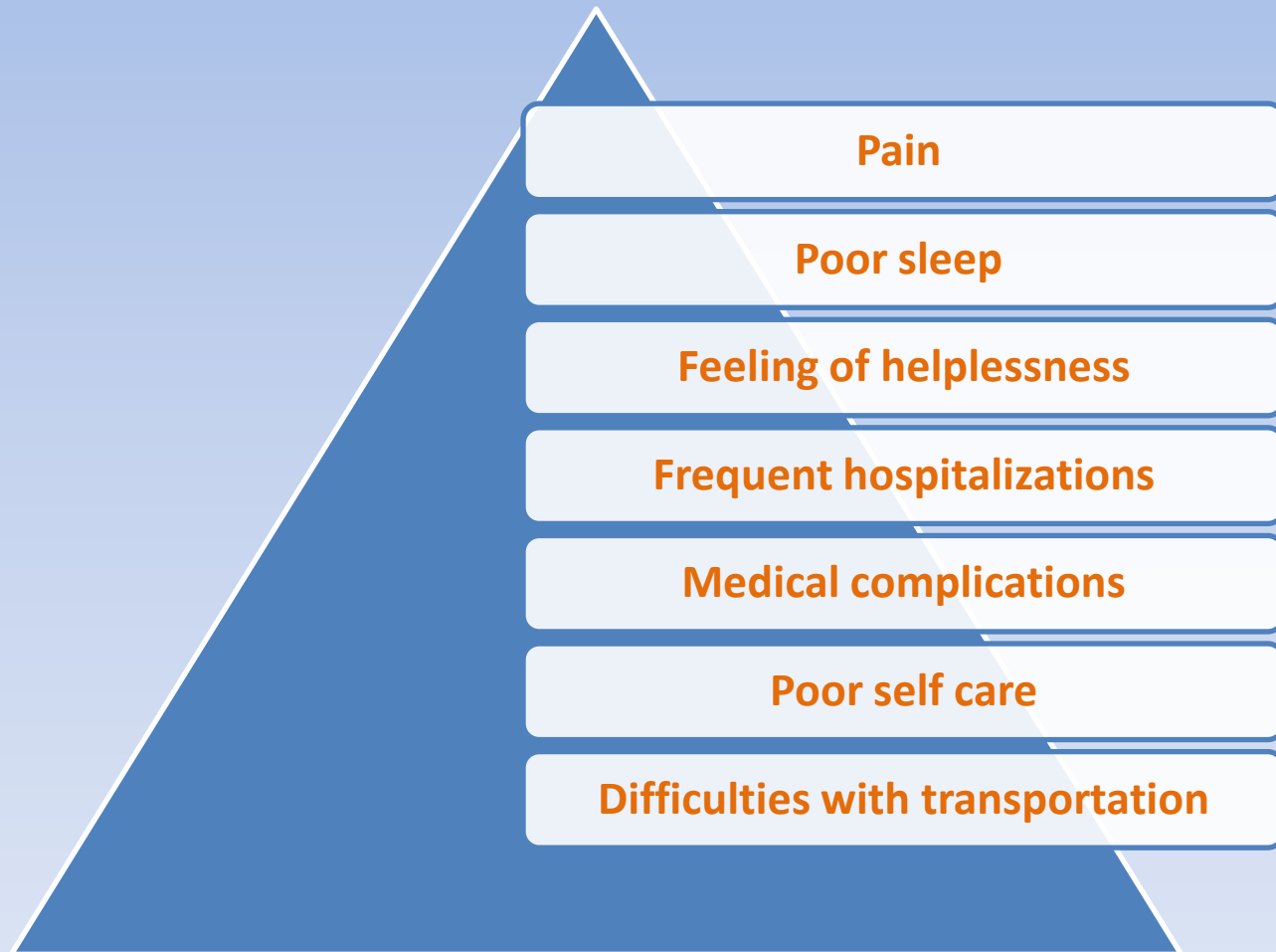
Anger

confusion

Substance abuse

Adjustment disorder

# Risk factors for negative psychological states



**Depression**

**20-43%**

**Depressive Symptoms**

(depressive mood & anxiety after completion of rehabilitation)

**15%**

Risk of negative psychological states remain high unless SCI individuals receive effective treatment such as CBT during rehabilitation

# In SCI patients

**Level of lesion, age, age at time of injury, sex, time since injury, completeness of lesion**

**Have not been consistently found to be associated with lower QOL**

**Negative psychological states & pain intensity**

**Have been found to lower QOL**



# PTSD & SCI

**Prevalence of PTSD after SCI ranges from 10-40%**

Ranidnitz et al found

Current PTSD	Life- time PTSD	Symptoms of current PTSD (not full criteria)	Symptoms of life-time PTSD (not full criteria)
11%	29%	28%	41%

# Co-morbidities of psychological problems

Brady reported that 80% of individuals with PTSD met the criteria for at least one other psychiatric diagnosis:

- **The most common → depression**
- **Dissociative disorder**
- **Anxiety disorder (eg. Panic disorder)**
- **Drug abuse / dependency**

# Predicting factors of PTSD in SCI

## 1-Level of injury

- PTSD in paraplegic 22%
- PTSD in quadriplegic 2%

The nerve fibers responsible for sympathetic arousal may be impaired in higher injuries with memory of emotional events being modulated through peripheral nervous system activity.

The injuries above T1-T3 were less likely to be diagnosed with current & lifetime PTSD than those with injuries below this area.

## 2-violence & crime

## 3-age

## 3-closed head injury

# summary

PTSD is a consequence of the trauma experienced which is resulted in the SCI & the SCI itself therefore attention to pharmacological and psychological treatment in addition to rehabilitation in this patient is very important.

THANK YOU FOR YOUR KIND ATTENTION

