

HEAD INJURY

AND ASSOCIATED DISABILITY IN MALE PRISONERS

V. Walker, H. Aslam, A. McGinley & T. McMillan

“ We present here preliminary data from one of a series of projects in Scotland that are associated with the development of a health service for people with head injury in the criminal justice system. ”

Introduction

There is precedent for the association between head injury (HI) and offender populations. Meta-analyses of self-report in offenders suggest that 50-60% have sustained a HI. However, there is little reported evidence about persisting effects and service need is not clear.

This study investigates the incidence of self-reported HI in a large sample of incarcerated male offenders Scotland, as well as the occurrence of disability, cognitive impairment, anxiety and depression.

Methods and Analyses

A cross-sectional, between-subjects design considered disability outcome in 81 males incarcerated in prisons in Scotland. Participants were screened for occurrence and severity of HI. Outcome measures were disability, cognitive ability, and mood. Participants were also tested for effort using the Word Memory Test.

SCREEN FOR HEAD INJURY OSU-TBI ID / BISI

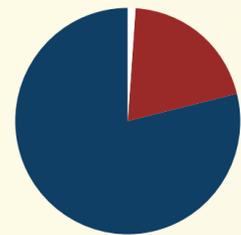
1. NO HI
2. MILD HI
3. MOD-SEVERE HI



ADMINISTER OUTCOME MEASURES:

- DISABILITY (PRIMARY OUTCOME)**
The Glasgow Outcome at Discharge Scale
- COGNITIVE**
Word Memory Test, Symbol Digit Modalities, Adult Memory and Information Processing Battery, Trail Making Test, and Hayling Sentence Completion Test
- MOOD**
Hospital Anxiety and Depression Scale

Analysis & Preliminary Results



All but one individual self-reported at least one HI, and 20% of these reported a moderate-severe HI.

The remaining individuals self-reported mild HI.

88%

reported more than one head injury



The average age at first head injury was

10

84%

convicted of violent offences



74%

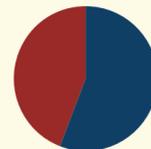
of offenders lived in areas of high social deprivation before sentencing



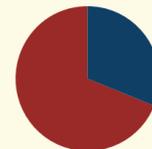
88%

sustained a HI prior to their first conviction.

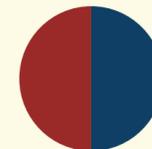
Multivariable regression after adjusting for age, education, effort score, prior alcohol/ substance use showed:



Longer duration of LoC was associated with higher anxiety (56% clinically abnormal)



Longer duration of LoC was associated with greater occurrence of HI-related disability (20% disabled)



Longer duration of LoC was associated with poorer scores on Symbol Digit Modalities (50%; 1.5 SD below norms)

Conclusion

This ongoing study tentatively suggests that about 20% of male prisoners require assessment post-screening because of HI-related disability. Half of these (10%) are likely to require intervention. Importantly, prisoners who self-report more severe HI are more likely to have poorer outcomes after adjusting for other key factors, such as substance use, implying potential causality.



Institute of Health & Wellbeing



For further information, please contact:

Hira Aslam
Research Worker
Brain Injury and Offending

Institute of Health and Wellbeing
University of Glasgow, Gartnavel Royal Hospital
P: +44 (0) 141 211 0354
E: hira.aslam@glasgow.ac.uk



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