

Research finds significant head injury in women prisoners linked with past abuse

14 May 2021



Credit: CC0 Public Domain

New research has found that 78% of women prisoners in Scotland have a history of significant head injury—most of which occurred in the context of domestic abuse that often lasted over periods of several years.

The University of Glasgow-led study—funded by the Scottish Government and published today in *The Lancet Psychiatry*—also found 66% of [women](#) prisoners had suffered repeat head injuries for many years. The majority of the study participants were from the most deprived population quintile.

Domestic violence was the most common cause of repeat head injury in the women surveyed, reported by 89% of the participants who also reported repeat head injuries. Only five women had experienced a single incident moderate-severe head injury, without multiple, mild head injuries in addition. Of those with a [history](#) of significant head injury, a first head injury before the age of 15 was reported by 69% of women.

For the study, researchers interviewed around a quarter of women in Scottish prisons, 109 women

in total, between 2018 and 2019. The women were assessed for a history of head injury, including its causes, a history of abuse, as well as for disability and mental and physical health conditions. The study included participants from four Scottish prisons: HMP Cornton Vale, Greenock, Lothian and Polmont.

Of the 78% of women prisoners who had a history of significant head injury, 40% of those who participated in the study also had an associated disability. Previous research has reported that many women in [prison](#) have a history of head injury, but none looked at disability.

Researchers also found that violent criminal behavior was three times more likely in those with a history of significant head injury, and that women with a significant head injury had spent three times longer in prison.

Almost all participants in the study, 95%, reported a history of abuse, with more than half reporting sexual abuse in childhood and 46% reporting sexual abuse in adulthood. Physical abuse in childhood was reported by 39%, while 81% of participants reported physical abuse in adulthood.

A history of alcohol or drug misuse was common, with substantially higher rates in the group who reported significant head injuries. Almost all, 92%, complained of mental health difficulties, with anxiety and depression the most commonly reported. Although the average years of education for participants was 12, schooling was often disrupted by exclusion or truanting and many required special schooling or support.

Professor Tom McMillan, professor of clinical neuropsychology at the University of Glasgow and lead author of the study, said: "It is already recognized that women in prison are vulnerable because of histories of abuse and substance misuse. However, this research shows that a

history of significant head injury is also a vulnerability and needs to be included when considering mental health needs and in developing criminal justice policy given the relationships with associated disabilities, [abuse](#) and violent crime".

"Our findings suggest that interventions to reduce mental health morbidity, and assessment and management of risk of violent offending should include history of significant head injury. There is a need to recognize these vulnerabilities at an early stage, including at the first contact with the criminal justice system, to assess these women and provide long term support."

Common persisting effects of significant head injury include impairments in information processing and emotional changes associated with impulsivity, irritability and egocentricity. These effects can impair judgment and self-control, and as a result increase risk of offending. Significant head injury can also impair the maturation of the developing brain if occurring before adulthood.

The characteristics of significant head injury in women in prison differ from women with significant head injury in the general population. Domestic violence was the most common cause of these injuries in women in prison, whereas falls are most common in the general population. In addition head injury occurred repeatedly in around two-thirds of women in prison with significant head injury, whereas single incident [head injury](#) from an accident is more common in the general population.

At the time the study took place the total number of women in Scottish prisons was around 400, and there were 355 women in the prisons the researchers recruited participants from. All the women prisoners who took part were aged over 16 years.

More information: Tom M McMillan et al. Associations between significant head injury and persisting disability and violent crime in women in prison in Scotland, UK: a cross-sectional study, *The Lancet Psychiatry* (2021). [DOI: 10.1016/S2215-0366\(21\)00082-1](#)

APA citation: Research finds significant head injury in women prisoners linked with past abuse (2021, May 14) retrieved 16 June 2021 from <https://medicalxpress.com/news/2021-05-significant-injury-women-prisoners-linked.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.