Drug-related deaths and suicide in prison custody in England and Wales: 2008 to 2019

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Introduction

• The Ministry of Justice (MoJ) provides official estimates of deaths in prison custody in England and Wales in their HM Prison and Probation Service (HMPPS) safety in custody statistics.

• These deaths are categorised into a broad cause of death category which is assigned at the time of death. These categories include “self-inflicted deaths” defined as any death of a person who has taken their own life irrespective of intent.

• All deaths in prison are subject to a coroner inquest, after which ONS categorises the final cause of death in the deaths registrations database.

• By linking ONS death registrations with HMPPS records, we were able to identify deaths occurring in prison custody and provide a final cause of death code to define suicide or drug-related death according to National Statistics definitions.

Methods

Pre-processing

Prior to linkage, both datasets underwent basic normalisation processes to achieve consistency.

Linkage

Probabilistic

We matched like-for-like records using forename, surname, date of birth and date of death

74% (2,383 out of 3,224) records were matched using this technique

Deterministic

For remaining records, we calculated a Jaro-Winkler similarity distance

We accepted any records obtaining a 90% similarity match, resulting in a further 546 (17%) matched records

Analysis

Standardised Mortality Ratio (SMR)

An SMR higher than 100 indicates a greater risk among prisoners than general population for that cause of death

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\text{SMR} = \frac{\text{Observed deaths}}{\text{Expected deaths}} \times 100
\]

Age-standardised Rate (ASR)

Age specific mortality rates give us the rate adjusted for different distributions of age groups. Distribution of ages are weighted using the European Standard Population (ESP).

Results

We identified 2,714 deaths in prison custody from 2008 to 2019

Of the 677 deaths by suicide in the data, 97% were male (657 deaths)

The risk of suicide was 3.9 times higher than the general population between 2008 to 2019 (SMR=393)

Of the 145 drug-related deaths in the data, 92% were male (134 deaths)

The risk of drug-related death was similar to the general population between 2008 to 2019 (SMR=112)

However, SMRs for the years 2016-2018 (SMR=183) and 2017-2019 (SMR=184) were notably higher than previous years

"Any opiate" was the most common mention on the death certificate of prisoners dying by drug poisoning (58 mentions)

The second most commonly mentioned substance was “New Psychoactive substances”, which includes synthetic cannabinoids, such as Spice (44 mentions). 22 of these mentions were present in deaths occurring in 2018