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Suicide in prison: A comparison between France and its European neighbours

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The frequency of suicide has long been used as an indicator of tensions and problems in society. In French prisons, the number of suicides has increased considerably over the last fifty years and prison overcrowding is often blamed for this trend. But are there any other causal factors? How does France compare with its European neighbours?

The prison suicide rate has been increasing in lacksquare metropolitan France over the last 50 years, rising from 4 per 10,000 prisoners in 1960 to 19 in 2008 (see Figure 1 and Box for the method of calculation). Several peaks were recorded in the mid-1970s and the late 1990s, and the highest level was reached in 1996 with 26 suicides per 10,000 prisoners. After a decrease in recent years, 2008 was marked by a new upturn.

This pattern can be compared with that of suicides of men aged 15-59 in the general population (Figure 1), since 96% of the prison population are men, of whom 96% are aged under 60. For men in the general population, the suicide rate is much lower and more stable, although it rose at the end of the post-war boom decades. The uptrend in prison suicides is not reflected in society as a whole and appears to be specific to the prison population.

Figure 1 - Suicide rates among prisoners and among men aged 15-59 in the general population since 1960 Rate per 10,000 Rate per 10,000 25 20 General male population (ages 15-59) 1960 1970 1980 1990 2000 2010 1960 1970 1980 1990 2000 2010 (G. Duthé, A. Hazard, A. Kensey, J.-L. Pan Ké Shon, Population & Societies, 462, INED, December 2009) Population: Prison population and male population aged 15-59 in metropolitan France. Note: Limiting the general population to men aged 15-59 improves comparability with the prison population (see Box).

Sources: French Prison Administration and INED.

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★ Is there a link between prison overcrowding and suicide?

Contrary to popular belief, prison overcrowding and suicide do not follow parallel curves (Figure 2). The overall prison occupancy rate, i.e. the ratio of the number of prisoners to the total effective capacity of all prisons in the country, decreased in the 1990s, falling below the threshold of 100 prisoners for 100 places in early 2001. Since then, it has risen again, reaching 119 prisoners for 100 places in January 2008. Yet although the occupancy rate fell in the early 1990s, the suicide rate move upwards, and when occupancy rates rose again from 2002, the suicide rate started falling.

The conditions of imprisonment are often blamed for this situation. Although inadequate living space and overcrowding are contrary to human dignity, they are not the only factors involved: half of all prisoners who commit suicide are alone in their cell [1]. Indeed, being in a one-man cell is even considered by some as an important suicide risk factor [2]. Further analysis is needed, however, by type of prison establishment. In long-term prisons, for example practically all inmates live in individual cells. In these establishments, the prisoners' propensity to commit suicide and their characteristics (detention status, length of imprisonment, type of offence) are very different (see below).

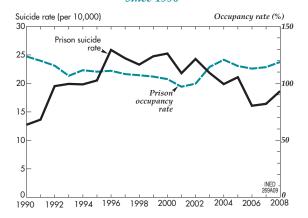
These two examples of correlation illustrate the complexity of the factors involved in suicide, which sometimes evolves in unexpected ways.

Twice as many suicides among pre-trial detainees as among sentenced prisoners

In France, most suicides occur in the first weeks or months of imprisonment. A quarter of suicides take place within two months, and half within six months, for a mean period in detention of 8 months over the period 1998-2008. And among prisoners, pre-trial detainees - more recently imprisoned and still awaiting trial - commit suicide twice as often as sentenced prisoners. These higher suicide rates remain relatively stable over time (Figure 3), though pre-trial detainees are generally younger than sentenced prisoners (33 years versus 35 years in 1999-2008) and include slightly more women (5% versus 3%). Their more frequent suicide may be due to the psychological shock of imprisonment, the difficulty of facing up to the ensuing moral and legal judgements, or it may reflect a selection effect: given that "vulnerable" prisoners commit suicide early on, only the "stronger" ones remain.

The shock of imprisonment may be linked to

Figure 2 - Prison suicide rates and occupancy rates since 1990



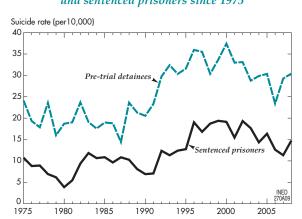
(G. Duthé, A. Hazard, A. Kensey, J.-L. Pan Ké Shon, Population & Societies, 462, INED, December 2009)

Interpretation: In 1990, the crude prison suicide rate was 13 suicides per 10,000 prisoners; on 1 January 1990, the occupancy rate was 124 prisoners per 100 places on average.

Population: Population of registered prisoners and all penal institutions in metropolitan France.

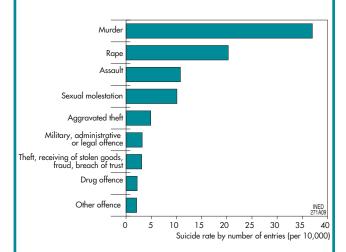
Source: French Prison Administration.

Figure 3 - Suicide rates of pre-trial detainees and sentenced prisoners since 1975

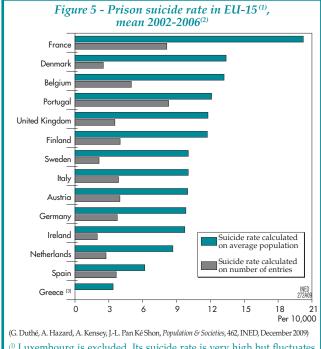


(G. Duthé, A. Hazard, A. Kensey, J.-L. Pan Ké Shon, *Population & Societies*, 462, INED, December 2009) Population: Population of registered prisoners in metropolitan France. *Source: French Prison Administration*.

Figure 4 - Suicide rate by type of offence, 2006-2008



(G. Duthé, A. Hazard, A. Kensey, J.-L. Pan Ké Shon, Population & Societies, 462, INED, December 2009) Population: Population of registered prisoners (whole of France). Source: French Prison Administration.



(1) Luxembourg is excluded. Its suicide rate is very high but fluctuates

- strongly over time, partly because of the small numbers involved.
- (2) Calculation of rates: see Box. The average is valid for only part of the period in a few countries, as information is missing for certain years: Austria (2003 and 2004), Belgium (2003), Greece (2003 and 2006), Ireland (2003 to 2005) and Portugal (2003).
- (3) The number of prison entries is not available for Greece, so suicide rate by number of entries cannot be calculated.

Sources: Council of Europe, SPACE 1 [5].

various factors: the strain of adapting to a highly constrained environment, notably the deprivation of freedom; the difficulty of facing up to public disclosure of one's acts, not only before a judge, but also before the family and the rest of society; ostracism from other prisoners for certain types of offence.

In fact, the suicide rate increases with the gravity of the offence. For the period 2006-2008, 37 suicides per 10,000 prisoners were recorded for persons accused or convicted of murder (Figure 4); 20 among men in prison for rape; half as many among those detained for assault (11) and sexual molestation (10), and much lower rates for other types of offence. These rates are calculated as the ratio of the number of suicides to the number of persons registered as prisoners over the period, to take account of the very uneven flow of detainees by type of offence (Box).

France and EU-15

With an annual rate of 20 suicides per 10,000 prisoners in 2002-2006, France has the highest prison suicide rate in EU-15, well ahead of Denmark (13 per 10,000). The lowest rate is recorded in Greece (4 per 10,000) (Figure 5).

European comparisons are difficult, however, because suicide is defined differently from one country to another, and prison populations are not strictly

Suicide in prison: definitions and measures in France and Europe

In France, the suicides counted by the penal administration include all deaths of prisoners, either in detention (in prison under the responsibility of the penal administration) or not (registered as a prisoner but not in a prison at the time of death). This definition can be qualified as broad, in the sense that certain countries do not count suicides that occur outside prison, nor even those where the prisoner dies in hospital. This difference limits the utility of European comparisons. For the year 2005, for example, only five countries in EU-15 - Germany, Finland, Luxembourg, Portugal and Sweden [5] – had a definition similar to that of France.

The suicide rate is obtained by relating the number of suicides in the year to the mean population of registered prisoners over the same period, representing the prison population on any particular day of that year. However, this average only imperfectly reflects the number of persons who entered prison at least once over the year. The many prisoners who spend a short time in prison - from a few weeks to a few months - may be left out of the count. One way of including them is to calculate the annual number of entries, i.e. the number of individuals registered as a prisoner at least once in the year, whatever their period of detention. Persons who enter prison several times in the year are thus counted several times.

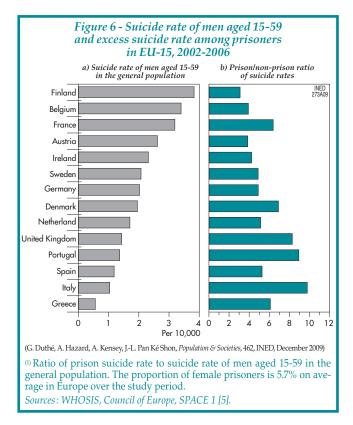
The suicide rate of a population is influenced by its age-sex composition: in general, men commit suicide more than women and the frequency of suicide increases with age. The sex composition of the French population has barely changed since 1960. It comprises practically equal numbers of men and women, but the average age has increased. Limiting the general population to men aged 15-59 improves comparability with the prison population.

The proportion of women in prison remains small (below 4%) and has been stable since 1960, but the mean age of prisoners has risen from 30 to 35 years. A strictly comparative rate since 1960 cannot be calculated with available data. In any case, the ageing of the prison population, observed above all in the 1990s, explains only a very small part of the rise in suicides, which is due mainly to other causes.

At the European level, the comparison of suicide rates between countries is improved by taking account of the number of entries [6]. The composition by sex, age, detainee status and reason for imprisonment, should also be taken into account, although this is not currently possible due to a lack of published data made available by the different countries.

comparable (Box). In France, for example, almost onethird of prisoners are pre-trial detainees, compared with just one in ten in Finland. As penal policies and rules of imprisonment vary between countries, the number of prison entries and the lengths of imprisonment also differ. Although many suicides occur during the first months of detention, it is logical to expect more suicides in countries where the flow of prison entries and departures is large and where length of imprisonment is short, as in Denmark.

Rates decrease everywhere when they are calculated in relation to the number of entries, and the country rankings also change (Figure 5). With a rate close to



that of Portugal, France nonetheless maintains a very high ranking.

Comparisons between countries must also take account of the suicide rate in the general population in each country, and measure the "excess suicide rate" in prison with respect to the national average. The suicide rate of the general population is an indicator of the mental state of a nation and of its inhabitants' capacity to withstand the tensions of life. Here too, rates are high in France compared with its European neighbours; psychological distress, anxiety, alcohol addiction and mental health problems are more frequent than elsewhere in Europe. The ratio of the prison suicide

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rate to the suicide rate of men aged 15-59 in the general population shows that French prisoners commit suicide 6 times more than non-imprisoned men. This represents a high excess suicide rate (Figure 6). It is generally acknowledged that suicide among the general population is under-estimated by around 20% in France [3], but this is not the case in prisons. After adjusting the ratio accordingly, the excess suicide rate in prison is still 5 times higher. In Europe, the excess suicide rate is particularly high in countries where suicide rates in the general population are low, such as Italy, Portugal and the United Kingdom, where prisoners commit suicide between 8 and 10 times more frequently than non-imprisoned men aged 15-59.

Yet this indicator cannot be directly interpreted as the lethal effect of the prison environment on prisoners. Prisons today are still populated by many psychologically vulnerable individuals, with a high suicide risk, so the profile of prison populations is not identical to that of the general population.

Towards a better understanding of suicide in prison

Many factors associated with suicide in prison cannot be covered here, such as the role of concomitant events relating to the family (marital breakdown, loss of contact with children) or the prison environment [4]. The individual characteristics of the detainee must also be taken into account (age, sex, family situation, but also capacity to adapt) and last, those of society (suicide rates in the general population, degree of social condemnation of the offence committed, management of mental health problems). The causes of suicide are multiple, stemming from an accumulation of negative social factors and of psychological tensions. Further indepth statistical studies are needed to capture simultaneously all dimensions of suicide in prison.

ABSTRACT

The suicide rate in French prisons has increased five-fold in 50 years, while remaining stable among the general population. The prison occupancy rates do not follow a parallel trend, so overcrowding cannot be the sole reason for this increase. Prisons contain many psychologically vulnerable individuals, with a high suicide risk, whose profile is different from that of the general population. Pre-trial detainees commit suicide twice as often as sentenced prisoners and the frequency of suicide varies according to the gravity of the offence. The prison suicide rate in France, the highest recorded in the EU-15 countries, is 5 to 6 times higher than that of the non-imprisoned male population aged 15-59.