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Prison structure, inmate mortality and suicide risk in Europe

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ABSTRACT

Suicide presents a major complication during imprisonment and greatly contributes to the high mortality rate of prisoners. All international studies have found increased suicide rates among prisoners compared to the general population. This study examines risk factors for suicide and mortality in prisoners using supranational data from the Council of Europe Annual Penal Statistics (Statistiques Penales Annuelles du Conseil du L'Europe or SPACE) from 1997 to 2008. Macrostructural risk factors for prison suicide are analyzed from this supranational data set and the identified indicators are further evaluated on the single country level. Sexual offenders, offenders charged with violent crimes and prisoners sentenced for short- and long-term imprisonment are considered to be at an elevated risk for suicide. In addition, prison mortality is associated with overcrowding.

1. Introduction

Suicides present a severe and major complication during imprisonment and contribute to the high mortality rate of prisoners. In an early attempt to counter these problems, Towl, Snow, and McHugh (2002) notes that Lady Constance Lytton, in the early 20th century, introduced constructional changes in British prisons to reduce prison suicides. In their study of inmate suicides in Great Britain in 1922, Hobhouse and Brockway (cited by Towl et al., 2002) report a higher suicide rate during the first weeks of imprisonment, among prisoners during their first detention or among pretrial detainees compared to the other prisoners.

Since this study, international studies have repeatedly demonstrated higher suicide rates among prisoners than in the general population. Fazel, Benning, and Danesh (2005) found that from 1978 to 2003, suicides among male prisoners in England and Wales were five times more common than in the general population. In Finland, the prison suicide rate from 1969 to 1992 was three times higher than in the general population (Joukamaa, 1997), and in Canada, from 1971 to 1995, this rate was four times higher than that in the general population (Laishes, 1997).

When explaining the elevated risk of inmate suicide, different approaches and theories have been discussed. The approaches can be divided into theoretically orientated importation and deprivation models as well as research for risk factors (Fazel, Grann, Kling, & Hawton, 2010). The risk factors approach analyzes criminological, psychological and psychiatric individual factors that increase the risk of suicide.

Fazel, Cartwright, Norman-Nott, and Hawton (2008) performed a meta-analysis of 34 worldwide studies of prison suicides. Male gender, Caucasian ethnicity, marital status, single cell accommodation, pretrial detention, detention for violent crimes, addictive disorder, psychopharmacological treatment and sentence length equal to or greater than eighteen months were identified as risk factors. Sexual offenders did not have a higher suicide rate. In an additional study, the suicide rate in prisons in twelve countries was found to be three times higher than in the general population. The suicide rate in the general population has no influence on the suicide rate in prison (Fazel et al., 2010). Shaw, Baker, Hunt, Moloney, and Appleby (2004) found that prison suicides were associated with pretrial detention, the first seven days of imprisonment, violent offenses (homicide and manslaughter) and a history of psychiatric disorders.

Leese, Thomas, and Snow (2006) reported that overcrowding, the absence of meaningful work and activity and assaults from other inmates correlated with the prison suicide rate. Furthermore, Laishes (1997) identified primary incarceration, sentence length from two to five years, transfer to another prison facility, negative relationships with prison staff and inmates, a dysfunctional family background, psychological and psychiatric problems, substance abuse and fear of other prisoners as risk factors for prison suicide in Canada from 1971 to 1995.

Patterson and Hughes (2008) explored suicides among 154 prisoners in California between 1999 and 2004. Risk factors similar to those found in the general population, including age, gender, ethnicity, substance abuse, previous suicide attempts and psychiatric treatment, were identified. Seventy-three percent of the prison suicides were found to occur in a maximum security facility; isolation, disciplinary sanctions, changes in sentencing or legal status, fear about personal security and physical illness were correlated with suicide risk.

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Fruehwald and colleagues (Fruehwald et al., 2000a, 2000b; Fruehwald et al., 2002) examined prison suicides in Austria and identified two groups of prisoners with a high suicide risk. One set of risk factors were composed of the socially marginalized, less educated, alcohol abusing prisoners who committed suicide after numerous and repeated incarcerations. The second group was characterized as being better educated, socially integrated people, for whom the incarceration denoted dramatic social loss and who committed suicide during the pretrial incarceration. In addition, Konrad et al. (2007) concluded that two typological risk profiles for suicide were present in the prison. Pretrial prisoners had a higher risk for suicide, and prisoners sentenced for violent crime committed suicide after four to five years of imprisonment depending upon legal changes and conflicts within the institution or with their relatives. Situational risk factors considered to be significant included single cell accommodation, low staff attendance and psychosocial factors, such as low social support, psychiatric illness, bullying and emotional problems.

Kerkhof and Bernasco (1990) found the highest suicide rate in Dutch prisons during the first three months of incarceration. Prisoners charged with homicide or violent crimes have a higher suicide risk; in addition, acute stressors, including family problems, problems concerning legal status, drug abuse and conflicts inside the prison, predict inmate suicides.

Social scientists have developed a deprivation model of imprisonment to analyze the specific context and impact of the prison on individuals. Typical stresses and strains of imprisonment are caused by the condition of the penal facilities' structural and institutional character. In a sociological analysis, Sykes (1958, cited in Van Zyl Smit & Snacken, 2009) referred to the pains of imprisonment as the institutional demands of adjustment on the prisoner, including the removal of services and goods, the loss of autonomy and intimate partnership and restrictions of personal security. Goffman (1961) claimed that penal facilities are total institutions, which are characterized by foreclosure, bureaucratic hierarchies, routines and rituals and an imbalance of power between the guards and the prisoners. Goffman suggested that prisoners are at risk of dying a civil death. According to the deprivation model, imprisonment involves the compulsion to adjust to the structure, conditions and subculture in the prison and leads to a negative and stressful experience. Gilligan (1996) countered that for some prisoners, the substantial safe and structured prison environment leads to relief from external negative living conditions. The prison, therefore, builds not only a context of deprivation, but also for some inmates, prison causes an abolishment of their insecure and withdrawn living conditions outside the institution. The dominant view of deprivation should be individually corrected compared to the living conditions outside.

Beginning with the end of the last century, the idea of the importation of norms, risks and problems into the prison has become more central. Zamble and Proporino (1988) demonstrated that according to the coping model, the stress of imprisonment was reduced significantly during the first year of custody. A high rate of emotional distress was found for untried prisoners during their first two weeks after admission (Obschonka, Warms, Schulte-Markwort, & Barkmann, 2010). From the perspective of imprisonment as a critical life event, prisoners have to cope with the structural impacts of the institution. In turn, the applied coping style of the prisoner impacts the amount of experienced stress (Bennefeld-Kersten, 2009; Ireland, Boustead, & Ireland, 2005). This leads to a more complex and interactional model of individual risk factors and coping possibilities on the one hand and prison structure on the other.

Many risk factors for suicidal behavior in custody are considered to be similar to those in the general population. These parameters include male gender, previous or repeated suicidal acts, young or elderly age, serious physical illness and exposure to critical life events, such as unemployment, low income, retirement and partner or family problems (Beautrais, 2003; Quin, Agerbo, & Mortensen, 2003; Wolfersdorf, 2008). Additionally, Blaauw, Arensman, Kraaij, Winkel, and Rout (2002), Blaauw (2005) found that traumatic life events, social isolation, homelessness and unemployment are risk factors for suicidal behavior. The main risk factors in a study of a Dutch prison population were a combination of age over 40, homelessness, violent offense charges, prior incarceration, a history of psychiatric disorders and drug abuse. The typical suicidal prisoner presents a risk profile comprised of male gender, early critical or traumatic life events, unemployment and lack of partnership (single marital status, divorced, widowed). Blaauw and colleagues (Blaauw, Kerkhof, & Hayes, 2005; Blaauw et al., 2002) concluded that high rates of inmate suicides are mostly due to the exposure of vulnerable persons to a stressful situation, especially in the first weeks of incarceration.

In addition, psychiatric and addictive disorders are recognized as risk factors for suicidal tendencies (Quin et al., 2003; Wolfersdorf, 2008). A higher incidence of mental disorders has been found in the prison populations in Europe and the USA (Baillargeon et al., 2009; Bulten, Nijman, & van der Staak, 2009; Von Schoenfeld, Schneider, Schröder, Widmann, & Botthof, 2006). Psychiatric disorders are also associated with a higher mortality rate both in prison and after release in Australia (Kariminia et al., 2007a; Kariminia et al., 2007b). Thus, the mortality of prisoners is considered to be higher than in the general population. The development of a criminal career, the early development of delinquency in life, psychiatric illnesses and especially drug related problems are thought to be risk factors for premature death in prison and after release (Coffey et al., 2004; Kjesberg & Laake, 2010; Salias et al., 2005).

2. Methods

The aim of this study is to explore the impact of macrostructural risk factors on prison suicides and mortality. From the review of the literature, hypotheses were developed that predict that prison suicides and mortality are related to the following:

- overcrowding (prison density),
- the number of prisoners on remand and prisoners with an undefined, sentence length,
- the number of juvenile prisoners,
- the length of the sentence,
- the average duration of imprisonment,
- the suicide rate in the general population,
- the characteristics of the offense.

Therefore, the aggregated data from the Council of Europe Annual Penal Statistics were comparatively analyzed with a time-series cross-sectional design and a time-series for each country (Lauth, Pickel, & Pickel, 2009). Therefore, this study cannot explore the individual factors contributing to the deaths occurring in custody. A top–down method was chosen that first analyzed the pooled data sets (TSCS data) and then took a deeper look at single countries.

The European Union provides a supranational aggregation of similarly structured potential context variables (e.g., political, social, economic and legal system), but it is necessary to keep in mind that all assumptions of constancy and equality of supranational aggregates are distorted (Lauth, Pickel, & Pickel, 2009). The chance to keep confounder variables in this assimilated political structure on a lower or moderate level appears feasible. To obtain a broader view of the risk factors contributing to suicides rates and mortality in prison, six additional states outside the European Union with low missing values and appropriated data sets over the chosen time period were included.

The study population included all the states of the European Union and, to extend the study, Russia, Turkey, Albania, Norway, Switzerland and Croatia. The aggregated data were collected from SPACE from 1997 to 2008. For the European Union, the pooled data set included 277 cases, and for the broader European country matrix, 328 cases were used.