

127 The Forensic Analysis of the State of Health in Prisoners: Is It Possible to Prevent Psychiatric Diseases and Suicide Risks in Prison?

Fabrizio Cordasco, MD*, Università Magna Graecia CZ, Catanzaro, ITALY; Carmen Scalise, MD, University of Catanzaro, Catanzaro, ITALY; Isabella Aquila, MD, PhD*, Institute of Legal Medicine, Catanzaro, Italy 88100, ITALY; Matteo A. Sacco, MD*, Chair of Legal Medicine, University of Catanzaro, Catanzaro 88100, ITALY; Francesco Sicilia, MD, University Magna Graecia of Catanzaro, Catanzaro 88100, ITALY; Orazio Malfa, MD, University "Magna Graecia" of Catanzaro, Catanzaro, ITALY; Cristoforo Ricci, PhD, University of Catanzaro, Catanzaro, ITALY; Luigi De Aloe, MD, Institute of Legal Medicine, Catanzaro 88100, ITALY; Santo Gratteri, MD, Catanzaro 88100, ITALY; Silvia Boca, Viale Europa, Catanzaro, ITALY; Pietrantonio Ricci, PhD, University of Catanzaro, Catanzaro, ITALY

Learning Overview: After attending this presentation, attendees will understand the importance of using a protocol that can prevent psychiatric diseases in prison and reduce the suicide risk in the prison population.

Impact on the Forensic Science Community: This presentation will impact the forensic science community by demonstrating the importance of surveillance systems in order to reduce the prevalence of psychiatric diseases and suicide in prisoners.

There are about 10 million prisoners in the world, of which 6 million are held in United States prisons.¹ From 2016 to 2018, there was a reduction in Europe in the detention rate estimated at 6.6%, while in Italy the prison population is growing: this phenomenon is linked to the increase in organized crime. As of June 2019, there are 23,442 prisoners in Italian prisons.² Due to the worldwide importance of the phenomenon in the public health, it is necessary to investigate the relationship between detention and prisoner health as well as the change in the psychophysical state of a subject after a period of incarceration. The scientific literature shows that in prisoners, there is a higher incidence of psychiatric diseases compared to the general population.³ A systematic review of the literature shows that the prevalence of depressive disorders in prisoners is higher by 10%–12 % and almost half are affected by personality disorders. Suicide is the main cause of death among prisoners, and it causes over half of the deaths in prisons. The main risk factors are alcohol or drug abuse, family conflict relationships, and low socio-cultural status.

A review of the scientific literature was performed. The results were compared with the cases of Institute of Legal Medicine of Catanzaro, consisting of 30 forensic medical reports relating to the health of prisoners and their compatibility with detention. Prisoners were subjected to medical history collection and clinical examination. The clinical diary, laboratory, and/or instrumental investigations were analyzed. The most frequent pathologies were: anxious-depressive disorder (50%), gastrointestinal diseases (50%), osteoarticular diseases (40%), endocrine diseases (40%) and migraine (30%). The anxious-depressive disorder is reactive in all of cases and is a consequence of the detention and change of daily routine. Furthermore, gastrointestinal disorders and migraine may be expressions of an important anxiety somatization.⁴

In order to reduce psychiatric disorders and suicide risks, it is necessary to perform a medical and psychological evaluation for each new prisoner. In this way, it is possible to know the health status of each prisoner and to schedule a periodic monitoring of the diagnosed diseases. This evaluation requires specialized medical personnel able to set up an appropriate treatment. This study shows that prisoners suffering from psychiatric diseases are subjected to drug therapy without a complete diagnosis. It is important to adopt strategies in order to safeguard the mental health of prisoners. A mental health management protocol is not yet adopted in prisons worldwide. First, a risk stratification of the development of psychiatric diseases (for healthy subjects) or suicide risks (in subjects with known psychiatric pathology) must be conducted. A careful case history is needed, with investigations about the age of the subject, history of alcohol or drug abuse, familiarity with psychiatric pathologies, previous suicide attempts, type of relationship with family (a subject isolated from his/her own family has a higher risk of developing psychiatric pathologies). Once the medical chart of each prisoners is completed, it is necessary to schedule periodic updates to assess any worsening of health conditions. Furthermore, it is essential to train prison custodians in the recognition of signs of mental suffering (feelings of guilt, shame, despair, isolation). Periodic meetings must be scheduled between prison police and prison medical staff. During the meetings, updates concerning each prisoner are reported. The application of this protocol could reduce suicide episodes and allow for the early identification of risk signals.

Reference(s):

- ^{1.} Massoglia M., Pridemore W.A. Incarceration and Health. *Annu Rev Sociol.* 2015 Aug;41:291-310.
- ^{2.} Fazel S., Baillargeon J. The health of prisoners. *Lancet*. 2011 Mar 12;377(9769):956-65.
- ^{3.} Fazel S., Danesh J. Serious mental disorder in 23,000 prisoners: A systematic review of 62 surveys. *Lancet* 2002; 359: 545–50.
- ^{4.} Bekhuis E., Boschloo L., Rosmalen .G., Schoevers R.A. Differential associations of specific depressive and anxiety disorders with somatic symptoms. *J Psychosom Res*, 2015; 78(2):116-22.

Forensic Science, Prison, Mental Disorders