Monkeypox epidemic in prisons: How to prevent it?

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On July 23rd 2022 the World Health Organization (WHO) declared the monkeypox virus (MPXV) outbreak a Public Health Emergency of International Concern. As of October 2022, in Italy 856 cases of MPXV infection were detected in the general population of which 350 in the Northern Region Lombardy, 71% in Milan, main metropolitan centre (1.4 million inhabitants); 99% of them were males aged 30–39 years old. On August 10th, a vaccination campaign against monkeypox virus started in Lombardy with the administration of the first 2000 doses for categories at risk as defined by national and regional authorities (excluding individuals already vaccinated for smallpox virus, who have sufficient immunity against MPXV).

- Laboratory personnel.
- Gay, transgender, bisexual and other MSM, who meet the following risk criteria: recent history (last three months) of multiple sexual partners and/or participation in group sex events and/or participation in sexual encounters in local/club/cruising/saunas and/or recent sexually transmitted infection (at least one episode in the past year) and/or the habit of associating sexual acts with the consumption of chemical drugs (chemsex).

Although the past MPXV epidemics have been focused in very poor areas of Central and West Africa, the impact of marginality on the severity of the current epidemic was underestimated. This is particularly relevant for people living in prison (PLIP). Vulnerability, poor healthcare access and awareness, overcrowding, multiple sexual partners, exchange of clothing and personal items, all factors associated with MPXV spread, are widely prevalent in prison. Furthermore, in European prisons, the presence of foreign PLIP is significant, including individuals originating from countries where MPXV is endemic. This situation is more worrisome in remand houses, due to the high turnover of people awaiting trial. In addition, prisons house a large number of transgender people and people with multiple sexual partners and/or practice chemsex.

Actually the size of the MSM population in prison is not easily quantifiable due to the challenges in collecting these anamnestic data in Italy.

To date, poor attention has been reserved to the risks of MPXV spreading in prisons. Apart from the report of a case of human-to-human transmission in a Nigerian prison in 2017, we have not found any other evidence in the scientific literature. The US media hinted at heightened MPXV risk in prison with alarmist tones at the end of July 2022. The first case of MPXV in a prison was reported in Chicago on July 26th 2022.

To our knowledge, no case of MPXV has been detected in Italian prisons so far, therefore we believe it is essential to take timely measures to prevent the development of outbreaks.

The Milan penitentiary system consists of a remand house (“San Vittore”), two correctional houses for long sentenced people and a juvenile institution for young males aged up to 25 years. About nine hundred PLIP actually live in San Vittore prison, many originating from countries where MPXV is endemic. Furthermore the median age of PLIP in San Vittore is 35 years old (range 18–76 years old, the majority of the youngest being foreigners) and most of them were not immunized against the smallpox virus.

In the first week of August 2022, based on the indications of governmental and public health authorities adapted to the prison context, we developed a protocol for managing MPXV infection in the prison system of Milan and over Lombardy.

According to our Protocol, the main elements for MPX control in prisons are:

A. Surveillance on newcomers
B. Prompt contact and respiratory isolation of suspected and confirmed cases
C. Contact tracing
D. Availability and correct use of personal protective equipment by PLIP and prison staff
E. Swabs and efficient procedures for sending and communicating with the Laboratory
F. Information and sensitization on healthcare and penitentiary staff and PLIP
G. Primary prevention interventions, including vaccination for groups at risk

As concerns points A, B, C, D and E, the current experience of managing COVID-19 infection shall...
inform MPXV management, considering the differences in the duration of incubation and infectivity periods and in the surveillance of close contacts which do not require isolation.

The greatest challenges dwell in vaccine prophylaxis, because MPXV vaccination campaign is focused on sensitive targeted groups. In prison this could generate two types of problems: 1) the fear of being identified and marginalized by other PLIP and 2) the reluctance to provide anamnestic data on sexual behaviours. Actually in Italian prison homosexuality/bisexuality is generally not disclosed (except in the case of transgender people, who are housed in protected areas), due to the fear of stigma from the other PLIP and/or the prison staff.

The Lombardy Region authorities authorized the administration of MPXV vaccine for PLIP in San Vittore belonging to the risk categories on the same day of the administration of MPXV vaccine for PLIP in San Vittore.1 We have selected PLIP eligible for the MPXV vaccine, prioritising transgender people and young adults with a history of recreational drugs use. Approximately 100 vaccinations have been allocated to Lombard prisons for the first phase of the campaign, and currently more than 25 PLIP have been vaccinated. To our knowledge, this vaccination campaign is among the first documented experiences of primary prevention for MPXV in prisons. The next steps of this project will be: the standardization of strategies for identifying subjects at risk in compliance with confidentiality and dismantling the dynamics of stigma; and the proposal to consider all the PLIP as a risk category worthy of vaccination against MPXV during the epidemic phases. Balancing confidentiality and public health needs will be a major public health challenge, which will involve the support of psychologists and social workers.

In the end, we would like to call for heightened attention to the prison settings in order to:

1. Elicit scientific and institutional attention on prison as a place of possible spread of MPXV infection
2. Alert health and justice authorities over the risk that MPXV circulation in prison could be sustained by transmission ways other than sexual activity
3. Collect and share epidemiological data and clinical experiences of MPXV infection management
4. Implement educational and prevention interventions for prison staff and for PLIP
5. Take advantage of the recent management of the COVID-19 pandemic, in the procedures of isolation, diagnosis, contact tracing, and in the use of personal protective equipment. The use of face masks, still in force in Italian prisons, could help to minimize the human-to-human transmission of monkeypox virus by droplets
6. Ensure the enforcement of the equivalence of care between the general and the prison population

Including PLIP in the MPXV immunization campaign should reduce the risk of MPXV circulation, but also protect after release people with suboptimal access to healthcare. Inclusive and equitable vaccination strategies could help to reduce the viral circulation in the community, and to foster the right to health for all.

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Contributors
N.C. and R.R made literature search and drafted and wrote the comment; T.S., R.G., D.C., A.D.A.M. and L.T. revised it.

Declaration of interests
All authors declare no conflict of interests.

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