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Literature Review: Sexually Transmitted Diseases In Prisoners

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ABSTRACT

Introduction: The prevalence of sexually transmitted diseases is higher among prison populations compared with the general population. Prisoners have high rates of chronic conditions, and the experience of detention (exposure) generally has a greater impact on health than the length of detention. Aims: This article discusses some of the most important infectious diseases found in prisons. Methods: All research was conducted using a cross-sectional study design and published after 2018. Results: We found HIV, HBV, HCV and Syphilis as common sexually transmitted diseases in prison. HIV incidence was found to be 3.7%, 0.4%, 1.4%, 4.1%, and 1.6%. The incidence of hepatitis B in this study was 3.3%, 6.3%, 16.4%, and 41.5%, while the incidence of hepatitis C was 2.3%, 6.2%, 11.6%, 14.3%, and 18.9%. Syphilis was found in 7.0%, 22.1%, 1.1%, 2.0%, 0 and 1.2%. Conclusion: The incidence of sexually transmitted diseases found in the incarcerated population is high.

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INTRODUCTION

Prison conditions significantly impact health, and this relationship has become a significant public health concern (Massoglia & Menster, 2019). Infectious diseases are more prevalent among the prison population than the general population due to factors such as poor health status, limited access to medical care, and a lack of diagnosis and treatment for infected inmates. Prisons are often overcrowded, poorly ventilated, and have inadequate sanitation. Preventive measures like vaccination programs, isolation, and early treatment remain significant challenges. Many inmates serve short sentences; they may exhibit symptoms of infection but are reluctant to seek treatment for fear of extending their sentences. This condition can lead to undiagnosed or untreated infections. Inmates also frequently move in and out of prison daily, potentially acting as conduits for disease between the prison and the external community.

Prisons also lack adequate organisational structure and sanitation, endangering inmate health while infectious diseases remain a primary concern (Beaudry et al., 2022). Structural factors such as poverty, low education levels, and limited vocational skills contribute to the poor health conditions of inmates (Massoglia & Pridemore, 2015). Inmates also tend to have

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high-risk behaviours such as drug use or exposure to violence compared to the general population (Western, 2006). They are also vulnerable to chronic conditions and the negative impacts of incarceration (Massoglia & Pridemore, 2015).

Certain diseases, such as infectious diseases, coronary heart disease, obesity, hypertension, and cancer, are prevalent among inmates, both during incarceration and after release, compared to the general adult population (Howel et al., 2016). Therefore, inmates are more susceptible to these chronic conditions than the general population (Massoglia & Pridemore, 2015). This article will discuss some infectious diseases circulating in prison.

METHODS

This research was a literature review, which included references related to the identified case or issue. According to Creswell, John W. (1998), a literature review is a written summary of articles from journals, books, and other documents describing theories and information from the past and present. It organises the literature into relevant topics and necessary documents. The author utilises data from literature studies, a method used to collect data or sources related to the topic addressed in a research study. The obtained data is then analysed using descriptive analysis, which not only presents facts but also provides sufficient understanding and explanation

RESULTS AND DISCUSSION

Our research includes four articles from Jakarta, Brazil, Switzerland, and Italy. All studies were conducted using a cross-sectional study design and were published after 2018. Two publications describe the entire sample as female, one describes the entire sample as male, and one does not provide sample characteristics. The average age of respondents in these articles is 33.4 years and 29.8 years. The overall sample mean age is 31 years.

Based on the data collected from three publications with HIV screening, the incidence rates were 3.7%, 0.4%, 1.4%, 4.1%, and 1.6%. In 2017, out of 189 countries registered with UNAIDS, HIV/AIDS, HCV, and TB testing programs were reported to be available in at least one prison in 59, 42, and 43 countries, respectively (UNODC, 2019). Previous research established that HIV prevalence among prisoners in developed countries ranges from 0.2% in Australia to over 10% in some European countries. The highest prevalence rates are in sub-Saharan Africa and Eastern Europe (Dolan et al., 2016).

The prevalence of hepatitis B in this study is 3.3%, 6.3%, 16.4%, and 41.5%, while hepatitis C prevalence is 2.3%, 6.2%, 11.6%, 14.3%, and 18.9%. Hepatitis B and C prevalence is higher in developed countries compared to developing nations. The combined prevalence of hepatitis B and C is 8% and 7%, respectively. However, this publication does not mention any studies conducted in India. Additionally, the global combined prevalence of hepatitis B and C is 5.17% and 13.22%, respectively (Moradi et al., 2018)

The highest prevalence of hepatitis C among prisoners is found in the Southeast Asia region, specifically at 24.26% (Moradi et al., 2018). A study conducted in Kahramanmaras, Turkey, in 2016 found hepatitis B and C prevalence rates among prisoners to be 2.6% and 17.7%, respectively (Keten et al., 2016). Another study conducted in 2018 in Porto Velho, Rondonia, Brazil, reported hepatitis B and C prevalence rates among prisoners as 1.4% and

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0.9%, respectively (Shefat et al., 2018). Recent research among prisoners in 2019 revealed hepatitis B and C prevalence rates of 1.9% and 17.0% in Stockholm County, Sweden (Gahrton et al., 2019) and 4.7% and 0.5% in Turkey (Kose et al., 2019).

Table 1 List of publications on infectious diseases in prisons

variable	Publication					
	(Arends et al., 2019)	(Batista et al., 2020)	(Chacowry Pala et al., 2018)	(Nava et al., 2022)		
Time of research	**2019**	**2020**	**2009 dan 2011**	**2019**	**2020**	**2021**
Research design	cross-sectional	cross-sectional	cross-sectional	cross-sectional		
Sample size	214	113	273	825	611	691
Location	Jakarta	Brazil	Swiss	Italia		
Cases	38 (17.8%)	25 (22.1%)	21 (0.07%)	390 (99.8%)		
Sex						
Man	0	0	273 (100%)	N/A		
Woman	214 (100%)	113 (100%)	0	N/A		
Age (year)	33.4	29.8	29.8	N/A		
Infectious disease						
HIV	8 (3.7%)	N/A	1 (0.4%)	10 (1.8%)	16 (4.1%)	5 (1.6%)
HBV	7 (3.3%)	N/A	N/A	35 (6.3%)	64 (16.4%)	132 (41.5%)
HCV	5 (2.3%)	N/A	17 (6.2%)	65 (11.6%)	56 (14.3%)	60 (18.9%)
Sifilis	15 (7.0%)	25 (22.1%)	3 (1.1%)	14 (2.5%)	0	4 (1.2%)
HAV	N/A	N/A	N/A	0	0	0
TB	N/A	N/A	N/A	160 (28.6%)	136 (34.9%)	153 (48.1%)
Test method						
HIV	Serology test	N/A	Serology test	Serology test		
HBV	Serology test	N/A	N/A	Serology test		
HCV	Serology test	N/A	Serology test	Serology test		
Sifilis	Serology test	rapid tes	Serology test	Serology test		
HAV	N/A	N/A	N/A	Serology test		
TB	N/A	N/A	N/A	Serology test		

Syphilis was found at rates of 7.0%, 22.1%, 1.1%, 2.0%, 0, and 1.2%. Syphilis has been detected in various prison units worldwide, with prevalence rates ranging from 0.7% to 11% (de Albuquerque et al., 2014). For instance, in Guanajuato State Prison in Mexico, the

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observed prevalence of syphilis was 0.7% (Adjei et al., 2008), while in Portuguese prisons, the prevalence was 6.0% (Marques et al., 2011). A study in the Venezuelan prison system found a syphilis prevalence of 6.1% (Posada et al., 2008). In Ghana, the prevalence is slightly higher at 11% (Adjei et al., 2008). In Brazil, a study conducted in Pernambuco identified an infection prevalence of 3.92% (de Albuquerque et al., 2014). These rates are generally influenced by factors related to sexual behaviour and intravenous drug use.

The entry of prisoners into the prison population directly and nearly immediately impacts society. Pretrial infections often lead to disease spread within prisons. The continuous turnover of the prisoner population minimises the impact of releasing individuals who have not yet faced trial back into the community. Prisons are overcrowded and unhealthy places where unwell individuals are detained and confined. On any given day, prisons house over 10 million people. A single infection case can easily and rapidly impact many others within the prison while the individual is incarcerated. These infections also frequently spread to the broader community upon prisoners' release.

Prisoners are often considered the most marginalised members of society. They exhibit risky behaviour patterns, tendencies toward violence, deviant sexual behaviour, substance abuse, and neglect of healthcare services. This group faces a dual punishment of incarceration followed by acquired illnesses. In some cases, the latter can have implications for prisoners' families after their release (Kumar et al., 2013). Common use of injection drugs, tattoos, and other conditions leading to blood contact increases infection risk. One of the major health issues among prisoners is bloodborne infections, including hepatitis B and C (Reekie et al., 2014).

CONCLUSION

The high prevalence of sexually transmitted diseases (STDs) among incarcerated populations demands effective prevention measures. Screening programs, education, and promotion of low-risk behaviours should be strengthened to ensure that prisoners receive quality healthcare services. Infection control must be a top priority within prison environments to reduce the risk of health complications and further disease transmission. These efforts benefit not only the inmates but also the broader community as they reintegrate after release.

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