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REVIEW

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Protocols and guidelines for sexually transmitted infection management in people deprived of liberty: an integrative review

Protocolos e diretrizes no manejo de infecções sexualmente transmissíveis à população privada de liberdade: revisão integrativa

Protocolos y guías para el manejo de infecciones de transmisión sexual en población penitenciaria: una revisión integradora

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Abstract

Objective: to analyze the procedures for managing sexually transmitted infections (STIs) recommended by clinical protocols and guidelines for people deprived of liberty. **Method:** an integrative review was conducted in six stages across 17 data sources. Data collection was conducted from July 2023 to April 2025, using the terms "Practice Guideline", "Prisoner", "Protocol, Clinical", and "Hostage". Protocols and guidelines in any language were included. Documents unavailable in full and lacking scientific support were excluded. The sample was analyzed using the Appraisal of Guidelines Research & Evaluation II management checklist, assessing their similarities and differences. **Results:** 3,986 documents were identified, resulting in nine in the final sample. The methodological analysis proposes modifications to the approach of all included guidelines, particularly regarding the clarity of methodological aspects and editorial independence. Prevention and screening management in people deprived of liberty involves the specificities of the setting. Similarities were identified between diagnostic and therapeutic methods, with differences related to the variety of options. **Conclusion and implications for practice:** the study contributes to STI management in prison environments, and highlights the need for clinical protocols and guidelines that consider the social dynamics in prison for the production of knowledge.

Keywords: Clinical Protocols; Sexually Transmitted Infections; Prisoners; Prisons; Sexual Health.

Resumo

Objetivo: analisar as condutas no manejo das infecções sexualmente transmissíveis (ISTs) recomendadas por protocolos e diretrizes clínicas à população privada de liberdade. **Método:** revisão integrativa, conduzida por seis etapas em 17 fontes de dados. A coleta de dados foi realizada no período de julho de 2023, e novamente em abril de 2025, utilizando-se os termos "*Practice Guideline*", "*Prisoner*", "*Protocol, Clinical*" e "*Hostage*". Foram incluídos protocolos e diretrizes em qualquer idioma. Excluíram-se documentos indisponíveis na íntegra e sem respaldo científico. A amostra foi analisada pelo *checklist Appraisal of Guidelines Research & Evaluation II* para o manejo, analisada quanto às suas semelhanças e divergências. **Resultados:** identificaram-se 3.986 documentos, resultando em nove na amostra final. A análise metodológica propõe modificações no percurso de todas as diretrizes incluídas, sobretudo quanto à clareza de aspectos metodológicos e de independência editorial. O manejo para prevenção e rastreio com a população prisional envolve as particularidades do cenário. Identifcaram-se semelhanças entre os métodos diagnósticos e terapêuticos, com diferenças relacionadas à variabilidade de opções. **Conclusão e implicações para a prática:** o estudo contribui para o manejo nas ISTs no ambiente prisional, e orienta a necessidade de protocolos e diretrizes clínicas que considerem a dinâmica social no cárcere para produção do conhecimento.

Palavras-chave: Infecções Sexualmente Transmissíveis; Prisioneiros; Prisões; Protocolos Clínicos; Saúde Sexual.

Resumen

Objetivo: analizar los procedimientos para el manejo de las infecciones de transmisión sexual (ITS) recomendados por los protocolos y guías clínicas para la población penitenciaria. **Método:** Se realizó una revisión integrativa en seis etapas con 17 fuentes de datos. La recopilación de datos se realizó entre julio de 2023 y abril de 2025, utilizando los términos "*Practice Guideline*", "*Prisoner*", "*Protocol, Clinical*" e "*Hostage*". Se incluyeron protocolos y guías en cualquier idioma. Se excluyeron los documentos no disponibles en su totalidad o sin respaldo científico. La muestra se analizó utilizando la lista de verificación de gestión de la *Appraisal of Guidelines Research & Evaluation II*, evaluando sus similitudes y diferencias. **Resultados:** se identificaron 3986 documentos, de los cuales nueve conformaron la muestra final. El análisis metodológico propone modificaciones en el enfoque de todas las guías incluidas, en particular en lo que respecta a la claridad de los aspectos metodológicos y la independencia editorial. La prevención y el cribado en la población penitenciaria se basan en las particularidades del entorno. Se identificaron similitudes entre los métodos diagnósticos y terapéuticos, con diferencias relacionadas con la variedad de opciones. **Conclusión e implicaciones para la práctica:** el estudio contribuye a la gestión de las ITS en el entorno penitenciario y destaca la necesidad de protocolos y directrices clínicas que consideren la dinámica social en prisión para la producción de conocimiento.

Palabras clave: Protocolos Clínicos; Infecciones de Transmisión Sexual; Prisioneros; Prisiones; Salud Sexual.

INTRODUCTION

Sexually transmitted infections (STIs) are clinical and infectious conditions spread predominantly by unprotected sexual practices. However, their individual and collective effects are directly interconnected with social relationships, interactions, and beliefs among the population, making them a widespread public health problem.[1,2]

In people deprived of liberty (PDL), the risks of infection and illness are heightened, as imprisonment creates social "people storage areas", characterized by overcrowding, unsanitary conditions, violence, and other risky practices, such as unprotected sex and injecting drug use. These perspectives are rarely explored in the clinical recommendations found in protocols and guidelines for STIs in Brazil.[3,4]

The global population of inmates increased 24% from 2000 to 2018, proportional to the increase in the global population over the same period. In Brazil, since the 1990s, the population of inmates has grown exponentially, and according to the latest Penal Information Report, from January to June 2024, it comprised 883,608 inmates, held in physical cells and under house arrest with and without electronic monitoring; of these, 37,945 are in the state of Ceará.[5-7]

In Brazil, of the total of 663,387 inmates in physical cells, from January to June 2024, 21,720 cases of STIs were recorded, with the Human Immunodeficiency Virus (HIV) responsible for 10,562 cases of the disease profile (48.6%), syphilis, for 8,945 cases (41.2%), and hepatitis, for 2,213 cases (10.2%).[1,2,6]

Although the existence of the Brazilian National Policy for Comprehensive Health Care for Persons Deprived of Liberty in the Prison System (In Portuguese, *Política Nacional de Atenção Integral à Saúde das Pessoas Privadas de Liberdade no Sistema Prisional* - PNAISP) of 2014 represents progress in the search for comprehensiveness and recognition within the Health Care Networks of the harm arising from the prison period, the vertiginous growth of STIs is still potentially higher in these environments compared to the general population.[8-10]

Gaps in the establishment of health promotion, ranging from the precariousness of preventive actions to the risk inherent in deprivation of liberty, expose the growth of STIs in the Brazilian penal system, with an increase of 614 cases from the second half of 2023 to the first half of 2024. Despite the insurgencies, documents that guide care for this population are scarce, with aggravations exacerbated by inmates' condition and associated with other variables of vulnerability.[6]

Given the above, the analysis of protocols and guidelines allows for an understanding of the specificities in STI management in the prison system, considering institutional dynamics, interpersonal relationships and public safety, intertwining the implementation and maintenance of therapeutic procedures.[11] Therefore, it is urgent to develop an integrative review that makes it possible to understand prevention, screening, diagnosis, and treatment strategies amid the vulnerability inherent to the prison context, with its rules and norms that are different from those of the general population.

Furthermore, it will strengthen the evidence-based practice of nurses and multidisciplinary teams working in prison settings, due to their ability to holistically address clinical issues and enable adaptations consistent with care, social, and managerial needs. Thus, the objective was to analyze STI management practices recommended by clinical protocols and guidelines for inmates.

METHOD

This is an integrative literature review, conducted from the following stages according to the adopted methodological framework: (1) objective and/or review question formulation; (2) literature systematic search using predetermined criteria; (3) critical assessment of selected research; (4) literature analysis and synthesis; (5) discussion on new knowledge; and (6) plans for dissemination of results.[12]

Data collection took place in July 2023 and again in April 2025, to retrieve current studies, through the review question "How do clinical protocols and guidelines recommend STI management in PDL?", constructed from the components of the acronym PIPDS (Population – PDL; Intervention – application of clinical protocols and guidelines for STIs; Professionals targeted by the guideline – healthcare professionals in the prison system; Outcomes – STI prevention, screening, diagnosis, and treatment; and Health System that will be implemented – Brazilian Health System (In Portuguese, *Sistema* Único *de Saúde* - SUS).[11]

Clinical protocols and guidelines on STI prevention, screening, diagnosis, and treatment in PDLs published between July 2013 and April 2025 were included. Documents specifically targeting this population or citing it as a key population or vulnerable group were accepted. The timeframe is justified by the PNAISP (2014), seeking recent evidence applicable to the Brazilian context. There were no restrictions on gender or language.

Documents lacking scientific support or not available in full and free of charge were excluded. This review represents the initial phase of protocol adaptation, including expert opinions and an integrative review aimed at the most reliable source of evidence.

The search strategy combined each database's specific controlled language with natural language, using Boolean operators, to increase sensitivity and reach. In repositories and websites, searches were conducted using publication tabs intuitively targeted to the intended search. A manual search for references of studies selected for full-text reading was also performed. The search strategy presented in Chart 1 refers to the Scopus database, as it has the clearest and most systematic structure. This strategy was later adapted to the other databases included in the study, namely MEDLINE via PubMED, BDENF, EMBASE, Web of Science, LILACS, Cochrane Clinical Answer, Cochrane Protocols, and Cochrane Library.

References were exported to Rayyan®,[13] with duplicates removed, and gray literature was manually attached to Google Drive® after the initial selection. Screening occurred in two stages (titles and abstracts), followed by full-text reading to determine eligibility. Disagreements between the two independent reviewers were resolved in a consensus meeting after the blinding was broken.

Chart 1. Search strategy used in the Scopus database (adapted to other databases). Fortaleza, Ceará, Brazil, 2025.

Electronic databases/search strategy
SciVerse Scopus (TITLE-ABS-KEY (guideline OR practice AND guideline OR clinical AND protocols OR treatment AND protocol) AND TITLE-ABS-KEY (prisoners OR hostage OR hostages OR prisoner OR prisons OR penitentiaries OR penitentiary OR prison))
Grey literature/manual search
OpenGrey Guideline OR "Clinical Protocols" AND Prisoners
Coordination for the Improvement of Higher Education Personnel Theses and Dissertations Catalog *Diretriz* OR "*Protocolos Clínicos*" OR "*Protocolo de Tratamento*" AND *Prisioneiros* OR *Penitenciária*
Government repositories and websites/manual search
World Health Organization/Pan American Health Organization/Ministry of Health/United Nations Programme on HIV/AIDS/Brazilian Society of Infectious Diseases/Centers for Disease Control and Prevention/Canadian Medical Association InfoBase/National Commission on Correctional Health Care. Guideline OR "Practice Guideline" OR "Clinical Guidelines" OR "Clinical Practice Guideline" OR "Clinical Protocols" OR "Clinical Protocol" OR "Protocol, Clinical" OR "Protocols, Clinical" OR "Protocols, Treatment" OR "Treatment Protocol" OR "Treatment Protocols" AND Prisoners OR Hostage OR Hostages OR Prisoner OR Prisons OR Penitentiaries OR Penitentiary OR Prison
Brazilian National Council of Justice. Guideline OR "Practice Guideline" OR "Clinical Protocols" OR Treatment Protocol AND Prisoners OR Hostage OR Hostages OR Prisoner OR Prisons OR Penitentiaries OR Penitentiary OR Prison
National Institute for Health and Clinical Excellence Guideline OR "Practice Guideline" OR "Clinical Protocols" OR Treatment Protocol AND Prisoners OR Hostage OR Hostages OR Prisoner OR Prisons OR Penitentiaries OR Penitentiary OR Prison

Source: the authors.

Data extraction was performed blindly, using a standardized form with information on identification, year, country, language, population, application context, professionals involved, recommendations for STI prevention, screening, diagnosis, and treatment, in addition to the methodological assessment of the studies.

Methodological assessment followed the Appraisal of Guidelines Research & Evaluation II (AGREE II) checklist, a specific instrument for assessing guideline development and report quality.[14] It was applied by two independent reviewers, previously trained by a professional qualified in the construction, assessment, and validity of clinical protocols and guidelines.

Analysis and synthesis were based on recommendation matrices extracted from the protocols/guidelines, comparing similarities and differences in prevention, screening, diagnosis, and treatment actions, focusing on the specificities of PDLs to guide future adaptations. The authors' expertise in vulnerable populations, STIs, and prison health is highlighted. Data from the AGREE II studies, matrices, and results were organized into charts.

RESULTS

The search of databases, gray literature, government repositories and websites, and reference lists initially retrieved 3,986 results. Of the 73 eligible results, nine met all the proposed criteria. The exclusion occurred due to the impossibility of assessing other formats using the AGREE II, which assesses practical guidelines. Ultimately, from the repositories and government websites, we obtained the Ministry of Health (n=2), the National Commission on Correctional Health Care (n=2), the Pan American Health Organization (n=1), and the World Health Organization (n=1), in addition to MEDLINE via PubMed (n=1) and reference lists (n=2), presented in the flowchart in Figure 1.Chart 2 presents the characterization of the documents that made up the final sample.

The studies were published between 2014 and 2023. The largest number of studies was in 2021 (n=5). Regarding scope, the majority were national (n=6), considering the context of the study's application. Furthermore, there is mention of international protocols and one with regional scope, targeting countries in the Americas.

From the synthesis of the protocols and guidelines described in Chart 3, the studies[15-17,19,23] provide greater detail on care for PDL and vulnerable groups in this context. The other four documents[18,20-22] provide recommendations for the general population and vulnerable groups, including PDL, gays, men who have sex with men, transsexuals, people who inject drugs and other groups who may be in prison.

When considering future adaptation proposals, the above recommendations will serve as the foundation for clinical protocols and guidelines in the prison system. Therefore, it is essential to detail each care proposal, taking into account the economic, political, cultural, organizational, and legislative differences between the original context and the target context for adaptation, as well as the current model (if any) of STI care, in addition to its actual applicability and effectiveness.[11]

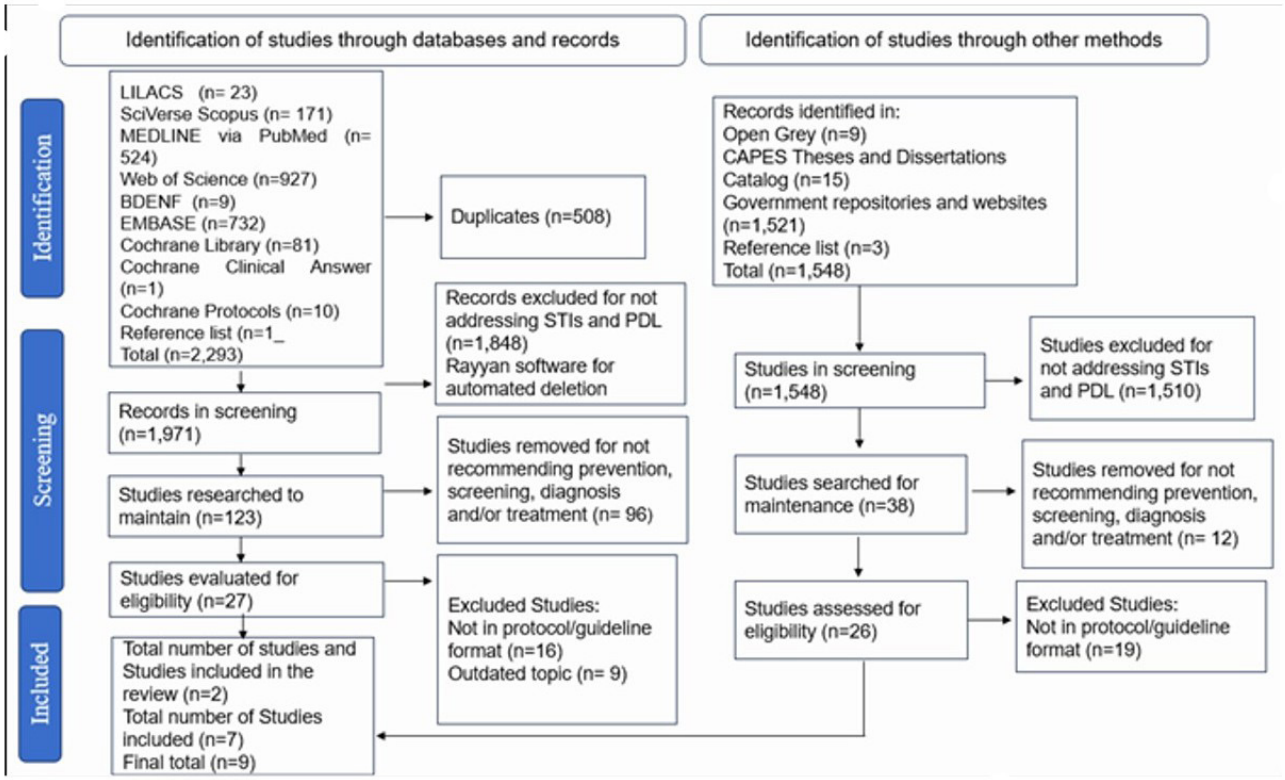

Figure 1. Study retrieval and selection flowchart. Fortaleza, Ceará, Brazil, 2025.

Therefore, it is necessary to identify heterogeneity in the sources included, which is most evident in prevention actions. The provision of condoms and lubricants is mostly directed to prisons and specifies existing vulnerable groups and particularities in distribution,[15,16,18] unlike the Brazilian reality, where condoms and lubricants are cited as the method of choice for prevention, but are not aimed at PDL, due to logistical situations and particularities of access.[20]

Another difference is harm reduction programs, such as the provision of sterile syringes and needles, and opioid substitution, especially for withdrawal from injectables.[15,22] Although Brazil has a Harm Reduction Policy, such strategies to reduce the negative effects of injectables without the need for compulsory abstinence are not mentioned in its protocols.[20,21]

As screening tools, screening and exclusion or "opt-out" consist of explaining that testing will be carried out unless he/she does not want it, i.e., there is the possibility of informed refusal[15,16,18,22]. However, the informed consent or "opt-in" strategy is a reality in Brazilian systems.[15]

For diagnosis and treatment, it was observed that most of the recommendations belong to two documents, one of which is from Brazil.[16,20] However, neither recommendation addresses prison dynamics and their specificities, the system's health vulnerability, medication administration mechanisms, whether medication is in the cell, whether refusal is possible, whether there is another therapeutic option, or what course of action should be taken, considering potential transmission and the long-term effects of a lack of treatment. Furthermore, the documents reveal a wide range of therapeutic options, with a wider range in developed countries.[16,18] However, in Brazil, the methods are well established, and the options are also variable.[20]

In relation to AGREE II and methodological quality assessment, the assessment used a 7-point scale (from 1 (strongly disagree) to 7 (strongly agree). After applying the recommended formula for calculation, all scores for the 23 individual items in each of the six domains were added together, scaling the total as a percentage of the maximum possible score for the domain. An overall assessment of the document was performed, based on qualitative aspects so that its use can be recommended using a Likert scale from 1 to 7.[14]

Concerning quality assessment, it should be noted that some items may not be applicable to the guideline analyzed and, as there was no response "not applicable", they were classified as 1 (absence of information).[14] This situation was observed in studies by the Ministry of Health and in specific studies, such as the Federal Bureau of Prisons, so that, in the editorial independence domain, the lack of information resulted in 0%. Chart 4 described the assessments.

AGREE II does not define minimum scores or standards to determine the quality of the material, as it considers and guides the subjectivity and importance of the recommendations in the analyzed document and their benefits according to the context of application and user judgment. However, for the overall assessment, a minimum score of 75% was established, according to a study that assessed the quality of these documents.[24]

Chart 2. Characterization of protocols and clinical guidelines for sexually transmitted infections in the context of people deprived of liberty. Fortaleza, Ceará, Brazil, 2025.

Identification/ scope/ language	Population characterization	Application context	Professionals involved
WHO, 2014[15] Switzerland/English/ International	People deprived of liberty in the prison system and other closed environments, MSM, people who inject drugs, sex workers, transgender people and adolescents.	Prison system and other closed environments and private or government-supported health facilities	Managers of national HIV programs, decision-makers in ministries of health, and those responsible for prison health policies, programs, and services
CDC, 2021[16] United States/English/ National	People deprived of liberty, pregnant women, adolescents, children, MSM, WSW, WSWM, transgender and gender diverse people.	Private health facilities, federally qualified health centers, and correctional facilities	Healthcare professionals and informal caregivers
BOP, 2021[17] United States/English/ National	Deprived of liberty in general and for special populations with HIV – older patients, pregnant women and transsexuals.	Federal Prison	Healthcare professionals and correctional facility managers.
WHO, 2021[18] Switzerland/English/ International	The general population, especially those with STI/HIV symptoms, key populations (people detained in prisons and other closed settings; MSM, transgender people, drug users, homeless people, sex workers), and pregnant people.	Prison system and other closed environments	Healthcare professionals (physicians, nurses, pharmacists, community health workers), and clients, colleagues, and family members
BOP, 2021[19] United States/English/ National	People deprived of liberty.	Federal Prison	Healthcare professionals and those responsible for prison health policies, programs, and services
AASLD/IDSA,2021[20] United States/ English/National	The general population and key populations, such as people deprived of liberty, people who inject drugs, MSM, and people on hemodialysis.	Prison system and other closed environments, and private or government-supported healthcare facilities	Healthcare professionals, workers, and managers
MoH, 2022[21] Brazil/ Portuguese/National	General population and key or vulnerable populations, such as people deprived of liberty, people living with HIV, sex workers, MSM, transgender people (homeless people, drug users).	Healthcare Networks with an intersectoral perspective	Healthcare professionals, workers and managers
MoH, 2022[22] Brazil/ Portuguese/National	Women and their sexual partners with potential vertical transmission of STIs, people living with HIV, children exposed to syphilis, and viral hepatitis B and C.	Healthcare Networks with an Intersectoral Perspective	Healthcare professionals, workers, and managers
PAHO, 2023[23] Spain/ Spanish/ Regional	Inmates deprived of liberty in prisons and other closed environments, MSM, drug users, sex workers of both sexes, transgender and gender-diverse people.	Correctional services and private or government-supported healthcare facilities	Healthcare professionals, caregivers, managers and decision-makers, and politicians at the national and subnational levels

WHO: World Health Organization; CDC: Centers for Disease Control and Prevention; BOP: Federal Bureau of Prison; AASLD: American Association for the Study of Liver Diseases; IDSA: Infectious Diseases Society of America; PAHO: Pan American Health Organization; MoH: Ministry of Health; MSM: men who have sex with men; WSWM: women who have sex with women and with men; STIs: sexually transmitted infections.

Chart 3. Recommendations of protocols and guidelines for sexually transmitted infection prevention, screening, diagnosis, and treatment. Fortaleza, Ceará, Brazil, 2025.

Care recommendations
Prevention
Educational programs on STIs with videos and group sessions, neutral and non-judgmental language, addressing partners, sexual practices, prevention, pregnancy history and intentions, and training for prison system professionals[16-22]
Free, anonymous and unrestricted distribution of condoms and lubricants, with instructions for use and hygiene, with an emphasis on MSM and trans people[15,16,18,21]
Harm reduction programs such as needle exchange and assessment of tattooing practices for prevention[15,20,23]
OST for drug addicts, ensuring access equivalent to that of the community[15,18,20,22]
Medical male circumcision: reducing female-to-male HIV transmission by approximately 60%. Recommended prevention practice in prisons, with confidentiality and ethics[15,18]
PrEP for at-risk populations, such as serodiscordant couples, MSM, trans women, and drug users[16,18,21-23]
PEP after HIV exposure, with clear protocols for inmates and staff[15-17,19-20]
Pre-exposure vaccination for hepatitis B and HPV for unvaccinated individuals[15-17,19]
EPT[16]
Screening
Rapid opt-out testing for HIV, syphilis, hepatitis B and C, gonorrhea, chlamydia and trichomoniasis (female)[15,16,18,20,23]
STI screening: HIV annually[15,17,19,22,23], biannually for syphilis and testing for hepatitis B and C biannually to annually, respectively[19-21]
Monitoring of key populations (MSM, sex workers, transvestites/transsexuals, alcohol and other drug abusers) with specific screening[16,19]
Screening for individuals diagnosed with STIs: syphilis and HIV: at the time of diagnosis and four to six weeks after diagnosis. Chlamydia, gonorrhea, hepatitis B and C: at the time of diagnosis. Individuals with receptive (passive) anal sex without condom use: syphilis and HIV: every six months. Hepatitis B and C: every six months to annually[16,18,21]
Pregnant women deprived of liberty: HIV testing in the first and third trimesters of pregnancy, especially high-risk women. Syphilis: first prenatal visit, third trimester, and delivery or abortion. Chlamydia and gonorrhea: pregnant women under 25 or with a history of STIs during pregnancy. New or multiple partners or with a history of STIs: testing at the first visit, but, if at risk, routinely or in the third trimester[16,21,22]
Timely notification[16-18,21]
Diagnosis
HIV: Ag/Ab combination assay followed by confirmatory assay[16,17,22]
Syphilis: non-treponemal and treponemal tests; dark-field examination and direct investigation with stained material: primary and secondary lesions[16-18,21,22]
Gonorrhea: culture, NAAT, smears and bacterioscopy[16,18,21]
Chlamydia: smears, first-urine culture, or molecular biology tests[16,18,21]
Genital herpes: NAAT or culture in the presence of lesions[16,18,21]
Trichomoniasis: fresh examination, bacterioscopy, culture and specific tests[16,20]
Chancroid: clinical assessment and exclusion of other diseases[16,21]
HPV: clinical assessment and biopsy if there are pigmented, hardened lesions, affixed to underlying tissue, bleeding or ulcerated lesions[16,21]
Genital mycoplasmosis: NAAT and vaginal swab samples[16]
Bacterial vaginosis: clinical criteria and tests[16,21]
Vulvovaginal candidiasis: clinical examinations and culture, treatment according to results[16,21]
Hepatitis B and C: serological tests, clinical assessment and preventive interventions[16,18,19,22]
Diagnosis by exclusion for herpes, chlamydia, *Klebsiella granulomatis*[19-21]
Treatment
HIV: ART started immediately, with guaranteed continuity[16,18,21,22]
Syphilis: penicillin G benzanthine according to stage; alternatives for allergy sufferers; monitoring with non-treponemal tests[16,21,22]
Chlamydia: azithromycin and second option doxycycline, except pregnant women, with alternative regimen with amoxicillin[16,21]
Gonorrhea: ceftriaxone as first choice, alternatives as needed[16,21]
Trichomaniasis: oral metronidazole and alternative tinidazole[16,21]
Chancroid: antibiotics such as azithromycin, ceftriaxone and ciprofloxacin[16,21]
HPV: topical treatments, cryotherapy, surgery, and other methods[16,21]
Genital mycoplasmosis: antibiotics, considering resistance[16,21]
Bacterial vaginosis: metronidazole and clindamycin in different forms[16,21]
Candidiasis: Over-the-counter intravaginal antifungals: clotrimazole cream, miconazole cream or suppository, tioconazole ointment. Prescription: butoconazole cream and terconazole cream or suppository. Oral: fluconazole[16]. Also: intravaginal with miconazole cream or oral nystatin with fluconazole or intravaginal[21]
Hepatitis A and C: supportive therapy[16]
Hepatitis A and C: supportive therapy; antiviral treatment for hepatitis C with adapted regimen and duration, ensuring continuity[16,19,20]

MSM: men who have sex with men; STIs: sexually transmitted infections; OST: opioid substitution therapy; PrEP: pre-exposure prophylaxis; PEP: post-exposure prophylaxis; EPT: expedited partner therapy; NAAT: nucleic acid amplification test; HPV: Human Immunodeficiency Virus; ART: antiretroviral therapy.
Source: the authors.

Chart 4. Assessment of methodological quality through the Appraisal of Guidelines Research & Evaluation II. Fortaleza, Ceará, Brazil, 2025.

AGREE II domains	15	16	17	18	19	20	21	22	23
1. Scope and Purpose	91.6%	97.2%	33.3%	100%	33.3%	90.2%	83.3%	94.4%	94.4%
2. Stakeholder Involvement	75%	77.7%	2.7%	41.6%	5.5%	51.8%	41.6%	61%	63.8%
3. Rigour of Development	75%	73.9%	7.2%	58.3%	11.4%	72.9%	5.2%	21.8%	67.7%
4. Clarity of Presentation	91.6%	94.4%	80.5%	97.2%	86%	89.5%	100%	86%	94.4%
5. Applicability	87.5%	35.4%	47.9%	83.3%	39.5%	55.7%	88.8%	31.2%	85.4%
6. Editorial Independence	33.3%	50%	0%	0%	0%	36.5%	0%	0%	41.6%
Overall Guideline Assessment 1	6	6	4	6	4	6	4	4	6
Overall Guideline Assessment 2	6	6	4	5	4	5	5	4	6

AGREE: Appraisal of Guidelines Research & Evaluation II.

Of the six existing domains, only "clarity of presentation" achieved a percentage higher than that established in all included guidelines. The "rigour of development" and "editorial independence" domains had the lowest percentages, with one guideline and none, respectively, exceeding the benchmark.

Regarding recommended use, judges recommended modifications to all protocols/guidelines. Although most domains did not meet the average score, they considered the unique information for the population and context.

The main modifications are related to: detailing the methodological development regarding the search and selection processes; consultation with the target and beneficiary population; barriers or facilitators for applicability; construction committee composition; strategies for updating the protocols/guidelines; and the existence or not of conflicts of interest and influence of funding agencies, considering, here, the specific information of protocols/guidelines.

DISCUSSION

The results obtained through the analysis of the included clinical protocols and guidelines allude to heterogeneities in the development mechanisms, subpopulations inserted in the context of PDL, as well as the range of recommendations for STIs in specific PDL materials, in addition to actions in the general population with reference to PDLs.

The provision of condoms, lubricants, and pre-exposure prophylaxis (PrEP) for HIV is recommended in the documents analyzed, although there are variations in supply between Brazilian states, reflecting challenges in implementing these measures in the prison system.[25]

The literature reinforces that strengthening prevention methods is essential to reduce STI rates among PDL.[26] Studies highlight the need for meaningful educational strategies, especially among young adults with low levels of education and limited access to information.[27] The effectiveness of these actions depends on a confidential and respectful approach to sexuality and gender identity, a crucial factor for eligibility and adherence to PrEP, reducing the risk of stigmatization.[28,29]

Screening, as demonstrated in the findings, is mostly performed through rapid testing upon entry into the justice system or as soon as possible. The "opt-out" strategy is also reinforced in the literature, as it is believed to result in the identification and detection of many STIs annually, with the possibility of treating or initiating treatment for the majority of diagnosed inmates.[30] Furthermore, informed and non-coercive consent is associated with seeking care during imprisonment.[26]

Of the diagnostic methods offered, there is limited discussion within the prison context regarding their availability, knowing that ethical, moral, cultural, and social factors can obscure the quality of access to actions and services. Thus, treatment may be guided solely by the syndromic approach (when symptoms are present), weakening the identification of asymptomatic individuals, whether through rapid tests or other laboratory tests.[21]

In Brazil, tests for syphilis, HIV, hepatitis B and C are still performed more frequently on pregnant women, while tests for gonorrhea and chlamydia are rarely performed on women under 25 or with a history of STIs.[21]

Thus, there was alignment between the national and international recommendations analyzed in this review. However, Brazilian documents present gaps in failing to consider inequalities among PDL, limiting their full access to existing recommendations.[21]

In the practical scope of the recommendations by the SUS, the Prison Primary Care team is made up of multidisciplinary teams, with emphasis on the nursing professional, for their role in managing the health screening of these people upon entry into the system.[25]

Furthermore, they work to control the main conditions, monitor them, conduct individual consultations and collective activities, and provide ways to obtain valuable information for syndromic approaches and the transmission chain, by creating confidential environments when dealing with sexuality and STIs.[25]

Of the guidelines and protocols included in the sample, although they did not reach 75% in all AGREE II domains, the analysis reinforces PDL's invisibility in the context of health policies. The mention and the specific document that considers care for this population, even with an awareness of its practical limitations, still represent significant progress.[11]

In the context of adaptation, these guidelines can provide valuable insights, considering a local context that is completely unique in its smells, colors, language, and human interactions. Furthermore, to strengthen this support, the "clarity of presentation" domain received above-average scores across all protocols/guidelines, reflecting the ease of understanding, clarity, and information covered on topics targeted at this population.[11]

Similar parameters were identified in other studies, such as in a guideline for Diabetes Mellitus, in which the highest percentage was for domain 1, with 66.7%.[31]

Furthermore, a study conducted in Spain added 75% of its score to the classification created: very low score (less than or equal to 25%); low score (between 25% and 50%); high score (from 50% to 75%); and very high score (above 75%). Thus, according to this classification, three protocols/guidelines included could be classified as high score.[30]

The guidelines' uniqueness and adaptability to the context of inmates allow recommendations to be aligned with real-world clinical practices, considering the heterogeneity of this group. This approach favors the development of protocols more applicable to the prison setting, contributing to the promotion of health and well-being, in line with Sustainable Development Goal (SDG) 3.[32]

The SDGs, especially SDG 3, aim to ensure healthy lives and promote well-being for all individuals, including those deprived of liberty. Therefore, promoting health and well-being in this population is essential to guarantee basic human rights, reduce inequities, and achieve a more just and inclusive society.[32]

CONCLUSIONS AND IMPLICATIONS FOR PRACTICE

The recommendations found for STI management in PDL involved health education, provision of condoms and lubricating gel, antiretroviral therapies for prevention, harm reduction, screening through rapid testing, clinical and laboratory diagnoses, and specific treatments for each STI, most of which were transversalized by the intrinsic dynamics of the system's organization, in addition to its inequalities and inequities in health.

Among the limitations, the unavailability of some complete documents and the lack of an in-depth practical assessment in prison units stand out. Although exploratory visits to the prison system were conducted, they were observational in nature, without direct application of the recommendations or systematic monitoring of care practices.

The evidence identified in this study can inform the organization of nursing and multidisciplinary teams' work in the prison system, guiding screening processes with rapid STI testing upon admission, the confidential distribution of condoms, lubricants, and harm reduction materials, and clinical follow-up with periodic consultations and exams. They also support the planning of educational initiatives and clear protocols for the use of PrEP, post-exposure prophylaxis, and the management of diagnosed infections. Systematizing these recommendations enables the production of knowledge applicable to the prison context, contributing to ensuring the right to health of inmates.

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DATA AVAILABILITY RESEARCH

The contents underlying the research text are contained in the article.

CONFLICT OF INTEREST

No conflict of interest.

REFERENCES

1. Domingues CSB, Duarte G, Passos MRL, Sztajnbok DCN, Menezes MLB. Brazilian Protocol for Sexually Transmitted Infections 2020: congenital syphilis and child exposed to syphilis. Epidemiol Serv Saude. 2021 mar 15;30(spe1):e2020597. http://doi.org/10.1590/s1679-4974202100005.esp1. PMid:33729402.
2. Rowley J, Vander Hoorn S, Korenromp E, Low N, Unemo M, Abu-Raddad LJ et al. Chlamydia, gonorrhoea, trichomoniasis and syphilis: global prevalence and incidence estimates, 2016. Bull World Health Organ. 2019 jun 6;97(8):548-562P. http://doi.org/10.2471/BLT.18.228486. PMid:31384073.
3. Carvalho ID, Guedes TG, Bezerra SMMS, Alves FAP, Leal LP, Linhares FMP. Educational technologies on sexually transmitted infections for incarcerated women. Rev Lat Am Enfermagem. 2020 nov 6;28:e3392. http://doi.org/10.1590/1518-8345.4365.3392. PMid:33174996.
4. Oliveira CB, Paiva EMC, Nogueira DA, Assunção MRS, Goyatá SLT, Chini LT et al. Sexually Transmitted Infections in a population deprived of liberty in the south of Minas Gerais: a cross-sectional study. CLCS. 2023 ago 30;16(8):13092-104. http://doi.org/10.55905/revconv.16n.8-248.
5. World Prison Brief. An online database comprising information on prisons and the use of imprisonment around the world [Internet]. London: Birkbeck, University of London; 2018 [cited 2023 Sep 16]. Available from: https://www.prisonstudies.org/
6. Brasil. Ministério da Justiça e Segurança Pública. Sistema Nacional de Informações Penais. Relatório de informações Penais [Internet]. Brasília: SENAPPEN. 2024 [cited 2024 July 14]. Available from: https://www.gov.br/senappen/pt-br/servicos/sisdepen/relatorios/relatorios-de-informacoes-penitenciarias/relatorio-1o-semestre-de-2024.pdf
7. Sousa FLM, Farias MGG. Social vulnerability and mediation of information in the prison context: interrelationships and perceptions [Internet]. Rev Bras Bibl Doc. 2020 jan 28; [cited 2023 Sep 16];16:1-19. Available from: https://rbbd.febab.org.br/rbbd/article/view/1319

8. Golrokhi R, Farhoudi B, Taj L, Pahlaviani FG, Mazaheri-Tehrani E, Cossarizza A et al. HIV prevalence and correlations in prisons in different regions of the world: a review article. Open AIDS J. 2018 ago 31;12(1):81-92. http://doi.org/10.2174/1874613601812010081. PMid:30369993.
9. Brasil. Ministério da Saúde. Secretaria de Atenção à Saúde. Departamento de ações programáticas estratégicas. Plano Nacional de Saúde no Sistema Penitenciário [Internet]. 3ª ed. Brasília: Ministério da Saúde; 2004 [cited 2023 Sep 22]. Available from: https://bvsms.saude.gov.br/bvs/publicacoes/cartilha_pnssp.pdf
10. Brasil. Política Nacional de Atenção Integral à Saúde das Pessoas Privadas de Liberdade no Sistema Prisional (PNAISP) [Internet]. Brasília: Ministério da Saúde; 2014 [cited 2023 Sep 22]. Available from: https://www.gov.br/saude/pt-br/composicao/saps/pnaisp
11. Brasil. Ministério da Saúde. Secretaria de Ciência, Tecnologia, Inovação e Complexo da Saúde. Departamento de Gestão e Incorporação de Tecnologias em Saúde. Diretrizes metodológicas: elaboração de diretrizes clínicas [Internet]. Brasília: Ministério da Saúde; 2023 [cited 2023 Sep 22]. 138 p. Available from: https://www.gov.br/conitec/pt-br/midias/artigos_publicacoes/diretrizes/diretrizes-metodologicas-elaboracao-de-diretrizes-clinicas-2020.pdf
12. Toronto CE, Remington R. A step-by-step guide to conducting an integrative review. Cham: Springer International Publishing; 2020. http://doi.org/10.1007/978-3-030-37504-1.
13. Ouzzani M, Hammady H, Fedorowicz A, Elmagarmid A. Rayyan: a web and mobile app for systematic reviews. Systematic reviews. Systematic Reviews. 2016 dez;5:210. http://doi.org/10.1186/s13643-016-0384-4.
14. Brouwers MC, Kerkvliet K, Spithoff K, and the AGREE Next Steps Consortium. The AGREE Reporting Checklist: a tool to improve reporting of clinical practice guidelines. BMJ. 2016 mar 8;352:i1152. http://doi.org/10.1136/bmj.i1152. PMid:26957104.
15. World Health Organization. Consolidated guidelines on HIV prevention, diagnosis, treatment and care for key populations [Internet]. Geneva: WHO; 2014 Jul [cited 2024 Feb 10]. Available from: https://www.who.int/publications/i/item/9789241507431
16. Kimberly A, Workowski MD, Laura HB, Philip AC, Christine MJ, Christina AM, et al. Sexually Transmitted Infections Treatment Guidelines [Internet]. Atlanta: Centers for Disease Control and Prevention; 2021 jul 21 [cited 2024 Feb 10]. (Morbidity and Mortality Weekly Report; vol. 70, no. 4). Available from: https://www.cdc.gov/std/treatment-guidelines/default.htm
17. Federal Bureau of Prisons. Clinical guidance: evaluation and management of hepatitis C virus (HCV) infection [Internet]. Washington, DC: BOP; 2021 mar [cited 2024 Feb 15]. Available from: https://www.bop.gov/resources/pdfs/hcv_guidance.20210513.pdf
18. World Health Organization. Consolidated guidelines on HIV prevention, testing, treatment, service delivery and monitoring: recommendations for a public health approach [Internet]. Geneva: WHO; 2021 jul [cited 2024 Feb 23]. Available from: https://www.who.int/publications/i/item/9789240031593
19. Federal Bureau of Prisons. Clinical guidance: HIV management [Internet]. Washington, DC: BOP; 2021 abr [cited 2024 Feb 15]. Available from: https://www.bop.gov/resources/pdfs/hiv_infection_management_20210427.pdf
20. American Association for the Study of liver Diseases. Infectious Diseases Society of America. HCV guidance: recommendations for testing, managing, and treating hepatites C [Internet]. Alexandria: AASLD/IDSA; 2025 [cited 2025 Apr 23]. Available from: https://www.hcvguidelines.org/
21. Brasil. Ministério da Saúde. Secretaria de Vigilância em Saúde, Departamento de Doenças de Condições Crônicas e Infecções Sexualmente Transmissíveis. Protocolo clínico e diretrizes terapêuticas para atenção integral às pessoas com infecções sexualmente transmissíveis – IST [Internet]. Brasília: Ministério da Saúde; 2022 [cited 2024 Feb 10]. 211 p. Available from: http://bvsms.saude.gov.br/bvs/publicacoes/protocolo_clinico_atecao_integral_ist.pdf
22. Brasil. Ministério da Saúde. Secretaria de Ciência, Tecnologia, Inovação e Insumos Estratégicos em Saúde. Secretaria de Vigilância em Saúde. Protocolo clínico e diretrizes terapêuticas para prevenção da transmissão vertical do HIV, sífilis e hepatites virais [Internet]. Brasília: Ministério da Saúde; 2022 [cited 2024 Feb 15]. 224 p. Available from: http://bvsms.saude.gov.br/bvs/publicacoes/protocolo_clinico_hiv_sifilis_hepatites.pdf
23. Organización Panamericana de la Salud. Unified guidelines on the prevention, diagnosis, treatment, and care of HIV infection, viral hepatitis, and STIs for key population groups [Internet]. Washington, DC: OPS; 2014 [cited 2023 Feb 10]. Available from: https://iris.paho.org/handle/10665.2/57413?show=full
24. Sousa DMDN, Chagas ACMA, Vasconcelos CTM, Stein AT, Oriá MOB. Development of a clinical protocol for detection of cervical cancer precursor lesions. Rev Lat Am Enfermagem. 2018;26(0):e2999. http://doi.org/10.1590/1518-8345.2340.2999. PMid:29791673.
25. Brasil. Conselho Nacional de Justiça. Relatórios de inspeções do sistema prisional [Internet]. Brasília: Conselho Nacional de Justiça; 2023 [cited 2024 Nov 11]. Available from: https://www.cnj.jus.br/sistema-carcerario/publicacoes-e-relatorios/
26. Spaulding AC, Rabeeah Z, González-Montalvo M, Akiyama MJ, Baker BJ, Bauer HM et al. Prevalence and management of sexually transmitted infections in correctional settings: a systematic review. Clin Infect Dis. 2022;74 (Suppl 2):S193-217. http://doi.org/10.1093/cid/ciac122. PMid:35416974.
27. Carvalho FF, Takeda E, Chagas EFB, Pinheiro OL. Knowledge of the prison population about sexually transmitted infections. Rev Gaúcha Enferm. 2020;41:e20190268. http://doi.org/10.1590/1983-1447.2020.20190268. PMid:32520111.
28. Brinkley-Rubinstein L, Peterson M, Zaller ND, Wohl DA. Best practices for identifying men who have sex with men for corrections-based pre-exposure prophylaxis provision. Health &amp. Health Justice. 2019;7(1):7. http://doi.org/10.1186/s40352-019-0088-7. PMid:30982117.
29. Desai J, Krakower D, Harris BL, Culp S, Nijhawan AE. HIV/sexually transmitted infection screening and eligibility for HIV preexposure prophylaxis among women incarcerated in an urban county jail. Sex Transm Dis. 2023 out 1;50(10):675-9. http://doi.org/10.1097/OLQ.0000000000001852. PMid:37699368.
30. Parra-Anguita L, Granero-Moya N, Pancorbo-Hidalgo PL. Quality of the spanish clinical guidelines about Alzheimer's disease and others dementias. Rev Esp Salud Pública. 2016 jul 14;90:e1-7. PMid:27412476.
31. Radwan M, Akbari Sari A, Rashidian A, Takian A, Abou-Dagga S, Elsous A. Appraising the methodological quality of the clinical practice guideline for diabetes mellitus using the AGREE II instrument: a methodological evaluation. JRSM Open. 2017;8(2):205427041668267. http://doi.org/10.1177/2054270416682673. PMid:28203385.
32. Brasil. Instituto Brasileiro de Geografia e Estatística. Objetivos de Desenvolvimento Sustentável (ODS) Brasil: Objetivo 3 – Saúde e Bem-Estar [Internet]. Brasília: IBGE; 2024 [cited 2025 Mar 15]. Available from: https://www.gov.br/senappen/pt-br/servicos/sisdepen/relatorios/relipen/relipen-1-semestre-de-2024.pdf

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