


Epidemiology of Hepatitis B and Syphilis in Ouagadougou (2013-2024): Screening, Prevalence and Drug Treatment

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Abstract

Context: Asymptomatic sexually transmitted infections (STIs), such as hepatitis B and syphilis, affect more than one million people aged 15 to 49 every day. A better understanding of their prevalence is essential in order to move towards their elimination and contribute to a 90% reduction in chronic hepatitis cases by 2030. **Objective:** To analyze changes in the epidemiological trends of hepatitis B and syphilis between 2013 and 2024 in order to strengthen control strategies and improve medical care for patients. **Method:** A descriptive cross-sectional study was conducted, including retrospective data collection from the CERBA database (2013-2023) and prospective data collection in 2024. Biological samples were analyzed using rapid diagnostic tests: Determine™ HBsAg 2 and Determine™ Syphilis TP. **Results:** From 2013 to 2024, among the 2,604 participants (mean age: 30.33 ± 10.87 years), the prevalence of hepatitis B virus (HBV) was 8.49% and that of syphilis was 1.61%. A downward trend in HBV was observed during the study period: 8.91% in 2013, 8.45% in 2016, 8.75% in 2020, and 7.83% in 2024. For syphilis, the rates were 2.30% in 2016, 2.61% in 2020 and 1.54% in 2024. Over the same period, HBV prevalence was higher in men than in women (9.24% vs. 7.10%, P = 0.061) and syphilis prevalence was also higher in men (1.72% vs. 1.42%, P = 0.563). In the management of HBV, tenofovir disoproxil fumarate (TDF) remains the reference molecule, prescribed in 98.1% of cases, while tenofovir alafenamide (TAF) is

used marginally (1.9%), and the hepatitis B vaccine (HepB) remains accessible. **Conclusion:** The still high prevalence of HBV in Burkina Faso requires increased vaccination efforts, particularly among at-risk groups, as well as equitable access to antivirals, with the goal of reducing chronic forms of hepatitis B by 90% within a decade. Furthermore, the decline in the prevalence of syphilis highlights the importance of early and continuous screening, treatment of partners and the implementation of effective prevention programs.

Keywords

Hepatitis B, Syphilis, Prevalence, Hepatitis B Vaccine, Tenofovir, Antibiotic

1. Introduction

Global and regional epidemiological data reveal that every day, more than one million people, mainly aged 15 to 49, contract a sexually transmitted infection (STI). A significant proportion of these infections remain asymptomatic, with hepatitis B and syphilis being two representative examples [1]. According to the Medical Dictionary, hepatitis B is an inflammatory liver disease caused by HBV, while syphilis is an infectious disease of bacterial origin caused by *Treponema pallidum* [2]. In 2022, the World Health Organization (WHO) estimated that approximately 8 million adults aged 15 to 49 had been diagnosed with syphilis [1]. If not treated properly, syphilis can lead to various complications several years after the initial infection. In its advanced stages, syphilis can compromise various systems and organs, including the central nervous system, the muscular and skeletal systems, the cardiovascular system, the liver, and the eyes. These severe complications, linked to the untreated progression of the infection, can lead to death [3].

With regard to hepatitis B, the WHO emphasizes that this viral infection causes a high number of deaths each year [4] [5]. It is estimated that approximately 1.1 million people worldwide die each year from acute hepatitis B or HBV-associated hepatocellular carcinoma. This high mortality rate reflects the persistent global burden of infection and highlights the urgent need to strengthen prevention strategies, including universal vaccination, early screening and equitable access to antiviral drugs [6] [7]. In 2022, an estimated 254 million people worldwide were living with HBV, but only 13% were aware of their infection. The African region alone accounted for 63% of all new HBV infections [5] [8]. In Burkina Faso, previous studies have reported a prevalence ranging from 7.7% to 9.3% [9]-[11] among pregnant women, while it can reach between 8.56% and 13.4% among blood donors [12] [13]. In some regions, the prevalence is even higher, reaching up to 14.5% [14] [15]. The major complications associated with HBV infection are hepatocellular carcinoma (primary liver cancer) and liver cirrhosis [16], which are life-threatening conditions because they are usually diagnosed at an advanced stage. Furthermore, the resources available for diagnosis and treatment remain limited and

are often associated with particularly high financial costs. This combination of factors contributes to an increased mortality rate and has significant socio-economic repercussions for the populations concerned [17]. The overall seroprevalence of syphilis in Burkina Faso is 1.5% among blood donors [18] and in some areas, its prevalence reaches 3.96% [19]. Infections caused by HBV and *Treponema pallidum* are major public health issues worldwide, particularly in sub-Saharan Africa, where diagnosis is often delayed. Although these conditions are preventable, they require continuous epidemiological surveillance. With this in mind, it seemed appropriate to focus the analysis on the city of Ouagadougou, the capital of Burkina Faso, which had an estimated population of approximately 3.2 million in 2023 and is a strategic migration hub. The present study, entitled “Epidemiology of hepatitis B and syphilis in Ouagadougou (2013-2024): screening, prevalence and drug treatment”, aims to examine the evolution of the prevalence of these two infections over an eleven-year period. The analysis aims to highlight the epidemiological trends of HBV and syphilis between 2013 and 2024, with a view to strengthening control strategies and improving medical care for patients.

2. Methodology

2.1. Study Type and Setting

This was a descriptive cross-sectional study with prospective and retrospective data collection. The Pietro Annigoni Biomolecular Research Centre (CERBA) served as our study setting. Located in sector 51 of the city of Ouagadougou, CERBA is in the Bogodogo health district. It is a reference centre for health research and aims to contribute to improving the health of populations in Burkina Faso and Africa through research and training of young doctors, pharmacists and biologists.

2.2. Study Population

Our study involved the general population of the city of Ouagadougou in Burkina Faso who were seen at CERBA for hepatitis B or syphilis screening and received hepatitis B treatment between¹January 2013 and 30 May 2024.

2.3. Data Collection

For prospective data collection, an awareness campaign and voluntary screening for hepatitis B and syphilis were launched through the media. Anyone who wanted to know their serological status for hepatitis B and/or syphilis was free to come in for blood tests for serological examination on 28, 29 and 30 May 2024. Retrospective data collection was carried out using CERBA data.

2.4. Sample Analysis Methodology

Between 2013 and 2023, the reagents listed below were employed for hepatitis B and syphilis diagnostic testing:

HBsAg Detection HBsAg was detected using Heapanostika HBsAg Ultra (Bio-

mérieux, The Netherlands); HBV Rapid Test (ABON Biopharm, China); HBV Combo Rapid Test Cassette (Ref. IHBSG-401, Lot HBSG14120001, China); or Architect HIV Ag/Ab Combo and Architect HBsAg Qualitative II (Abbott) on the Architect 1000 SR analyzer (Abbott Laboratories, USA).

HBsAg Confirmation Positive samples were confirmed with Bio-Rad Monolisa™ HBsAg ULTRA (France) or Alere Determine HBsAg (Standard Diagnostics, South Korea).

Syphilis Screening Antibodies against *Treponema pallidum* were screened using Rapid Plasma Reagin (RPR) tests (Cypress Diagnostics, Belgium or (RPR) FUTURA SYSTEM, Italy).

Syphilis Confirmation RPR-positive samples were confirmed by TPHA (Cypress Diagnostics, Belgium) or the ARCHITECT Syphilis TP assay (Abbott Japan, Tokyo), a two-step CMIA performed on the ARCHITECT-i100SR system (Abbott, USA).

The biological samples from the 2024 campaign were analyzed using rapid diagnostic tests: Determine™ HBsAg 2 and Determine™ Syphilis TP, in accordance with the manufacturers' instructions.

Abbott's Determine™ HBsAg 2 is a qualitative, visually read, *in vitro* immunoassay for the detection of HBsAg in human whole blood from capillary or venous samples, plasma or serum. The test is intended to aid in the diagnosis of HBV infection by detecting HBs antigen in infected individuals [20].

Determine™ Syphilis TP is a qualitative, *in vitro*, visually read immunoassay for the detection of antibodies to *T. pallidum* in human whole blood, plasma, and capillary and venous serum. The test is intended to aid in the detection of antibodies to *T. pallidum* in individuals infected with [21].

2.5. Medical Management of Patients Infected with HBV

A total of 104 patients with HBV infection received therapeutic management based on the administration of tenofovir disoproxil fumarate (TDF) or tenofovir alafenamide (TAF) as part of their treatment protocol.

2.6. Data Analysis

The study data were entered into Excel 2013, which was used to create graphs. They were processed using the standard *Statistical Package for Social Sciences* (SPSS) version 25.0 software. The statistical significance threshold was set at $p < 0.05$.

2.7. Ethical Considerations

This study was approved by the Institutional Ethics Committee of the Saint Camille Hospital in Ouagadougou (HOSCO)/CERBA, Deliberation No. 2024-05-005A of 6 May 2024.

Confidentiality and anonymity were respected with regard to the information provided.

3. Results

3.1. Demographic Characteristics of the Study Population

Among all individuals who attended CERBA for HBV and syphilis screening, only 2,604 participants who had explicitly consented, at the time of blood collection, to the future use of their data for research intended for publication were included in this study. Of these, 1,668 (64.82%) were men and 916 (35.18%) were women. This corresponds to a sex ratio (M/F) of 1.84 in favor of men. The mean age of the study population was 30.33 ± 10.87 years. The 15 - 29 age group was the most represented (**Table 1**).

Table 1. Demographic characteristics of the study population from 2013 to 2024.

Age groups (years)	N	%	Average age	Women (N)	%	Men (N)	%	P
<15	21	0.81	5.57 ± 5.86	10	47.62	11	52.38	0.819
15 to 29	1446	55.53	23.12 ± 3.39	508	35.13	938	64.87	<0.0001
30 to 44	843		35.46 ± 4.20	293	35.22	550	64.78	<0.0001
45 to 59	244		49.99 ± 4.15	85	34.76	159	65.24	<0.0001
>59	50	1.92	66.58 ± 5.21	20	40	30	60	0.166
Total	2604	100	30.33 ± 10.87	916	35.18	1668	64.82	<0.0001
Women	916	35.18	30.46 ± 11.30					
Men	1688	64.82	30.26 ± 10.64					0.654
Total	2604	100	30.33 ± 10.87					

N: sample size; p: p-value (significance threshold).

2.2. HBV and Syphilis Test Results Based on Patient Age Averages

Of the 2604 participants, the test results showed a prevalence of 8.49% and 1.61% for HBV and syphilis, respectively. The average age of HBV⁺ participants was 30.95 ± 10.15 years, while that of participants who tested positive for syphilis was 31.69 ± 10.96 years (**Table 2**).

Table 2. HBV and syphilis test results based on patient age averages.

	N	%	Average age	P
HBV				
Negative	2383	91.51	30.27 ± 10.94	0.374
Positive	221	8.49	30.95 ± 10.15	
Total	2604	100	30.33 ± 10.87	
Syphilis				
Negative	2562	98.39	30.30 ± 10.12	0.378
Positive	42	1.61	31.69 ± 10.96	
Total	2604	100	30.33 ± 10.87	

3.3. Prevalence of Hepatitis B and Syphilis by Age Group and Gender

The overall prevalence of hepatitis B was 8.49% (221/2,604), with a significantly higher proportion among men (9.24%; 156/1,688) than among women (7.10%; 65/916) ($P < 0.0001$). The 30 - 44 age group had the highest prevalence (9.37%; 79/843). The overall prevalence of syphilis was 1.61% (42/2,604), with 1.72% (29/1,688) among men and 1.42% (13/916) among women. The 45 - 59 age group had the highest prevalence (2.05%; 5/244) (**Table 3**). Finally, five cases of *HBV-Treponema pallidum* co-infection were identified in the study population (**Table 4**).

Table 3. Prevalence of HBV and syphilis by age group and sex from 2013 to 2024.

Age groups (years)	Sex	HBV				Syphilis			
		Neg	Positive	Total	% (Pos)	Neg	Pos	Total	%
<15	F	10	0	10	0	10	0	10	0
	M	10	1	11	9.09	11	0	11	0
	Total	20	1	21	4.76	21	0	21	0
15 - 29	F	474	34	508	6.69	503	5	508	0.98
	M	852	86	938	9.17	923	15	938	1.6
	Total	1,326	120	1,446	8.3	1426	20	1446	1.38
30 - 44	F	271	22	293	7.51	288	5	293	1.71
	M	493	57	550	10.36	538	12	550	2.18
	Total	764	79	843	9.37	826	17	843	2.02
45 - 59	F	77	8	85	9.41	82	3	85	3.53
	M	149	10	159	6.29	157	2	159	1.26
	Total	226	18	244	7.38	239	5	244	2.05
59<	F	19	1	20	5	20	0	20	0
	M	28	2	30	6.67	30	0	30	0
	Total	47	3	50	6	50	0	50	0
Total	F*	851	65	916	7.1	903	13	916	1.42
	M	1532	156	1688	9.24	1659	29	1688	1.72
	Total	2383	221	2604	8.49	2562	42	2604	1.61

HBV: F* ----> M:P = 0.061; Syphilis: F* ----> M:P = 0.563.

3.4. HBV-Syphilis Co-Infection from 2013 to 2024

The study identified five cases of HBV⁺/syphilis⁺ co-infection, in addition to 216 HBV⁺/syphilis⁻ cases and 37 syphilis⁺/HBV⁻ cases. These results indicate that syphilis remains less common than hepatitis B, but the coexistence of both infections highlights the need for systematic screening and integrated prevention strategies (**Table 4**).

Table 4. HBV-syphilis co-infection from 2013 to 2024.

		Syphilis		
		-	+	Total
HBV	-	2346 (90.09%)	37 (1.42%)	2383 (91.51%)
	+	216 (8.30%)	5 (0.19%)	221 (8.49%)
Total		2562 (98.39%)	42 (1.61%)	2,604 (100.00%)

2.5. Prevalence of HBV and Syphilis by Gender and Age Group in 2024

In 2024, the prevalence of infections among study participants was 7.83% for HBV and 1.54% for *Treponema pallidum*. HBV prevalence was higher among men (5.22%) than among women (2.61%). Similarly, the prevalence of syphilis was higher among men (0.92%) than among women (0.61%) (Table 5).

Table 5. Prevalence of HBV and syphilis by gender in 2024.

Gender	HBV 2024						<i>Treponema pallidum</i> 2024					
	-		+		Total		-		+		Total	
	N	%	N	%	N	%	N	%	N	%		
F	244	37.48	17	2.61	261	100	257	39.48	4	0.61	261	
M	356	54.68	34	5.22	390	100	384	58.98	6	0.92	390	
Total	600	92.16	51	7.83	651	100	641	98.46	10	1.54	651	

3.6. Changes in HBV and Syphilis Prevalence from 2013 to 2024

Between 2013 and 2024, HBV infection showed a three-phase trend: a slight decline from 8.91% in 2013 to 8.45% in 2016, followed by an increase to 8.75% in 2020, then a decline to 7.83% in 2024. Prevalence rates for syphilis showed a downward trend, falling from 2.30% in 2016 to 1.54% in 2024 (Table 6).

Table 6. Changes in HBV and syphilis prevalence from 2013 to 2024.

Pathogens	Years			
	2013	2016	2020	2024
HBV	8.91%	8.45%	8.75%	7.83%
SYPHILIS	-	2.30%	2.61%	1.54%

3.7. Drug Treatment for Hepatitis B

Follow-up of 104 out of 221 HBsAg-positive patients at CERBA.

“During the follow-up of HBV-positive patients, several factors led to the exclusion of certain seropositive individuals, thereby resulting in the coexistence of

treated and untreated patients within the CERBA cohort.

- First, clinical and therapeutic criteria play a central role. Treatment decisions are based on strict eligibility requirements. Not all HBsAg carriers require immediate therapy. At CERBA, initiation of treatment with tenofovir disoproxil fumarate (TDF) or tenofovir alafenamide (TAF) among the 221 patients depended on viral load, transaminase levels (ALT/AST), the degree of hepatic fibrosis, and the presence of comorbidities. Moreover, the phase of infection is decisive: inactive chronic carriers or those with low viral replication were generally monitored without treatment, under regular clinical surveillance.
- Second, contraindications and drug interactions may also influence therapeutic decisions. At CERBA, conditions such as renal insufficiency, pregnancy, or potential drug interactions could lead to delaying or avoiding treatment initiation. These patients required closer monitoring to adapt management to their individual context.
- Third, patient-related and health system factors further impact continuity of care. Refusal of therapy, risk of poor adherence, or loss to follow-up after diagnosis represent major barriers. In such cases, reinforced support was necessary, including therapeutic education, psychosocial assistance, and strategies to improve retention in care pathways.

Thus, among the population of individuals who tested positive for HBV, a significant subset of 104 patients met the criteria for drug treatment in accordance with the national protocol for the management of hepatitis B. This subgroup is regularly monitored and receives TDF and TAF as part of its therapeutic regimen. Moreover, it should be noted that TDF appears to be the most frequently prescribed molecule, accounting for 98.08% of all prescriptions issued for HBV treatment in these patients (**Table 7**).

Table 7. Therapeutic follow-up of HBV+ individuals.

	Tenofovir disoproxil fumarate 300 mg/day		Tenofovir alafenamide 25 mg/day		Total	
	N	%	N	%	N	%
Gender						
F	59	56.73	1	0.96	60	57.69
M	43	41.35	1	0.96	44	42.31
Total	102	98.08	2	1.92	104	100

N: number of subjects.

3.8. Hepatitis B Vaccination Protocol in Burkina Faso

In Burkina Faso, the hepatitis B protocol for children consists of one dose at birth followed by three pentavalent doses at 6, 10 and 14 weeks. For non-immune adults, the schedule consists of three intramuscular injections at 0, 1 and 6 months, ensuring long-lasting protection (**Table 8**).

Table 8. Hepatitis B vaccination protocol in Burkina Faso.

Hepatitis B vaccination protocol for children in the Expanded Program on Immunization (EPI) in Burkina Faso		Hepatitis B vaccination protocol for adults in Burkina Faso	
Children		Adult	
Child's age	Vaccine administered	Period	Vaccine administered
Newborn ≤ 24 h	HepB-BD (monovalent)		
6 weeks	Pentavalent 1 (includes HepB)	Start of vaccination	First dose HepB (M0)
10 weeks	Pentavalent 2 (includes HepB)	One month after the first dose	Second dose HepB (M1)
14 weeks	Pentavalent 3 (includes HepB)	Six months after the first dose	Third dose HepB (M6)

4. Discussion

Although women represent 50.19% of the population of Burkina Faso, a male predominance (64.82%) was observed among individuals seeking hepatitis B (HBV) and syphilis testing at CERBA. This higher participation of men in HBV testing may be explained not only by sampling biases, such as targeted screening or inclusion of at-risk populations, but also by behavioural factors, inequalities in access to healthcare, and sociocultural norms.

In line with these demographic observations, the results of this study—consistent with those of Meda *et al.* [22] and Zouré *et al.* [23]—reveal a higher prevalence of HBV and *Treponema pallidum* infections among men, probably linked to risky behaviours and practices. The predominance of 15 - 29 years olds is confirmed, but the data diverge: Zouré *et al.* report a low prevalence of HBV, while Meda *et al.* observe higher rates, a difference attributable to awareness campaigns.

4.1. Average Prevalence of HBV and Syphilis from 2013 to 2024

Average prevalence of HBV from 2013 to 2024:

Our results indicate a HBV prevalence of 8.49% for the period 2013-2024. This rate confirms that Burkina Faso is located in a highly endemic area, defined as having a prevalence of $\geq 8.00\%$ [24]. These data are consistent with those of Meda *et al.* (9.10%), Zouré *et al.* (8.77%) [23], and Simpore *et al.* (9.3%) [9]. They are also close to the 8.80% reported by Diarra *et al.*, [25] although slight variations can be explained by differences in methodology, population or study period. On the other hand, our prevalence is lower than that observed by

Yanogo *et al.* (11.94%) [26] and by Wongjarupong *et al.*, who reported higher rates among blood donors at regional transfusion centres between 2009 and 2013: 12.90% in Ouagadougou, 11.80% in Bobo-Dioulasso, 17.40% in Ouahigouya and 14.10% in Fada N’Gourma [12]. It also remains lower than the 14.78% reported by Jary *et al.* in 2019 in Mali, in a cross-sectional study of blood donors in Bamako [27]. These discrepancies can be attributed to methodological differences, the characteristics of the populations studied, and improved access to drug treatments. Analysis of data for the period 2013-2024 suggests that prevalence is relatively stable, reflecting the limited impact of prevention efforts, particularly vac-

cination. This situation could be linked to the persistence of socio-cultural risk factors, insufficient vaccination coverage and the limitations of the surveillance system. The prevalence of 8.49% confirms that hepatitis B remains a major public health problem in Ouagadougou, requiring strengthened prevention strategies, intensified screening and improved access to care. The results of this research also remain lower than those reported by Lingani *et al.*, who observed rates of 11.93% in urban areas, 17.35% in rural areas, 11.21% among pregnant women and 11.73% among blood donors, based on a meta-analysis covering the period 1996-2017 [28]. Similarly, Ouédraogo *et al.* (2019) reported a prevalence of 12.80% among female sex workers in three secondary cities (Koudougou, Ouahigouya and Tenkodogo) [29], with rates varying from 6.40% to 15.70% depending on the location. Finally, an even higher prevalence (20.40%) was observed among men who have sex with men in Ouagadougou [30]. These differences reflect the influence of socio-demographic characteristics and levels of exposure to risk factors, which are particularly pronounced in vulnerable populations such as sex workers.

Average prevalence of syphilis from 2013 to 2024:

Our results indicate a syphilis prevalence of 2.40%, close to the 2.10% reported by Nagalo *et al.* (2011), but significantly higher than the global estimates (0.50%) proposed by Newman *et al.* in 2015 [31], and Rowley *et al.* (2019) [32]. It also exceeds the African regional average of 1.60% [32]. In comparison, Kirakoya-Samadoulougou *et al.* (2011) [33] observed a prevalence of 1.70%, while Bisseye *et al.* (2013) [18] reported lower rates, ranging from 0.70% in BoboDioulasso to 1.70% in Ouagadougou. These differences can be attributed to the characteristics of the populations studied. The Kirakoya-Samadoulougou sample consisted mainly of pregnant women, which could explain the lower prevalence. Our data confirm this trend, with a lower rate among women (2.1%) compared to men (2.6%). In the 15 - 29 age group, the prevalence is 1.6% among women compared to 2.4% among men, and in the 30 - 44 age group, 2.7% and 3.3% respectively. A survey by Bisseye *et al.* (2013) [18] had already highlighted a similar variation, with 2% among men and 1.2% among women in Ouagadougou. The prevalence observed in Ouagadougou between 2013 and 2024 remains higher than that reported in some neighbouring countries: 0.04% in Mali [27] and 0.60% in Togo [34]. These differences may be related to diagnostic methodologies (TPHA/VDRL) and demographic characteristics. However, it remains moderate compared to other African contexts: 5.40% among pregnant women in Cameroon [34] and 10.80% in Ghana [35], where participants had clinical lesions consistent with primary or secondary syphilis. Finally, our results are similar to those of Wongjarupong *et al.* (2021) [12], who observed a prevalence of 2.90% in Ouagadougou and 2.40% in the general population of the four main cities of Burkina Faso.

4.2. Trends in the Prevalence of HBV, Syphilis and Drug Treatment for Chronic Hepatitis B

The 2022-2030 global health strategies for HIV, viral hepatitis and STIs set out the health sector's guidelines for eliminating, or failing that, significantly reducing the

prevalence of AIDS, hepatitis B and C and other sexually transmitted infections by 2030 [36].

Data collected in 2013, 2016, 2020 and 2024 indicate HBV prevalence rates of 8.91%, 8.45%, 8.75% and 7.83% respectively. These data show a relative stability in HBV prevalence between 2013 and 2024, remaining around 8%. The decline observed in 2024 (7.83%) is not statistically significant ($P = 0.903$). These findings reflect, despite minor variations, the persistence of the epidemiological burden. They also demonstrate that potential sampling biases and changes in HBV diagnostic reagents did not significantly influence the results over the eleven years of follow-up.

Beyond these considerations, it is important to note that the diagnostic reagents used for HBV and syphilis screening evolved during the period under review. Although all tests performed complied with national performance standards, variations in sensitivity and specificity between the reagents employed may have contributed to the fluctuations observed in positivity rates. These factors must therefore be recognized as a methodological limitation of the study. Within this methodological framework, the examination of therapeutic practices provides an additional analysis. Within this methodological framework, the examination of therapeutic practices provides additional analysis. Our study highlights a marked predominance of Tenofovir Disoproxil Fumarate (TDF) (98.08%) over Tenofovir Alafenamide (TAF) (1.92%) among the 104 patients included. This distribution reflects several realities: the established clinical experience with TDF, its more affordable cost and the limited availability of TAF in the context studied. It remains consistent with current WHO recommendations, which advocate TDF as first-line treatment, with TAF being considered a more recent alternative [37]. It should be noted that in Burkina Faso, nucleoside analogues with a high resistance barrier (entecavir, TDF, TAF) are the treatment of choice according to the Standards and Protocols for the Management of Viral Hepatitis [38]. In our study, the use of TAF was limited to patients with renal impairment.

5. Conclusion

This study, conducted in Ouagadougou between 2013 and 2024, reveals a high prevalence of HBV (8.49%), confirming Burkina Faso as a highly endemic area. Despite a downward trend, the prevalence remains a cause for concern, especially among men, requiring increased vaccination and equitable access to antivirals. Tenofovir disoproxil fumarate (TDF) remains the standard treatment, while tenofovir alafenamide (TAF) remains marginal. Syphilis has a lower prevalence (1.61%), which is declining, but is higher among men. These results highlight the importance of strengthened prevention and screening strategies.

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Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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