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SOROPREVALENCE IN ITINERANT TESTS FOR SYPHILIS, HIV AND HEPATITES

SOROPREVALÊNCIA EM TESTAGEM ITINERANTE PARA SÍFILIS, HIV E HEPATITES

SEROPREVALENCIA EN PRUEBAS ITINERANTE PARA SÍFILIS, VIH Y HEPATITIS

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ABSTRACT

Objective: to identify the seroprevalence of syphilis, HIV and hepatitis B and C in the care of patients in the Itinerant TCC of the Ambulatory Clinical Teaching Unit. ***Method:*** this is a quantitative, descriptive, retrospective study. The documentary research method was chosen. The registration of 1125 users of the Itinerant TCC service was obtained in 2017. The results were presented in the form of tables. ***Results:*** seroprevalence of 79 (7.02%) confirmed cases of all pathologies tested (HIV, syphilis, hepatitis B and C), including five (0.44%) positive HIV tests; four (0.36%) for hepatitis B; seven (0.62%) for hepatitis C and 63 (5.60%) for syphilis. ***Conclusion:*** a high prevalence of positive serologies was reported, mainly for syphilis, which presented a much higher number. It is concluded, therefore, that sexually transmitted infections are present in the population in general and that the Itinerant TCC can contribute to identify new cases and, consequently, to be referred to the treatment as early as possible, leading to a favorable prognosis.

Descriptors: Serum epidemiology; HIV; Hepatitis B; Hepatitis C; Syphilis; Mobile Health Units.

RESUMO

Objetivo: identificar a soroprevalência de sífilis, HIV e hepatites B e C nos atendimentos de pacientes no CTA Itinerante do Ambulatório Escola. ***Método*:** trata-se de um estudo quantitativo, descritivo, retrospectivo. Escolheu-se o método de pesquisa documental. Obteve-se o registro de 1125 usuários do serviço de CTA Itinerante no ano de 2017. Apresentaram-se os resultados em forma de tabelas. ***Resultados*:** identificou-se a soroprevalência de 79 (7,02%) casos confirmados de todas as patologias testadas (HIV, sífilis, hepatite B e C), incluindo 5 (0,44%) testes positivos para HIV; 4 (0,36%), para hepatite B; 7 (0,62%), para hepatite C e 63 (5,60%), para sífilis. ***Conclusão:*** reportou-se a alta prevalência de sorologias positivas, principalmente, para sífilis, que apresentou um número bem mais elevado. Conclui-se, portanto, que as infecções sexualmente transmissíveis estão presentes na população em geral e que o CTA Itinerante pode contribuir para identificar novos casos e, consequentemente, para que sejam encaminhados para o tratamento o mais precocemente possível, levando a um prognóstico favorável. ***Descritores***: Estudos Soroepidemiológicos; HIV; Hepatite B; Hepatite C; Sífilis; Unidades Móveis de Saúde.

RESUMEN

Objetivo: identificar la seroprevalencia de sífilis, VIH y hepatitis B y C en las atenciones de pacientes en el CTA Itinerante del Ambulatorio Escuela. ***Método:*** se trata de un estudio cuantitativo, descriptivo, retrospectivo. Se eligió el método de investigación documental. Se obtuvo el registro de 1125 usuarios del servicio de CTA Itinerante en el año 2017. Se presentaron los resultados en forma de tablas. ***Resultados:*** se identificó la seroprevalencia de 79 (7,02%) casos confirmados de todas las patologías probadas (VIH, sífilis, hepatitis B y C), incluyendo 5 (0,44%) pruebas positivas para el VIH; 4 (0,36%), para la hepatitis B; 7 (0,62%), para hepatitis C y 63 (5,60%), para sífilis. ***Conclusión:*** se reportó la alta prevalencia de serologías positivas, principalmente, para sífilis, que presentó un número mucho más elevado. Se concluye, por lo tanto, que las infecciones sexualmente transmisibles están presentes en la población en general y que el CTA Itinerante puede contribuir a identificar nuevos casos y, consecuentemente, para que sean encaminados al tratamiento lo más precozmente posible, llevando a un pronóstico favorable. ***Descriptores:*** Estudios Seroepidemiológicos; VIH; Hepatitis B; Hepatitis C; Sífilis; Unidades Móviles de Salud.

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INTRODUCTION

It is known that sexually transmitted infections (STIs) increase every year in Brazil, and also in the world, regardless of gender, class or race; they mainly affect groups of sexually active people and, in this way, a large percentage are unaware of their serological situation. It should be noted that, due to the large increase in STIs, public financial resources suffer from the high costs of treatment.

It is pointed out that in the country the first official HIV counseling and prevention experiences were carried out in 1988, with the implementation of the first Guidance and Serological Support Center (GSSC). A change was registered in 1997: consolidation of the counseling practice and the change of the GSSC name to the Testing and Counseling Center (TCC).[1]

It is defined that the Testing and Counseling Center (TCC) aims to present strategies for the counseling and diagnosis of HIV, syphilis and hepatitis B and C, together with the other services of the Unified Health System (UHS), which perform a promotion, prevention and equity of users.

It is understood that the role of the nurse in the TCC is of fundamental importance for the people who seek this service. It is worth noting that the work carried out in the TCC is structured in the counseling before and after the serological testing, thus creating a web of assistance that is not lost during the process of serological confirmation of the client, besides the service dynamics based on accessibility, gratuity, anonymity and confidentiality, agility, resolution and advice, and it is also extremely important that the multidisciplinary team be very well trained and know how to guide their clients.[2]

Sexually transmitted infections (STIs) are considered to be a serious public health problem in Brazil and around the world, making especially the developing countries a major socioeconomic impact. It is worth noting that since 1996, with the free availability of antiretroviral therapy (ART) for the treatment of persons infected with the human immunodeficiency virus (HIV), a 49% reduction in the mortality rate for Acquired Immunodeficiency Syndrome (AIDS) and the reduction of hospital admissions, thus confirming the efficacy of the therapy.[3]

It is evaluated that due to the good results and to the increase in the expectation and quality of life provided by ART, HIV / hepatitis B (HBV), HIV / hepatitis C (HCV) and HIV / Treponema pallidum (syphilis) infections have become important factors for morbidity and mortality among seropositive individuals. [3]

Law No. 12,401 was published on April 28, 2011, which directly amends Law No. 8,080, of 1990, providing for therapeutic assistance and the incorporation of health technologies in the scope of UHS. The Ministry of Health, assisted by the National Commission for the Incorporation of Technologies (CONITEC), is responsible for the incorporation, exclusion and modification of new medicines, products and procedures, as well as the constitution or change in Clinical Protocols and Therapeutic Guidelines.[4]

It should be emphasized that the Clinical Protocols and Therapeutic Guidelines (CPTG) are documents that aim to guarantee the best health care possible in the context of Brazil and the resources available in the Unified Health System. It should be noted that health professionals can be used as educational material, administrative assistance to managers, regulation of care delivery, before the Judiciary, and for the explanation of rights to UHS users.[4]

It is observed that the investigation of the presence of coinfection by HBV, HCV and syphilis in HIV-positive patients is of utmost importance for public health, with this, decision-making and distribution of the public resources necessary for the prevention and treatment. It is argued that the results of this research may be of great importance for assessing the burden of viral hepatitis and syphilis in people living with HIV / AIDS and undertake preventive measures for groups vulnerable to coinfection.[3]

It is verified that the treatment of STIs should be carried out in primary care units, through a syndromic approach, a strategy recommended by the World Health Organization (WHO) and the Brazilian Ministry of Health. With this strategy, it is possible to predict the early diagnosis and to perform the immediate treatment of people affected, avoiding losses, sequelae and the transmission of diseases. Thus, it is possible to carry out the service even in places of difficult access, where there are few resources, a situation that normally occurs in developing countries.[5]

The Centers for Testing and Counseling (TCC) are health services that, in partnership with other services of the Unified Health System, are working to elaborate important strategies to promote equal access to HIV counseling and diagnosis, hepatitis B and C and syphilis. The objective is also to prevent these and other sexually transmitted infections (STIs), favoring segments of the population in situations of greater vulnerability, with respect to human rights, voluntariness and integrality of care, without territorial restrictions.[6]

The process of implantation of the rapid tests (RT) for HIV, syphilis and viral hepatitis in the UHS-BH (Unified Health System / Belo Horizonte) network was started in Belo Horizonte (MG) in 2011. It was noticed that, at that time, the team responsible was not enough to achieve the goal of training and monitoring the entire network. It was

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therefore necessary in 2014 that the Municipal Coordination of Sexual Health and Attention to STD/AIDS and Viral Hepatitis of the Municipal Health Secretariat should start the implementation of the Itinerant TCC project. It is worth mentioning that this service made it possible to form a new multiprofessional team, composed of pharmacists, nurses, social workers, physicians (infectologists) and psychologists, with the purpose of continuing the rapid test implementation process, thus promoting training and monitoring of the Basic Health Units and the itinerant campaigns with actions of testing and prevention of STIs.[7]

It should be noted that there are studies for the formation of a strong movement for the construction of a new narrative on the treatment of HIV and a new definitive and ambitious but achievable goal: by 2020, 90% of all people living with HIV they will know they have the virus; by 2020, 90% of all people with diagnosed HIV infection will receive antiretroviral therapy uninterruptedly, and by 2020, 90% of all people receiving antiretroviral therapy will have viral suppression. It is postulated that when this goal is achieved, at least 73% of all people living with HIV in the world will have viral suppression, a statistic three times higher than the current estimates.[8]

It is estimated that progress in the most affected areas of the world, East and South Africa, has been impressive. It is reported that with accelerated treatment in combination with existing prevention interventions, AIDS-related deaths have declined by almost half in the last six years, and new infections have declined from about 1.1 million to about 790,000, a reduction of 29%. The progress of the region is comparable to that of Latin America and, if sustained, both will probably reach the targets for Europe and North America, which have already reached the 2020 target.[9]

It can be seen that Brazil is the country with the highest number of cases of acquired immunodeficiency syndrome (AIDS) in Latin America, with the first cases registered in the early 1980s. It is understood that the disease has become recognized as a social phenomenon, after the demystification of the idea that it only affected risk groups, such as homosexuals and hemophiliacs.[10]

It is highlighted that human immunodeficiency virus (HIV) infection and its advanced clinical manifestation, or acquired immunodeficiency syndrome (AIDS), are still considered a public health problem of great relevance today, due to its pandemic character and its transcendence. It is noted that untreated HIV-infected individuals progress to severe immune system dysfunction as CD4 + T lymphocytes are destroyed among the major target cells of the virus. It is emphasized that the natural history of this infection has been considerably altered by antiretroviral therapy (ART), initiated in Brazil in 1996, resulting in an increase in patient survival through reconstitution of immune system functions and reduction of secondary diseases.[11]

It is pointed out that HIV-1 and HIV-2 are retroviruses of the Lentiviridae family, belonging to the group of cytopathic and non-oncogenic retroviruses, requiring, in order to multiply, an enzyme called reverse transcriptase, responsible for transcription of viral ribonucleic acid (RNA) to a copy of deoxyribonucleic acid (DNA), which can then integrate into the host genome.[11]

It can be seen that HIV can be transmitted sexually, through the blood (parenterally and mother to child) and through breast milk, and from the moment of acquisition of the infection, the HIV carrier is transmitting. It is known that transmission can occur through: unprotected sex; use of blood or its derivatives not tested or not treated properly; receiving organs or semen from untested donors; reuse and sharing of syringes and needles and occupational accidents during handling of blood-contaminated instruments and patient secretions.[11]

The incubation period and the time between HIV infection and the onset of acute phase signs and symptoms, called acute retroviral syndrome (ARVS), are shown to be from one to three weeks, 11 and the latency period after infection, the time to develop signs and symptoms of AIDS is, on average, ten years. However, it is countered that the signs and symptoms of immunodeficiency associated with HIV infection, not AIDS, may appear with variable latency time after acute infection.[11]

In Brazil, the gay public and other men who have sex with men (MSM), sex workers, transvestites, transsexuals and people who use drugs as key populations.[11]

It is reported that, once immunodepression is aggravated, the HIV infection has opportunistic infections (OI) caused by microorganisms that are not usually pathogenic, that is, not capable of triggering diseases in people with normal immune system; however, normally pathogenic microorganisms may also eventually cause OI. It is confirmed, however, that in this situation, infections necessarily assume a more serious or aggressive character, to be considered opportunistic.[11]

It refers to the rapid test, the HIV test that must be performed in a place that allows to provide the result during the period of customer service, such as during the medical consultation, attendance at the Testing and Counseling Center (TCC), home care, attendance in a mobile testing unit, in a non-governmental organization, among others. It is advised that, once diagnosed as having

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HIV infection, the individual should be referred immediately to a care unit at a Basic Health Unit (BHU) of the UHS or to a Specialized Care Service (SCS).[11]

The blood sample may be obtained by puncturing the digital pulp or by venipuncture in a tube containing anticoagulant. It is preferred the blood collected by digital puncture because it allows the testing in the presence of the client, providing an immediate and accurate result.[11]

Viral hepatitis are defined as diseases caused by different types of hepatotropic virus that have their distinct epidemiological, clinical and laboratory characteristics, and the most relevant are A (HAV), B (HBV), C (HCV), D (HDV) and E (HEV). It is noted that these viruses belong specifically to the following families: Picornaviridae, Hepadnaviridae, Flaviviridae, Deltaviridae and Hepeviridae.[11]

It is specified that hepatitis B is considered to be susceptible to individuals with HBsAg, anti-HBc and anti-HBs negative serological profile, concomitantly. Naturally acquired immunity is defined by the presence of anti-HBc and anti-HBs reagents. It is noted that anti-HBc may be the only indicator of detectable natural immunity, as, over time, anti-HBs levels may become undetectable. It should be noted that the hepatitis B vaccine induces the formation of anti-HBs alone.[11]

It is observed that hepatitis C is susceptible to individuals with anti-HCV negative serological profile. It is pointed out that the client infected with C virus presents the anti-HCV serology reagent for an indefinite period, but this pattern does not distinguish if the infection was resolved or if it became a chronic carrier. It is alerted that there is still no vaccine for hepatitis C.[11]

It is stated that as soon as the individual comes in contact with the virus, he develops asymptomatic or symptomatic acute hepatitis. It is understood that this acute condition can occur in infection by any of the viruses and has its clinical and virological aspects limited to the first six months. It is verified that the prodromic or preicteric period occurs after the incubation period of the etiologic agent and before the onset of jaundice. The symptoms are described as non-specific: anorexia; nausea; vomiting; diarrhea or, rarely, constipation; low fever; headache; malaise; asthenia and fatigue; aversion to taste or smell; myalgia; photophobia; urticaria; arthralgia or arthritis and papular or maculopapular exanthema. It is revealed that, with the onset of jaundice, there is a decrease in prodromal symptoms. It is observed that, during the convalescence phase, jaundice disappears. It is noted that complete recovery occurs after a few weeks, but weakness and tiredness may persist for several months.[11]

It is postulated that hepatitis B can be detected by rapid or laboratory tests. HBsAg (HBV surface antigen) is identified as the first marker of infection, detectable around 30 to 45 days after infection, and may remain detectable for up to 120 days in cases of acute hepatitis. It is characterized, if it continues for more than six months, the chronic infection. It is understood that Anti-HBc IgM is a recent infection marker that usually arises 30 days after the onset of HBsAg, and is found in serum up to 32 weeks post infection. It is pointed out that Total Anti-HBc is the expression referring to a test capable of detecting anti-HBc antibodies of the IgG and IgM classes. Immunity to HBV is conferred by Anti-HBs (antibodies against the HBV surface antigen) when present in the appropriate titers (at least 10 IU / ml). It is thought that its onset is usually associated with the disappearance of HBsAg, acting as an indicator of cure and immunity, and is present in isolation in people who have taken the HBV vaccine. It is defined that HBV DNA is the genetic material of the virus. It corresponds to its quantification to the viral load circulating in the individual. It should be pointed out that, as a direct indicator of the presence of the virus, it can be used as a confirmatory test in the diagnosis of HBV infection.[11]

Anti-HCV (antibody against HCV) can be detected in relation to hepatitis C by rapid test or laboratory serological test. This is the marker that indicates the previous contact with the virus. It is identified in acute or chronic infection and in the cured patient, thus not differentiating the stage of the disease. It is recorded that, after infection, this marker takes from eight to 12 weeks to be detected, remaining reagent indefinitely. HCV RNA (HCV RNA) is used to confirm the presence of the virus, and can be detected within one to two weeks after infection. It should be noted that, when undetected, it may indicate sustained cure or response to treatment.[11]

Syphilis is defined as a chronic, systemic bacterial infection caused by Treponema pallidum. It is found that, when untreated, it progresses over many years, being classified as primary, secondary, recent latent, latent late and tertiary syphilis. T. pallidum is considered as a gram-negative bacterium of the group of spirochetes of high pathogenicity.[11]

It is verified that the mode of transmission can be sexual, vertical or sanguine, being the sexual transmission is the main one. It is recognized that the inoculation sites of T. pallidum are genital organs in general, and extragenital manifestations (lips, tongue and areas of the skin with a solution of continuity) may also occur. It is pointed out that vertical transmission can occur throughout pregnancy, often resulting in severe damage to the fetus or to the child. It is observed that the

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incubation period lasts from ten to 90 days and presents an average of 21 days from the infecting sexual contact.[11]

It is reported that the transmissibility of acquired syphilis requires the presence of lesions (hard cancer, flat condyloma, mucosal plaques, wet lesions); in pregnant women, syphilis can be transmitted to the concept (vertical transmission) by transplacental route, at any stage of gestation, with the highest probability of infection in the primary phase and the lowest in the latent phase.[12]

It is known that the disease may or may not have clinical expression soon after infection, and it is important that the professional know how to conduct laboratory research after the suspicion of risk of HIV infection. It is considered essential, moreover, to know the concepts of epidemiological window and seroconversion.[11]

The epidemiological window is defined as the time elapsed between the infection and the appearance or detection of a marker of the infection; the length of this period depends on the type of test. Seroconversion is the term denoting the process of development of antibodies against a specific pathogen.[11]

It is reported that, on average, for the immunological window period, it is 30 days, because in it, most individuals will present positive results in sets of diagnostic tests for the detection of HIV infection. It is postulated that, in case of suspicion of HIV infection, a new sample should be collected 30 days after the date of collection. The goals of treatment are described to improve quality of life and prolong survival by reducing viral load and reconstituting the immune system.[11]

It is understood that syphilis is a systemic bacterial infection, curable and exclusive to humans, caused by T. pallidum, a gram-negative bacterium of the spirochete group, discovered in 1905. It is established that all health professionals should be able to recognize the clinical manifestations of syphilis as well as to interpret laboratory test results that play a key role in infection control and allow confirmation of diagnosis and monitoring of response to treatment.[12]

Penicillin is identified as one of the drugs that can be used to treat syphilis. Patients should be followed at shorter intervals, every 60 days; in the case of pregnant women, should be evaluated monthly with the non-treponemic test, considering the detection of the possible indication of retreatment due to the possibility of therapeutic failure.[12]

It is emphasized that viral hepatitis B is an infection of parenteral transmission, predominantly by the sexual route. It is reinforced that the vertical transmission can also occur, causing an unfavorable evolution, with greater chance of chronification. It is added that unlike viral hepatitis A, infections caused by HBV are usually anicteric in more than two thirds of infected persons.[12]

It is estimated that approximately 5% to 10% of infected people become chronic carriers of HBV (Hepatitis B Virus). It is estimated that about 20% to 25% of chronic hepatitis B virus replication cases progress to advanced liver disease. It is noted that HBV infection is also a condition for the development of hepatitis D, caused by the Delta virus.[12]

It has been shown that HBV is highly infectious and remains viable for a long period when out of the body (for example, in a drop of blood). Hepatitis B vaccination is recommended for all persons, regardless of age and / or vulnerability. (Information Bulletin No. 149/2015 - CGPNI / DEVIT / SVS / MH). For endemic areas such as the Northern region, serology for previous hepatitis B and vaccination of susceptible persons are indicated.[12]

It is argued that, despite the progression of vaccination coverage and expanded access to the guidelines for the prevention of STIs, there is still an increasing number of diagnoses of hepatitis B, with approximately ten thousand new cases detected and reported annually. This index is added to the expressive number of carriers already diagnosed and being followed up, increasing the impact of the disease in the Brazilian territory.[12]

Hepatitis C is known as a primarily parenteral transmission infection. It marks the natural history of HCV by the silent evolution; the disease is often diagnosed decades after infection, and the signs and symptoms are common to other chronic parenchymal diseases of the liver, manifesting only in more advanced stages. Treatment for hepatitis C is made up of antiviral drugs for a long period of time until the patient's body is completely free of the virus.[12]

It is estimated that 20.9 million people had access to antiretroviral therapy by June 2017. It is estimated that 36.7 million people worldwide were living with HIV in 2016. There were 1.8 million new HIV infections in 2016, and that year, one million people died from AIDS-related causes. It is estimated that 76.1 million people have been infected with HIV since the beginning of the epidemic and during that period 35 million people died from disease-related causes.[9]

It is reported that in 2016 there were 36.7 million people living with HIV, including 34.5 million adults, 17.8 million women (15 years of age or older) and 2.1 million children under 15 years.[9]

In June 2017, 20.9 million people living with HIV had access to antiretroviral therapy; in 2015,

were 17.1 million and in 2010 it was 7.7 million. It is noted that in 2016, about 53% of all people living with HIV had access to treatment and that about 54% of adults aged 15 years or more living with HIV had access to treatment, but only 43% of children from zero to 14 years had access. It is added that by 2016, about 76% of pregnant women living with HIV had access to antiretroviral drugs to prevent the transmission of HIV to their babies.[9]

It is estimated that 1.8 million people worldwide have been infected with HIV in 2016. It is noteworthy that, since 2010, new HIV infections among adults have fallen by about 11%, from 1.9 million to 1.7 million in 2016. New HIV infections among children have been reduced by 47% since 2010, from 300,000 to 160,000 by 2016.[9]

Deaths from AIDS-related causes are estimated to have dropped 48 percent since the peak in 2005. It was concluded that in 2016, one million people died from AIDS-related causes worldwide, compared with 1.9 million in 2005 and 1.5 million in 2010.[9]

It is known that in Latin America, in 2016, there were 1.8 million people living with HIV. In 2016, there were 97,000 new HIV infections in the region. It is noteworthy that the number of new HIV infections did not change between 2010 and 2016. It is found that in Latin America, 36 thousand people died of AIDS-related causes in 2016. It is understood that, between 2010 and 2016, the number of AIDS-related deaths in the region fell by 12%. It is stated that treatment coverage in 2016 was 58% among all people living with HIV in Latin America. There were 1,800 new HIV infections among children in Latin America in 2016.[9]

We are currently evaluating a time of high expectations, in which several studies have presented scientific evidence that the chance of any HIV positive person with an undetectable viral load transmitting the virus to a sexual partner is "scientifically equivalent to zero". A multicenter, prospective, observational study was conducted in 14 European countries involving 1166 HIV-seropositive couples in heterosexual couples and serodifferent men who have sex with men, engaging in intercourse without the use of condoms, and with the HIV-positive partner using long-term suppressive antiretroviral therapy (ART). It is clarified that long-term viral suppression means not having the virus in the system for several months, with adequate adherence to the use of the drugs. The objective of this study was to evaluate the rate of HIV transmission in these couples. 1166 couples were enrolled, who had 1238 years of eligible follow-up (median follow-up of 1.3 years per couple). It was found that in this follow-up period there were no documented cases of intraparental HIV transmission with a 95% confidence upper limit of 0.30 per 100 pairs-years of follow-up. It is added that there were no cases of HIV transmission among the couples who practiced 58 thousand acts of sex without condoms. Therefore, the Partner study is an estimate of the zero risk of HIV transmission when the seropositive partner has an undetectable viral load; however, the 95% confidence limits suggest that, with the eligible years accumulated to date, appreciable levels of risk can not be excluded, particularly for anal sex and when considered from the perspective of a cumulative risk over time years. It is suggested that additional long-term follow-up is necessary to provide more accurate estimates of risk.[13]

In another study, such as the HIV Testing Network (HPTN) 052 trial, antiretroviral therapy (ART) prevented more than 96% of the genetically linked infections caused by human immunodeficiency virus type 1 (HIV) -1) in serodiscordant couples. It is concluded, therefore, that successful HIV treatment is a highly effective tool for the prevention of sexual transmission of the virus.[14]

The slogan Undetectable = Untransmissable (U = U) was launched by the Prevention Access Campaign in early 2016 to promote the discovery that people infected with HIV suppressed can not sexually transmit the virus to others. This idea is now accepted in the HIV / AIDS community as a result of the accumulation of evidence since the early 2000s. The campaign has been endorsed by more than 400 organizations from 60 different countries since its launch. It appears that the US Centers for Disease Control and Prevention (CDC) has joined the movement in a letter released on National HIV / AIDS Awareness Day for gays, emphasizing the fact that HIV treatment has advanced and PLWHA have a chance to live long, healthy lives with zero chance of sexually transmitting the virus to others if they do an effective treatment. It is evaluated that the U = U campaign is simple but extremely important and based on a solid basis of scientific evidence. It is argued that it will certainly encourage more and more people with HIV to seek treatment, be able to collaborate in combating stigma and could also have a positive impact on public health as well as on individuals.[15]

It should be emphasized, however, that it is only through the diagnosis that it will be possible for PLWHA to start treatment early.

It was decided to consider the itinerant CTA or the mobile health unit as an effective strategy for the identification of new cases of HIV, syphilis and hepatitis B and C, by carrying out a study with the objective of identifying the seroprevalence of syphilis, HIV and hepatitis B and C in the visits of the Itinerant TCC Ambulatory Clinical Teaching Unit (ACTU), carried out during the year 2017.

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OBJECTIVE

• To identify the seroprevalence of syphilis, HIV and hepatitis B and C in the visits of the Itinerant TCC of the Ambulatory Clinical Teaching Unit (ACTU).

METHOD

It is a quantitative, descriptive, retrospective study.16-7 The documentary method was chosen for the means of research. In this category, data were stored in an ACTU database.

The ACTU is considered a regional reference center in the prevention and treatment of STIs, HIV/AIDS and viral hepatitis of a municipality in the State of Minas Gerais.

The center has a multidisciplinary team consisting of nurses, infectologists, nursing technicians, psychologists, social workers, pharmacists, nutritionists, as well as academics from Nursing, Medicine, Biomedicine, Social Work and Nutrition courses.

It should be noted that the service has the Testing and Counseling Center (TCC), the Specialized Care Service (SCS) and the Drug Dispensing Unit (DDU). It is known that TCC responds spontaneously to the entire population for the rapid testing of Anti-HIV (AIDS), Anti-HCV (hepatitis C), HBsAg (hepatitis B) and syphilis, including venous other complementary examinations and the free distribution of condoms. Campaigns are held with TCC Itinerant and health education in schools, companies, prisons, etc.

It is also added that ACTU also conducts rapid testing of HIV, syphilis and hepatitis B and C in all persons who have been exposed to a hazardous situation with biological material, post-exposure risk prophylaxis (PEP), such as occupational accidents or non-occupational, unprotected sexual intercourse or sexual violence, performing their clinical laboratory follow-up. Pre-exposure prophylaxis against HIV is also currently performed (PrEP).

It is reported that, in SCS, for patients with positive serology for HIV and / or STIs, the outpatient clinic offers specialized medical consultations, all types of tests required and treatment follow-up, also acting as a field of teaching, research and extension, where these academics improve the practices, contributing to their personal and professional development.

Data from the ACTU database were used in the study, with a register of 1125 subjects who were users of the TCC Itinerant service in the year 2017. It should be emphasized that the research did not involve human subjects, used data from the public domain and of unrestricted access, without identification of individuals, therefore, dispensing with the assessment by the Research Ethics Committee (REC).

Users who were registered in the TCC Itinerant database in the year 2017 were considered as inclusion criteria and, as exclusion criteria, unregistered users.

The aim of this study was to identify the seroprevalence of syphilis, HIV and hepatitis B and C among people attended at the Itinerant TCC of the ACTU and characterize these patients.

It is worth noting that the database was presented by TCC. Monthly itinerants carried out in campaigns of commemorative dates, such as Carnival, Fight Day Against Hepatitis, World AIDS Day and also in companies and institutions that requested the testing of their team.

The various worksheets were compiled for the months of January to December 2017, which included all the subjects tested in TCC Itinerantes, in a single spreadsheet, to consolidate the data obtained. They were subsequently presented in tables and graphs, through the program Microsoft Excel, for the presentation of the results. Data were analyzed through simple descriptive statistics and presented in absolute and percentage values, with the purpose of evaluating and discussing the final results.

RESULTS

It was shown, for those collected in the ACTU Itinerant TCC, in the year 2017 in the following tables:

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Table 1. Incidence of HIV positive results in the Itinerant TCC of the ACTU. Passos (MG), Brazil, 2017.

Month	N tested	HIV	%
January	0	0	0.00
February	57	0	0.00
March	0	0	0.00
April	0	0	0.00
May	122	1	0.82
June	50	2	4.00
July	195	0	0.00
August	228	2	0.88
September	122	0	0.00
October	182	0	0.00
November	169	0	0.00
December	0	0	0.00
Total	**1125**	**5**	**0.44**

Table 3. Incidence of positive hepatitis C results in the Itinerant TCC of the ACTU. Passos (MG), Brazil, 2017.

Month	N tested	Hep C	%
January	0	0	0.00
February	57	0	0.00
March	0	0	0.00
April	0	0	0.00
May	122	0	0.00
June	50	0	0.00
July	195	2	1.03
August	228	4	1.75
September	122	0	0.00
October	182	0	0.00
November	169	1	0.59
December	0	0	0.00
Total	**1125**	**7**	**0.62**

Table 4. Incidence of positive syphilis results in the Itinerant TCC of the ACTU. Passos (MG), Brazil, 2017.

Month	N tested	Sífilis	%
January	0	0	0.00
February	57	4	7.02
March	0	0	0.00
April	0	0	0.00
May	122	6	4.92
June	50	1	2.00
July	195	6	3.08
August	228	13	5.70
September	122	3	2.46
October	182	15	8.24
November	169	15	8.88
December	0	0	0.00
Total	**1125**	**63**	**5.60**

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Table 5. Incidence of positive results in the itinerant TCC of the ACTU. Passos (MG), Brazil, 2017.

Month	N tested	Total Positive	%
January	0	0	0.00
February	57	4	7.02
March	0	0	0.00
April	0	0	0.00
May	122	7	5.74
June	50	3	6.00
July	195	8	4.10
August	228	21	9.21
September	122	4	3.28
October	182	16	8.79
November	169	16	9.47
December	0	0	0.00
Total	**1125**	**79**	**7.02**

A total of 79 (7.02%) confirmed cases among 1125 people tested in the year 2017 in the Itinerant TCC.

DISCUSSION

When the seroprevalence of human immunodeficiency virus (HIV) and hepatitis B (HBV) was verified in pregnant women in the north-west of Paraná, from the results of serological tests of prenatal screening of 1,534 patients seen during the first In the second half of 2010, HIV positivity was 0.3% and HBsAg seropositivity for HBV was positive in 0.5% of pregnant women.[18] In this study, a seroprevalence for HIV of 0.44% and, for hepatitis B, of 0.36% was presented in a higher number of positive HIV cases and fewer cases of hepatitis B.

It is known that in the period between 2007 and 2011, the Testing and Counseling Center of the Municipal Referral Center in STI/ HIV / AIDS in Feira de Santana recorded a total of 20,332 visits, of which 558 (2.7%) presented seropositivity for HIV, 321 males and 237 females.[19] The number of positive tests in the referral service was shown to be much higher than those identified in the Itinerant TCC, since they are performed in daily practice, in a much higher number of tests, and also by individuals who seek the service by free demand, presumably for having performed some type of risk exposure. However, it is encouraged by the Itinerant TCC, the search for a different clientele, the one that does not attend the referral service of its own free will, therefore, enabling the expansion of the diagnosis.

In a study that carried out the clinical and serological screening of 6139 blood donors from the Cruz Alta Regional Blood Center, with the objective of verifying the seroprevalence of infectious diseases in blood donors, from January 2013 to June 2014, the following results were observed: 280 (4.56%) were considered unfit because they presented some positive serological marker. It is concluded that the results point to the importance of serological screening in order to guarantee transfusion safety and to avoid the infection of individuals who require blood transfusions.[20]

In a study aimed at describing risk behaviors and prevalences of HIV and syphilis in a population of men who have sex with men (MSM) in Belo Horizonte (MG), 274 MSM were recruited. It is reported that the participants were mainly young individuals with high schooling, social classes A / B, self-referred gays or homosexuals and had a high proportion of irregular use of condoms. It is reported that the weighted prevalence of HIV and syphilis infection were 10.3% and 13.9%, respectively, corroborating the premise that the HIV epidemic in Brazil is characterized as concentrated in key populations, including men who have sex with men (MSM).[21]

It is pointed out that, when analyzing HIV prevalence and vulnerability profile of 1,405 homeless users of host institutions in São Paulo (SP) from 2006 to 2007, HIV prevalence was 4.9% (17.4% of them also presented positive serology for syphilis).[22] It should be noted that, for this population, the result was well above that obtained in this study.

CONCLUSION

It was presented at the TCC Itinerant carried out by the ACTU in the year 2017, for the detection of HIV, hepatitis B and C and syphilis, during campaigns on commemorative dates, such as Carnival, Hepatitis Day, World AIDS Day and a total seroprevalence of 79 (7.02%) confirmed cases of the diseases tested, being: HIV; syphilis and hepatitis B and C. Five (0.44%) HIV-positive cases, four (0.36%) for hepatitis B, seven (0.62%), hepatitis C and 63 (5, 60%) for syphilis.

The high prevalence of positive serologies, mainly for syphilis, was reported, which presented a much higher number, demonstrating the reemergence situation of this disease.

According to data from the study, it is concluded that sexually transmitted infections are present in the general population and that the traveling TCC can contribute to identify new cases and consequently to be referred for treatment as early as possible, favoring personal and public

health benefits and leading to a favorable prognosis.

It is also evaluated, based on the studies presented, that a person living with HIV, whose viral load is suppressed in a sustained way, does not present a risk of HIV transmission. It is argued that this knowledge has the potential to alter the negative perceptions surrounding the disease, thus collaborating to minimize the stigma related to the virus. It is understood that the more PLWHA are diagnosed, treated properly and have their viral load undetectable, the nearer the end of the epidemic will be.

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