Esc Anna Nery 2023;27:e20220334

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Aspects that weaken access of people with viral hepatitis to healthcare services[a]

Aspectos que fragilizam o acesso das pessoas com hepatites virais aos serviços de saúde

Aspectos que debilitan el acceso de la persona com hepatitis virales a la atención em servicios de salud

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Abstract

Objective: to analyze the aspects that weaken the access to viral hepatitis care. **Method:** evaluative research, developed in the State of Mato Grosso, with managers of the State Health Department and professionals from reference services. For data collection, interviews were conducted. Content analysis was used in a theme-based approach and, for the discussion, the dimensions of the analysis model of universal access to health services. **Results:** The political dimension presents little participation of federal and state management in the proposition of guidelines, coordination, and pacts. In the economic-social dimension, the low investment in the public network and the difficulty in hiring specialist professionals were identified. In the organizational dimension, the regulation of access, assistance, and the logistics of treatment suffers from geographic barriers, besides the low use of monitoring and evaluation. In the technical dimension, the little professional training and the absence of a shared network project were noticed. In the symbolic dimension, cultural factors, beliefs, values, and subjectivity interfere with access. **Conclusion and implications for the practice:** the results collaborate to direct confrontation actions, aiming to reach the goals agreed upon for the 2030 Agenda

Keywords: Comprehensive Health Care; Health Management; Health Services; Human Viral Hepatitis; Unified Health System.

Resumo

Objetivo: analisar os aspectos que fragilizam o acesso à atenção às hepatites virais. **Método:** pesquisa avaliativa, desenvolvida no Estado de Mato Grosso, com os gestores da Secretaria de Estado de Saúde e os profissionais dos serviços de referência. Para a coleta de dados realizaram-se entrevistas, utilizou-se a Análise de Conteúdo, na vertente temática e, para a discussão as dimensões do modelo de análise de acesso universal aos serviços de saúde. **Resultados**: a dimensão política apresenta pouca participação da gestão federal e estadual na proposição de diretrizes, coordenação e pactuação. Na dimensão econômico-social o baixo investimento na rede pública e a dificuldade de fixação de profissionais especialistas. Na dimensão organizacional a regulação do acesso, da assistência e a logística do tratamento sofrem com as barreiras geográficas, além do baixo uso do monitoramento e a avaliação. Na dimensão técnica a pouca formação profissional e a ausência de projeto compartilhado em rede. Na dimensão simbólica os fatores culturais, de crença, valores e subjetividade interferem no acesso. **Conclusão e implicações para a prática:** os resultados colaboram para direcionar ações de enfrentamento, almejando alcançar as metas pactuadas para a Agenda 2030.

Palavras-chave: Assistência Integral à Saúde; Gestão em Saúde; Hepatite Viral Humana; Serviços de Saúde; Sistema Único de Saúde.

Resumen

Objetivo: analizar los aspectos que debilitan el acceso a la atención a las hepatitis virales. **Método:** investigación evaluativa, desarrollada en el Estado de Mato Grosso, con los gestores del Departamento de Salud del Estado y los profesionales de los servicios de referencia. Para la recolección de datos fueron realizadas entrevistas, se utilizó el Análisis de Contenido, en el aspecto temático, y para discutir las dimensiones del modelo de análisis de acceso universal a los servicios de salud. **Resultados:** la dimensión política presenta poca participación de la administración federal y estatal en la propuesta de lineamientos, coordinación y acuerdo. En la dimensión económico-social la baja inversión en la red pública y dificultad para fijar profesionales especializados. En la dimensión organizacional, la regulación de la logística de acceso, asistencia y tratamiento sufren con las barreras geográficas, además del bajo uso de monitoreo y evaluación. En la dimensión técnica poca formación y ausencia de proyecto compartido en red. En la dimensión simbólica los factores culturales, la creencia, los valores y la subjetividad interfieren en el acceso. **Conclusión e implicaciones para la práctica:** los hallazgos colaboran para reflejar las acciones de afrontamiento destinadas a alcanzar los objetivos acordados para la Agenda 2030.

Palabras clave: Atención Integral de la Salud; Gestión de la Salud; Hepatitis Viral Humana; Servicios de Salud; Sistema Único de Salud.

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Submitted on 09/05/2022.
Accepted on 04/14/2023.

DOI:https://doi.org/10.1590/2177-9465-EAN-2022-0334en

INTRODUCTION

Human viral hepatitis is a term that refers to the liver inflammation caused by a viral infection of etiologic agents that are distinct in their pathophysiological and epidemiological characteristics, with one aspect in common the hepatotropism, being currently delimited in five types of viruses, namely Hepatitis A Virus (HAV), Hepatitis B Virus (HBV), Hepatitis C Virus (HCV), Hepatitis D Virus (HDV) and Hepatitis E Virus (HEV).[1,2]

Considered a major public health problem worldwide, human viral hepatitis is a chronic and silent disease, diagnosed in most people at an advanced stage, and affects groups with greater vulnerability to the risk of infection, with unequal access to health services that offer testing, examinations, and prevention programs.[3] About 257 million people worldwide living with chronic hepatitis B virus infection and 71 million people with hepatitis C virus infection are unaware of their infection, and estimates indicate that approximately 57% of liver cirrhosis cases and 78% of primary liver cancer cases are the result of hepatitis B and C virus infection.[4]

In Brazil, from 2000 to 2021, 718,651 cases of human viral hepatitis were confirmed. Of these, 168,175 (23.4%) are hepatitis A cases, 264,640 (36.8%) hepatitis B, 279,872 (38.9%) hepatitis C, and 4,259 (0.6%) hepatitis D.[5] The Northeast region concentrates the highest proportion of hepatitis A virus infections (30.1%), the Southeast region has the highest proportions of hepatitis B and C viruses, with 34.2% and 58.4%, respectively, and the North region accumulates 73.7% of all hepatitis D (or Delta) cases.[5] From 2000 to 2020, regarding deaths, 82,169 were registered due to basic causes and associated with hepatitis types A, B, C, and D, being 1.6% to viral hepatitis A; 21.3% to hepatitis B; 76.2% to hepatitis C; and 0.9% to hepatitis D.[5] The state of Mato Grosso ranks ninth in the incidence of hepatitis A cases, seventh for hepatitis B, and tenth for hepatitis C.[5] However, the regional organization of the network of services, testing, and treatment reference, aligned to geographic issues and demographic aspects, which includes indigenous people, riverside dwellers, and *quilombolas* (camp of formerly enslaved people), makes the state a peculiar scenario regarding viral hepatitis.[6]

It is worth acknowledging the advances in recent decades that permeate the actions for implementing preventive measures, from immunization through vaccines to the passive immunization strategy; however, the field with the greatest emphasis has been the development of treatment, considered promising and effective for some forms of hepatitis.[7] There is an international movement that proposes special attention to a strategic agenda to strengthen the Health Systems' (HS) response to human viral hepatitis through actions to stop transmission, strengthen access to diagnosis, and ensure treatment,[8,9] with efforts to reduce new infections by 90% and lower mortality by 65%.[8] In Brazil, since the creation of the National Program for Prevention and Control of Viral Hepatitis (PNVH) in the Unified Health System (UHS), there are strategies to deal with this grievance, which permeate the emphasis on prevention, and more recently in guidelines for organizing the care network.

In summary, it is possible to evidence that in the field of human viral hepatitis the biggest challenges that still permeate the health surveillance actions are, in relation to the HAV infection, the socioeconomic issues related to drinking water and sanitation, the low vaccine immunization in childhood and the monitoring of transmission cases of men who have sex with men, injecting drug users and contaminated food; for the HBV the prevalence is in relation to sex, alcohol intake and obesity predisposing to greater progression of the disease, the cases of transmission and its monitoring in the priority target population, the need to find the genetic markers, in addition to the low vaccination coverage; for the HCV out of the already known manifestations the rate of Sustained Virologic Response (SVR) after Direct Action Agents (DAA) is higher than 97%, still a small group of 4-5% cannot eradicate the HCV, the need to better understand the relationship to donor transplantation, the risk of hepatocellular carcinoma after treatment with DAA and investment in studies for vaccination; for the HDV to expand the knowledge of the course of coinfection or superinfection by the HBV and HDV, innate immunity, investment in studies for the treatment, because it is still difficult to treat the HDV; for the HEV, to recognize the actions of detection strategies in environmental matrices and food, monitoring in blood products and attention to the acute form, which has manifested a growing problem, in addition to extrahepatic complications and the absence of a vaccine, despite a pioneering report in China, but with little evidence for the use.[10]

One of the challenges of the HS is the prevention and control of viral hepatitis, mainly due to the dynamics of health programs and services, so the use of evaluation to address this grievance becomes relevant. Regarding the clinical conditions of attention to human viral hepatitis, there is a vast consolidated scientific production, however, the commitment of the HS regarding the organization of care for the confrontation and the need for health management actions for the development of strategies related to international goals, is still a field to be explored. By weaving the guidelines described in Agenda 2030[11] for Sustainable Development, based on the considerations made, it is believed to be relevant to analyze the aspects that weaken the access to care for viral hepatitis.

METHOD

This is an evaluative research,[12] based on the mixed sequential method,[13,14] justified by its temporal asymmetry between quantitative and qualitative data collection giving the researcher promising paths to examine aspects that require a better understanding of the object.

The research6 was developed in the state of Mato Grosso, which is the third largest in the country in terms of land area, has six macro-regions and sixteen Health Regions (HR), and its choice was justified by the characteristics of management decentralization and the regionalization process,[15] geographic and demographic issues, and the condition of service distribution that can limit access.

In the second half of 2020, the reference services for viral hepatitis care in the HR were mapped by consulting the data from the National Registry of Health Establishments (NRHE). The HR considered to have the largest quantity and heterogeneity of reference services was selected, understood as the capacity to offer health actions and services. The south HR of Mato Grosso met the criteria; it is noteworthy that the HR has a greater population density, with seven services for viral hepatitis care, six of which participated in the study. The exception was the service allocated in the penitentiary, whose conditions of organization of care required a specific approach.[16]

The participants were the people responsible for health management in the area of viral hepatitis at the State Department of Health of Mato Grosso (SDH-MT) and professionals technically responsible for services, namely, the Testing and Counseling Center (TCC) and/or Specialized Care Service (SCS), of one of the HRs. The inclusion criterion was: having been for at least six months developing the role in the service and, the exclusion was having been absent from the service for any reason.

For data collection, an individual semi-structured interview was used, composed of two parts: one related to professional characterization and the other asking the interviewee, based on situations experienced in his/her daily life in management, to report the aspects that would enhance the organization and articulation of services and user access to viral hepatitis care services. The script was submitted to face validation and pre-testing. The participants were contacted via email and phone call. After making their acceptance official by email and sending the signed Free and Informed Consent Term (FICT), the interview was scheduled, via a digital platform (WhatsApp, Google Meet, or Zoom), and the time specified by the participant. It is noteworthy that data collection was performed online due to the measures adopted during the coronavirus pandemic.

In addition to the script, a vignette was used to facilitate the approach to the participant.[17] The interviews lasted an average of 50 minutes and were conducted by the researcher in charge between August 2020 and January 2021. It is important to stress that in addition to the use of the chosen techniques, the researcher's observations during the interview were recorded in a field diary. The material was transcribed by the researcher and checked by another researcher, the participant was identified by the letter P followed by the Arabic numeral, according to the increasing chronological order of the interviews.

To systematize and analyze the data, the thematic analysis was used,[18] which followed the process of impregnation, with the exploratory, vertical, and exhaustive reading of the material until the content of the interviews was mastered, allowing the listing of the perceptions and the context, as well as the particularities of each interview. After the vertical reading, which focused on the particularities of each interview, a horizontal reading of all the reports was carried out, allowing the establishment of connections between the statements and the meaning they acquired in the context. An attempt was made to identify recurrent, contradictory, and antagonistic aspects. The content was grouped, forming the nuclei of meaning, and the categories of analysis were defined, which, especially in this study, present the aspects that weaken the access to viral hepatitis care.

The analysis model: universal access to health services[19] was adopted to guide the systematization of the presentation of results and, in order to foster discussion based on the evidence found for each item that corresponds to the dimensions. The study was approved by the Research Ethics Committee (REC), CAAE: 01481918.0.0000.5393, and co-participating institution CAAE: 01481918.0.3001.5164.

RESULTS

Twelve key informants were considered eligible, however, nine agreed to participate. The highest frequency of participants is female, seven (77.7%), white, six (66.6%), between 50 and 60 years old, four (44.4%), with a degree in nursing, four (44.2%), with a specialization level, eight (88.8%), and two professionals have a master's degree. The most frequent hiring is by the statutory system, seven (77.8%), and with more than three years in the service, eight (88.2%).

Chart 1 presents the main findings compiled from the analysis of the dimensions of access.[6]

As for the level of agreement in the analyses, it shows that they were higher than 75% in all dimensions.[6] The points of disagreement were the posture of the Ministry of Health in the organization of the Health Care Network (HCN), the IHC in assuming the space of management instruments and distancing the coordination by the state management, the SDH-MT, and the RHO; the sufficient availability of specialist doctors in the network; the resistance of the PHC in assuming the decentralization of the testing, besides the reduction of specificity of actions to diagnose the priority population. There was no disagreement regarding the items of the symbolic dimension.

DISCUSSION

In the **political dimension**, inadequately formulated guidelines and policies, as well as problems in coordinating actions at the federal level, especially in low- and middle-income countries, aligned with funding and knowledge gaps, lack of data and studies to support programs of care for vulnerable groups[20] are the main challenges to establish adequate comprehensive healthcare to address hepatitis. The lack of data to support focal actions for vulnerable groups, drug users, men who have sex with men and patients co-infected with HIV, prisoners, and sex workers[21] is a limiting factor to consider micro elimination.

It should be noted that it is from the model of care adopted and the organization of health services, in the HS, that a response with resoluteness can be produced. In the UHS, the discussion of care in the HCN is an opportunity to expand comprehensive healthcare and enhance the articulation of health management decentralization. However, the organization of hepatitis care in the UHS has shown an uncoordinated pulverization of services that are not effective as a network that favors equitable access.[22] Thus,

Chart 1. Aspects that weaken the access to viral hepatitis care in the southern region of Mato Grosso, Mato Grosso, Brazil, 2021.

DIMENSION OF ANALYSIS: POLITICAL		
Analyzed Aspects	**Main results**	**Main speech extracts from the key informants**
Process Monitoring (PNVH) Pacts between the instances (State and Municipal)	**Federal level:** - Ministry of Health fragile to the formulation of guidelines for the organization of the care network. - Hepatitis is not a relevant issue on the agenda of public health policies. - The PNVH has not yet promoted universalization and equity of access**.**	*"It has political instigation, and that the Ministry has its disease flagships. We have many hepatitis protocols, to guarantee treatment, but not to organize care."* P7 *"Hepatitis has never been a priority in the Ministry's speeches".* P8
	State and regional level: - Absence of monitoring of the state coordination and the Regional Health Office (RHO) in the pact of the care network and organization of care flows. - The Intermunicipal Health Consortium (IHC) did not show monitoring potentiality to qualify the care network. - The hiring of the physician by the IHC showed, in some moments, discontinuity due to lack of payment.	*"There is no presence of the SDH accompanying our work, not even that of the RHO."* P3 *"I don't participate in the management articulations in the Municipal Health Secretariat or in the RHO, they just check if there is a vacancy".* P6 *"The doctor is paid by production, they are hired as a legal entity. We had to suspend consultations for some days, because of contract or payment".* P5
	Municipal level: - Rotation of managers, in the municipal sphere, and in health services, showed influence on the direction of actions for hepatitis care.	*"The change of mayor hinders or helps because each manager comes with an understanding (of the situation)."* P3 *"During the changes of managers, I saw that we lost what we had".* P4 *"Mayors change and the coordination change. Each one comes with his or her particular way".* P8
DIMENSION OF ANALYSIS: ECONOMIC AND SOCIAL		
Analyzed Aspects	**Main results**	**Main speech extracts from the key informants**
Investments in the public network by a sphere of power and level of complexity Social, economic, cultural, and physical barriers	- Only one specialist physician attends the network of nineteen municipalities. -No policy was designed to attract and retain specialized doctors to attend hepatitis, even with the decentralization of SAE in the region. - Low quantity of human resources, especially in TCC. - Most municipalities in the HR do not have testing services	*"Two SAEs were decentralized, but I couldn't get a doctor to cover hepatitis."* P9 *"We have not moved forward to be microregional because we need doctors who stay in the program."* P7 *"It is one infectologist to serve the network of nineteen municipalities".* P6 *"It is only me who does the testing here. If I go out on extramural activity the patients are left without testing".* P7 *"Here we have a TCC and we still can't test everyone, imagine where there isn't one".* P3 *"There are few municipalities in the HR that have testing".* P5
	- Testing actions have not kept up with the population expansion of the municipalities. - Municipal support for patient transportation depends on the municipal budget and vehicle availability. - The physical structure of the TCCs limits group actions and restricts services.	*"The population grew and the amount of testing performed, is still little if it is to be compared."* P7 *"There are difficulties with transportation, sometimes you miss an appointment due to lack of transportation or financial reasons.* P5 *"The TCC is a room next to the health unit".* P9
DIMENSION OF ANALYSIS: ORGANIZATIONAL		
Analyzed Aspects	**Main results**	**Main speech extracts from the key informants**
Entrance Flow of care Geographical barriers Regulation/ Referral/ Counter-reference Evaluation	- Resistance of Primary Health Care units (PHC) in the decentralization of testing. - The reference service, TCC, refers the user with a confirmed diagnosis more quickly than the PHC. - Multiple flows in the municipalities until the user receives the diagnosis. - Lack of definition of regional governance. - Centrality to perform confirmatory tests and consultations indicates a geographical barrier.	*"We are supposed to have quick tests in family health, but it's a stalemate. A lot of resistance from the nurses.* P4 *"The orientation for patients is that every time the doctor asks for an exam, he/she has to schedule it here with us because if he/she goes to the PHC, it takes 30 to 40 days".* P7 *"The viral load is done at six o'clock in the morning. It's exhausting for the patient who needs to leave his municipality to be here on time. The same happens with consultations and follow-ups.* P6
	- State management is absent from the care regulation process. - The responsibility of the federal entities in care management is not clear for health services. - The regional reference service does not participate in the analysis of the care network and follow-up/monitoring. - For transplantation, it is not clear the user flow in the HR care network.	*"The regulation is via IHC, I don't know anything about waiting demand".* P5 *"Since IHC took over TCC stopped following up on people with hepatitis".* P4 *"We don't do an integrated service with the network".* P6 *"The transplant is the first case. I can't tell how it happens yet".* P6
	- Treatment access logistics is a major problem, especially for hepatitis C. - There is no coordination of services to monitor user access to treatment. - There are weaknesses in communication between the distribution of the medication in the municipalities, and the users waiting for the medication.	*The difficulty is the medication logistics. We have many cases of irregular patients, patients who discontinued the medication, because of bureaucratization.* P6 *"After it is forwarded to the high-cost pharmacy, we the SCS do not perform the monitoring".* P6 *"We had cases of patients whose medication was in the municipality, however, they didn't notify the patient".* P6
	- There is no monitoring by the health services that referred users to the referral. - IHC management does not assess care coordination in the network. - It is not clear whether the PHC or the hepatitis care program assumes the user's follow-up in the municipality. - Evaluation of the service, the work process, and the care provided is not carried out in health services.	*"Monitoring has become loose. The patient is the one who goes there to complain about something or because they are passing out."* P4 *"The patient's follow-up is difficult. Some move to another city, and others stop the treatment".* P8 *"We participated in some network evaluations that were done by the Ministry, but you realize that it is more about infrastructure than quality."* P6 *"I don't work here with evaluation, that is up to the SDH as is the goal planning".* P5

Source: The authors.[6]

Chart 1. Continued...

DIMENSION OF ANALYSIS: TECHNICAL		
Analyzed Aspects	**Main results**	**Main speech extracts from the key informants**
Welcoming Connection Competence/ Ability Autonomy Commitment Shared therapeutic project - team and user Quality of care	- Need for trained teams to take on hepatitis care.	*"It would be our competence to assist hepatitis because we are an SCS, but we do not have trained staff." P9* *"If you don't have a training and support team you won't decentralize. There are doctors in PHC and SCS who don't know how to read a marker in hepatitis results. P5*
	- Confronting hepatitis is not routine in health services. - Late diagnosis is a reality. - Little strategic action to identify users early and the key/vulnerable population.	*"There is not a routine for hepatitis." P8* *"Prevention is up to the municipality. About 80% of our diagnoses are late. P6* *"It doesn't mean that where there is a TCC, there are not people with a late diagnosis". P5*
DIMENSION OF ANALYSIS: SYMBOLIC		
Analyzed Aspects	**Main results**	**Main speech extracts from the key informants**
Culture Beliefs Values Subjectivity	- Culture, beliefs, values, and subjectivity contribute to reducing access to testing and influence treatment. - The fact that the user has some symptoms makes him/her seek testing. - Lack of knowledge about the actions that the services offer. - Posture of the health professional.	*"There are people who don't come here because they are afraid. It's a small town, they might see them (hepatitis patients) coming into my room.* P3 *"Hepatitis testing is more common when they come looking for HIV testing".* P8 *"People usually don't know they have hepatitis; by the time they get here, it's already serious.* P9 *"There was one lady who had stopped her treatment because she started drinking tea.* P5 *"Many patients don't know that this service exists, that it has free and affordable testing."* P7

Source: The authors.[6]

to expand the actions agreed upon for the 2030 agenda, it will be necessary to assume an effectively federative debate, not limited to a sectoral organization.

In the HR analysis space, it is important to highlight the composition of the municipalities. Regarding Southern Mato Grosso's HRs, which are small and medium-sized, it is a situation that has historically projected the IHC celebrations. The results of this study corroborate the very limitation that studies on this model of the pact have already exposed, the difficulties of constituting horizontal cooperative arrangements.[23] The distancing of the SDH-MT and the RHO in pact management amplifies these limitations and weakens the managerial process of the UHS.

It is understood that, for what was exposed in the political dimension, the confrontation of viral hepatitis requires leaders capable of promoting agenda strategies in collegiate spaces, capable of promoting a broad investment in monitoring the reduction of new infections, with the proposal to increase by 90% and lower mortality by 65%,[8] respecting the expansion of awareness, the guarantee of treatment, and studies that subsidize the advancement in diagnostic/treatment technologies, with the support of equitable access to preventive and clinical care.[8,9,11]

This set of international guidelines that subsidize the actions to address hepatitis needs to perpetuate the agenda of management leaders with a cautious look at the contexts of organization of health services in the HS, aligning strategies to guide this grievance in the political agenda of the HS, as considered in the Sustainable Development Goals (SDGs),[11] to be achieved by 2030.

In the **socio-economic dimension**, the key informants presented factors that represent the investment of the public network, related to the infrastructure of services and the number of human resources, showing mainly the low responsiveness of the TCC in health actions in the community. The reduction of the TCC teams to only one employee shows the low capacity to act in prevention,[24] even if the proposal that the TCC will take responsibility for the user's matriciation with the PHC becomes effective.

It is recommended that low- and middle-income countries, in order to ensure scaled-up production of health services for hepatitis care, focus on the cost-effectiveness of testing the high-risk groups.[25] This strategy has been carried out in developing countries such as Thailand[26] and in developed countries such as Germany[27] and Australia.[28] In countries that have introduced health insurance schemes based on socioeconomic status, user out-of-pocket expenses for testing and treatment are a limiting factor.[29,30]

In Brazil, through UHS, a universal, capillary, and public system covering the entire national territory, hepatitis care is supported by PNVH guidelines and can be an example with considerable chances of successful experiences in the battle against hepatitis. However, the little dispersion of SCS in strategic regions weakens the guarantee of access to medication and continuity of treatment, and it gets even worse when the SCS cannot provide hepatitis care, as was the case in the studied HR. The medical demography, especially in the Legal Amazon,[31] and the centrality for diagnosis and treatment that does not consider geographic and socioeconomic aspects amplify the limitations to access.[10,22]

The approximation of the state coordination of the PNHV with the technical professionals who coordinate the reference services in the HR and the collegiate management of the HR is essential to allow approaches that are capable of elaborating practical actions for the state management's contribution to the investment policy in the formation of human resources in health,

training projects, as well as the approximation of teaching and research centers to broaden the connections that can strengthen professional practice and minimize care gaps.

In the **organizational dimension**, it is recognized that, worldwide, health systems have shown weaknesses in the organization of care flows that ensure comprehensive health care for hepatitis, especially in ensuring referral to specialists.[32] This fact exposes the decrease in responsiveness with the impact on the user's quality of life, by increasing the incidence of chronic forms, which will lead to transplantation and the risk of opportunistic diseases.[33]

The weaknesses of decentralization of testing in PHC evidenced in this study corroborate an extensive agenda of sectoral dialogues capable of implementing the proposed strategies to expand testing through the first level of care. Internationally, the guideline to invest in PHC as a strategy to expand the confrontation of hepatitis is confirmed, but even in cities like Dublin, London, Bucharest, and Seville, the need to improve the coordination of care was identified.[34]

In UHS, the logistics for distributing treatment have been one of the main limitations after the user's diagnosis. The comings and goings in the care network are a fact, even for transplanted patients.[35] The attempt to decentralize diagnosis and treatment to PHC is an opportunity to reduce the loss in treatment follow-up since many cases of loss are related to the distance to health services and the cost of transportation.

For UHS, the coordination of care by the PHC is important, especially in small municipalities, during the follow-up of patients undergoing treatment. The participation of the multidisciplinary team at the primary level of care, through therapeutic support, especially when the patient returns home,[36] advances the potential of care management to ensure continuity and coordination of care for patients and families with hepatitis.[37]

When considering the foundations that support the HCN, specifically the sufficiency, access, and availability of resources, the guideline given by the publication of Ordinance No. 1537/2020[38] tones the attributions of the PHC in the PNVH, especially expanding the role of nurses, through Technical Note No. 369/2020.[39] However, it must be recognized that these users, especially those with a chronic manifestation of the disease, present extrahepatic complications, with prolonged emotional and cognitive manifestation, in addition to the need for clinical investigation resulting from the treatment.[40] In this sense, it is pertinent to invest in care monitoring through the clinical competencies of network professionals and the guarantee of support to specialists in a timely response to the demands of PHC.

Strategically, the World Health Organization (WHO) has worked in international cooperation since 2015 to move the component to the Essential Medicines List (EML), and in Brazil, since the publication of Ordinance GM/MS No. 1.537,[41] we have been working to reduce the bureaucratic obstacles that limit access. However, it is worth pointing out that it is through federative articulation that the network operates to support the care, prioritizing the pacts in collegiate instances.

In the **technical dimension**, the organization of the work process for planning actions toward the micro elimination of hepatitis is still a challenge. Few services work with an approach focused on vulnerable populations. In Brazil, access to public health services in *quilombolas*,[42] indigenous,[43] and riverine communities is still precarious.[44] Under this approach, there has been a unanimous recommendation to expand the active search in PHC. However, studies[45,46] show the high referral of PHC doctors to specialty services, especially in cases of hepatitis B and C, indicating the need for investment in training for clinical approach.

When considering the expansion of nurses' activities[39] and because this professional category has taken on the management of PHC units, it is relevant to qualify their training, since their graduation, in order to expand beyond managerial skills, the clinical approach to care, in order to advance in the proposals for decentralization of hepatitis care.[6]

International experiences cite the expansion of clinical training with the supervision of specialists,[47] in addition to the participation of nursing in consolidating advanced practice guidelines.[48] The role of nurses inserted in the conduction of the care model has shown that the responses are promising and positive, as in the HepCare Europe program,[49] and in countries such as Australia,[50] New Zealand,[51] and the U.S. state of Maryland.[52]

Telehealth has been used to strengthen clinical decision-making on hepatitis therapeutic management and training, to advance the continuing education proposal, and to show the opportunities for virtual integration into treatment monitoring. The use of telehealth to expand hepatitis care in Australia was to ensure greater monitoring of treatment,[53] in Mexico for economic factors[54] and in Spain to ensure access to specialists in the population deprived of freedom.[55]

In the symbolic dimension, it should be noted that adherence to hepatitis treatment is related to the ethnic group's cultural baggage and beliefs,[56] as well as to the population's mental health problems, medication abuse, and alcohol consumption,[57] in addition to the user's level of knowledge and interaction with the health care professional.[58]

The Covid-19 pandemic made it possible to expose with greater emphasis the need to organize the HCN to meet social needs with greater resoluteness. In hepatitis care, it was verified that in the state of Mato Grosso, it is urgent to expand the coordination of care in prevention and health promotion, in order to face the fragmentation of care regarding diagnosis, treatment, and monitoring. In this sense, the position of the state management is crucial to organize the spaces for dialogue, to encourage pacts, and to invest in the evaluation of access to timely subsidize decision making.[59]

The evidence found in the HR has characteristics influenced by the aforementioned factors, which coexist with the stigma, both in the professional field that, depending on the team, does not address certain issues with the population, and from the service users themselves, in the search for testing. In this sense, the deconstruction of stigma has to do with overcoming the work process guided by the biomedical model, by considering

welcoming, integrity, empathy, and other elements that help to promote strategies that enhance prevention, diagnosis, treatment, and monitoring of the health service.

CONCLUSION AND IMPLICATIONS FOR PRACTICE

The statements highlighted so far support an analysis for management on strategic actions with a priority focus on health services, as well as elements that contribute to the development of strategies that take into account the regional and team peculiarities, especially in a country such as Brazil, with a vast territory and cultural diversity. It is a consensus that to expand the approach to hepatitis, in a perspective that expands the integral healthcare, the political structure in a state health system should consider: the lack of awareness about hepatitis in the community; the reduced supply of testing material, consequently, the underfunding for this area; the little knowledge of the clinical approach of those who perform the healthcare, collaborating to the fragmentation in the care levels; the difficult access to medicines; the reduction of stigma, and the expansion of local or national laws about illicit drugs.

Nursing, a protagonist in the technical responsibility of different hepatitis care services, has an interface with the planning actions to meet the goals agreed upon for the 2030 agenda. Therefore, it is a matter of aligning the resources that enhance, in the diverse conditions of the healthcare network organization, the capacity to connect the services and expand the testing with the incorporation of monitoring and evaluation as tools for healthcare management.

When considering the dynamics and peculiarity of access to care for viral hepatitis in a state with geo-political-health characteristics as heterogeneous as Mato Grosso, it is understood that the study has limitations regarding the selection of only one HR and the option to punctuate only key informants from management and services, which even being a punctual cutout of the selection of stakeholders did not provide the opportunity to give voice to users, who would verify the findings and could make explicit the major limitations of access, as well as strategies used to overcome them. Even so, the results bring relevant contributions to the practice of care and management, subsidizing an expanded look at the object of study.

The non-investigation of access in the prison context, and, the non-participation of three managers who were considered important to understand the management process in the SDH-MT, mainly because they hold positions that confirm the decision-making, limited the more robust analyses on the aspects of state management in the regional process; however, for the study's proposed objective, the approach of the key informants who participated made it possible to present the consistent results for the PNVH.

From this initial assessment, it is understood the evaluation's contribution to the confrontation of viral hepatitis, that future studies should adopt a mixed method approach, using the articulation of different techniques for data collection, in order to favor the capture of different nuances of access. It is considered that the use of the universal access to health services analysis model is an important design to present the evidence of the study, for enabling an understanding of different aspects, systematizing them in dimensions of analysis, with support for the multiple considerations of access in a health system, contributing to the understanding of the topic.

FINANCIAL SUPPORT

Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq) concerning the doctoral scholarship awarded to Josué Souza Gleriano, Process No. 165813/2018-0.

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[a] The study was extracted from the doctoral thesis "Evaluation of access to viral hepatitis care services in the State of Mato Grosso - MT", authored by Josué Souza Gleriano. Supervision by Dr. Lucieli Dias Pedreschi Chaves. Graduate Program in Fundamental Nursing. Ribeirão Preto School of Nursing - University of São Paulo. Doctoral dissertation: 2021.