



University indissociability and addressing viral hepatitis: an interinstitutional experience

Indissociabilidade universitária e enfrentamento das hepatites virais: experiência interinstitucional

Indisolubilidad universitaria y enfrentamiento de las hepatitis virales: experiencia interinstitucional

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ABSTRACT

Objective: to analyze the contributions of indissociability in the integration of teaching, service, and management, considering the interinstitutional commitment and the expansion of nursing practices in the regional context aimed at eradicating viral hepatitis. **Method:** experience report, considering the reflective professional, based on a documentary analysis of teaching, research, and extension projects developed between 2018 and 2024 in the state of Mato Grosso. Reports, meeting minutes, and scientific materials were considered and analyzed through thematic analysis, resulting in three main categories. The theoretical framework adopted was complex thinking, articulated to the principle of indissociability. **Results:** the experience highlighted the need to raise awareness among managers and health professionals about viral hepatitis as a public health problem, leading to the development of a regional response plan. Integrated actions enabled an expanded role for nursing in care coordination, strengthening the connection between professional training and the needs of the Unified Health System. **Conclusions and implications for practice:** the university's indissociability has proven to be a strategy for qualifying the health system's response, thereby strengthening interprofessional practice. The experience contributes to the advancement of public policies aligned with the Sustainable Development Goals and reinforces the importance of integrating education, service, and management.

Keywords: Intersectoral Collaboration; Sustainable Development; Nursing; Human Viral Hepatitis; Health Systems.

RESUMO

Objetivo: analisar as contribuições da indissociabilidade na integração ensino-serviço-gestão, considerando o compromisso interinstitucional e a ampliação das práticas de enfermagem no contexto regional voltadas à eliminação das hepatites virais. **Método:** relato de experiência, considerando o profissional reflexivo, baseado na análise documental de projetos de ensino, pesquisa e extensão desenvolvidos entre 2018 e 2024, no estado de Mato Grosso. Foram considerados relatórios, atas de reuniões e materiais científicos, analisados por meio de análise temática, com três categorias principais. O referencial teórico adotado foi o pensamento complexo, articulado ao princípio da indissociabilidade. **Resultados:** a experiência evidenciou a necessidade de sensibilização de gestores e profissionais de saúde sobre as hepatites virais como problema de saúde pública, resultando na construção de um plano regional de enfrentamento. Ações integradas permitiram ampliar o papel da enfermagem na coordenação do cuidado e fortaleceram a articulação entre formação profissional e necessidades do Sistema Único de Saúde. **Conclusões e implicações para a prática:** a indissociabilidade universitária mostrou-se uma estratégia para qualificar a resposta do sistema de saúde, fortalecendo a atuação interprofissional. A experiência contribui para o avanço das políticas públicas, alinhada aos Objetivos de Desenvolvimento Sustentável, e reforça a importância da integração entre ensino, serviço e gestão.

Palavras-chave: Colaboração Intersetorial; Desenvolvimento Sustentável; Enfermagem; Hepatite Viral Humana; Sistemas de Saúde.

RESUMEN

Objetivo: analizar las contribuciones de la indisolubilidad en la integración enseñanza-servicio-gestión, considerando el compromiso interinstitucional y la expansión de las prácticas de enfermería en el contexto regional, orientadas a la eliminación de las hepatitis virales. **Método:** relato de experiencia, considerando al profesional reflexivo, basado en el análisis documental de proyectos de enseñanza, investigación y extensión desarrollados entre 2018 y 2024, en el estado de Mato Grosso. Se consideraron informes, actas de reuniones y materiales científicos, analizados a través de un análisis temático, con tres categorías principales. El marco teórico adoptado fue el pensamiento complejo, articulado al principio de la indisolubilidad. **Resultados:** la experiencia evidenció la necesidad de sensibilización de gestores y profesionales de la salud sobre las hepatitis virales como problema de salud pública, resultando en la construcción de un plan regional de enfrentamiento. Acciones integradas permitieron ampliar el papel de la enfermería en la coordinación del cuidado y fortalecieron la articulación entre la formación profesional y las necesidades del Sistema Único de Salud. **Conclusiones e implicaciones para la práctica:** la indisolubilidad universitaria se ha mostrado como una estrategia para calificar la respuesta del sistema de salud, fortaleciendo la actuación interprofesional. La experiencia contribuye al avance de las políticas públicas, alineadas con los Objetivos de Desarrollo Sostenible, y refuerza la importancia de la integración entre enseñanza, servicio y gestión.

Palabras-clave: Colaboración Intersectorial; Desarrollo Sostenible; Enfermería; Hepatitis Viral Humana; Sistemas de Salud.

INTRODUCTION

Ensuring the qualification of the health workforce beginning in university education is a challenge for health systems, especially in the face of local and regional priorities and inequalities. The integration of students into practice settings through educational processes aligned with health services strengthens the connection between teaching and service, contributing to the improvement of care quality.¹ In this context, extension activities expand the articulation between teaching and research, fostering social engagement, institutional commitment, and impact on health actions.²

The principle of indissociability among teaching, research, and extension expresses a closer relationship between the university and society, fostered through critical self-reflection. This process contributes to the theoretical and practical empowerment of students, reinforcing the social significance of academic production. Its implementation requires the development of collective projects guided by institutional evaluation processes, participatory planning, and a commitment to the interests of the broader society.³

In this sense, the principle assumes a paradigmatic and epistemologically complex character, as it implies the reformulation of the foundations that govern university practices, recognizing that teaching, research, and extension cannot fully exist in isolation. Indissociability, therefore, is not merely a normative guideline but an essential condition for the wholeness of academic practice, whose strength lies precisely in the interdependence among its constituent dimensions.⁴

In Brazil, the principle of indissociability among teaching, research, and extension is enshrined in the 1988 Federal Constitution (Art. 207). It has consolidated the trajectory of Brazilian universities in different political, social, and economic contexts, contributing to intersectoral collaboration. In contemporary times, this principle acquires renewed significance as it aligns with pedagogical approaches centered on interdisciplinarity.⁵ Given the complexity of public health problems, which reflect social inequalities, it becomes necessary to understand community and organizational contexts to formulate strategies that are responsive to real needs.⁶ University extension, when integrated with teaching and research, enhances transformative actions by being rooted in concrete contexts and engaging multiple social actors.

Embedding indissociability within interinstitutional and intersectoral commitments constitutes a strategic approach to expanding and qualifying responses to health demands, particularly in contexts marked by local and regional inequalities. Collaboration among universities, health services, and other public and social sectors enables the construction of systematic and agreed-upon actions, aligned with public policies and oriented toward the real needs of local territories.⁷

Within this framework, the experience presented in this study stems from an intersectoral collaboration that takes human viral hepatitis (VH) as a reference to analyze and describe strategies aimed at strengthening the health workforce in the prevention

of new infections. These actions align with the goals of the 2030 Agenda and the targets established at the World Health Assembly, which propose an integrated approach combining prevention and clinical care.^{8,9} The international agenda sets forth the goal of reducing new VH infections by 90% and mortality by 65% through strategic actions within health systems, such as expanding diagnosis, ensuring treatment, and controlling transmission.¹⁰

In Brazil, since the creation of the National Program for the Prevention and Control of Viral Hepatitis (PNHV), the Unified Health System (SUS) has promoted initiatives focused on prevention, organization of the Health Care Network, and workforce qualification, with particular emphasis on the role of nursing.¹¹ The profession has emerged as a strategic actor in addressing VH, playing a central role in prevention, diagnosis, treatment, and monitoring along the continuum of care.¹²

Considering the above, by integrating knowledge and resources from different institutions and sectors, a more comprehensive approach to public health problems is fostered, consolidating proposals for knowledge translation and establishing the indissociability of knowledge as an operational principle of university action committed to social transformation.

Accordingly, this study is grounded in the trajectory built through the articulation of teaching, service, and management through intersectoral collaboration, based on the indissociability strategy for strengthening nursing practice and institutional commitment to the health system at the regional level.

It is also important to highlight the relevance of the partnership with the State Health Department of Mato Grosso, collegiate bodies, and health care services, which facilitated the translation of knowledge derived from a doctoral dissertation that used human viral hepatitis as a tracer condition to evaluate access in the state.¹³ This articulation spurred new areas of work and partnerships in alignment with the global agenda.

Thus, the objective of this study is to analyze the contributions of indissociability in the integration of teaching, service, and management, considering interinstitutional commitment and the expansion of nursing practices in the regional context, with the aim of eradicating viral hepatitis.

METHOD

This is an experience report with a qualitative nature, grounded in discursive formulation through documentary analysis, considering the reflective professional as someone who critically and constructively thinks about their own practice.^{14,15} The study was guided by the central question: What contributions can the indissociability of teaching, research, and extension offer to addressing viral hepatitis as a public health problem, considering Nursing's commitment to providing conditions through management, care, education, and research within the health system?

This perspective is based on the understanding that reflection constitutes a dynamic and continuous process expressed in three interconnected dimensions: reflection on action, reflection in

action, and reflection on the reflection in action.¹⁵ The first refers to a retrospective analysis of practices carried out, seeking to understand the effects and limitations of the decisions made; the second occurs during practice itself, allowing adjustments and reformulations in real time; and the third deepens the understanding of previous reflective processes, consolidating learning and supporting new strategies for action.

Knowledge construction here occurs through reflection, critical analysis, and the problematization of experience itself. In this process, the knowledge mobilized by professionals acquires a predominantly tacit nature, being constituted by both systematized knowledge collectively shared by the profession and individual conceptions developed in daily practice. Schön highlights the value of knowledge that emerges from action and is refined through reflection.¹⁵ Thus, practice is not merely a field for applying theoretical knowledge, but also a space of active knowledge production, where the professional acts as a reflective subject, capable of interpreting, reframing, and transforming their interventions.¹⁶

Adopting this framework enables a critical and proactive examination of the contributions of the indissociability of teaching, research, and extension to addressing viral hepatitis as a public health issue, based on the integration of management, care, education, and research within the SUS.¹⁵ Reflection on practice itself therefore emerges as a central axis for rethinking training and professional performance, with a view to social transformation and strengthening health care.¹⁷

This approach is particularly relevant when addressing the articulation among teaching, research, and extension, as it reinforces the ethical and political commitment to transforming social realities, such as the response to viral hepatitis.¹⁵ In this sense, indissociability among these dimensions becomes not only an institutional principle but also a formative tool capable of integrating theory and practice.¹⁵

The experience described in this study results from the collaboration between the Research Group on Policies and Management of Health Systems and Services and the Extension Program “Quality Office for Health Organizations” at the State University of Mato Grosso, in partnership with the State Health Department of Mato Grosso, the Regional Health Office (ERS), and the Counseling and Testing Center/Specialized Care Service (CTA/SAE). The context involved interinstitutional actions with managers and professionals from the care network, as well as students and scholarship holders participating in research, teaching, and extension projects on the topic within the regional reference service.

A data extraction matrix for documentary sources was employed to systematize and organize the information contained in the analyzed documents. Teaching, research, and extension projects were reviewed, along with scientific materials and institutional reports submitted to the Office of Research and Graduate Studies and the Office of Extension and Culture, covering the period from 2018 to 2024. The matrix enabled the identification and registration of variables such as project

type (teaching, research, extension, or integrated), year of implementation, theme addressed, declared objectives, involved actors, institutional partnerships, expected or achieved results, interface with the Unified Health System (SUS) and the Sustainable Development Goals (SDGs), and evidence of collaboration among teaching, research, and extension.

Data extraction was independently carried out by two researchers, who filled in the matrix based on the selected documents. Later, the extracted information was compared in consensus meetings to validate and finalize the database. The systematized information was then analyzed using a thematic approach,¹⁸ aligned with the levels of reflection on action, in action, and on the reflection in action,¹⁵ which facilitated the development of analytical categories capable of illustrating how the inseparability of teaching, research, and extension has been used as a strategy to address viral hepatitis and to strengthen nursing's role in management, care, training, and knowledge production in health.

Based on the identification and interpretation of patterns of meaning in the documentary sources, three categories were defined: raising stakeholders' awareness about the public health problem, integrated research, teaching, and extension actions following the problematization of viral hepatitis, and the context of nursing practice in the negotiation setting: lessons learned. To organize the understanding of the material, the analytical strategy adopted was the logic of professional reflection.¹⁵ Thus, university indissociability was approached as a structuring axis of the analysis, operationalized through the collection and systematization of documentary data that evidenced the articulation among teaching, research, and extension. The discussion, guided by the principle of indissociability, functions as an integrative element among these three dimensions, which are autonomous yet interdependent and hold transformative potential.¹⁹

From an ethical standpoint, only public documents and reports of projects previously approved by Research Ethics Committees were used, as per the following records: CAAE 01481918.0.0000.5393; CAAE 01481918.0.3001.5164; and CAAE 78776624.4.0000.5166.

RESULTS

The first category, focused on a retrospective analysis of practices carried out, made it possible to understand the effects and limitations of the decisions taken in training and management processes related to addressing VH. This category underpins “Raising stakeholders' awareness about the public health problem” by revisiting previous initiatives and their impacts on recognizing the issue.

The second category, corresponding to reflection during practice itself, enabled the identification of how actions have been adjusted and reinterpreted in real time by professionals and students. This forms the basis of the category “Integrated research, teaching, and extension actions following the problematization of Viral Hepatitis,” which highlights the interactive and responsive dynamics of the training process and the institutional reach of the projects.

The third category deepened the understanding of the meanings attributed to practices and strategies adopted, consolidating institutional learning and outlining possibilities for innovation. This stage is expressed in the category “The context of nursing practice in the negotiation setting: lessons learned,” where the main advances and challenges observed are systematized, guiding new directions for articulating training, care, and management.

Raising stakeholders’ awareness about the public health problem

Although viral hepatitis (VH) is recognized as a public health problem and is included in the 2030 Agenda with elimination targets, in Mato Grosso, this recognition had been concentrated mainly in studies focused on clinical management and treatment. Chart 1 presents a synthesis of institutional proposals and responses related to awareness-raising.

Until then, no studies had evaluated the healthcare network from the perspective of access, using VH as a tracer condition to analyze the outcomes of the state system. This gap hindered the understanding of the health system’s organizational response in both macro- and micro-regions. In this context, the evaluative research on access to health services contributed to system management by proposing nine strategic pillars with recommendations for eliminating VH. This specific study sought to address pillars eight and nine, within the governance scope of the stakeholders involved.¹³

Based on this, an interinstitutional working group was established, comprising state, regional, and municipal management, health professionals, specialists, civil society representatives, and university personnel. The group developed an agenda of actions and approved a regional plan for tackling VH, conceived as a pilot proposal for future replication. In parallel, the regional center for health workforce training, which leads the teaching-service articulation, expanded its role in negotiation

processes, informed by a situational analysis of VH in the health region. This mobilization generated continuing education spaces, with emphasis on strengthening the role of nurses in the health care network, particularly in PHC.²⁰

Integrated research, teaching, and extension actions following the problematization of viral hepatitis

Chart 2 presents a summary of integrated actions based on teaching, research, and extension efforts aimed at eradicating VH.

The results of the first study supported meetings with stakeholders and motivated the development of three new investigations: one on clinical management within the interprofessional approach at the reference service for VH; another on treatment abandonment for hepatitis B in the state; and a third analyzing, from the perspective of managers, frontline professionals, and social control actors, a diagram of central elements for access to comprehensive VH care in the SUS.^{8,13,21} In parallel with these studies, practice settings became consolidated as spaces of protagonism for teaching and extension, particularly at the regional level, where projects were articulated. Within this context, the 1st Regional Symposium on Tackling VH was organized with stakeholders, resulting in the development of the 2023–2030 Action Plan for the Mid-North Region of Mato Grosso.

The Symposium took place in three stages: (1) formation of a management group that analyzed regional epidemiological data, reviewed international guidelines, and systematized strategies; (2) focus groups with 45 participants from the region—including managers, PHC coordinators, nurses, and state and regional technicians—who applied a matrix to diagnose network-based care management; and (3) a final plenary, guided by a document prepared from the previous stages, which enabled the definition of consensus-based strategic lines for addressing VH with a regional focus.

Chart 1. Synthesis of awareness and institutional response to viral hepatitis in Mato Grosso, Brazil, 2024.

Element	Description
Identified problem	Limited recognition of VH as a systemic problem; focus restricted to clinical and therapeutic aspects. Absence of studies on access and network organization.
Gap	Lack of evaluation of the health care network from an access perspective, using VH as a tracer condition.
Contribution of evaluative research	Assessed access to services and proposed nine strategic pillars for the elimination of VH. This study specifically contributed to pillars 8 and 9 of the evaluative research.
Stakeholders involved	State, regional, and municipal management; university; specialists; civil society; and health professionals.
Actions developed	Formation of an interinstitutional working group; development of a regional action plan; agreements among institutions; creation of continuing education spaces.
Focus of workforce qualification	Strengthening the role of nurses in the health care network, with emphasis on Primary Health Care (PHC).
Expected result	Pilot proposal for a regional plan with potential for replication and impact on the eradication of VH.

Chart 2. Integrated research, teaching, and extension actions after the problematization of viral hepatitis in Mato Grosso, Brazil, 2024.

Element	Description
Trigger for integrated actions	The results of the first survey prompted new studies and coordination with regional stakeholders.
Scientific output	Three studies were developed addressing: clinic management, abandonment of hepatitis B treatment, and analysis of access to comprehensive care.
Integration of teaching, research, and extension	Practice scenarios were strengthened as spaces for student leadership and coordination with health services.
Mobilizing event	The First Regional Symposium on Combating Viral Hepatitis was held with broad intersectoral participation.
Regional strategic plan	The 2023–2030 Action Plan for the Mid-North Region of Mato Grosso was developed and approved by the Regional Interagency Committee.
Strategic lines of the plan	Four pillars: preventive care, primary health care with specialized support, laboratory capacity, and health surveillance.
Training and capacity building	Training courses, extramural activities, and webinars are offered to professionals and key populations.
Coordinated extension projects	Projects ‘Strengthening management actions for viral hepatitis care’ and ‘Interinstitutional alliance in the Central-Northwest Macroregion for the eradication of viral hepatitis’.
Featured funded research	Studies funded by the National Council for Scientific and Technological Development (CNPq) on treatment abandonment and micro-elimination strategies for VH, using an action research approach for the state.
Commitment to SDGs and replicability	Initiatives aligned with the 2030 Agenda, with an indicator plan and a focus on macro-regional replication.

The Action Plan defines and prioritizes actions and investments in the strategic agenda of local and regional planning across four lines: (1) comprehensive and integrated response with equitable access to preventive care (7 strategies and 28 actions); (2) equitable access to PHC with specialized support (1 strategy and 8 actions); (3) strengthening laboratory capacity (1 strategy and 1 action); and (4) strengthening health surveillance with agreed commitments (4 strategies and 36 actions). In August 2023, the Plan was submitted to the Regional Intermanagement Commission (CIR) and formally approved through Resolution CIR Mid-North Mato Grosso No. 015, dated September 19, 2023. Its ratification reaffirmed the regional commitment to the 2030 Agenda and highlighted the integration of management, care, teaching, and research. From this process, a set of items was established to be transformed into indicators for monitoring and evaluation, ensuring ongoing follow-up of actions. The agreed initiatives are to be implemented in the short, medium, and long terms under the shared responsibility of regional management.

In response to the need to expand learning opportunities from undergraduate training onward, the extension project Strengthening health management actions for VH care, initiated in 2022, enabled student placement in VH reference services and provided four undergraduate research scholarships with an extension interface, one undergraduate extension scholarship, and two extension professional scholarships, consolidating an

institutional plan of integrated research, teaching, and extension actions. As a result, in the health region, four training courses were offered for network professionals on reception and testing, 20 community-based activities targeting key populations in the context of micro-elimination, and two webinars on the VH situation in the state, clinical approaches, and updates based on national protocols. To expand this approach to the macroregional level, the extension project Interinstitutional Alliance in the Mid-Northwest Macroregion for the Eradication of VH was created, funded by an internal university grant aligned with the SDGs, with the goal of replicating the regional experience.

In the research domain, two studies funded by the National Council for Scientific and Technological Development (CNPq) stand out: the first, focused on VH treatment abandonment, supported under Call no. 21/2023, Track A – Secondary Studies (Process: 445013/2023-0); and the second, an action research project aimed at strengthening care management and coordination strategies for VH micro-elimination in the state’s Health Care Network, supported under CNPq Call no. 34/2024 (Process: 405761/2024-4).

The context of nursing practice in the negotiation setting: lessons learned

Chart 3 presents the context of nursing practice in the agreement scenario and outlines the strategies to expand nursing activities within the context of HV.

Chart 3. Context of nursing practice in the agreement scenario and strategies to expand action in the context of viral hepatitis, Mato Grosso, Brazil, 2024.

Element	Description
Initial challenge identified	Resistance to decentralization of testing and insecurity among professionals in caring for VH.
Mitigation strategy	Development of a regional pilot action focused on raising awareness and gaining the support of stakeholders.
Institutional coordination	Partnerships with CIR and the Teaching-Service Integration Commission (CIES) for regional mobilization and agreement on actions in the territory.
Professional training	Three training classes for health professionals in the region, focusing on counseling, testing, and network organization.
Emphasis on clinical practice	Integration of technical aspects, skilled listening, bonding, health education, and planning.
Intervention results	Training of 58 nurses; 34% increase in diagnoses and increased adherence to treatment.
Strategic action by nurses	Prevention, active search, adherence to treatment, and action in vulnerable territories.
Lessons learned	Importance of stakeholder participation and regionalized debate on VH.
Persistent challenges	Maintaining resistance to decentralization and active search as a management axis.
Recommendations for sustainability	Need for permanent governance, with a focus on surveillance and coordination of care.

Research findings highlighted resistance to decentralizing testing and professional insecurity in VH care.²² To mitigate this, a pilot action was developed in the Health Region (RS), articulated with the CIR and the Teaching-Service Integration Commission (CIES), aimed at securing stakeholder engagement and raising awareness among professionals. In the second semester of 2023, three training cohorts were offered, each with 25 slots, focusing on the theoretical and practical training of nurses in counseling and testing, with an emphasis on organizing care flows within the health network. A total of 58 nurses were trained, with a minimum requirement of six pre- and post-test counseling sessions. Emphasis on clinical practice expanded understanding of the nurse's role in VH care, integrating technical aspects, qualified listening, health education, user bonding, and planning interventions based on social determinants of health and comprehensive care.

Within this context, the strategic role of nurses was reaffirmed in prevention, active case finding, and ensuring treatment adherence, particularly in territories marked by social vulnerabilities. As a result of training, a 34% increase in diagnosed cases was observed compared to 2022, along with a 28% increase in hepatitis B diagnoses and a 17% increase in adherence to treatment for this condition. From September onward, 39 new VH cases were diagnosed. Among the lessons learned, the involvement of stakeholders in debating the VH landscape at municipal and regional management levels proved valuable, particularly in addressing challenges such as treatment abandonment and improving access. However, resistance persists in the network to decentralize testing and adopt active case finding as a central planning axis. This underscores the need to establish permanent governance and regional negotiation spaces, with a focus on health surveillance and care coordination.

DISCUSSION

Stakeholder awareness emerges as a central analytical category for understanding the processes that enable interinstitutional articulation in addressing VH as a public health problem, as it requires active engagement in incorporating this condition into the priority agendas of health systems.²³ Many of the challenges stem from weaknesses in the intergovernmental coordination of policies and actions, particularly at the federal level, which compromises the effectiveness of health responses.²⁴ It is therefore necessary that public managers, especially those in strategic positions, recognize the urgency of including VH in national health discussions while aligning efforts with the international community.²⁵

Among the persistent obstacles in addressing VH are the insufficient formulation of specific policies, the scarcity of robust epidemiological data, and the limited knowledge of care for vulnerable populations.²⁵ This scenario demands from stakeholders an effective commitment to participate in securing research funding, technological innovation, and the production of evidence to guide more equitable and resolute models of care within health services. For this reason, in the case of VH, the influence of stakeholders on network management and the challenges related to care fragmentation motivated the involvement of these actors from the very beginning of the experience, enabling the expansion of the field of investigation and of teaching and extension actions.²²

Using VH as a tracer condition to evaluate the health system's response demonstrated that, to transform scenarios and contexts, it is necessary to be genuinely present within them. This requires time, willingness, and mutual respect among those involved,

as well as synergy in building projects that are recognized as priorities for their work.¹³ This movement—necessary, yet complex and dynamic—is a living construction that can be considered challenging in terms of process relations and interests within the university setting. Thus, awareness is not limited to one-time mobilization but rather constitutes a continuous and strategic action to consolidate intersectoral commitments, enable knowledge translation, and strengthen regional governance in the response to VH.

On this basis, the integration of teaching, service, and management, anchored in the indissociability of training, practice, and care management, becomes central as a vector of institutional innovation, especially by mobilizing knowledge, skills, and commitments in favor of more equitable and resolute responses to VH. Consolidating the principle of indissociability among teaching, research, and extension in public higher education institutions is not a simple task, even though it is enshrined in Article 207 of the 1988 Federal Constitution and reaffirmed as one of the five principles of university extension.⁵ This difficulty lies in the complexity of academic work processes, which demand synergies capable of integrating different interfaces. However, the experience presented in this study demonstrates that its realization is feasible through coordinated efforts and strategies that connect diverse institutional and social contexts.

The argument advanced in this study—that projects should be articulated based on the principle of indissociability, developed within and by the university—is supported by philosophical, political, pedagogical, and methodological foundations aimed at fostering training that goes beyond decontextualized disciplinary knowledge and advances toward a pluriversity of knowledge connected to the real demands of educational settings. This perspective requires broad dialogue across different domains of knowledge, enabling more effective responses to the multiple social needs observed in the territory.²⁶ It also implies recognizing the level of social responsibility that this approach demands, involving both the position of the faculty member and the institutional support necessary for its implementation, since it is in university extension that social cohesion is strengthened and protagonism emerges through articulation with action research.²⁷

This assertion places extension at the heart of the pedagogical exercise of academic work—not as dilettantism or assistentialism, but as a professional practice assumed by faculty committed to university training.²⁸ It is necessary to debate what it truly means to produce knowledge through the principle of indissociability, as fragmentation is also present in faculty work proposals.

It is equally important to recognize the habitus of each actor who comprises the university field, as actions stem from the central recognition of what is proposed as a work process. In other words, there is a diversity of trajectories that coexist in teaching practice, with different training backgrounds, conceptions, or teaching experiences that may or may not have incorporated the concept of indissociability.²⁹ What is ultimately at stake is the capacity to produce knowledge through a political conception of training in which indissociability is assumed as a principle.

To this end, it will be necessary to revisit training spaces, from teaching practice to curriculum flexibility, without losing sight of the fact that the institutional support for implementing the principle of indissociability must be embedded in the Institutional Pedagogical Project (PPI) and Institutional Development Plan (PDI), which underpin the other projects and activities developed within the university.

Without expanding excessively, it is worth emphasizing that the principle of indissociability invites us to revisit the question: “*What does training truly mean?*”—an inquiry that calls for reordering symbolic structures to move from the instituted to the instituting.³⁰ This reflection underscores the responsibility of the university in regional development and in contributing to global improvements in health systems, which in this case includes defending the sustainability of Brazil’s largest public policy, the Unified Health System (SUS), and acknowledging the central role of nursing, the largest professional workforce within this system.

Revisiting the field of knowledge translation—understood as the dynamic process of transforming scientific knowledge into socially relevant practices—reveals its greater potential when mediated by indissociability, particularly in the context of public universities.³¹ By articulating teaching, research, and extension, this process gains further significance when sustained by interinstitutional and intersectoral commitments, which expand the reach of actions and foster collective solutions to complex problems such as VH.³²

In this sense, indissociability emerges as a crucial factor in strengthening equity and sustainability in health systems. However, within the scope of integrated health policies guided by the SDGs, addressing VH in the SUS requires revisiting a strategic field for implementing practices that ensure the universal right to health, grounded in social justice and institutional sustainability.³³

In this process, nursing assumes a prominent role in care coordination, acting strategically in organizing care flows, actively listening to users’ needs, and mediating across different levels of care. Its involvement in multiple domains—from training to care management—reinforces the implementation of integrated responses, especially in regions marked by inequalities and gaps in service provision.³⁴

Within the scope of nursing, valuing its functions in management, care, teaching, and research—particularly by highlighting the expansion of its scope of practice in line with user-, family-, and community-centered care models—reinforces the strategic role of this profession in eradicating VH in the SUS, in alignment with notable experiences nationally and internationally.³⁴

To address VH in Brazil effectively, it is essential to consolidate a constantly evolving scope of nursing practice, especially within work processes that seek to overcome fragmented care.³⁴ Nursing clinical practice, when guided by care-coordination models, finds in the interprofessional approach an essential path to strengthening. This requires both recognition of nursing’s specific knowledge and skills, as well as openness to dialogue and shared responsibility across professional categories.^{34,35}

Building high-quality interprofessional care involves transforming hierarchical practices into collaborative arrangements, where the clinic becomes a space for shared decision-making and follow-up.^{35,36} In this perspective, the experience reported here emphasizes the need to strengthen nursing's scope of practice as a field connected to care models and territorial realities, thereby promoting equity and contributing to an expanded clinical practice aligned with an ethical-political health project in response to the socio-sanitary conditions that characterize VH.

When contextualizing the expansion of nursing's scope of practice, it is crucial to recognize that significant changes must also occur in the university sphere—teaching, research, and teaching-service integration—by legitimizing practices through projects aligned with social demands and the commitment to a socially responsible university.³⁵ Achieving this requires planning built through active dialogue with multiple sectors of society, an indispensable condition for realizing indissociability.³⁷ A particularly relevant outcome, even if implicit, of this experience lies in the university's role as a vector of regional development, especially in states facing geographic, organizational, and social challenges that demand specific strategies to ensure access to essential goods and services, such as health and education.

FINAL CONSIDERATIONS AND IMPLICATIONS FOR PRACTICE

The experience analyzed highlights the concrete effort to operationalize the indissociability of teaching, research, and extension, not only in response to the urgent health needs posed by viral hepatitis (VH) but also due to its potential as an articulating axis for critical training, scientific production, and social intervention. In this context, indissociability is established as a guiding principle for more nuanced and context-sensitive responses to public health challenges, particularly in addressing VH, where approaches still centered on specialized services necessitate integrated action based on the social determinants of health.

From the perspective of interinstitutionality, this experience demonstrates that advancing the response to VH depends on a shared commitment among diverse institutions and sectors, combining efforts to broaden public debate and promote integrated actions. This presents a significant challenge, given that public management constantly reorders its priorities, shifting focus according to the changing political and epidemiological contexts. What differentiated this process was the capacity for dialogue between education, service, and management, which became a structuring element by enabling the construction of co-responsible planning tailored to local realities.

In the field of health care, resistance to paradigm shifts reveals difficulties in adopting territorialized and user-centered approaches—an essential condition for confronting VH. This challenge can be overcome by incorporating surveillance as a guiding framework for care. These lessons demonstrate that overcoming VH requires more than applying clinical protocols;

it demands cultural, institutional, and political change that repositions the healthcare network with a focus on care coordination and equity in access, aiming to reduce inequalities and fulfill the 2030 Agenda for the SDGs.

Nursing, as a technical, scientific, and ethical profession, has a historical commitment to health promotion and the defense of universal public systems, reaffirming its strategic role in management, care, teaching, and research to consolidate interprofessional and intersectoral practices aimed at eradicating VH.

Thus, indissociability makes it possible for the response to VH to transcend being merely a technical field of application, becoming instead a formative space in which clinical practice informs knowledge production, research guides decisions and public policies, and extension returns scientific knowledge to the community in the form of social transformation. From this perspective, the reported experience gains value as scientific production, reiterating that tackling VH is a collective challenge that demands articulation across sectors, disciplines, and institutions—an endeavor in which Brazilian nursing has extensive experience.

Methodological limitations are acknowledged, such as the absence of primary data collection, the restricted regional scope, and potential institutional bias. Nevertheless, the systematized experience reveals feasible and innovative pathways for integrating teaching, service, and management, with concrete effects on strengthening the SUS at the local level. Future studies are recommended to expand primary data collection with managers, professionals, and users, broaden the territorial scope of analysis, and explore the medium- and long-term effects of interinstitutional actions in addressing VH. It is also relevant to investigate the impact of integrating teaching, service management, and professional training on strengthening nursing's role in care coordination, as well as to critically examine the university's indissociability as a structuring strategy for public health policies.

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DATA AVAILABILITY RESEARCH

The contents underlying the research text are included in the manuscript article.

CONFLICT OF INTEREST

None.

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