



# Nurses in an interdisciplinary pain clinic: the experience of a university extension

*O enfermeiro em uma clínica interdisciplinar em dor: experiência de um projeto de extensão universitária*

*Project Enfermeros en una clínica interdisciplinaria del dolor: la experiencia de un proyecto de extensión universitaria*

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## ABSTRACT

**Objective:** to report on the experience of students and teachers in a university extension project at an interdisciplinary pain reference center. **Method:** experience report carried out at the Reference Center for Interdisciplinary Care in Pain: *Universidade Federal de São Carlos* Pain Clinic, composed of professors, undergraduate and graduate students, with a presentation of the admission and care flows and the clinic's operation. **Results:** the activities carried out by the students and teachers were divided into three areas: Nursing as part of the interdisciplinary team; Nursing in the pain clinic; and Case discussion and planning of nursing care. The first axis describes how the nursing team is made up and how it fits into the interdisciplinary team. The second axis presents the actions carried out in conjunction with the interdisciplinary team, in addition to those specific to nursing, and the third axis reports on the dynamics of meetings for planning nursing care. **Conclusions and implications for practice:** teachers, undergraduate and postgraduate nursing students play a fundamental role in the interdisciplinary team. This report provides an opportunity to reflect on the role of nurses in caring for individuals with chronic pain in interdisciplinary pain clinics.

**Keywords:** Chronic Pain; Interdisciplinary Placement; Nursing; Pain Clinics; Pain Management.

## RESUMO

**Objetivo:** relatar a experiência de estudantes e docentes em um projeto de extensão universitária de um centro de referência interdisciplinar em dor. **Método:** relato de experiência realizado no Centro de Referência no Atendimento Interdisciplinar em Dor: Clínica da Dor da Universidade Federal de São Carlos, composto por docentes, estudantes de graduação e pós-graduação *lato e stricto sensu*, com apresentação dos fluxos de admissão e de atendimento e do funcionamento da clínica. **Resultados:** as atividades realizadas pelos estudantes e docentes foram divididas em três eixos: A enfermagem inserida na equipe interdisciplinar; A enfermagem nos atendimentos da clínica da dor; Discussão de caso e planejamento da assistência de enfermagem. O primeiro eixo descreve como está composta a equipe de enfermagem e como se insere na equipe interdisciplinar. No segundo eixo são apresentadas as ações realizadas em conjunto com a equipe interdisciplinar, além daquelas específicas de enfermagem; no terceiro, relata-se a dinâmica de reuniões para o planejamento da assistência de enfermagem. **Conclusões e implicações para a prática:** docentes e estudantes de graduação e pós-graduação em enfermagem desempenham papel fundamental na equipe interdisciplinar. Esse relato possibilita reflexões sobre o papel do enfermeiro no cuidado ao indivíduo com dor crônica em clínicas interdisciplinares de dor.

**Palavras-chave:** Clínicas de Dor; Dor Crônica; Enfermagem; Manejo da Dor; Práticas Interdisciplinares.

## RESUMEN

**Objetivo:** informar sobre la experiencia de estudiantes y profesores en un proyecto de extensión universitaria en un centro interdisciplinario de referencia en atención de dolor. **Método:** informe de experiencia en el Centro de Referencia para la Atención Interdisciplinaria del Dolor: Clínica del Dolor *Universidade Federal de São Carlos*, formado por profesores, estudiantes de pregrado y postgrado, *lato e stricto sensu*, con presentación de los flujos de admisión y atención y del funcionamiento de la clínica. **Resultados:** las actividades se dividieron en tres ejes: Enfermería como parte del equipo interdisciplinario; Enfermería en la clínica del dolor; y Discusión de casos y planificación de los cuidados de enfermería. El primer eje describe cómo se compone el equipo de enfermería y cómo se integra en el equipo interdisciplinario. El segundo presenta las acciones llevadas a cabo conjuntamente con el equipo interdisciplinario, además de las acciones específicas de enfermería, mientras que el tercero informa la dinámica de las reuniones de planificación de los cuidados de enfermería. **Conclusiones e implicaciones para la práctica:** los docentes, como así también los estudiantes de grado y posgrado en enfermería desempeñan un papel fundamental en el equipo interdisciplinario. Este informe permite reflexionar sobre el papel de los enfermeros en el cuidado a personas con dolor crónico en las clínicas interdisciplinarias para la atención del dolor.

**Palabras-clave:** Clínicas de Dolor; Dolor Crónico; Enfermería; Manejo del Dolor; Prácticas Interdisciplinares.

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## INTRODUCTION

The prevalence of chronic pain (CP) in Brazil is variable, with studies reporting rates ranging from 23.02% to 42.33%,<sup>1</sup> 45.59%,<sup>2</sup> and up to 76.17%.<sup>3</sup> Unlike acute pain, which has a survival function, CP is maladaptive<sup>4</sup> and is associated with increased mortality, either independently or in conjunction with other chronic diseases.<sup>5</sup>

In the latest International Classification of Diseases (ICD-11), CP is defined as a condition involving suffering and interference with daily activities, often accompanied by a range of emotions, signs, and symptoms. It may be classified as primary or secondary, with both types characterized by persistent pain lasting three months or more.<sup>6</sup>

CP must be understood as a multidimensional phenomenon involving dynamic interactions between biological mechanisms and psychosocial factors that mutually influence each other.<sup>4,7</sup> Given its complexity, the International Association for the Study of Pain (IASP) recommends a biopsychosocial and interdisciplinary approach for its management,<sup>8</sup> which has demonstrated positive outcomes in self-efficacy, quality of life, and reductions in disability symptoms, catastrophizing, depression, and long-term pain intensity and frequency.<sup>9,10</sup>

Non-cancer CP is recognized as one of the leading causes of disability worldwide, significantly impacting the quality of life of affected individuals.<sup>11</sup> It interferes with routine activities such as walking and household tasks, often leading to limitations that compromise independence and self-care.<sup>12</sup> Additionally, CP disrupts sleep and is closely linked to poor mental health, including higher rates of depression and anxiety.<sup>13</sup> These challenges can strain interpersonal relationships and social interactions, resulting in social isolation.<sup>14</sup>

Given its magnitude, it is essential to implement effective interventions addressing the physical, psychological, and social dimensions of CP to mitigate its negative impact on individuals' lives and reduce the economic burden it imposes on society.

Interdisciplinary pain clinics play a pivotal role in delivering comprehensive care for pain management. Within this context, nurses are instrumental in patient-centered care planning, setting realistic goals, teaching self-management strategies, and promoting practices that enhance physical and emotional well-being. Nurses are also vital in listening to and validating patients' experiences of pain, involving family networks to strengthen patient-team relationships, and educating patients about the harmful effects of inactivity and social isolation on health. Furthermore, nurses actively involve patients in care planning, positively influencing treatment outcomes.<sup>15,16</sup> Adjuvant therapies such as music therapy, psychoeducation programs, and guided imagery are interventions that nurses can implement to manage CP in adults.<sup>17</sup>

A successful example occurred in a chronic musculoskeletal pain clinic in Staffordshire County, United Kingdom. Three years after its implementation, there was a reduction in primary and secondary healthcare service utilization by fibromyalgia patients, from 2.8 to 1.4 visits per year. Nurses led the entire process, conducting patient evaluations, managing care, and

organizing interventions with individualized care plans based on self-management principles and strategies for managing pain, sleep, and stress.<sup>18</sup>

Interdisciplinary pain centers stand out as models of excellence for individual-centered assessment and treatment through multidisciplinary teams. When linked to academic institutions, these centers play a crucial role in advancing, applying, and disseminating scientific knowledge through teaching and research activities. Beyond being multidisciplinary, pain treatment centers must embrace interprofessional collaboration to address the full complexity of pain.<sup>8</sup>

These centers provide fertile ground for nurses to develop and act as integral members of interdisciplinary teams dedicated to delivering comprehensive care to individuals with CP. The Manual for Developing a Multidisciplinary Pain Center<sup>19</sup> identifies nurses as one of the four essential professionals in this setting.

This study describes the integration of nurses into a Reference Center for Interdisciplinary Pain Care, based on a university extension project developed at a public university. This experience report aims to contribute to the development of new specialized services for treating individuals with pain.

The objective of this study is to report the experiences of students and faculty in a university extension project within an interdisciplinary pain reference center.

## METHOD

This is an experience report conducted at the "Reference Center for Interdisciplinary Pain Care: Pain Clinic" at UFSCar. The clinic began operations in 2018 with the goal of providing interprofessional care to adults and older adults with non-cancer CP in its multidimensional nature, employing reliable pain assessment methods, advanced education techniques, and strategies for pain management and self-management.

Its activities are anchored in the pillars of the university: Teaching (undergraduate and graduate), Research (scientific initiation projects, master's, and doctoral studies), Extension (community care through interdisciplinary practices, events, knowledge dissemination, specialization programs), and Management (training qualified human resources to create and manage specialized pain care services). The clinic provides care for individuals with CP, facilitates deep discussions on pain, maintains open communication channels with the community about CP, and serves as a strategic health resource for the municipality.

The Pain Clinic's activities are conducted at the School Health Unit (USE), an academic multidisciplinary unit at UFSCar functioning as a medium-complexity outpatient clinic linked to the São Carlos-SP health network and its surrounding region.

### Composition of the Pain Clinic and care teams

The Pain Clinic comprises an expanded team of faculty members, undergraduate and graduate students (*lato sensu* and *stricto sensu*) from seven UFSCar departments: Nursing, Physical Education and Human Movement, Physiotherapy, Gerontology, Medicine, Psychology, and Occupational Therapy.

It also includes health professionals from other healthcare and educational institutions. Each area is coordinated by faculty members, with two postgraduate tutors handling administrative activities. When social care is required, the USE social worker is called upon to join the care team.

On-site activities occur weekly and include interprofessional team meetings for continuing education and clinical case discussions, followed by patient consultations. Each team conducts two consultations lasting a total of two hours, with patient records updated afterward.

Interdisciplinary teams are organized daily for each patient under the supervision of coordinating faculty members and tutors. Team composition varies according to the patient's clinical condition, progress, and the availability of clinic students and professionals. Initial teams may consist of two or three professional categories, with additional members from other disciplines joining after initial evaluations if necessary. When specific professionals are required, the team organizes within the consultation timeframe. For psychological care, sessions last two hours, one hour for psychological care and another hour for other team members' interventions.

### Continuing education for the team

Team training is ongoing and includes theoretical-practical sessions on CP management, neuroscience education on pain, assessment tools, care technologies for pain management and self-management, pharmacological and non-pharmacological treatments, psychological aspects of pain patients, as well as broader topics such as interdisciplinary practice, polypharmacy, associated clinical conditions, aging, sleep hygiene, genograms, and ecomaps, among others. A virtual platform was developed to provide access to training materials for all members, along with updated articles on various topics. Training sessions are conducted by external guests or clinic members, including faculty and students.

### User admission workflow

Patients are admitted to the Pain Clinic through referrals from health units or interconsultation requests from other USE outpatient clinics. Admission criteria include complaints of specific pain lasting more than three months or nonspecific pain lasting more than six months, along with at least one primary complaint of persistent pain or specific diagnoses of conditions causing CP without improvement from prior treatments.

### Initial care protocol of the pain clinic

The initial care protocol necessarily includes an evaluation conducted by an interdisciplinary team, as previously mentioned, and consists of: Anamnesis, investigating the main complaint, current illness history, general health history, medications in use, laboratory and imaging exams, lifestyle habits (smoking, alcohol consumption, physical activity), investigation of expectations regarding the Pain Clinic's care, and the outcomes intended to be achieved in the short, medium, and long term; General and

specific physical examination depending on the chief complaint; Pain assessment using the Brief Pain Inventory;<sup>20</sup> Health-related quality of life assessment (WHOQOL-bref);<sup>21</sup> and Functionality assessment (WHODAS).<sup>22</sup>

The application of these assessment tools can be performed by any member of the initial team, provided they have been trained and possess the necessary skills. The initial evaluation may take place over one or more consultation days, as this is a time for active listening, allowing the user to speak freely and fostering a bond with the team.

If needed, additional assessment tools may be applied, such as the Tampa Scale for Kinesiophobia,<sup>23</sup> the Pain Catastrophizing Scale,<sup>24</sup> the Central Sensitization Inventory,<sup>25</sup> the Pittsburgh Sleep Quality Index,<sup>26</sup> and the Hospital Anxiety and Depression Scale.<sup>27</sup> Other professionals may also be called upon to join the initial care team and suggest the application of specific assessment tools relevant to their areas of expertise.

### Pain Neuroscience Education

After completing the initial evaluation, Pain Neuroscience Education (PNE) is conducted as an educational therapeutic resource. PNE provides information through teaching-learning techniques about pain, aiming to reduce beliefs, myths, and fears related to the pain process.<sup>28</sup> Any team member trained for this activity can conduct PNE. It is delivered in one or more sessions, depending on the user's profile, clinical needs, and proposed interventions. PNE sessions may occur concurrently with other interventions if immediate health actions are required. It is important to note that after completing the education sessions, the team may revisit aspects of PNE at any time to support therapeutic goals.

Twelve topics are addressed in accessible language for each individual: 1 - Pain as an alarm system; 2 - Sensors throughout the body; 3 - Pain is different from injury; 4 - The brain as the central monitor; 5 - The brain making decisions; 6 - The dysregulated alarm system; 7 - What helps to dysregulate the alarm system?; 8 - The brain's fire brigade; 9 - Stimulating the brain's pharmacy production; 10 - The fire can grow; 11- Brains that extinguish, amplify, or fail to combat the fire; 12 - The accelerator and brake of the pain system; 13 - The lion and the tamer.<sup>29</sup>

### Care program

Following the initial evaluation and PNE, the care team presents the case and a proposed therapeutic plan to the extended team. An interdisciplinary discussion of the clinical case is then held to validate the therapeutic plan and suggest additional proposals for implementation.

The patient is systematically re-evaluated by the care team, and the case is brought back for extended discussion whenever the team deems it necessary to revise the therapeutic plan or initiate discharge planning.

### Ethical aspects

This study presents and discusses aspects of the nurse's role based on the experiences and practices of students and

faculty in an interdisciplinary pain clinic. It provides conceptual analyses, descriptions of care dynamics, and relevant interventions to understand the nurse's role in this context. As such, this study does not require approval from a Research Ethics Committee.

## RESULTS

The experiences of the nursing team, faculty, and students at the Pain Clinic are presented in three main areas, as outlined below.

### Nursing integrated into the interdisciplinary team

In the Nursing area, the Pain Clinic includes a nurse faculty member who coordinates the area, as well as undergraduate and postgraduate students (master's and doctoral levels).

Undergraduate students are integrated into interdisciplinary care teams alongside members from other areas, under the supervision of the area coordinator, clinic tutors, and with support from postgraduate students. Their participation is determined by the specific needs of each case.

In interprofessional work, nursing contributes to teaching pain self-management based on PNE, collaboratively developing patient- and family-centered care plans. This is guided by trust-building and clear, objective communication between team members, the patient, and their family. Additionally, nursing participates in discussions with the team regarding patient expectations for pain relief, intensity, and comfort levels, while implementing multimodal non-pharmacological strategies for pain control.

The number of cases attended depends on the number of nursing members available at the clinic. The inclusion of a nursing member in a case is determined by the tutors based on the clinical history provided in the referral. Priority is given to nursing participation in more complex cases involving multimorbidity and requiring specialized attention.

### Nursing in Pain Clinic care

As members of the initial team, nursing students conduct the user's initial evaluation, apply PNE, and collaborate with the interdisciplinary team to reflect on the case and develop a therapeutic plan. In this process, nursing identifies and assesses risk factors and complications related to other health conditions, recognizing pain as a complex phenomenon that both influences and is influenced by other conditions.

As part of the initial team, nursing students present clinical cases to the extended team. Nursing contributes to various aspects of the extended discussion, including decisions about clinical management and therapeutic plans, with a specialized focus on identifying signs and symptoms that may require immediate referrals to other services.

These contributions extend to discussions of all clinical cases, not just those in which the student is directly involved. This is due to nurses' specialized knowledge and skills regarding users' general health needs, which often include multiple associated chronic conditions. When activated, nursing conducts targeted clinical evaluations to identify acute events that may occur before,

during, or immediately after clinic visits. Urgent and emergency situations are managed according to a standardized protocol established by the Unit. Actions for these situations are always shared with faculty coordinators from various areas, clinic tutors, the user's care team, as well as the patient and their family.

After the extended team's evaluation and recommendations regarding therapeutic planning, nursing students address the user's general needs related to pain and health conditions.

The nursing team proposes actions to promote and strengthen self-care and health education for various needs, such as evaluating and advising on medication therapy and polypharmacy, promoting adherence to non-pharmacological treatments for chronic diseases, educating on balanced nutrition, identifying diverse acute conditions, and explaining health test results. When risk factors or complications are identified, nursing actions are implemented, followed by new evaluations to analyze outcomes. Additionally, nursing identifies access tools, provides guidance, and facilitates referrals to various healthcare services while monitoring the user's journey through the healthcare system.

When necessary, nursing schedules consultations outside clinic hours. These consultations address specific health-disease process issues and develop individualized nursing care plans. In these cases, a postgraduate nursing student or faculty member conducts the consultation, preferably alongside an undergraduate student.

Continuous follow-up fosters bonding, periodic evaluation of intervention impacts, and user perception of the effectiveness of techniques used for pain relief, while also strengthening family involvement in care. Nursing care actions emphasize valuing users' accounts of their pain experiences as well as new or pre-existing health complaints. Beyond user care actions, undergraduate and postgraduate nursing students provide training for the interdisciplinary team as needed. Training sessions have addressed topics such as medications for pain management, polypharmacy, initial management of patients with hypertensive crises, seizures, and syncope, as well as key measures for protecting healthcare workers' safety and health.

### Case discussion and nursing care planning

To ensure effective management of each clinical case and the teaching-learning process, the nursing team holds supervision meetings involving area members and the supervising faculty. These meetings are essential for discussing clinical cases and planning activities, which are subsequently validated in extended team meetings. They also serve as a space for specific skill development, including training sessions, discussions of scientific articles, guidelines, and recommendations on managing CP, associated pathologies, and health conditions.

It is noteworthy that UFSCar's undergraduate nursing curriculum does not include content on evaluating and treating individuals with non-cancer CP or on nurses' roles in this context.

Each case managed by the nursing team is thoroughly discussed based on data collected by students during the initial evaluation and subsequent care sessions. These discussions are

guided by clinical reasoning, which directs further investigations and the implementation of nursing interventions.

Supervision meetings also provide a platform for in-depth discussions about the nurse's role in a pain clinic. Topics include the importance of nurses as essential team members in pain assessment, management, and care coordination, as well as fostering patient and family involvement in therapeutic decision-making.

## DISCUSSION

As a university extension activity, the Pain Clinic integrates knowledge from various fields through interdisciplinary practice and disseminates academic knowledge to improve care for individuals with CP. Participation in the clinic allows undergraduate students, faculty, postgraduate students, and professionals to continuously build and refine their knowledge and skills, providing a unique advantage in nursing education and qualification for comprehensive pain care.

A qualitative study conducted in Spain explored the attitudes and knowledge of nurses working in specialized CP clinics. The interviewed nurses described their approach as biomedical rather than multidisciplinary and suggested incorporating knowledge of psychological therapies, health education, group therapies, and evidence-based advanced care into undergraduate and continuing nursing education programs. The study highlighted a predominantly pharmacological and interventionist education, with nursing practice often dependent on medical prescriptions and orders. Among other interventions, nurses were identified as key in educating patients about disease progression, engaging in active listening, and helping patients develop coping strategies for pain.<sup>30</sup>

Another study assessing the knowledge and attitudes of nurses in Saudi Arabia regarding pain management found low levels of knowledge and inappropriate attitudes toward pain assessment and treatment. The authors emphasize the need for interventions in hospitals and nursing schools to provide nurses with appropriate education on pain.<sup>31</sup> This highlights the importance of training professionals in this field, an aspect to which the present university extension project aims to contribute.

Recognizing the need to improve education on this topic, the IASP has developed a curriculum over recent decades to support pain education in nursing. This curriculum outlines the knowledge and skills related to pain and its management that future professionals should acquire at the undergraduate level as part of an interprofessional team.<sup>32</sup>

Several items from the IASP curriculum regarding pain management knowledge and skills are experienced by students during their time at the Pain Clinic. These learning processes offer an opportunity to include content in undergraduate education that is currently absent from the curriculum.

Pain science has emerged as a specific discipline, and within nursing, it is a growing specialty. To establish uniform standards for specialization and certification, the European Pain Federation has also published a proposed nursing curriculum for pain management. This curriculum outlines values, competencies,

and standards for nurses working in this field. The curriculum strengthens the training of qualified nurses to work in various therapeutic modalities, resource allocation, research, ethical considerations, and the proposal of public policies on pain and its management.<sup>33</sup>

The curriculum reinforces the nurse's role in the assessment and management of individuals with pain, emphasizing their knowledge of pain epidemiology, pain mechanisms, barriers to effective management, variables influencing the patient's perception and response to pain, and valid and reliable methods for clinical assessment and pain relief. It also underscores nurses' skills in education, reflective practice, and effective communication based on best practice recommendations.<sup>33</sup>

Both the IASP and European Pain Federation curricula recognize the unique contribution of nursing to pain management, given its strategic presence in various healthcare settings, its representation as a significant workforce in institutions, and its broad and autonomous role that spans individuals of all ages. These curricula also stress the need to strengthen professional training to ensure nurses' effective collaboration as integral members of interprofessional teams. The nursing team's learning experience highlights the importance of interprofessional work.

Pain treatment centers serve a wide range of patients, often those experiencing persistent suffering after unsuccessful therapeutic interventions. In response to this clinical complexity, such institutions adapt to address multiple therapeutic needs.<sup>34</sup> Within this context, the Pain Clinic enables nursing students to acquire skills and competencies for managing complex CP cases and comorbidities, fostering clinical reasoning in patient care.

Healthcare professionals from pain centers were interviewed to investigate their experiences with interdisciplinary collaboration. The results revealed that patients often had undergone multiple unsuccessful treatments. The study emphasized the importance of collaboration among professionals from diverse fields, noting that interdisciplinary practice provides a broader perspective that leads to new treatment modalities beyond those previously implemented. The study also highlighted the need for greater patient engagement, particularly in setting treatment goals, and the importance of avoiding redundancy by offering therapeutic options already attempted elsewhere in the healthcare system.<sup>34</sup>

The Pain Clinic operates within this framework, providing a learning environment for nursing teams in interdisciplinary care for individuals with pain. Nursing applies its full scope of knowledge to manage complex cases effectively. The isolated development of professional specialties does not contribute to successful, high-quality care for patients with pain. Thus, the clinic's activities are organized around a collaborative approach, fostering coordinated decision-making among different fields.

Increasingly, interdisciplinary approaches to CP care contribute to reducing medication use and surgical interventions, significantly improving treatment efficacy and cost-effectiveness in the long term.<sup>35</sup> These strategies have shown positive outcomes in reducing opioid use, implementing comprehensive treatment plans in pain education, and introducing multimodal treatments.<sup>36,37</sup>

A qualitative study conducted in Norway investigated nurses' experiences in providing comprehensive care for patients with pain. The study underscored the biopsychosocial model as fundamental for pain management. Previously, a preference for pharmacological treatment offered only short-term solutions, leaving pain as a limiting factor in patients' lives. The study emphasized the importance of interdisciplinary teams, as integrated care planning avoids leaving therapeutic alternatives unexplored. Neglecting interdisciplinary practice risks overlooking valuable treatment options.<sup>38</sup>

Significant obstacles remain in consolidating interdisciplinary treatment. This requires a diverse range of healthcare professionals with varying levels of specialization, adequate physical space aligned with interdisciplinary goals, frequent and effective communication, clear role definitions, treatment models/approaches, time availability, and other factors.<sup>35,38,39</sup>

A common challenge in interdisciplinary collaboration lies in defining each professional's role in treatment decision-making. Balancing individual preferences with the need for group cohesion can be complex. Within the interdisciplinary team, it is crucial that all members feel empowered to freely express their opinions, although it is recognized that interdisciplinary work often involves decision-making in which not everyone agrees. In this context, flexibility within each field during the decision-making process poses a challenge for the interdisciplinary team.<sup>34</sup>

At the university level, highly qualified human resources are available. However, integrating health and psychology courses across different educational levels (undergraduate, postgraduate *lato sensu* and *stricto sensu*) with society (health network professionals) requires significant effort, including organizational strategies, task sharing, and planning. Despite these challenges, collective efforts and an understanding of the university's responsibility in extension projects have contributed to the clinic's success.

## CONCLUSION AND IMPLICATIONS FOR PRACTICE

This experience report presented the integration of nursing into an interdisciplinary pain clinic as part of a university extension project. The report was structured around three main areas: Nursing integrated into the interdisciplinary team, Nursing in pain clinic care, and Case discussion and nursing care planning.

One limitation of this study is that it does not include students' perceptions of their pain education or patients' perspectives on the effectiveness of comprehensive care. Future qualitative studies could explore these aspects. Another limitation is the absence of a specific theoretical model for nursing care, as one has not yet been implemented. Nurses are essential members of interdisciplinary teams providing outpatient care for individuals with chronic pain. Their practice is a daily learning process based on the biopsychosocial model of care and interdisciplinary collaboration.

The UFSCar Pain Clinic has the potential to train nursing professionals capable of working interdisciplinarily and managing complex chronic pain cases.

This report encourages reflection on the nurse's role in caring for individuals with chronic pain in interdisciplinary pain clinics, contributing to the consolidation of multidimensional care approaches for individuals with pain.

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