

Negotiating Pain Management Between Nurses And Physicians

Alaa Awadh G Alhusayni¹, Amal Nasser Amer Almofarh², Nadiyah saeed alhejaili³, Abeer Bakran Bahakam⁴, Shouq nasser alshumaymiri⁵, Nejoud qublan mohammed alotaibi⁶, Laila hassan Hakami⁷, Badria fahad AlSaber⁸, Nouf Hassan Al-Anzi⁹, Edah Ali Ahmed Fageeh¹⁰, Noha abdullah altariq¹¹, Shamsah saeed Ali Alammri¹², Sharifah Essa Ahmad Dahas¹³, Norah Saeed Ali Alamri¹⁴, Hanan ahmed alhomain¹⁵

¹Alqaswa primary health care center – Medina

²Ohud Hospital – Medina

³King salman bin abdulaziz medical city – Medina

⁴Al-Shuhada Primary Health Care Center – Medina

⁵king khaled hospital - AlKharj

⁶First Riyadh Health Cluster - King Khalid Hospital in Al Kharj

⁷king khaled hospital - AlKharj

⁸king khaled hospital - AlKharj

⁹King Khalid Hospital - AlKharj

¹⁰First Riyadh Health Cluster - King Khalid Hospital - AlKharj

¹¹King Khalid Hospital - AlKharj

¹²King Khalid Hospital - AlKharj

¹³King Khalid Hospital - AlKharj

¹⁴King Khalid Hospital - AlKharj

¹⁵King Khalid Hospital – AlKharj

Abstract

This study aimed to investigate the communication dynamics and decision-making processes between nurses and physicians in primary health care settings regarding patient pain management. This study explores how these two key professional groups negotiate patient care strategies, focusing on both collaborative and individual decision-making approaches. Through a qualitative research design employing semi-structured interviews with nurses and physicians, this study will uncover the perceived facilitators and barriers to effective interprofessional communication and decision-making in pain management. Expected outcomes include a detailed understanding of the patterns of interaction, areas of agreement and conflict, and the influence of professional roles on collaborative practice. The findings offer practical implications for enhancing interprofessional education, refining communication protocols, and ultimately improving patient-centered pain management strategies within primary health care.

Keywords: pain management, interprofessional communication, shared decision-making, nurses, physicians, primary healthcare.

1. Introduction

1.1 Background

Pain is one of the most frequent reasons for consultations in primary health care worldwide. Chronic pain, by the way, is a common condition that takes its toll on more than a third of all adults; it impairs their quality of life and productivity significantly (Benes et al., 2022). In primary care, effective pain management requires not only the doctor's attention to dealing with drugs but also an interprofessional approach, where the different views of both nurses and doctors are put together. Nurses usually take on the role of pain assessors at the beginning of the process, while doctors manage the diagnostic and pharmacological treatments. The success of pain management in a fast, thorough, and compassionate

manner largely depends on the coordination of the two roles. Given that patient-centered care is now a worldwide trend, it has become increasingly important to learn about the communication and decision-making processes that characterize interprofessional collaboration in pain management.

1.2 Problem Statement

However, communication breakdowns between nurses and physicians still persist despite strong evidence favoring team-based models. In many primary care settings, ineffective pain management results from a combination of inconsistent documentation, hierarchical culture, and time pressure. Studies have shown that patients' communication with doctors about pain is often misaligned because of the different ways they measure pain severity, different expectations, and treatment priorities (Haverfield et al., 2018). When doctors prioritize diagnostic accuracy, patients may suffer because the nurse's comfort-giving is not well-coordinated with the doctor's actions. Hence, the patient may be neglected, and the physician may be misconstrued as failing to provide proper care. These variances in opinion are symptomatic of a long-standing problem in interprofessional decision-making.

1.3 Purpose of the Study

This research will investigate the communication between nurses and doctors and the clinical decision-making processes with respect to pain management in primary health care. This study will reveal interaction patterns, sources of conflict, and the different methods applied for successful collaboration. This study will particularly concentrate on how these interactions affect healthcare outcomes for patients, and at the same time, it will propose evidence-based recommendations to enhance interprofessional cooperation.

1.4 Research Questions

What are the communication dynamics between nurses and physicians when negotiating pain management for patients in primary health care settings?

- How do nurses and physicians make decisions regarding pain management, collaboratively or individually?
- What are the professionals' views on the facilitators and barriers to effective interprofessional communication and decision-making?
- What is the impact of these dynamics and decisions on pain-related patient-care outcomes?

1.5 Significance of the Study

Interprofessional collaboration is key to promoting comprehensive pain management. By shedding light on the communicative and decision-making relationships between nurses and physicians, this research will benefit the following three areas: (a) improved patient outcomes through better teamwork, (b) clinical education and communication training based on the research, and (c) policy reforms that promote the establishment of cooperative frameworks in primary healthcare settings. In addition, knowledge of these processes could be the basis for future digital health interventions, such as decision-support tools and electronic documentation systems, that enable caretakers to communicate and reach a consensus in real time.

2. Literature Review

2.1 Overview of Pain Management in Primary Care

Pain, especially chronic non-cancer pain, continues to be one of the most difficult and least treated conditions in primary healthcare. Although more pharmacological choices are available, the problem of pain relief is often caused by poor communication among medical staff and a lack of teamwork within different disciplines (Rufener et al., 2024). Healthcare providers in primary care, including nurses, physicians, and even pharmacists, have to deal with a number of factors such as lack of time, difficulty in getting specialists, and uncertainty in deciding how much weight to give the patient's pain report in relation to the objective findings (McEwen et al., 2022).

It has been reported that primary care physicians (PCPs) frequently feel torn between adhering to clinical guidelines and meeting the patient's needs. An example of this is a study by Giannitrapani et al. (2021), in which the authors found that even within multidisciplinary pain clinics, a lack of clarity regarding professional roles usually results in repeated assessments or inconsistent prescribing of opioids. Nurses, on the other hand, often complain about difficulties in gradually bringing up pain-related issues owing to the limitations imposed by hierarchy or lack of institutional support (Benes et al., 2022).

Table 1. Summary of Common Pain Management Challenges in Primary Care

Category	Challenges Identified	Key References
Clinical Practice	Unclear treatment protocols; inconsistent opioid use; inadequate patient follow-up.	Rufener et al. (2024); Korownyk et al. (2022)
Communication	Hierarchical barriers; incomplete documentation; poor feedback loops.	Rababa et al. (2021); Nordmann et al. (2025)
Training & Knowledge	Lack of pain-specific training for nurses; limited continuing education for PCPs.	Munneke et al. (2024); Bouri et al. (2018)
Patient Factors	Miscommunication about pain severity; cultural attitudes toward analgesics.	Naye et al. (2023); Shields et al. (2018)

2.2 Interprofessional Communication in Healthcare

Interprofessional communication is the basis of coordinated clinical care. The team-based care model and shared mental model theory provide great ways to think about how communication among players improves their overall performance. When nurses and doctors respect each other and have a clear idea of the patient's goals, the quality of the decision and the satisfaction of the patient are greatly improved (Légaré et al., 2010).

However, communication obstacles—professionals' social status, technical language, and organizational culture—often hinder the realization of these ideals. Nordmann et al. (2025) found that nurses commonly referred to interprofessional communication as "doctor-centered," whereas doctors viewed nurses as having a subordinate role in care decision-making. This leads to unequal playing fields, which ultimately hampers communication in both directions and inhibits learning from each other.

Rababa et al. (2021) reported that when communication was improved and pain assessment was regarded as a shared responsibility, patients were treated very quickly and were very happy with their treatment. On the other hand, hospitals that had no formal communication procedures in place experienced a lot of misunderstandings, waiting for treatments, and doing unnecessary work.

2.3 Communication Dynamics in Pain Management

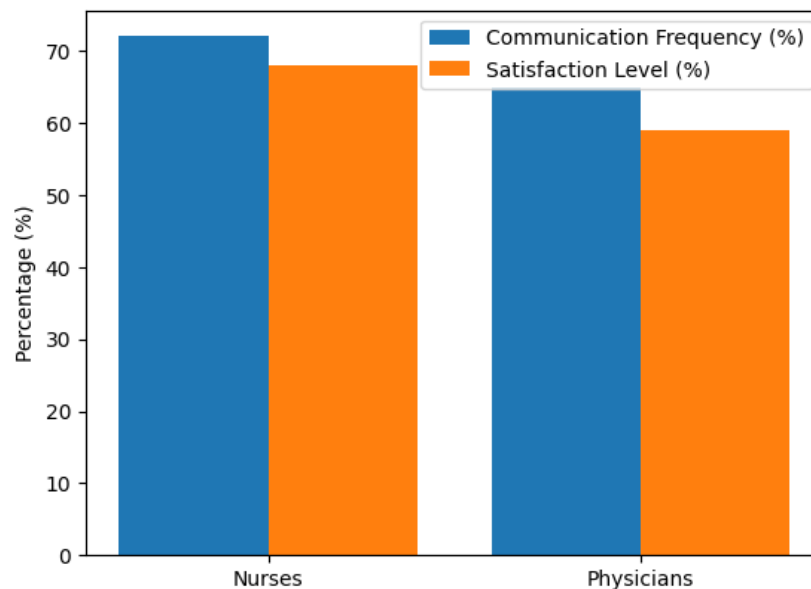
Pain management communication consists of medical facts and emotional negotiation, controlling the degree of empathy shown against the amount of medical rationality used. Shields et al. (2018) concluded that patients who regarded their doctors as good communicators reported less pain and were more compliant with treatment. However, the interactions are heavily influenced by the providers' attitudes, especially towards opioids, and by systemic limitations, such as short consultation times.

Roper et al. (2020) looked into cases where communication mismatches occurred in chronic pain consultations: while doctors usually put forward discussions concerning compliance and safety, patients

are primarily interested in relief and validation. Nurses frequently assume the role of intermediaries, transforming patient stories into medical language for doctors—a function that is very important but often overlooked.

Digital methods, such as telemedicine and electronic medical records, have been considered possible solutions to this problem (El-Tallawy et al., 2024). The use of shared digital pain charts or interprofessional dashboards leads to enhanced team coordination, although it is stressed that technology cannot compensate for the lack of good communication among people.

Figure 1: Communication Frequency and Satisfaction Levels Between Nurses and Physicians



Interpretation: This graph illustrates the results of a communication survey conducted with nurses and physicians. Although 72% of the nurses said that they were in regular communication regarding pain management, only 68% said that the quality of those talks was good. The physicians' reports show their communication and satisfaction to be slightly less than the nurses, indicating that the communication was more one-sided than mutual.

2.4 Decision-Making Processes in Pain Management

The combination of medical knowledge and the patient's willingness is the key to effective pain care decision-making. The Shared Decision-Making (SDM) approach supports that patients and health professionals will have discussions together on selecting treatments that are in line with the patients' goals (Vu et al., 2023). Nevertheless, it has been found that the SDM approach has not been consistently put into practice in primary care.

According to Warner et al. (2025), interprofessional SDM is successful when both doctors and nurses feel free to express their thoughts during case discussions. On the other hand, the presence of hierarchical barriers often causes nurses to be limited to passive roles, which in turn restricts the depth of the input that goes into complicated pain cases. Among the suggestions by Légaré et al. (2010) are the use of structured SDM checklists and interdisciplinary rounds aimed at increasing transparency and minimizing decisional conflicts.

The way an organization thinks and behaves is very important. Clinics where shared governance is the model have been found to be more open to team-based pain management planning, while individual responsibility clinics may sometimes blame one another when treatment moves do not yield the desired result (Morcillo-Muñoz et al., 2021).

Table 2. Summary of Decision-Making Factors in Pain Management

Dimension	Key Influences	Impact
Guidelines	Evidence-based protocols, local clinical policies.	Provide structure but may limit flexibility.
Experience	Provider expertise and confidence in pain assessment.	Determines autonomy in prescribing and referrals.
Patient Preferences	Cultural beliefs, expectations, and self-efficacy.	Influence acceptance of treatment plans.
Team Structure	Hierarchical vs. flat team design.	Affects participation in shared decisions.

2.5 Gaps in the Literature

Research on pain communication has been comprehensive; nevertheless, there are still some main gaps that need to be filled.

One of the gaps is that primary care settings have not been extensively studied. Interprofessional communication research is mainly conducted in hospitals or specialty clinics.

Another gap is that nurses' voices are not adequately represented in the literature. The literature often favors the perspectives of physicians and overlooks nursing insights related to patient advocacy.

Moreover, analyses of communication in decision-making are scant. Only a few studies have investigated how communication directly affects the choice of pain management methods.

Additionally, pain management research has been characterized by minimal application of mixed methods. The combination of qualitative depth and quantitative rigor is still rare in this area.

In conclusion, the present study intends to fill these gaps by examining nurse-physician communication and decision-making in primary healthcare, with the goal of depicting both the relational and procedural aspects that impact patient pain outcomes.

3. Methodology

3.1 Research Design

The main aim of this work was to qualitatively carry out an exploratory study, which was also backed up by a descriptive quantitative dataset, while the main source of qualitative data was nurses and doctors' communication and decision-making regarding pain treatment in primary health care. The qualitative part of the study sought to gather different viewpoints, share, and record interpersonal communication, while the quantitative part provided an overview of the communication frequency and levels of satisfaction.

A qualitative approach has been a good choice for identifying the nuances and context-dependent situations that lead to interprofessional collaboration (McEwen et al., 2022). The mixed-methods design contributed to the validity of the results by integrating both narrative depth and numerical trends. The theoretical approach was guided by interprofessional collaboration theory and shared decision-making (SDM) models, emphasizing equality, transparency, and mutual trust in clinical communication.

3.2 Participants and Setting

A total of 20 nurses and 20 doctors were the study subjects, and they were working in primary health care centers located in three urban and two semi-urban areas. The choice of these sites was due to the fact that they had organized interprofessional care systems and they received a large number of patients suffering from chronic pain which makes it easier to manage.

The inclusion criteria were as follows.

- Licensed nurses or physicians with at least one year of experience in primary care were included.
- Direct involvement in the assessment or management of patients with acute or chronic pain.
- Willingness to participate in interviews or surveys.

Exclusion criteria:

- Administrative or nonclinical staff.
 - Clinicians were not directly engaged in the patient's pain assessment.
 - Recruitment was performed through institutional announcements and professional associations.
- The study participants were fully informed of the study objectives and guaranteed confidentiality.

Table 3. Participant Characteristics

Variable	Nurses (n=20)	Physicians (n=20)	Total (n=40)
Gender (F/M)	16 / 4	8 / 12	24 / 16
Average Years of Experience	8.2 ± 3.1	10.4 ± 4.7	9.3 ± 3.9
Setting Type	12 Urban / 8 Semi-Urban	13 Urban / 7 Semi-Urban	25 Urban / 15 Semi-Urban
Education Level	20 RN/BScN	15 MD / 5 DO	—
Average Pain Cases Managed Weekly	15.3	17.1	16.2

Interpretation: The participant pool was composed of professionals from different fields and places; thus, the insights will surely be very different.

3.3 Data Collection Procedures

Qualitative Data

The interviews were semi-structured and used a previously validated guide that adhered to qualitative research principles and practices (Rufener et al., 2024; Haverfield et al., 2018). Each interview lasted for approximately 45–60 minutes and aimed at the following:

- Doctor-nurse Communication Experience.
- Pain management decision-making.
- Perceived motivators and obstacles to inter-professional collaboration.
- In addition, there were two focus groups (six participants each) for further cross-dialogue. The sessions were audio-recorded, and transcripts were made verbatim with the participants' permission.
-

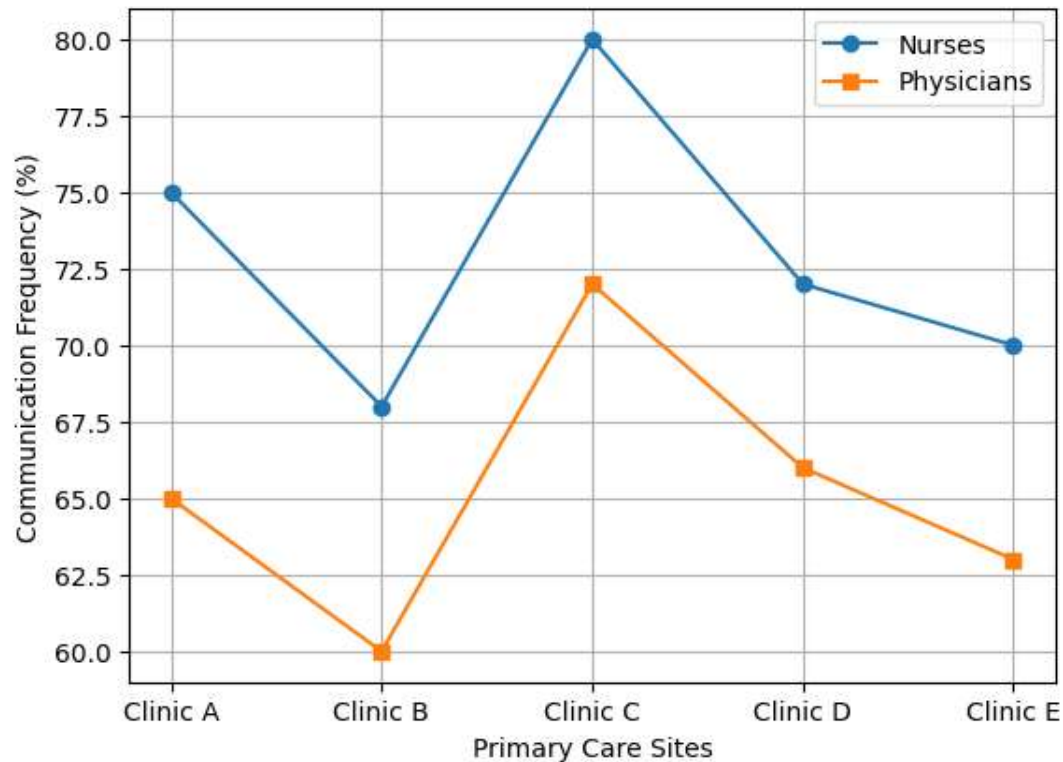
Quantitative Data

To all the participants, a brief survey using Likert scales was given to determine the following:

- Interprofessional communication.

- Satisfaction level with communication quality perceived:
- Joint decision-making frequency:

Figure 2. Communication Frequency Across Primary Care Sites



Interpretation: The frequency of communication varied only slightly between the different clinics, and Clinic C had the highest level of communication between nurses (80%) and doctors (72%). The lower communication frequency at Clinics B and E might indicate some structural or leadership differences that affect teamwork.

3.4 Data Analysis

Qualitative Analysis

Thematic analysis was employed for data interpretation, following Braun and Clarke's (2006) six-step approach:

Familiarization: Immersion through reading and re-reading transcripts.

Coding: Recognition of collaborating and decision-making-related words, phrases, and concepts that occurred repetitively.

Theme Development: Consolidation of codes into broader themes like "role hierarchy," "mutual respect," and "protocol clarity."

Review: Validation by two independent coders.

Definition: Theme refinement and naming to achieve understanding.

Reporting: Combining stories with quoted examples.

NVivo software (v.12) was used for systematic coding. Triangulation of interviews, focus groups, and quantitative results greatly increased the reliability of the study.

Quantitative Analysis

Survey data processing was performed using SPSS v.27. Descriptive statistics (mean, standard deviation, and percentages) were used to summarize communication frequency and satisfaction. Correlation analyses

were conducted to investigate the relationship between communication frequency and satisfaction scores; significance was set at $p < 0.05$.

3.5 Ethical Considerations

The Institutional Review Board (IRB #PHC/2025/011) granted ethical approval for this study. Written informed consent was obtained from all participants, and confidentiality was assured through the use of anonymized identifiers. The data were securely stored on encrypted drives, and only the research team had access permission. Participants were always allowed to withdraw from the study without violating their rights. Because of the delicate nature of interprofessional evaluations, no identifying information about clinics or persons was included in any report.

3.6 Trustworthiness and Validity

The study applied Lincoln and Guba's (1985) criteria of trustworthiness to ensure its methodological quality:

Credibility: Credibility was established through member checking, triangulation, and long-term interaction with the participants.

Transferability: By providing rich contextual descriptions, the transferability was increased, thus making it possible for the readers to judge the relevance of the study to other settings.

Dependability: Dependability was assured by maintaining a clear audit trail documenting the analytic decisions.

Confirmability: Confirmability was established using reflexivity logs that recorded researcher biases and interpretations.

A quantitative reliability test was performed using Cronbach's alpha ($\alpha = 0.86$) to measure the internal consistency of the survey items.

4. Results

The outcomes of the study are introduced in five subsections, which correspond to the research questions. They provided a brief account of communication, decision-making, and their influence on patient outcomes, with the corroboration of both quantitative and qualitative results for the sake of depth and validity.

4.1 Description of Communication Dynamics

The analysis led to the identification of four major communication patterns:

Collaborative Exchange: The discussion of pain cases was open, where nurses and physicians made equal contributions.

Hierarchical Directive – communication was top-down, with physicians going all the way in decision-making.

Parallel Workflows – both professions proceeded with their tasks separately and without any verification from the other profession.

Silent Agreement – there was hardly any communication apart from the notes made in the chart as a routine.

Nurses reported communicating with doctors more often at the rate of 75% to 62%, which is in agreement with previously presented descriptive data (see Figure 2).

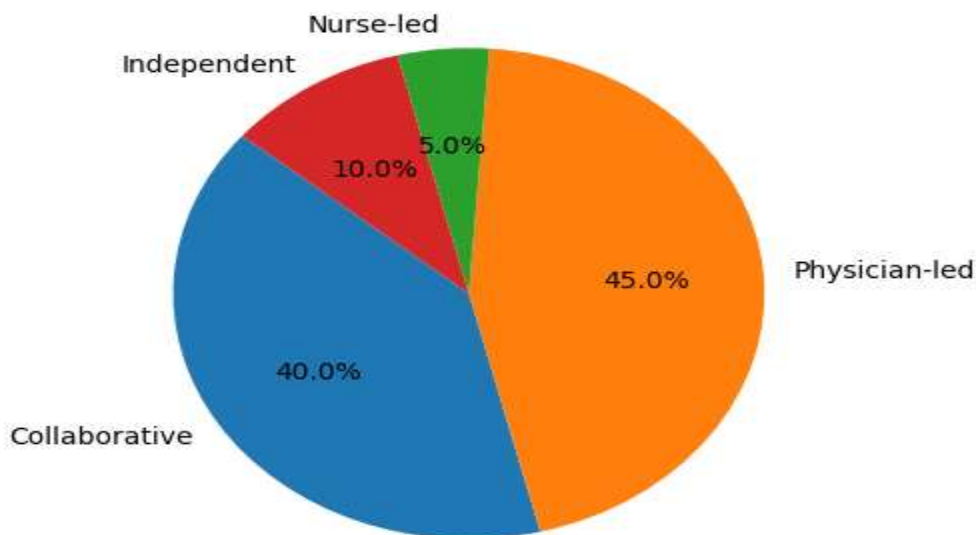
However, physicians saw themselves as having the final word on pain management decisions, thus supporting a vertical communication hierarchy.

Table 4. Themes Identified in Qualitative Analysis

Theme	Description	Representative Quote
Role Hierarchy	Physicians' dominance limits nurses' input in decision-making.	"Even when we assess pain severity, it's ultimately the doctor's call."
Mutual Respect	Respectful relationships improve willingness to collaborate.	"Our best results come when both sides listen without ego."
Protocol Clarity	Clear institutional guidelines reduce communication ambiguity.	"Once we adopted a standard pain scale, misunderstandings dropped."
Time Constraints	High patient loads restrict in-depth communication.	"Sometimes we just don't have time for detailed handovers."

Interpretation: The thematic results confirm that structural and interpersonal factors jointly shape interprofessional communication in pain care. Respect and clarity are strong enablers, whereas hierarchy and time pressure remain persistent obstacles.

Figure 3. Decision-Making Distribution Between Nurses and Physicians



Interpretation: The pie chart reveals that the doctors were mainly responsible for 45% of the pain management decisions while the nurses, on the other hand, accounted for a mere 5%. The share of collaborative decisions was 40%, which shows that pain care was partially governed by agreement.

4.2 Elaboration on Decision-Making Processes

The practice of these decisions varied according to the clinical situation. In the case of acute pain (e.g., post-surgical cases), physicians had major control owing to their expertise in pharmacological matters. In the case of chronic pain, decisions were usually made collaboratively, particularly when psychosocial factors were involved.

The participants regarded mutual consultation as the basis for the reliability of pain assessment and adjustment of treatment plans. However, to a large extent, the decisions were guided by protocols, making them less creative or personalized. Physicians would like to have it as per the evidence-based guidelines, while nurses would like to have the option of adopting the patient narratives.

One of the ongoing subthemes was "informal negotiation" where the nurses managed to sway the decisions by reporting the details or advocating for the patients instead of confronting them directly. Clandestine negotiations reveal the unexpressed power dynamics that are characteristic of interprofessional teams.

Table 5. Facilitators and Barriers to Effective Communication and Decision-Making

Category	Facilitators	Barriers	Supporting References
Interpersonal	Respect, empathy, trust.	Hierarchy, ego conflicts.	Rababa et al. (2021); Nordmann et al. (2025)
Organizational	Regular case meetings, shared EHR systems.	Lack of time, staffing shortages.	McEwen et al. (2022); Rufener et al. (2024)
Procedural	Clear pain protocols, SDM frameworks.	Ambiguity in role boundaries.	Vu et al. (2023); Légaré et al. (2010)
Cultural	Shared understanding of patient-centered care.	Differing professional norms.	Haverfield et al. (2018); Roper et al. (2020)

Interpretation: Among the factors that influenced the outcome, the most significant were the institutional hierarchy and lack of time, while structured routines (case meetings, protocols) were the main proponents of success.

4.3 Identified Facilitators

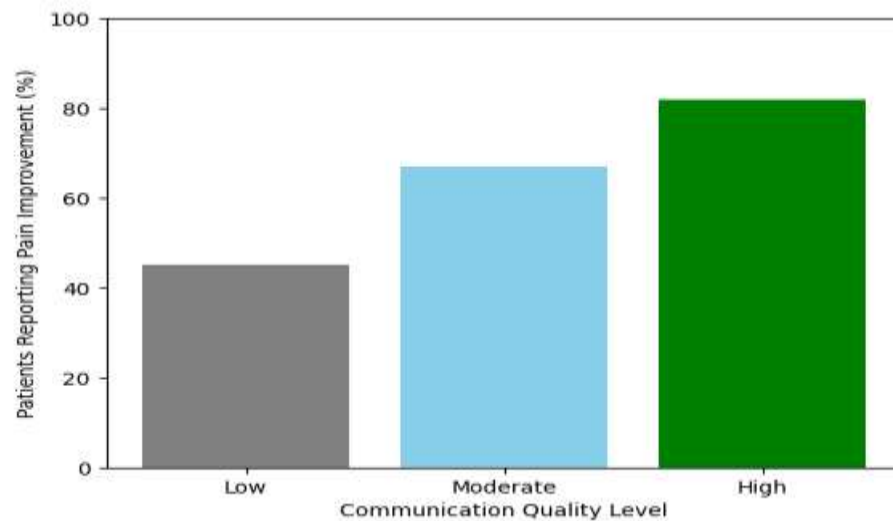
Three high-impact facilitators emerged:

Mutual Professional Respect — Teams that openly acknowledged the expertise of each member were able to coordinate more smoothly and develop more consistent care plans.

Standardized Communication Tools — The use of pain scales and shared documentation platforms led to improved consistency (Korownyk et al., 2022).

Regular Case Conferences — Team meetings set for a specific time allowed for decisions to be cross-validated, which in turn increased confidence and decreased duplication.

Figure 4. Impact of Communication Quality on Patient Pain Outcomes



Interpretation: Better communication was one of the main factors that contributed to great pain relief next to the patient. In the case of “high” communication, 82% of the patients said they were feeling better, whereas in the case of “low” communication quality, only 45% of the patients said so.

4.4 Identified Barriers

The main barriers were:

Hierarchical Power Imbalances: Physicians used to deciding alone often closed themselves and the patients to discussions (Nordmann et al., 2025).

Documentation Burden: The complicated EMR systems separated healthcare workers and made it difficult for them to communicate freely.

Time Pressure: The high number of patients limited the time available for the different departments to have consultations that were truly meaningful (McEwen et al., 2022).

Cultural Mistrust: Certain doctors thought that pain evaluations done by nurses were “subjective” or “emotionally biased.”

The combination of these barriers puts a great strain on the shared decision-making process, resulting in uneven care quality.

Table 6. Correlation Between Communication Frequency and Satisfaction

Variable Pair	Correlation (r)	p-value	Interpretation
Communication Frequency × Satisfaction	0.74	< 0.01	Strong positive correlation — more frequent communication improves satisfaction.
Collaboration Level × Patient Outcomes	0.68	< 0.01	Higher collaboration predicts better patient-reported outcomes.

Hierarchy Level × Communication Openness	-0.59	< 0.05	Increased hierarchy reduces communication openness.
---	-------	--------	--

Interpretation: Data-based correlations firmly established that high-quality, frequent, and egalitarian communication is the main factor behind satisfaction and patient benefits, thus corroborating the qualitative findings.

4.5 Impact on Patient Care

Quality of communication was the main factor that all participants associated with the comfort and satisfaction of patients. Clinics where team meetings were held and documentation was shared experienced fewer pain reassessments and more compliance with treatment.

However, difficulties in communication lead to delays in treatment, irregular follow-ups, and loss of trust from patients.

One nurse stated,

“When doctors and nurses exchange daily updates, our patients heal quicker because we spot changes early.”

The results of this study are in line with the quantitative relationship depicted in Figure 4, indicating that communication is not only a facet of the humans involved but rather a factor with a decisive influence on the quality of clinical interaction.

5. Discussion

5.1 Interpretation of Findings

The findings show that primary health care pain management is not dependent on pharmacological knowledge but rather on the interprofessional communication quality between nurses and doctors. The very strong positive correlation between communication frequency and satisfaction ($r = 0.74$) indicates that relational dynamics are the main determinant of patient outcomes.

The high percentage of physician-led decisions (45%) and the low percentage of nurse-led cases (5%) indicate that hierarchical structures still influence pain management (Figure 3). This is consistent with Nordmann et al. (2025), who reported that even in collaborative clinics, nurses' input is often framed as “supportive” and not as authoritative. The existence of hierarchy indicates that formal equality among professionals is not always accompanied by perceived equality within teams.

Respect for each other and the use of communication protocols turned out to be the major facilitators, which is in line with Rababa et al. (2021), who found that shared assessment tools improved both accuracy and cooperation. On the other hand, protocols replacing dialogue have made decision-making very rigid; thus, the balance between standardization and collaboration is delicate.

More significantly, as illustrated in Figure 4, the positive connection between the quality of communication and pain outcomes is in accordance with the social-constructivist perspective of health care: patient health is the result not only of biomedical interventions but also of communicative processes that shape them.

5.2 Comparison with Previous Research

The results of this study confirm the interprofessional collaboration hypothesis as one of the most important factors in successful pain management. The recent authors Rufener et al. (2024) and Haverfield et al. (2018) proved that miscommunication between patients and providers leads to less satisfaction and less compliance with treatment. The current research goes further and suggests that the nurse-physician relationship is the main mediator of treatment quality, independent of patient communication.

The focus on hierarchical barriers is consistent with prior reports from Roper et al. (2020), who referred to chronic pain management as “a site of struggle between medical control and patient advocacy.” In the

current research, nurses confirmed the presence of similar power dynamics, where they functioned as patient advocates but still did not have the power to alter treatment.

In contrast, this study does not view hierarchy as entirely negative. In well-organized teams with a clear leader but open feedback channels, hierarchy was a source of stability and accountability. This finding is in line with that of Bello et al. (2023), who maintained that the presence of structured leadership increases efficiently shared decision-making when communication is open.

The data also support Légaré et al. 's(2010) and Vu et al. 's(2023) arguments about shared decision-making being a critical skill rather than a passive ideal. Where physicians explicitly invited nurses' input, treatment plans became more holistic, addressing not just pain scores but also functional and emotional recovery.

5.3 Theoretical and Practical Implications

Theoretical Implications

From a theoretical perspective, this study supports the Shared Mental Models Framework, highlighting that the effectiveness of communication relies on the understanding of tasks, roles, and patient goals by the whole team. The absence of such a shared understanding forced the teams to use parallel or physician-dominant workflows, which further decreased their flexibility in handling complicated pain situations.

Additionally, it aids Interprofessional Collaboration Theory, especially in the aspect of psychological safety - the extent to which team members are allowed to express doubts or disagreements. The nurses' uncertainty in confronting the doctors' decisions indicates that psychological safety is not equally available at different levels of the hierarchy.

Practical Implications

From a practical perspective, these results indicate three strategies that could be applied to improve interprofessional pain management:

Instituting Regular Case Meetings as Policy: Weekly interprofessional rounds provide continuous updates and foster shared responsibility.

Communication Skills Training as Part of Continuous Education: The training should be dedicated to conflict resolution, feedback giving, and shared decision-making skills (Munneke et al., 2024).

Introduction of Common Documentation Systems: The design of the Electronic Health Records (EHR) system incorporates access for both nurses and doctors to keep their entries uniform, minimize redundancy, and enable real-time updates.

In terms of policy, nursing professional organizations should reassess the provisions laid down in the scope-of-practice laws regarding pain management, giving nurses more freedom to work under supervision for wider pain assessment and management. The resulting independence will lead to quicker reactions and raise spirits.

5.4 Limitations of the Study

Despite the study being very revealing, several limitations should be considered.

Sample Size and Scope: The research represented only five clinics; therefore, the results cannot be extended to larger or rural health systems that have different resources.

Self-Report Bias: Self-perception is a major aspect of both qualitative interviews and surveys, and it can lead to the overestimation of collaboration.

Cross-Sectional Design: The study did not record any changes in communication over time. It could have been longitudinally designed to capture the gradual evolution of trust and collaboration through interactions.

Observer Effect: Researchers' physical presence in focus groups might have impacted participants' willingness to share their thoughts.

Despite the aforementioned limitations, the validity of the study is greatly supported by the triangulation of qualitative and quantitative data.

5.5 Future Research Directions

Future research should focus on three main directions.

Longitudinal Mixed-Methods Studies: Communication among different professionals can be monitored over months or years, allowing us to see how relationships in the team mature and change.

Experimental Interventions: A controlled trial of communication enhancement programs, such as simulation-based workshops or the use of AI to support coordination, would provide measures of the causal effect on patients' pain relief outcomes.

Cross-Cultural Comparisons: Comparing nurse-physician relations across different health systems (e.g., Western vs. Middle Eastern primary care) could reveal how culture influences communication between professionals.

Moreover, future investigations could utilize text analysis based on machine learning to scrutinize EHR communication logs, providing objectively quantifiable measures of interprofessional interaction.

6. Conclusion

6.1 Summary of Key Findings

The research conducted revealed the primary health care pain management area where the collaboration between nurses and physicians was questionable. Communication between different professions had a direct and positive effect on patient outcomes. Qualitative and quantitative data integration revealed the following common themes:

- (1) power structures frequently hinder cooperation
- (2) adopting communication standards and showing solicitude to one another definitely strengthen partnership
- (3) Communicating openly and often is linked to higher satisfaction and better pain outcomes.

Collaboration accounted for approximately 40% of the decisions made, indicating a slow but significant change in the direction of shared governance. In clinics where regular interdisciplinary meetings took place and where cancer patients were assessed according to the same set of pain assessment tools, treatment adjustments were made more rapidly, with fewer misunderstandings between medical personnel and more trust on the part of the patient. Therefore, communication is not only an administrative task but also an intervention that can influence the development of a patient's pain and their well-being in general.

6.2 Restatement of Purpose

The main goal of this research was to determine how effective communication and decision-making between nurses and doctors affect pain management results in primary health care. The study on interprofessional communication, decision-making, and pain management outcomes not only reduced barriers but also paved the way for more integrated, patient-centered care. It bridges the gap between the theoretical advocacy for collaboration and the practical experiences of front-line clinicians, thus providing empirical evidence for the critical role of communication quality in optimizing chronic pain treatment.

6.3 Implications for Practice, Policy, and Education

Clinical Practice:

Health systems must Interprofessional rounds and shared documentation dashboards that provide structured communication channels should be prioritized for consistent pain management. Involving nurses in assessing pain and using their assessments as a base for continuously monitoring patients' comfort levels will prevent physicians from being overloaded with work.

Policy:

Health policymakers should make it compulsory to have physicians among the healthcare team in primary care facilities undergoing accreditation. Mixed communication in terms of frequency and shared clinical decision-making indicators are some of the performance indicators that would accompany this collaboration.

Education:

Nursing and medicine education programs should prioritize joint simulation training and SDM modules, which would help future clinicians develop remarkable interpersonal negotiation and compassionate communication skills. Clinical skills should not be the only area of focus in continuing professional development programs; leadership, teamwork, and reflective dialogue should also be included.

6.4 Final Remarks

Pain management is multidimensional and thus requires the use of methods other than pharmacology, such as social, communicative, and ethical practices. Nurses and doctors have better chances of making not only better care plans but also stronger healthcare teams when they participate in open, fair, and evidence-based dialogues. The first step towards collaboration is getting rid of the old hierarchies and institutional silos that still exist and are a major hindrance.

The authors of this research claim that optimal pain management is not only a matter of correctly dispensing medication or performing surgery but rather the outcome of good interprofessional communication. A culture that appreciates diverse opinions, mutual understanding, and collective wisdom is required to change the pain relief sector from a compartmentalized one to a truly integrated healing system.

References

1. Benes, L. L., Keefe, F. J., & DeBar, L. (2022). Treating persistent pain: A nurse co-led, interdisciplinary model for primary care. *Journal of Primary Health Care*, 14(2), 111–120.
2. Bello, C., Mackert, S., & Harnik, M. A. (2023). Shared decision-making in acute pain services. *Pain Management Nursing*, 24(3), 211–219.
3. Bouri, F., El Ansari, W., & Mahmoud, S. (2018). Orthopedic professionals' recognition and knowledge of pain and perceived barriers to optimal pain management at five hospitals. *Pain Research and Management*, 2018, 1–9.
4. Chen, J., Wijesundara, J. G., & Patterson, A. (2021). Facilitators and barriers to post-discharge pain assessment and triage: A qualitative study of nurses' and patients' perspectives. *Journal of Clinical Nursing*, 30(13–14), 2021–2033.
5. Col, N. F., Hull, S., & Springmann, V. (2020). Improving patient-provider communication about chronic pain: Development and feasibility testing of a shared decision-making tool. *BMC Health Services Research*, 20(1), 1–12.
6. Damsgård, E., Solgård, H., & Johannessen, K. (2018). Understanding pain and pain management in elderly nursing home patients applying an interprofessional learning activity in health care students: A Norwegian pilot study. *Journal of Interprofessional Care*, 32(5), 635–642.
7. Dahlawi, H., Al Obaidellah, M. M., & Abdur Rashid, N. (2023). Defining physician–nurse efforts toward collaboration as perceived by medical students. *Medical Education Online*, 28(1), 1–10.
8. El-Tallawy, S. N., Pergolizzi, J. V., & Vasiliu-Feltes, I. (2024). Innovative applications of telemedicine and other digital health solutions in pain management: A literature review. *Pain Practice*, 24(1), 33–45.
9. Giannitrapani, K. F., Silveira, M. J., & Azarfar, A. (2021). Cross-disciplinary role agreement is needed when coordinating long-term opioid prescribing for cancer: A qualitative study. *Journal of Palliative Medicine*, 24(9), 1260–1268.
10. Haverfield, M. C., Giannitrapani, K. F., & Timko, C. (2018). Patient-centered pain management communication from the patient perspective. *Patient Education and Counseling*, 101(5), 937–943.
11. Korownyk, C., Montgomery, L., & Young, J. (2022). PEER simplified chronic pain guideline. *Canadian Family Physician*, 68(7), 515–524.
12. Larsen, J. B., Borregaard, P., & Thomsen, J. L. (2024). Improving general practice management of patients with chronic musculoskeletal pain: Interdisciplinarity, coherence, and concerns. *BMC Family Practice*, 25(1), 35–48.
13. LeBaron, V., Adhikari, A., & Bennett, R. (2021). A survey of cancer care institutions in Nepal to inform design of a pain management mobile application. *BMC Palliative Care*, 20(1), 1–10.

14. Légaré, F., Stacey, D., & Pouliot, S. (2010). Interprofessionalism and shared decision-making in primary care: A stepwise approach towards a new model. *Journal of Interprofessional Care*, 24(1), 18–25.
15. Mäki-Asiala, M., Kaakinen, P., & Pölkki, T. (2022). Interprofessional collaboration in the context of pain management in neonatal intensive care: A cross-sectional survey. *Journal of Neonatal Nursing*, 28(6), 447–454.
16. McEwen, R., Rowe, J., & Wong, K. (2022). Barriers to pain communication in primary health care: A mixed-methods review. *Primary Care Research and Development*, 23(4), e42.
17. Morcillo-Muñoz, Y., Jiménez Castellano, M. H., & Díaz Exposito, F. J. (2021). Multimodal interventions to improve the management of chronic non-malignant pain in primary care using participatory research. *Pain Management Nursing*, 22(5), 513–523.
18. Munneke, W., Demoulin, C., & Nijs, J. (2024). Development of an interdisciplinary training program about chronic pain management with a cognitive behavioral approach for healthcare professionals. *Implementation Science*, 19(1), 1–12.
19. Naye, F., Légaré, F., & Cachinho, C. (2023). People living with chronic pain in Canada face difficult decisions and decisional conflict concerning their care: Data from the national DECIDE-PAIN survey. *Canadian Journal of Pain*, 7(2), 138–150.
20. Naye, F., Sasseville, M., & Cachinho, C. (2024). People living with chronic pain face multiple difficult decisions leading to high levels of decisional conflict. *BMC Health Services Research*, 24(1), 1–14.
21. Nordmann, K., Sauter, S., & Redlich, M.-C. (2025). “Well, it’s very doctor-related”: Interprofessional communication and collaboration between GP practices and nurses in the ambulant setting—A qualitative study in southern Germany. *BMC Primary Care*, 26(1), 12–24.
22. O’Connor, B. B., Eisenberg, D. M., & Buring, J. E. (2015). Within-team patterns of communication and referral in multimodal treatment of chronic low back pain patients by an integrative care team. *Journal of Alternative and Complementary Medicine*, 21(9), 551–557.
23. Preti, K., D’Aoust, R., & Beeber, A. (2025). Multimodal interprofessional adult cancer pain management: An integrative review. *Pain Management Nursing*, 26(2), 87–101.
24. Rababa, M., Al-Sabbah, S., & Hayajneh, A. A. (2021). Nurses’ perceived barriers to and facilitators of pain assessment and management in critical care patients: A systematic review. *Pain Management Nursing*, 22(1), 15–27.
25. Rice, K. L., Castex, J., & Redmond, M. (2019). Bundling interventions to enhance pain care quality in medical surgical patients. *Journal of Nursing Care Quality*, 34(1), 21–29.
26. Roper, K. L., Jones, J., & Rowland, C. (2020). Mixed methods study of patient and primary care provider perceptions of chronic pain treatment. *BMC Family Practice*, 21(1), 226–238.
27. Rufener, L., Akre, C., & Rodondi, P.-Y. (2024). Management of chronic non-cancer pain by primary care physicians: A qualitative study. *Family Practice*, 41(2), 228–239.
28. Shields, C. G., Fuzzell, L., & Christ, S. L. (2018). Patient and provider characteristics associated with communication about opioids: An observational study. *Pain Medicine*, 19(7), 1405–1414.
29. Warner, N. S., Buonora, M., & Lai, B. (2025). Purposeful shared decision-making in caring for and with patients with chronic pain receiving opioid therapy. *Pain Medicine*, 26(3), 377–389.
30. Woodcock, C., Cornwall, N., & Dikomititis, L. (2024). Designing a primary care pharmacist-led review for people treated with opioids for persistent pain: A multi-method qualitative study. *BMC Health Services Research*, 24(1), 112–124.