



Improving interprofessional collaboration in pain clinics through simulation: a longitudinal Readiness for Interprofessional Learning Scale assessment

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INTRODUCTION

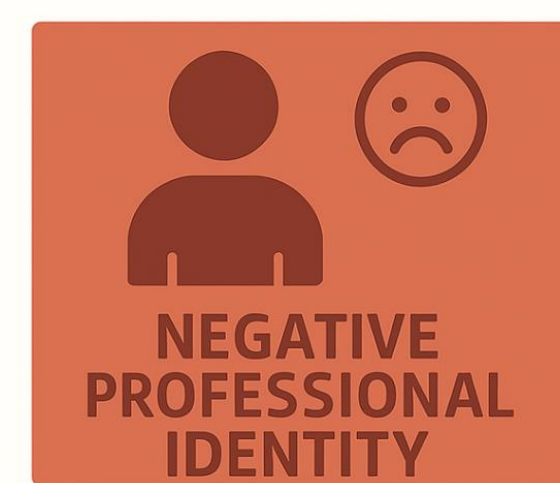
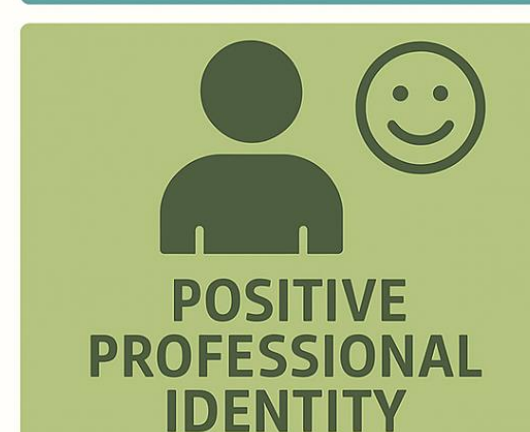
- Chronic pain management demands precise interventions, multidisciplinary input and careful coordination among healthcare professionals.- In many outpatient pain clinics, staff from multiple disciplines must communicate effectively to manage complex cases and mitigate procedural risks.
- Interprofessional collaboration (IPC) is linked to enhanced patient outcomes across various healthcare settings. Simulation-based education has proven beneficial for reinforcing teamwork, role clarity and communication skills.
- The Readiness for Interprofessional Learning Scale (RIPLS) survey is a validated instrument for quantifying attitudes towards interprofessional learning and collaboration among healthcare students and professionals. By applying RIPLS longitudinally, we aimed to determine whether simulation-based interventions might sustain or enhance collaborative attitudes over time in a high-acuity specialty setting.
- This project aimed to assess baseline readiness for interprofessional learning among pain clinic staff using the RIPLS survey as well as implement a simulation-based training intervention to improve communication, teamwork and shared situational awareness.

METHODS

- Outpatient pain clinic- from August 2021 to September 2022.
- 1 day workshop with immersive scenarios and post-simulation debriefing sessions.
- Simulation scenarios replicated critical complications during interventional pain procedures and a facilitated debriefing followed each simulation, focusing on communication, task delegation and error recognition. Qualitative feedback was collected during debriefings.
- The RIPLS survey was administered before the simulation workshop (baseline) and again 6 months later.

The RIPLS Survey consisted of 19 items covering four domains: Each item was scored on a 5-point Likert scale (1=strongly disagree, 5=strongly agree).

- Teamwork and collaboration
- Negative professional identity
- Positive professional identity
- Roles and responsibilities



INCREASED INTERPROFESSIONAL COLLABORATION

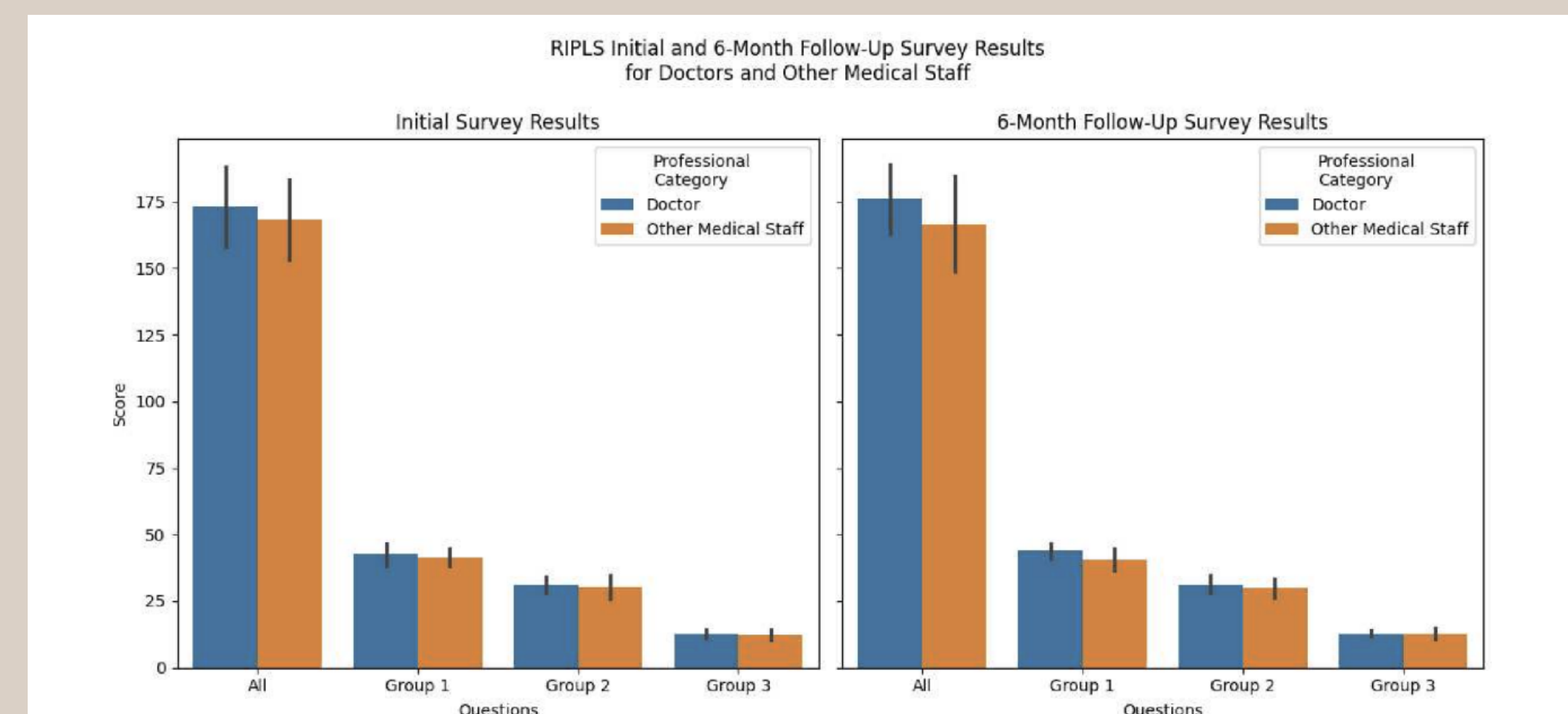
This study demonstrates the use of RIPLS over 6 months in an outpatient pain clinic, showing that simulation-based interventions can preserve already high IPC readiness.



SIMULATION-BASED INTERVENTION

RESULTS

Figure 1
Readiness for Interprofessional Learning Scale (RIPLS) initial and follow-up survey results. On a scale representing cumulative scores across survey domains, participants' attitudes towards interprofessional collaboration



Questions	P value	Level of significance	Significant
All	0.8937	0.05	No
Group 1	0.8586	0.05	No
Group 2	0.937	0.05	No
Group 3	0.4773	0.05	No

* This analysis includes all respondents regardless of professional category.

Figure 2
Figure legend

Qualitative Responses
1. "[I learned to] Designate leadership, Communicate, Know your environment"
2. One respondent noted they appreciated "Reinforcing [the] importance of speaking up and team communication"
3. "I learned a lot due to never being in the procedure room [when] an emergency [happens]. I learned most about how important it is to know where all the emergency equipment is... I really enjoyed the simulation class."
4. "I know how important communication is, but this training put it in a greater perspective of just how important [it] is for patient outcomes during critical events."

Figure 4
Figure legend

Incorporating interprofessional simulation in other ambulatory, procedure-oriented clinics may help maintain or boost team readiness for collaborative practice.



CONCLUSIONS

- A targeted simulation-based intervention can help outpatient pain clinic teams maintain high interprofessional readiness over 6 months
- The specific demands of interventional pain practice, such as procedural sedation, imaging guidance and real-time complication management, underscore the relevance of simulation for refining team communication and problem-solving. The findings align with previous studies where simulation improved collaborative behaviors and crisis management.

FUTURE DIRECTIONS

- Future investigations with larger sample sizes and varied settings can explore whether sustaining high RIPLS scores translates directly into improved patient safety outcomes or cost-effectiveness.

ACKNOWLEDGEMENTS

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