

Exploring Factors Influencing Chiropractors' Adherence to Radiographic Guidelines for Low Back Pain

Objective

To use the Theoretical Domains Framework (TDF) to explore perceived barriers and enablers to low back pain (LBP) radiographic guideline adherence with and management of LBP without x-rays among chiropractors in NL.

Practice Points

1. Most LBP is not due to specific pathology, and most clinical practice guidelines for the management of LBP recommend against the use of routine imaging, including lumbar radiography.
2. Based on our previous work, a small proportion of NL chiropractors identified beliefs discordant with current guidelines for LBP radiography, indicating a need to explore factors influencing their beliefs and actions.
3. The TDF contains 14 theoretical domains and was developed to understand the drivers of and barriers to health care providers' clinical behaviours.

Methods

1. We conducted two focus groups with a convenience sample of chiropractors in NL. These groups were interviewed to identify perceived barriers and enablers to LBP guideline adherence and management without x-rays using a guide based on the TDF.
2. Participant quotes were analysed thematically using the TDF, and similar quotes were grouped into belief statements.
3. Domains potentially important for adherence to radiographic guidelines or LBP imaging behaviours were identified by noting conflicting beliefs, and the reported influence of the beliefs on these target behaviours.

Results

- 12 chiropractors participated in the focus groups: eight in Eastern Newfoundland and four in Western Newfoundland.

- Six of the 14 TDF domains were perceived to be important for changing radiographic guideline adherence and LBP imaging behaviours: Knowledge; Skills; Social/professional role and identity; Beliefs about consequences; Memory, attention, and decision processes; and Behavioural regulation.
- Compared to a study including chiropractors in Ontario and Quebec, we identified several similar factors important for radiographic guideline adherence.

Table 1: Examples of Belief Statements Representing Key Factors Influencing Radiographic Guideline Adherence (e.g., Barriers and/or Targets for Intervention Development)

Domain	Belief Statement
Knowledge	I have limited knowledge/awareness of guidelines for imaging.
Skills	Good communication skills are required for managing LBP without x-rays.
Social/Professional Role and Identity	It is my responsibility as a clinician to manage LBP without taking an x-ray.
Beliefs About Consequences	Cost to the health care system is a negative consequence of taking x-rays.
	Missing a diagnosis is a potential negative consequence of NOT taking an x-ray
Memory, Attention, and Decision Processes	I decide whether a patient needs an x-ray based on their clinical presentation.
	I decide whether a patient needs an x-ray (instead of following the guidelines) if I have a gut feeling that there is something else going on.
Behavioural Regulation	Having a system to easily communicate with physicians and access previous imaging would help me better manage LBP (without x-rays).

Conclusions

1. This study identified several factors that may be important for radiographic guideline adherence and managing LBP without imaging within chiropractors in NL.
2. The beliefs identified within our study may be targets for future theory-informed behaviour change interventions aimed at reducing non-indicated imaging for LBP.