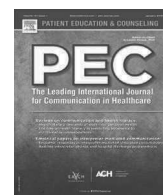




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# Training health professionals in patient-centered communication during magnetic resonance imaging to reduce patients' perceived anxiety

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## ABSTRACT

**Objective:** We examined how a patient-centered communication training program for magnetic resonance imaging (MRI) affected health professional (HP) practice and patients' perceived anxiety (PA). **Methods:** We implemented an intervention program. Six of the 17 eligible HPs completed the study. The proportion of observed desired behaviors (PODBs), including MRI procedure explanation (MRI-PE), communication, and MRI checking procedures was measured using an observation grid. We tested 182 patients (85 pre-, 58 post-, and 39 at follow-up) for PA pre- and post-MRI.

**Results:** The Bayesian ANOVA effect size suggested moderate evidence of improvement in HP PODBs, pre- to post-intervention. Use of MRI-PE declined between post-intervention and follow-up (6 months later). Observed changes in PA, pre- to post-MRI, could be related to time constraints and perceived pressure to explain the exam in detail once institutional routines are reestablished.

**Conclusion:** In MRI units, time constraints condition the performance of HPs who address patients' PA. **Practice implications:** "Real workplace" interventions that promote better patient-centered communication and provide each patient with a comprehensive explanation of MRI procedures also appear to improve HP PODBs.

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## 1. Introduction

Communication is vital for achieving quality assurance in health care organizations. Besides technical competence, patients expect health professionals (HPs) to be courteous, provide information and emotional support, and have good interpersonal communication skills [1]. When professionals communicate in a patient-centered manner, recipient satisfaction [2] and patients' confidence in HPs increases [3].

HPs must then develop the ability to express empathy, and be able to explore and understand patients' perspectives and emotional experiences. HPs must also share the decision-making process with patients; that is, they must operate in a patient-centered manner [4]. To achieve effective health communication, HPs must promote improved understanding while attempting to reduce situational

complexities. These actions should take the form of a tailored approach that is adjusted to fit individual needs [5].

Although the importance of patient-centered communication (PCC) is generally agreed-upon [6], its use may be hampered in some health care contexts. In highly technical settings, like medical imaging, technology and technical understanding may interfere with PCC [7]. In true patient-centered care settings, patients perceive that their interactions with the HP, and not with technology, are the most significant part of their experience [8].

Magnetic Resonance Imaging (MRI), an accurate high-end imaging technology, is frequently perceived as an unpleasant experience that impacts patients' experiences differently. The physical properties of the scanner (spatial constriction and noise), and the need to remain still [9], along with the concern about their illness and fear of what the scan may reveal, may cause patients to experience worry, anxiety, claustrophobia [10], and even panic attacks [11]. Those feelings manifest in patients undergoing the scanning process and can result from a perceived lack of control [10] and patients' limited understanding of the procedure [12]. These feelings also increase the need for support during scanning; consequently, HPs play a significant role in providing information

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