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Original article

# A comparison of patient education practices and perceptions of novice and experienced physiotherapists in Australian physiotherapy settings

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ABSTRACT

*Background:* Patient education is an integral component of physiotherapy practice. Little is known about the differences in reported use and perception of patient education between experienced and novice physiotherapists. Understanding these differences has important implications for training approaches and physiotherapy practice.

*Objectives:* To compare how experienced and novice physiotherapists report frequency of patient education practices and their perceptions of the importance of these practices.

*Design and methods:* A web-based purpose-designed survey was developed, piloted and administered to practicing physiotherapists through direct email. Of 305 complete responses, two subgroups were explored for comparative analysis: 'novice' (≤5years' experience, n = 52); and 'experienced' (≥11 years' experience, n = 204).

*Results:* The experienced group rated 14 of 15 educational items higher than the novice group in relation to frequency of use and perceived importance. Experienced physiotherapists reported a significantly higher frequency of using one-to-one discussion, personalised handouts and explicitly seeking patient understanding ($p < 0.05$). Novice physiotherapists perceived more barriers to patient education, particularly those related to characteristics of the patient ($p < 0.05$).

*Conclusion:* Experienced physiotherapists report higher use of self-management education and education content that is patient-centred. Experienced therapists report a higher frequency of seeking explicit patient understanding to evaluate their teaching than novice physiotherapists and perceive fewer patient-related barriers to their practice. These findings are important when considering teaching and learning of patient education skills. Students or novice physiotherapists may benefit from strategies to facilitate patient-centred education, self-management education, evaluation approaches and strategies to manage barriers.



## 1. Background

Patient education is widely recognised as an integral component of effective patient care across healthcare settings (Hoving et al., 2010). It provides a means for health professionals to communicate salient information (Hoving et al., 2010), enhance patient self-efficacy (Schrieber and Colley, 2004; Nour et al., 2006; Ndosi et al., 2015) and self-management skills (Nunez et al., 2006; Ndosi et al., 2015) and improve clinical outcomes including pain, disability and function within physiotherapy settings (Alston and O'Sullivan, 2005; Albaladejo et al., 2010; Louw et al., 2011).

Physiotherapists are well-positioned to plan and provide individualised education (Davis and Chesbro, 2003). Early survey based research reports that 99% of physiotherapists perceive patient education as an important skill within their practice and 98% report participating in individual patient education as part of their patient care (May, 1983). More recent studies report that physiotherapists frequently engage in patient education centred on the principles of adult learning (Breese and French, 2012) and self-efficacy (Rindflesch, 2009). Despite this, physiotherapists do not routinely engage in education relating to health promotion and stress reduction (Sluijs, 1991; Fruth et al., 1998; Rindflesch, 2009), and find it challenging to provide explanations of cause of symptoms for common patient populations (Slade et al., 2012). Further, patient education within physiotherapy is described as being primarily clinician-centred or didactic in nature (Trede, 2000) and often not individualised to the patient (Kerssens et al., 1999).

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The effective provision of patient education by a health professional is centred on skills and behaviours encompassing effective communication, patient-centredness (WHO, 1998), patient-therapist collaboration (Cooper et al., 2009), a focus on self-management (Lorig and Holman, 2003) and empowering the patient towards self-efficacy (Koehn and Esdaile, 2008). Studies of novice and experienced physiotherapists illustrate several distinguishing characteristics in cognition, reasoning and behaviours that are central to patient education practice (Jensen et al., 1990, 1992, 2000; Resnik and Jensen, 2003; Holmes, 1999; Doody and McAteer, 2002; Wainwright et al., 2011). Experienced physiotherapists are able to use information for decision making more rapidly (Wainwright et al., 2011), utilise more effective social interaction skills and provide more information to patients with higher levels of encouragement (Jensen et al., 1990, 1992, 2000; Resnik and Jensen, 2003). Experienced physiotherapists also employ a more patient-centred approach to care, promoting patient empowerment (Resnik and Jensen, 2003) and tailoring treatment to the patient's needs (Doody and McAteer, 2002). Novice therapists tend to rely more on professional and personal experience within their clinical decision making (Wainwright et al., 2011) and are described as placing more importance on their communication and psychomotor skills rather than their teaching skills (Jensen et al., 1992). Further, student therapists place less importance on discussing patient signs and symptoms within the consultation (Holmes, 1999). Gyllensten et al. (1999) also found that experienced physiotherapists placed higher importance on establishing a helping alliance, understanding the patients' perception of their condition and openly sharing information with a focus on patient participation.

Identifying perceived barriers to practice is integral to understanding the behaviour and motivations of the clinician (Glanz et al., 2008). Chase et al. (1993) surveyed practicing physiotherapists in North America regarding their perceptions of various patient educational content and barriers to practice. The respondents indicated that the most highly perceived barriers to patient education were psychological factors of the patient. Holmes (1999) used the same survey measure to compare practicing and student physiotherapists. Students consistently reported inherent characteristics of the patient, such as cognitive, emotional and physical status to be barriers to patient education, whereas practicing therapists did not (Chase et al., 1993; Holmes, 1999). The author concluded that students were likely less aware of the impact of their own behaviour and beliefs on the patient, potentially aligning their beliefs more with the medical model than a biopsychosocial approach (Holmes, 1999).

While it may be assumed that patient education skills, behaviours and practices change as a therapist gains experience, a review of the literature demonstrates a gap in our understanding about how experienced and novice physiotherapists differ in the way they perceive patient education and their use of patient education content, delivery approaches and evaluation methods in their practice. Much of the existing research is over a decade old and regardless, no studies to date have specifically addressed differences based on experience. The purpose of this study, therefore, is to investigate the influence of physiotherapist experience on the self-reported patient education practice and the perceived importance of educational content and delivery, and perceived barriers to practice.

## 2. Purpose and aims

This study seeks to compare novice and experienced physiotherapists' reported patient education practices and perceptions according to five key areas:

1. Frequency of patient education activities
2. Perceived importance of patient education activities
3. Approaches to delivery of patient education
4. Approaches to evaluate patient education practice
5. Perceived barriers to effective patient education practice

## 3. Methodology

### 3.1. The survey instrument

A cross-sectional survey was formatted using the online program SurveyMonkey. The measure was developed by the research team using a framework derived from five constructs representing physiotherapy context and patient education practice through a comprehensive review of the literature. The final survey consisted of nine demographic questions and five sets of closed-ended five point likert scale questions which rated a total of 57 individual items according to frequency, perceived importance or level of agreement. Individual survey items were derived from the overarching constructs based on a review of the literature, and a consultation process that included the research team (one current practicing physiotherapist with 10 years clinical experience and three academics with over ten years clinical and educational experience), a broad range of practicing physiotherapists and academic faculty across various areas of Physiotherapy practice. A final pilot was completed by eight physiotherapists practicing in both clinical and academic roles (age 29–52 years from musculoskeletal, neurological and cardiorespiratory areas). Feedback on content, clarity, item structure and wording was sought, and the pilot was undertaken twice to assess test-retest reliability. All individual survey items had an acceptable intra-class correlation of >0.7 (Fink, 1995). Six minor changes were made based on feedback.

### 3.2. Sample and recruitment

Qualified Australian physiotherapists were recruited through direct email contact to personal email addresses via the Australian Physiotherapy Association (APA) contact search engine. This is an online, publically accessible database for APA members to provide email and mailing contacts (APA, 2015). Stratified random sampling based on Australian states generated a total of 824 email addresses on April 28, 2015. The emails sent to each participant described the study and provided a link to the survey. Participant consent was gained through selecting the consent box on the first page of the survey. Exclusion criteria were; not being a qualified physiotherapist or working in a primary context of teaching or administration. The survey was open for four weeks and a reminder email was sent after two weeks with a link to the survey. Ethical approval was obtained by the institutional human research ethics committee on March 30, 2015.

In order to compare data for experienced and novice physiotherapists, two sub-groups were created. Previous research has defined ‘experienced’ healthcare practitioners in a number of ways, such as seven (Smith et al., 2010) or ten years of practice (Jensen et al., 1990, 1992; King and Bithell, 1998; Rivett and Higgs, 1997; Doody and McAteer, 2002), having post-graduate training (King and Bithell, 1998; Higgs and Bithell, 2001) or a knowledge base over multiple dimensions of practice (Jensen et al., 2000). Defining a ‘novice’ healthcare practitioner is less clear with researchers using cut offs of two or four years (Smith et al., 2010). In light of these previous definitions, the novice group was defined as $\leq$5 years of practice and the experienced group was defined as $\geq$11 years of practice. These definitions yielded two subgroups large enough to optimise between-group comparisons.