Patient Education and Counseling 75 (2009) 290–292

Contents lists available at ScienceDirect

Patient Education and Counseling

journal homepage: www.elsevier.com/locate/pateducou

Letter to the Editor

Self-management in long-term health conditions—A complex concept poorly understood and applied?

Keywords: Self-management; Self-efficacy

Long-term health conditions currently account for more than half of the global disease burden, and have been described as a primary challenge for 21st century healthcare systems [1,2]. It is fashionable in both research and clinical practice to use the term self-management to describe ways to support patients with long-term health conditions to manage their care in the community. Supporting patients in self-management has been found to be consistently associated with improved health outcomes in a variety of health conditions [3–6]. The evidence that self-management improves health outcomes in long-term conditions is clear in some patient groups such as those with asthma or diabetes, and less clear in others such as those with chronic obstructive pulmonary disease or heart failure [7]. This naturally gives rise to the question whether self-management is relevant for some conditions but not others, or that some conditions lend themselves better to this type of intervention or support.

In care programmes and research studies self-management is used either to refer to an increase in the individual patient's general confidence to manage their health condition [8], or to increase the individual patient's confidence to manage specific tasks relating to their illness condition [6,9]. Occasionally, it is used to refer to a mixture of both approaches [8]. Though these differences may appear to be inconsequential, they have substantial implications for the development of effective support strategies according to the theory of self-efficacy as developed by Bandura [10–12], the leading authority in this field.

Self-efficacy plays an important part in social cognitive theory from which many of the current programmes promoting self-management for patients with long-term health conditions are derived, such as the Expert Patients Programme in the United Kingdom [13]. Self-efficacy is defined as the belief that one can or cannot successfully execute the behaviour required to produce a specific outcome. In clinical practice it is often referred to as patients' confidence in their own ability to manage. Bandura differentiates between information conveyed by directly experienced events and information that becomes instructive only through cognitive processing and reflective thought, leading him to prioritise therapeutic interventions that change performance directly and provide experience of mastery [14]. These interventions have the strongest effects on efficacy expectations and, therefore, on subsequent behaviour.

Bandura identified a hierarchy of four sources of information—modelling and comparison with others attainments, verbal persuasion, feedback from autonomic arousal, and, most importantly, performance feedback from prior personal experience. This hierarchy is used widely in cognitive behavioural therapy to shape patients' self-efficacy by contracting realistic, achievable goals with patients, building patients' specific confidence and skills to improve enactive mastery experience. Two aspects of cognitive learning theory – 'self-efficacy expectation versus outcome expectation' and 'general self-efficacy versus specific self-efficacy' – are, however, given less consideration in the clinical practice arena of supporting self-management, yet they are key to the most effective approaches to the development of self-efficacy.

Expectations of self-efficacy are the most powerful determinants of behaviour change because self-efficacy beliefs determine the initial decision to perform a behaviour, the effort to be expended, and persistence in the face of adversity [14]. In adopting a desired behaviour, patients first form an intention and then attempt to execute the action. Outcome expectancies are important determinants in the formation of intentions, but are less so in action control [15]. Convincing patients that certain behaviour will lead to a desirable outcome will not lead to behavioural change unless they believe that they can perform the behaviour in the required situation. Hence a patient may believe that regular exercise will improve his or her future health (high outcome expectancy), but may still dismiss this health strategy because they have a low efficacy expectancy (having never been a regular exercise participant the patient will not see themself being able to start regular exercise now, and will certainly not believe themself able to sustain it). Effective patient self-management (self-efficacy) support needs to address patients' 'confidence' in their ability to manage specific activities rather than just convincing patients the 'value, of such activities. Hence, generic educational of material on diet that focuses only on improving health outcomes is unlikely to effectively strengthen patients' diet self-management [16,17].

Self-efficacy is not a personality characteristic that operates independently of contextual factors, rather it relates to beliefs about capabilities of performing specific behaviours in particular situations [14]. An individual's efficacy expectations vary greatly depending on the particular task and context in which it is required. It is therefore inappropriate to characterise a person as having 'high' or 'low' self-efficacy without reference to the specific behaviour and circumstance with which the efficacy judgement is associated. In practice, to promote patients' self-management for a specific long-term health condition, it is vital

0738-3991/$ – see front matter
doi:10.1016/j.pec.2009.02.001

that clear, precise and specific knowledge and specific competence in relevant skills are provided to them to support their own management of their particular condition. This detailed specificity occurs in diabetes and asthma care where healthcare interventions such as action plans, patient contracts or problem solving approach protocols are comprehensively constructed in a detailed and specific manner. These interventions contrast with some heart failure or chronic obstructive pulmonary disease interventions that have as their goal the improvement of the patient's 'general' confidence in managing their illness condition which, because of its lack of focus, is less likely to promote self-efficacy and self-management.

While different long-term health conditions require different disease management strategies and patients require particular illness knowledge and skills to support self-management, the difference in the description of the interventions is not confined to specific illness knowledge and skills; rather there is a difference in the emphasis on the role of the patient in the concept of self-management employed. For example, a recent updated Cochrane review on self-management education and regular practitioner review for adults with asthma describes the intervention characteristics of self-management as: patient asthma education, self-monitoring, regular review and a written action plan [6]. Another recent systematic review of randomized controlled trials on the effects of self-management intervention on health outcomes of patients with heart failure describes self-management interventions as those interventions in which patients retain the primary role in managing their health condition generally, while the operational definition of self-management interventions included programmes aimed at enabling patients to assume responsibility for only managing one or two aspects of heart failure (e.g. symptom monitoring, weight monitoring, medication dosage adjustment and/or decision making) [8]. The interventions described in these reviews differ in the emphasis they place on the role of the patients' general or specific confidence and the comprehensiveness of the specific skills and competencies identified to manage their condition.

A precise understanding of the effectiveness of developing specific rather than general self-efficacy is likely to lead to clinical practise that is more appropriate to support patient self-management. Where interventions fully articulate Bandura's principles of self-efficacy, patient confidence is developed against each specific aspect of their health condition. This level of detail and specific focus of managing each of the symptoms of the condition has been achieved to support diabetic patients' self-management, significantly improving patients' quality of life [9]. Where this detailed support is not achieved self-management support is less effective, as in chronic obstructive pulmonary disease [18]. Likewise, structured educational material to manage symptoms experienced in heart failure do not cover the common symptoms patients experience - 'fatigue', 'palpitations', or 'loss of appetite' - because the nature of these symptoms make it difficult to be specific when designing step-by-step instructions or action plans. While there are some structured educational materials on restricted fluid intake, daily body weight and use of diuretic medication to support heart failure patients' self-management symptoms such as oedema and breathless, the symptoms these patients commonly experience lack action plans[19]. In practice, such omissions may reduce the effectiveness of self-management support for these patients.

To design effective interventions to improve patient self-management, practitioners need to address patients' specific confidence to manage specific activities, rather than 'general confidence', across the range of symptoms that the patient feels is relevant to their condition as well as those deemed important medically [20,21]. They need to

- Establish and differentiate the evidence base of specific illness knowledge and skills to support the comprehensive self-management of symptoms;
- Produce educational material that focuses on best approaches to achieving patient understanding of relevant illness knowledge; and
- Develop patients' competencies in specific skills to increase their specific self-efficacy in managing their health condition.

There is general agreement that the primary role of self-management education aims to support patients to gain confidence and skills to manage their long-term health condition. A precise understanding and application of the theoretical basis that influences self-efficacy will enable researchers and practitioners to be more specific in the design and application of the complex interventions required to support self-management, and be more able to differentiate and explain the effects of separate elements of such complex interventions. This is likely to reduce the presumption that some illness conditions are more susceptible to self-management than others.

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5 January 2009