Supporting patient education using schema theory: A discourse analysis

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A R T I C L E   I N F O

A B S T R A C T

Background: While patient education has long been an important part of nurses' roles in patient care, research has found difficulties with providing patient education. Sound subject matter knowledge is not enough to give effective and meaningful instruction; pedagogical knowledge is also needed, with an understanding of different aspects of learning processes to inform our teaching methods Despite the importance of patient education, many nurses do not necessarily have pedagogical knowledge regarding how to teach, how to support patient's learning and how to consciously implement strategies into patient education.

Aim: By understanding theories that explain how people learn better, and awareness of the consequences of different approaches to giving patient education, nurses can be better informed about how to structure their information-giving in ways that will support patient learning.

Methods: Discourse analysis from an interactional sociolinguistic perspective is used to examine authentic nurse-patient health information encounters, mapped against cognitive learning theories, schema theory in particular.

Findings: The interactional consequences, when elements drawn from learning theories are implemented, are observable in the data.

Discussion: Strategies that support patients' learning include linking information to the patients' prior experience/knowledge, providing information that is relevant to them, and chunking information into unified themes while encouraging patients' active involvement through questioning and clarification of information.

Conclusion: Awareness of learning theories and strategies outlined in this paper can strengthen communication skills and assist health professionals to structure patient education in ways that support patients' learning, thereby enhancing patient safety.

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Problem

Despite being an important nursing role, the provision of patient education remains problematic as nurses can have difficulty knowing how to teach or support patients' learning.

What is already known

Educating patients about self-management of their condition and how to prevent complications is important for promoting patient safety.

What this paper adds

A case study approach is taken to analyse the discourse of three nurse/patient encounters that involve patient teaching. It explores how the RNs go about educating their patients, mapping the interaction to cognitive learning theory, and examining the interactional consequences of various strategies that are undertaken.

1. Introduction

Patient education has long been considered by nurses as an important part of their role in patient care, and despite being the focus of many research studies over the last thirty years, it continues to attract attention (Friberg, Vigdis, & Bergh, 2012). Educating patients about self-management of their condition, and how to prevent complications is important for promoting patient safety

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(Golaghaie & Bastani, 2014), but effective communication skills are necessary to achieve this (Xu, Shen, Bolstad, Covelli, & Torpey, 2010). Patient education is not a straight forward activity, and Major and Holmes (2008) argue that more research focusing on *ways* in which nurses communicate with patients is needed.

'Patient education' is broadly defined as health related educational activities directed to patients (Friberg et al., 2012). Whitehead (2001) argues, however, that there is confusion regarding terminology as the term 'health education' may be used to refer to any educational activity including formal health education programmes and health promotion, but the most predominant activity used in nursing practice is the provision of health-related information. The term 'patient education' in this paper refers to the process of empowering, encouraging involvement in decision-making, and assisting the patient to gain knowledge, skills, attitudes and behaviours related to their health problem through either informal information-giving or formal education programmes.

The provision of patient education results in positive outcomes that include an increase in knowledge resulting in adherence to treatment plans, involvement in care, perceived control over health and illness, and behaviour change that enhances health related quality of life (Svavarsdóttir et al., 2016). It is therefore imperative that health professionals have proficient communication skills to influence and enable this change (Svavarsdóttir et al., 2016). Despite the importance of patient education and the focus of research over many years, Friberg et al. (2012) argues that the provision of patient education remains problematic, as many nurses do not necessarily have the pedagogical knowledge regarding *how* to teach. A better understanding of learning theories on the part of nurses, enhanced through the mapping of these theories to authentic interactions, might support more effective patient teaching and learning. This paper reports on a project that examines nurse-patient encounters using discourse analysis (DA) specifically from an interactional sociolinguistic perspective. Patient information encounters are mapped against cognitive learning theories to increase awareness of factors that can inform nursing practice and enhance communication and patient education skills. Firstly, research focusing on patient education is reviewed, followed by a description of cognitive learning theories. Excerpts from three authentic patient education encounters are then analysed, explained and mapped against schema theory (described later in this paper).

2. Literature review

A review of 32 studies (Friberg et al., 2012) focusing on conditional factors that influence nurses' patient education work, found the provision of patient education is impeded by limited pedagogical competence and uncertainty relating to the educational task. Many of the studies in the review revealed that patient education was underpinned by an 'authority' model influenced by medical science which meant passing on information to patients, rather than a 'partnership' model where patient understanding is used as a starting point. Much of the patient education research has focused on what health professionals expected patients to know about their health, with the effectiveness of professionals' explanations regarding symptoms, interventions and management studied to a minor degree (Bergh, Persson, Karlsson, & Friberg, 2013). Similarly, a survey of 842 nurses in Sweden across primary care, community care and hospital care settings found that despite regarding patient education as important in daily work, nurses had low levels of pedagogical training, did not follow research in patient education, and few reported that they identified individual patients' need for knowledge and understanding of their health condition prior to providing education. Furthermore, the

quality was variable and the provision of education was random and guided more by tacit knowledge than by research evidence (Bergh et al., 2013). Other research found difficulties with patient education relating to communication difficulties and the language spoken (Golaghaie & Bastani, 2014; Lee & Lee, 2012), organisational factors such as limited time and a lack of managerial support, and uncertainty regarding role boundaries with other health professionals (Fitzpatrick & Hyde, 2005; Friberg et al., 2012; Ghorbani, Soleimani, Zeinali, & Davaji, 2014).

As Yilmaz (2011) points out, sound subject matter knowledge is not enough to give effective and meaningful instruction; we also need pedagogical knowledge and an understanding of different aspects of learning processes – explained by educational theory – to inform our teaching methods. Bergh et al. (2013) argue there is little research regarding *how* to determine what patients need to know, understanding *how* to support their learning and *how* to consciously implement strategies into patient education. Training and support in pedagogy and learning theories for nurses is required in primary care (Macdonald, Rogers, Blakeman, & Bower, 2008), and such training would seem no less important in other areas or specialties in nursing. Education that is patient-centred requires that nurses understand patients' reasoning and preferences to be able to support them in learning about their health/illness (Bergh et al., 2013).

This paper aims to add to the literature by taking a case study approach, analysing the discourse of three nurse/patient encounters that involve patient teaching, exploring how the RNs go about educating their patients. While there are many approaches that may be taken in patient education, the interactions analysed this paper illustrate the consequences of different approaches taken by three participants in this study. Discourse Analysis (DA) is the approach used here, as it examines not only the practical aspects of communication (such as speakers' choices of vocabulary, grammar, and intonation), but also how interactions are sequenced and how the content at each turn of talk is managed (Paltridge, 2012). It can thus enable a detailed understanding of what is happening within the communication process, and (in the cases analysed here) explicate how patient education is carried out. There are many forms of DA, building on early sociolinguistic studies, and increasingly drawing from ethnographic methods and conceptual frameworks informed by social and critical theory. Examples of different forms of DA include interactional sociolinguistic (IS) analysis (Gumperz, 1982, 1999), conversation analysis (Sacks, 1995), and critical discourse analysis (Fairclough, 1992; Wodak, 1996; Van Dijk, 1998). IS (described in more detail under 'analysis') is chosen in this study as it is a qualitative interpretive approach to the analysis of social interaction and social processes that individuals use to build and maintain relationships, project identities and create communities, particularly in institutions and workplaces (Gordon, 2011). While there have been significant discourse analytic studies focusing on health provider/patient communication in recent years, the majority have been conducted from a medical perspective with relatively little research on *naturally occurring* nurse/patient interactions (Major & Holmes, 2008). In the present study, the educational strategies that are identified in the interactions are linked to cognitive learning theories to enhance pedagogical awareness by nurses.

3. Cognitive learning theories

There are a number of theories regarding orientations to learning, with behaviourism as a teacher centred instructional framework, with later developments of cognitive learning theories and constructivism where the locus of control is with the learner. While having been developed in the 1990s, these learning the-