An international study of hospitalized cancer patients' health status, nursing care quality, perceived individuality in care and trust in nurses: A path analysis

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ABSTRACT

Background: Providing high quality nursing care for patients with malignancies is complex and driven by many factors. Many of the associations between nursing care quality, trust, health status and individualized care remain obscure.
Objective: To empirically test a model of association linking hospitalized cancer patients' health status, nursing care quality, perceived individuality in care and trust in nurses.
Design: A cross-sectional, exploratory and correlational study design was used.
Settings: This multi-site study was conducted in cancer care clinics, in-patient wards of five tertiary care hospitals in Cyprus, Finland, Greece and Sweden.
Sample: Out of 876 hospitalized patients with a confirmed histopathological diagnosis of cancer approached to participate in the study in consecutive order, 599 (response rate 68%) agreed to participate and the data from 590 were used for path analysis.
Methods: Data were collected in 2012–2013 with the Individualized Care Scale-Patient (ICS-Patient), the Oncology Patients' Perceptions of Quality Nursing Care Scale (OPPQNCS), the Euro-Qol (EQ-5D-3L) and the Trust in Nurses Scale. Data were analysed statistically using descriptive and inferential statistics. Mplus version 7.11 was used to determine the best Trust model with path analysis.
Results: Although the model fit indices suggested that the hypothesized model did not perfectly to the data, a slightly modified model which includes the reciprocal path between individualized care and nursing care quality demonstrated a good fit.
Conclusion: A model of trust in nurses was developed. Health status, individualized care, and nursing care quality were found to be associated with trust. The model highlights the complexity of caring for cancer patients. Trust in nurses is influenced by the provision of individualized care. Generating and promoting trust requires interventions, which promote nursing care quality, individuality and patients' health status.

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What is already known about the topic?

- Patients' trust in nurses develops as a result of a good nurse–patient relationship and is important during the complex care episodes.
- Although correlations between nursing care quality, trust, health status and individualized care have been previously found many of these associations remain obscure.

What this paper adds

- Perceived nursing care quality and perceived individuality in care are directly associated with trust in nurses.
- Cancer patients' perceived nursing care quality and individuality in care are directly affected by health status.
- Generating and promoting trust requires interventions which promote nursing care quality, individuality and patients' health status.

1. Introduction

There were up to 3.45 million new cases of cancer (excluding non-melanoma skin cancer) and 1.75 million deaths from cancer in 2012 in Europe, with countries in the North and South of Europe recording significantly higher levels compared to other regions (Ferlay et al., 2013). Given the complexity and duration of cancer care episodes, the construction of a good relationship with the healthcare team, which includes trust, is important. Trust is considered "the foundation for building the client's confidence in the care provided by the nurse" (Keller, 2008, p. 36) and healthcare workers achieve this trusting relationship by centring care on patients' needs and preferences (Wessels et al., 2010). Patients' trust in nurses has to be earned and the opportunity for trust development is generated when the patient experiences nursing care (De Raeve, 2002). This opportunity allows the patient to assess care processes such as the quality of the care and the behaviour of the carer throughout the caring experience. However, public trust in health institutions and in providers is under threat and so is high on the policy agenda making it important to find ways to improve patient trust through the development of the quality of care (Calnan and Rowe, 2004).

The literature in this area suggests that the provision of quality care is positively correlated with better clinical outcomes, for example, increased health related quality of life (Sandoval et al., 2006). Other studies support the contribution of individualized nursing care to improved patient outcomes, such as patient autonomy and perceived health status and these offer opportunities for change

within clinical practice to improve trust (Suhonen et al., 2005b, 2012).

It is well established that cancer patients throughout the cancer journey manage a wide range of challenges on a psychological, physical, emotional and existential level (Tamburini et al., 2003). Many of these arise from the impact of cancer-related treatments on patients and their families that generate different needs; create expectations and shape beliefs (Charalambous et al., 2008, 2009). These overall effects of cancer and its treatment influence the perceived quality of nursing care, patient and family participation in care and trust towards the carers. The aim of this study was to empirically test a model of association linking hospitalized cancer patients' health status, nursing care quality, perceived individuality in care and trust in nurses through path analysis. Path analysis, conducted by the statistical software MPlus is one of many procedures of a structural equation modelling. It allows the researcher to specifying a set of relationships between variables (Muthén and Muthén, 2007). Path analysis is an extension of the regression model, used to test the fit of the correlation matrix against two or more causal models which are being compared by the researcher (Freedman, 1987; Saris and Stronkhorst, 1984).

2. Background

This study used path analysis to map out associations between health status, perceptions of individualized care, nursing care quality and trust in nurses (variables) and test them for strength in a sample of European cancer patients. Although, the relevant literature suggests there is one or more associations between measures of trust, individualized care, nursing care quality and health status within the cancer care context (Fig. 1), the direct or indirect effects of these associations remain partially explored and some of these completely uncharted. The idea for a model based on these aspects of nursing care is a deductive response emanating from the long-term exploration of individualized care in several populations and different clinical settings (Suhonen et al., 2005b, 2012) and the possibility of new understandings emerging within the cancer care setting in terms of these concepts.

The concept of trust in care has been theoretically defined as 'the confidence that care would be appropriate, reliable and as successful as possible' (Radwin and Alster, 1999, p. 332). Trust has also been conceptualized as a belief (Dinc and Gastmans, 2012); an attitude bound to time and place (Washington, 1990); a confident reliance on someone or something (Carter, 2009) and a willingness to engage in a relationship while accepting one's consequent
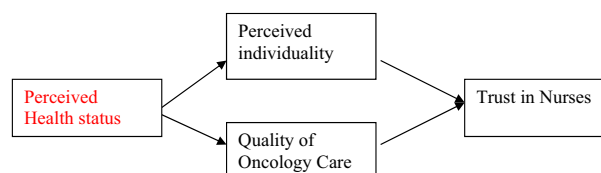

Fig. 1. Hypothesized model of the study.