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The challenge of multimorbidity in nurse education: An international perspective☆

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SUMMARY

The rise in prevalence of chronic diseases has become a global healthcare priority and a system wide approach has been called for to manage this growing epidemic. Whilst healthcare reform to tackle the scale of chronic disease and other long term conditions is still in its infancy, there is an emerging recognition that in an ageing society, people often suffer from more than one chronic disease at the same time. Multimorbidity poses new and distinct challenges and was the focus of a global conference held by the Organization of Economic Cooperation and Development (OECD) in 2011. Health education was raised as requiring radical redesign to equip graduates with the appropriate skills to face the challenges ahead. We wanted to explore how different aspects of multimorbidity were addressed within pre-registration nurse education and held an international (United Kingdom–Sweden) nurse workshop in Linköping, Sweden in April 2013, which included nurse academics and clinicians. We also sent questionnaire surveys to final year student nurses from both countries. This paper explores the issues of multimorbidity from a patient, healthcare and nurse education perspective and presents the preliminary discussions from the workshop and students' survey.

Introduction

Chronic diseases are the biggest cause of death worldwide with over 36 million people (63% of global deaths) dying of a chronic disease in 2008, a risk which is higher in women and undeveloped countries (WHO, 2011a). Nine million of these deaths were premature (before the age of 60) and potentially preventable (WHO, 2011b). Prevalence of chronic disease is high and increases with age, with over 15 million people in the UK suffering from one or more chronic diseases or other incurable conditions, a situation which is similar within the Swedish population (Coulter et al., 2013; Lennartsson and Heimerson, 2012). The co-occurrence of two or more diseases within one person at any one time is described as multimorbidity (van den Akker et al., 1998). Such multimorbidity further complicates the management of chronic disease and it is estimated that 23% of the population have multimorbidity, rising to up to 80% in those over 80 years (van den Akker et al., 1998; Barnett et al., 2012). Indeed, one study in Sweden found nursing home residents to have an average of 17 coexisting chronic health problems (Akner, 2009). In the United States 65% of all healthcare utilisation is by people with multiple chronic conditions and two thirds of healthcare expenditure is on people with 5 or more conditions (Robert Wood Johnson Foundation and the Johns Hopkins Bloomberg School of Public Health, 2010). In the light of our ageing population, multimorbidity is set to become an international healthcare priority which requires a radical redesign, not only of health care service delivery, but also of research and the education of health care professionals (American Expert Panel, 2012; Barnett et al., 2012).

By 2018 in terms of the UK example, the Department of Health (2012) forecasts a rise in the number of patients with multimorbidity to 2.9 million (53% increase over 10 years). In spite of the known increase with age, half of all those with multimorbidity are under the age of 65 years since, where there is socio-economic deprivation, such multimorbidity occurs up to 10–15 years earlier and is becoming the new normal of middle age in certain deprived areas (Mercer et al., 2011; Barnett et al., 2012; Smith et al., 2012). This is also reflected in a more than double death rate from non-communicable diseases in younger people in low-income countries than in high-income countries (WHO, 2011a). The prevalence of mental health issues is also a concern

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since this increases in relation to the number of coexisting physical conditions that a patient suffers; indeed, 36% of those with multimorbidity present with both mental and physical health issues and proportions are known to be higher in women and the elderly (Marengoni et al., 2011; Barnett et al., 2012). Where multimorbidity includes this combination of both physical and mental health problems, research demonstrates that the negative impact on the quality of life of the patient is increased (Mercer et >al., 2012). Despite the insight that we have, little is known about the risk factors for multimorbidity and there is currently no scientific evidence base for the care for such patients (Marengoni et al., 2011; Smith et al., 2012).

The Patient Context

The patient with multimorbidity often reports a very different experience of their healthcare journey (Boyd et al., 2007). Patients are often faced with an increased mortality risk, greater symptom burden, limited physical and psychological functioning, reduced quality of life and, as a result, severely compromised health outcomes (Gott et al., 2006; Barnes et al., 2006; Kadam and Croft, 2007; Barnett et al., 2012). Multimorbidity gives rise to the need for more regular contact with health care professionals, but such patients frequently report receiving fragmented care from specialists who focus on treating one disease or condition (Coulter et al., 2013). The risk of errors in care is heightened as a result of a single disease focus and polypharmacy, adverse drug reactions and inconsistent monitoring are common (Smith et al., 2012). The patient with multimorbidity often has to balance numerous appointments with a variety of specialists which results in poor continuity of care and a 'chaotic experience' with duplication of services and difficulty accessing relevant urgent care (Fortin et al., 2007). Such problematic interactions with health care professionals leads to reports from patients of conflicting advice, disappointment with care, a lack of attention to personal preferences, poor communication and a lack of shared decision making. These issues can lead to reduced motivation and a lack of understanding which limits the patient's ability to engage in self-management or to fully understand their conditions (Boyd et al., 2007; Fortin et al., 2007; Noel et al., 2007; Smith et al., 2012). Self-care is the cornerstone of chronic disease management (Department of Health, 2012) but often multimorbidity complicates the patient's ability to self-care since symptom recognition, appropriate lifestyle modifications and drug adherence are all more complex (Bayliss et al., 2003; Vogeli et al., 2007; Riegel et al., 2012).

The Healthcare Context

Over the past decade healthcare has become preoccupied with national and international, standardised guidelines and disease-specific policy (Rushton et al., 2011). In the light of the growing prevalence of multimorbidity, healthcare faces the challenge of developing new models of care that place the patient at the centre of care decisions and provide integrated services that meet their individual and complex health care needs. Our current healthcare delivery is based on a single disease framework and, internationally, systems are configured for individual diseases, which has serious limitations (Salisbury et al., 2011). Multimorbidity thus presents a major challenge to leaders on various levels in health care systems across the world (Barnett et al., 2012). Evidence demonstrates that this single disease approach to care is duplicative and inefficient, leading to services that fail to communicate with the patient and each other effectively or to provide integrated care. In the United Kingdom (UK), the King's Fund describes this as a 'reactive, disease-focused, fragmented model of care' rather than the holistic and patient-centred approach that would ensure that the patient and their needs were at the centre of the care delivery process (Coulter et al., 2013). This would require radical change; indeed The King's Fund (2013) reports that despite the lobbying of Members of Parliament (MPs) in the UK about this potential 'crisis' progress in such re-design remains slow and little progress has been made. Similarly, the Swedish Social Board of Welfare has issued several reports which highlight the need for new forms of care for those with multiple long term conditions. In addition, the Swedish Government has an ongoing initiative to improve the health and social care of the sickest elderly which emphasises enhanced collaboration, efficient resource usage and the delivery of care based on patient needs (Socialstyrelsen, 2013).

Managing specific conditions rather than the patient is a situation which is intensified by the current Quality and Outcomes Framework (QOF) in general practice in the UK which incentivises the application of evidence based clinical guidelines, albeit often with a single disease focus. This serves to limit the focus of consultation to that of a specific condition (Chew-Graham et al., 2013; NHS Improvement, 2013) whereas the shift needs to be towards better integration of information and care for the patient with multimorbidity (Kadam, 2012). Much of the care for the multimorbid patient takes place within primary care; long term conditions account for 90% of National Health Service activity and 80% of consultations within general practice are with a patient with long term conditions (Mercer et >al., 2012). The goals of primary care should include the enhancement of patients' functional status, minimising symptoms, disability and pain and prolonging life through secondary prevention (American Expert Panel, 2012). Yet despite these admirable goals, many qualified health care professionals report that they feel inadequately prepared to effectively manage multimorbidity (Boyd et al., 2007) and there is a reliance on single disease clinical pathways and guidelines which have not been tested in a multimorbid context. Clinical evidence and guidelines most often focus on a single disease and most randomised controlled trials exclude the elderly and those with multiple conditions (Barnett et al., 2012). Guidelines overlook multimorbidity and fail to support health care professionals when there are several relevant but conflicting guidelines for the patient with multiple conditions (Marengoni et al., 2011; Barnett et al., 2012).

The Nursing and Educational Context

Nursing as a profession has developed along a single disease management trajectory with ever increasing disease targeted specialist roles in, for example, heart failure and diabetes. As well as developing a variety of career pathways for nurses, such specialism has been found to improve patient outcomes (Blue et al., 2001). However, without careful consideration of the patient's other existing diseases, specialism can be at the expense of holistic and patient-centred practice (Castledine, 2006). This may leave nurses less confident to deal with multimorbid patients' complex needs; indeed, evidence suggests that during nurse consultations relating to a specific condition, nurses tended to overlook or 'block' patient cues or fail to offer advice when issues beyond the condition that is discussed (Green et al., 2013), an issue which may be intensified in the context of the patient with multiple conditions.

In the same way that specialism has begun to dominate healthcare delivery, the review of individual conditions is most often the focus of healthcare education, and there is extremely limited multimorbidity teaching. Despite the slow move of healthcare into the community setting education remains delivered in a mostly hospital centric environment and needs to include more ambulatory settings (Anderson, 2011). Current approaches to nurse education are said to be out-dated and at risk of 'producing ill-equipped graduates given the challenges to be faced' (OECD, 2011). Calls have been made for a shift in the focus of nurse education to improve the care of those with multiple long term conditions which may lead to a necessity to redesign the nursing curricula once again. Indeed, health professionals need to be trained differently; there needs to be a shift of emphasis to a focus on prevention (Hughes et al., 2012) and population health, with different measures of the quality of the health system, from specific diseases to

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