

Editorial: An Overview of Quality Care of People with Complex Health Needs

Chien Wai Tong

Professor, School of Nursing

The Hong Kong Polytechnic University

Hung Hom, Kowloon, Hong Kong

Tel: 852-27665648

Email: hschien@inet.polyu.edu.hk

In recent years, a high percentage of health care expenditures are associated with a relatively small proportion of the population – people with complex health care needs. Most clients in this high-cost group are those with multiple chronic illness conditions requiring long-term health care services, frequent re-hospitalizations, and limitations on their ability or capability to perform daily functions due to physical, mental and/or psychosocial problems. In the United States, health care expenditures for people with multiple chronic conditions are up to 17 times higher than for people with no chronic problems (Anderson, 2007), that is, the average per capita spending of US\$16,800 (16.9 times) for people with five types of chronic illness conditions and US\$7,381 (7 times) for three types versus US\$994 for no chronic illness. In Australia, chronic illnesses accounted for 70% of the total burden of ill health in 2002, as measured by disability-adjusted life-years, and this has been expected to increase to 80% by 2010 (National Health Priority Action Council, 2006). Given the far high prevalence of complex health needs among this group and the projected growth in the next decades of the aging

population, the costs of providing appropriate care for these client populations threatens future viability of health care system worldwide.

Individuals with complex health needs can be referred to those with multiple chronic illnesses, in acute, rehabilitative and ambulatory care settings with a particular interest in high risk care transitions (Schoe et al., 2008). No matter how many types of illness that people are having, each kind of chronic illness itself such as ischemic heart disease, stroke, colorectal cancer, breast cancer, diabetes mellitus, and mental illness are among the top leading causes of ill-health, disability and injury in the United States, Australia, Europe, and many other countries (Council of Australian Governments, 2006; O'Grady & Capretta, 2009; United Kingdom Department of Health, 2006).

However, this definition can vary among clients' ages. Children and young people with complex health needs can include those with not only physical diseases but also behavioral difficulties, emotional problems or mental illnesses (McConkey, Barr, & Baxter, 2007). Elderly clients with complex health needs are those with chronic medical problems accompanying with issues in unhealthy aging process and their needs are generally focused on a better quality of life if they can avoid hospitalizations, remain in their homes, and visit their family doctors or community nurses for treatment and care. Although complexity, vulnerability and age may not pre-dispose older people to receive poorer quality of care, several research provides evidence that older clients requires time-consuming processes in health care such as health assessment and history taking, counseling, and medication consultation and may therefore experience inadequate quality of care (Min et al., 2005). People with noticeable or severe mental health problems are often considered to the client group with complex health needs. It is because they require multi-dimensional and inter-disciplinary approaches of care for their complex conditions, including

neurological, emotional, physical, and psychosocial problems and dysfunctions (Chien & Lee, 2011; Chien & Norman, 2009).

As a matter of fact, people with complex health care needs are not a distinct category of patients; they are clients at the far end of a population-wide spectrum ranging from so called 'physically healthy' individuals to people with serious medical and/or psychological problems and high utilization of health care services. The long-term goal of efforts in taking care of these client populations may be to ensure that they can receive the appropriate care and management for the prevention and treatment of their priority illness conditions. However, new initiatives are required to improve health care safety and efficiency and quality in health care delivery, in which multi-components and multi-disciplinary collaborations in care planning and provision are found to be of utmost importance (Grabowski, 2009). In addition, more evidences on the efficacy of any new initiatives or interventions for clients with complex health care needs should also be established to effectively move the health care delivery to a new era of an advanced and a precise point of care for these clients, and their families.

Alternative models or approaches of care has been suggested or reported in recent research to address the complex health care needs in a wide variety of client populations. For instance, care management may be a delivery innovation that can reduce costs while enhancing the quality of care for people with complex needs. It is a set of activities designed to assist clients and their support systems in managing medical conditions and related psychosocial problems more effectively with the aim of improving clients' health status and reducing the needs for medical services (Bodenheimer, Wagner, & Grumbach, 2002; Bott et al., 2009). Even though this approach of care has been designed in the bases of different models and implemented in a number of settings, it has indicated preliminary evidences on its cost-effectiveness on chronic

illness management and reducing re-admissions and health care costs for different groups of clients with complex health conditions (Colman et al., 2006; Dorr et al., 2007; Nichol, 2007). Nevertheless, there are quite a number of methodological issues identified from the previous studies on this topic such as inadequate standardization and consistency of intervention and its interveners, heterogeneous and small-sized sample, no control group, and very short follow-up periods (Bodenheimer & Berry-Millett, 2009). A nurse-led case management for complex ambulatory patients in general medical care (Latour et al., 2007), excluding those with only one specific disease, found improved patient satisfaction but no effect on emergency care department visits. There has also been interest in care coordination and disease management programs as a means to prevent adverse clinical events such as falls, preventable hospitalizations, or adverse drug events (Latour et al., 2007; Norris et al., 2002).

Nevertheless, there has been limited nursing research striving to bridge the research and knowledge gaps of testing interventions for people with complex health care needs. This Special Issue aims at reporting a few studies on innovative approaches to advanced complex health care, particularly those conducted by nurse specialists and researchers and with significant findings and implications for the quality of complex health care. The studies reported in this Issue has been focused on Asian populations with various complex health needs such as psychotic and eating disorders, dementia, lung cancer, and chronic physical diseases.

There are two experimental, and one quasi-experimental, studies conducted among the Chinese population. For instance, Chien, Leung, and Chu (2012) studied the effects of a nurse-led, needs-based psycho-education program for Chinese patients with first-onset mental illness in Hong Kong on improving their mental and overall health status, insights into their treatment and illness, and hospitalization rates two weeks after completion of the intervention. This needs-

based psycho-education for Chinese patients with first-onset mental illness delivered in an outpatient clinic with the input of a multidisciplinary team was found more effective than usual psychiatric care. It would be important to implement and retest this timely nurse-led psychosocial intervention in diverse groups of patients with earlier stages of onset of their mental health problems, particularly those with first-episode psychosis or other moderate severe mental health problems. Similarly, Wang, Chien and Lee (2012) developed a 12-session bi-weekly mutual support group program for Chinese family caregivers of a relative with dementia in Guangzhou of mainland China. The nurse researchers facilitated the self-help groups led by family caregivers in one dementia care center and tested their effectiveness using an experimental study with pre-test and post-test, equivalent groups design. An advanced practice nurse facilitated the support group led by peer family leaders. The support group participants had significantly greater improvements in distress levels and quality of life than those with usual psychiatric care at one-month post-intervention, with no increase of demands for mental healthcare services. These findings support the effectiveness of mutual support groups that was originated from Western countries to offer psychosocial support to Chinese family caregivers in dementia care beyond routine community mental healthcare. Lastly, Chair et al. (2012) examined the effectiveness of an educational intervention with the use of videotape and pamphlet among 132 Chinese patients undergoing their first-time cardiac catheterization. The findings indicated that the use of videotape to prepare the patients for cardiac catheterization was highly effective in reducing their anxiety and uncertainty about the procedure and its subsequent care. In addition, the patients experienced higher satisfaction and knowledge level after the educational intervention than those received the usual cardiac care.

Three of the published studies here used qualitative or mixed research method to examine the process of psychosocial interventions for patients with eating disorders and lung cancer, respectively. The qualitative study by Leung, Ma, and Russell (2012) examined the participants' views of an Internet-based self-help programme developed in the Asia-Pacific region for people with eating disorders on how the self-help programme facilitated individuals' recovery and the contributing factors to its success, using telephone interviews. The programme was perceived by the participants as an effective means to improve individuals' awareness of eating disorders and their symptoms, motivation to change, and important health issues. Recovery was enhanced by individuals' determination and motivation to get better, the support available, their perseverance, sense of control, and personal confidence, and facilitating living environment. Chan, Richardson, and Richardson (2011) used mixed research methods to investigate intervention integrity and to identify key precursory factors among 70 Chinese lung cancer patients. The results show that the intervention conducted by two support nurses, in line with that planned at the outset of the study, achieved a high degree of consistency. Full adherence to the 20-minute muscle relaxation component was an important factor contributing to better symptom management. Another study by Hutchinson & St John (2012) using ground theory approach aimed at investigating strategies used by school nurses to promote adolescent boys' access to and engagement with school-based health services in Southeast Queensland, Australia. The central process identified from the nurses, including creating connections and encompassing three inter-related activities (facilitating communication, mediating contextual issues and bridging cultural issues), incorporate strategies that highlight ways for school nurses to engage boys to promote help-seeking from school-based health services.

The other **four articles** reported the use of advanced psychosocial interventions based on a theoretical framework or model, one for self-regulatory illness management in Koreans with chronic diseases, one for improvement of English proficiency among Asian Americans, **one for implementation of and barriers to chronic condition self-management in Australians, and another one for self-management ability among adults with type I diabetes mellitus in hospital setting.** In Yip's (2012) study, a health literacy model has been developed to guide the use of effective communication between individuals and their health care providers among limited English proficient populations in the context of information and communication technology. In addition, Jang and Yoo's (2012) literature review identified that there is a need for more research and clinical use of self-management programs based on Bandura's self-efficacy theory for Korean patients with hypertension and diabetes mellitus to enhance self-efficacy in regulation and management of their chronic diseases. **Similarly, Munt and Hutton (2012) reviewed research evidence between 1998 and 2008 on self-management ability in adults with type I diabetes mellitus. From the 16 publications reviewed, the adults with type I diabetes mellitus perceived their ability to self-manage as important and viewed themselves as 'expert' in their self-care. However, health professionals in hospital settings emphasized on biomedical care and considered the illness being poorly self-managed. Therefore, there has been a recognised difference on the perception towards patients' ability of self-management of their illness between patients themselves and health professionals. Paterson, Nayda, and Paterson (2012) reported the chronic illness conditions such as asthma as targeted health priorities and on the other hand, an increasing significant burden on the Australian health care system. Program and action plans for the chronic condition self-management should aim at the clients' different information literacy levels, age ranges and cultural variations, with their partnership in the decision making process**

of their own treatment and care planning. More research is required to produce more flexible, client-centred models of self-management of chronic illness to enhance practice development, especially giving more attention and support to children and adolescents.

The two final papers from the United Kingdom commented on the complexity and barriers to providing advanced nursing interventions for complex health conditions. Markey, Tilki, and Taylor explored some of the potential Irish specific barriers to providing anti-inflammatory care to non-Irish nationals in health care settings and their possible solutions. Increasing awareness in the Irish healthcare setting of the complexity of working trans-culturally is important to interrogate the concept of privilege and any racist practice. Nurses should be more consciously aware of personal, social and professional values that inform their attitudes and culturally competent practices. The authors also recommended on creating an environment of trust where critical reflection occurs, blame is avoided, risk managed, and new ideas developed, tested and evaluated. Nevertheless, the commentary written by Thompson and Clark (2012) provided a clear and pragmatic discussion on the multiple facets of complexity for both nursing and nursing interventions for patients with complex health problems. They emphasized the challenges in moving nursing nowadays towards a complex-responsive approach to interventions and research on various chronic disease conditions such as coronary heart disease and the aging population. Many of the interventions that nurses implement are not only complex in themselves but also are provided by organizations of diverse socio-cultural contexts and discrete delivery system. Therefore, research is recommended to better understand how the success of a complex intervention, or its health outcomes, is/are moderated by both care providers' and recipients' characteristics, the cultural context and setting in which the intervention occurs, and how the individual and combined elements of the intervention affect change.

In conclusion, this Special Issue **serves not only to provide** a channel to publish some of the few nursing research focusing on advanced interventions for people with complex health care needs but also **to enhance** awareness and stimulating thoughts and debates among nurses on the design of advanced healthcare interventions to address the complex needs of their patients.

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