



THE CHANGING ROLE OF NURSING

OPPORTUNITIES FOR NURSE-LED SERVICES IN THE MANAGEMENT OF CHRONIC DISEASE AND DIABETES IN THE UAE

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There is little debate that current and future healthcare is, and will continue to be, dominated by the prevention and management of increasingly complex chronic health disease; the UAE is no exception. Preventive and disease management services directed at groups and individuals at risk of unfavourable health outcomes are core to the make-up of an effective health system. The burden of non-communicable, chronic and diabetes-related diseases places a heavy strain on health service cost and service delivery requirements.

The UAE is faced with the challenge of identifying and developing

effective strategies for the prevention and management of the burgeoning prevalence of levels of chronic disease and diabetes, including the identification and development of appropriate health workforce and service development options.

Nursing and other allied health professionals possess a broad range of professional competencies and skills to provide preventive and follow-up services in an effective and cost-efficient manner. The addition of non-medical led services has significant ability to strengthen traditionally designed health systems.

WHAT IS CHRONIC DISEASE?

Chronic disease has been defined as illness that is prolonged in duration, does not often resolve spontaneously, and is rarely cured completely. Chronic diseases are complex and varied in terms of their nature, how they are caused and the extent of their impact on the community. While some chronic diseases make large contributions to premature death, others contribute more to disability. Features common to most chronic diseases include:

- Complex causes with multiple factors leading to their onset
- A long development period, for which there may be or not be any symptoms
- A prolonged course of illness, perhaps leading to other health complications
- Associated functional impairment or disability
- Usually require significant levels of behavioural and lifestyle change to support improvement
- Caring for the chronically ill commonly consumes 75% of a nation's healthcare resources. Non-communicable diseases (NCDs), inclusive of chronic disease, are the leading causes of death globally, killing more people each year than all other causes combined. The burden on the health service and community is extensive. "Chronic illness is a long journey during which care and support needs to be designed to best support and optimise a full life". Given the level of disease burden, "all staff, not just doctors, need to be viewed as part of the solution and encouraged to innovate and search for better ways of delivering appropriate care."

A SMALL GLIMPSE AT THE SCALE OF THE UAE CHALLENGE

The *National* newspaper (UAE) reported on 4 January 2013 that:

- Heart disease is the leading cause of death in the UAE and affects many patients in their mid-40s, i.e. between 10-15 years earlier than is most common in Europe
- In 2011, diseases of the circulatory system were the biggest killer Abu Dhabi alone, resulting in 1,089 deaths
- The average age of heart disease patients in the US and the UK is between 55-60; in the UAE it is between 40-45, with doctors often seeing patients as young as 20
- Junk food is killing us. It's not drugs or alcohol, nor cigarettes or shisha. It is food! Highly processed junk food is amongst the greatest threats to public health in the UAE.

Evidence exists that the problems are starting young. UAE-based researchers highlight concerns regarding the high levels of childhood obesity and the projected impact on the health of the incoming generation of Emirati adults. A recent Abu Dhabi study by Dr Abdullah Aljunaibi and team reported a level of 14.7% overweight and 18.9% obesity amongst participating students aged 6-19 years. Other studies report that by 2020, an estimated 32% of the adult population (age 20-79), including both UAE nationals and expatriates, may have diabetes or pre-diabetes. Medical costs attributable to diabetes and pre-diabetes in the UAE are forecast to increase to perhaps US\$1.04 billion (AED3.82 billion) by 2020, representing a 58% increase from an estimated US\$657 million (AED2.41 billion) in 2010.

THE NURSING WORKFORCE

The WHO (2010) *Global Status Report of Non-Communicable Diseases* notes and confirms that nursing is the largest single health profession within all health workforce groupings. The UAE employs approximately 30,000 nurses; 5,000 of which are employed within Abu Dhabi-based SEHA facilities alone.

Globally, the contributions of nurses and midwives form the backbone of primary healthcare services. Countries are increasingly →

THE GLOBAL BURDEN OF CHRONIC DISEASE AND DIABETES

The growing problem of chronic disease is well documented. In 2008 the World Health Organization (WHO) stated; "Today, non-communicable diseases (NCDs), mainly cardiovascular diseases, cancers, chronic respiratory diseases and diabetes, represent a major threat to human health and development. These four diseases are the world's biggest killers, causing an estimated 35 million deaths each year and 60% of all deaths globally, with 80% in low- and middle-income countries".

looking to nurses, midwives and allied health professionals to provide prevention and disease management services in response to the burgeoning burden of non-communicable and chronic disease worldwide. Better utilisation of the nursing and midwifery workforce is a key strategy being used by governments to strengthen healthcare systems and capacity.

ADVANCED NURSING ROLES: WHAT CAN AND DO NURSES DO?

Advanced practice roles involve a broad range of responsibilities within the legislated scope of practice and accountability frameworks of the specific nation/health system. Roles include, but are not limited to, patient counselling and health education; physiological and psychological assessment; patient screening for disease risk factors and early signs of illness; ordering diagnostic tests; providing and prescribing and delivering treatment services (within scope of practice); admitting or discharging patients from their caseload and referring patients to other healthcare providers; education, training and service improvement; research and evaluation; and; work in partnership with medical specialists and multi-disciplinary teams.

NURSE-LED CLINICS

Nurse-led services provide a structure in which advanced nursing practice roles can be implemented. Integrated nurse-led services and clinics are increasing innovations amongst health service re-design strategies. These models often include a nurse-led clinic model where the nurse has their own patient caseload and an increase in the autonomy of the nursing role, with the ability to admit and discharge patients from the clinic and/or to refer onto more appropriate healthcare colleagues.

'A broad definition of a nurse-led clinic is based on what nursing activities are performed at the site. Nurses within a nurse-led clinic assume their own patient caseloads, provide an educative role to patients to promote health, provide psychological support, monitor the patient's condition and perform nursing interventions. Advanced practice registered nurses, usually nurse practitioners, may have expanded roles within these clinics such as nurse prescribing authorities, depending on the scope of practice defined by their local state or national government and professional legislative framework.

Moves towards nurse-led services are in keeping with WHO and EMRO guidelines that states; "since the function of a profession is, by definition, to serve society, nursing, in common with other health professions, should be encouraged to serve to its maximum capability".

RATIONALE FOR NURSE-LED SERVICES AND ADVANCED PRACTICE ROLES

The aforementioned growing burden of chronic disease and patient demand has significantly increased general practice, hospital and medical speciality workloads. A December 2008 report published in the Australian Family Physician about the need for nurse-led services recorded chronic disease management consultations in general practice at 35% with projected levels at 50% by 2051. The researchers noted that under current workforce conditions, doctors would be unable to meet service demands. Simply put, the current and projected burden of disease is too high to be managed by the medical professional alone. Further, many of the associated patient education, counselling and behavioural support service requirements can be provided by nurses and other members of the healthcare team. Australian and international evidence tells us that effective chronic disease prevention and management requires effective:

- Systems: Chronic disease registers, patient follow-up, recall and

review mechanisms and patient information systems

- Education and support: Patient information and education including services information regarding prevention and self-management
- Community linkages: Connections to community resources and supports
- Effective team work: Effective links between medical specialists and all members of the healthcare team
- Nurse-led service delivery models and integrative collaborative care relieves medical practitioner workload, increases services to patients and improves patient outcomes.

EMERGING EVIDENCE: EARLY EVALUATIVE STUDIES

An increasing number of early evaluative studies are appearing in the literature highlighting the effectiveness of integrative nurse-led services. For example, trained nurses and general practitioners (GPs) are equally competent in providing primary care for common health issues, according to a Spanish study published online March 21, 2013 in the *Journal of Advanced Nursing*. In this study, a trial involving 1,461 adult patients seen for same-day appointments at 38 practices, Mireia Fàbregas, MD, from the Institut Català de la Salut, in Barcelona, Spain, and colleagues found that nurses successfully resolved 86.3% of cases randomly assigned to their care. The rate was similar to that achieved by GPs after adjustment for individual patient variables.

In a similar way, the April 2012 new sections of the *Australian Journal of Nursing* reports improvements in risk management, adherence and perception of care from nurse-led teams in chronic disease management. Results of the COACH (Community Outreach & Cardiovascular Health) project report a significant improvement in total cholesterol and lowering of blood pressure amongst participating patients, along with reported patient perceptions that the quality of chronic illness care was significantly better under this model.

Of particular relevance to the UAE, is the report of an innovative model using specialist and general nurses in the provision of nurse-led services for patients requiring support and management of chronic kidney disease and end-stage renal failure. Researched by Frances Wong and team (2010) and published in the *International Journal of Nursing Studies*, the study reports improvement in diet non-adherence, CAPD non-adherence, aspects of quality-of-life and satisfaction with care. These early evaluative studies conclude that redesigning chronic disease management services helps to maximise the use of different levels of skills and resources across the health workforce to bring about positive outcomes.

NEW OPPORTUNITIES FOR UAE NURSES

In keeping with global directions, UAE-based schools of nursing now offering degree level graduate nursing programmes as the minimum qualification for entry to the profession. The UAE is also providing bridging for UAE nurses to upgrade to existing qualifications from diploma to degree status thus allowing progression to speciality and advanced qualifications as post graduate programmes become available across the nation. The next five years will see significant further developments in nursing practice including achievement of the UAE, Nursing and Midwifery Council published strategic objectives to support the development of speciality and advanced practice roles and UAE-based PhD programmes in nursing. These developments will provide the platform for significant health service re-design including the introduction of nurse-led services for the prevention and management of chronic disease and diabetes. 📄

REFERENCES

References available on request (magazine@informa.com)
