Guest editorial

International Nurses’ Day and the future burden of kidney disease

Yanyan Gong & Bettina Douglas

Every year nurses remember the legacy of Florence Nightingale, celebrating International Nurses’ Day on 12 May, her birthday. Most know about her contribution to the evolution of nursing as a profession through the foundation of the school of nursing at St Thomas’ Hospital, London. Many would not know that she is also acclaimed as a pioneer of statistics.

Thanks to her early education by her father, she was a skilled mathematician. She was interested in the use of statistics in social science pioneered by Adolphe Quetelet. During the Crimean War, the death rate was higher in the hospital at Scutari than on the battlefield. After the war, Miss Nightingale applied statistical techniques to understand the causes of the high mortality rate. Her findings challenged her beliefs and assumptions (Small 1998). This approach to data set the scene for modern health care data collection and analysis, including of particular diseases.

Kidney disease is a significant problem for our community. It represents a huge burden for affected individuals and their families, a large part of the workload of health services and substantial financial costs to the health budget (AIHW 2009a). Analysing kidney disease (both chronic and end-stage) is therefore important in order to improve our understanding, assist with service planning – and maybe even challenge some assumptions about the problem.

In response to the need to monitor chronic kidney disease (CKD) regularly in Australia, the National Centre for Monitoring Chronic Kidney Disease (the National Centre) was established at the Australian Institute of Health and Welfare (AIHW) in late 2007 (AIHW 2009b). The National Centre analyses and reports on all aspects of CKD to inform policy makers, service planners and providers, and the general public.

Estimating how common CKD is, and how many people with end-stage kidney disease (ESKD) will commence treatment each year in the future, is an important foundation for determining its burden on the health of Australians and its impact on the health system. A recent report by the National Centre, Projections of the incidence of treated end-stage kidney disease in Australia, 2010–2020 estimated the incidence (number of new cases) of ESKD treated with regular dialysis or kidney transplantation (treated ESKD) in the next decade (AIHW 2011) (see box for key findings).

The report projected that between 2009 and 2020 the incidence rate of treated ESKD will increase by close to 80% (AIHW 2011). This translates to a doubling in the number of new cases.

The projected increase was mainly among older patients. In 1996, less than 1 in 10 new cases of treated ESKD were older than 74 years; by 2020, this number is projected to triple.

Key findings from the report Projections of the incidence of end-stage kidney disease in Australia, 2010-2020 (AIHW 2011):

- The incidence rate of treated ESKD is projected to increase by nearly 80% in Australia from 2009 to 2020 (11 to 19 per 100,000 people).
- Diabetes is expected to contribute considerably to the increase in treated ESKD. By 2020, nearly two-thirds of ESKD patients will have diabetes as a comorbidity when commencing treatment (64% compared to 45% in 2009).
- The Northern Territory is projected to have the highest incidence rate of treated ESKD among all jurisdictions (from 32 cases per 100,000 people in 2009 to 45 cases per 100,000 people in 2020). Small variations in the projected incidence rates were observed among the rest of the jurisdictions; but the rates are projected to be similar to the national rate.

Nurses are the largest professional group meeting the challenges of kidney disease at the prevention, primary and tertiary care levels. The challenges that nurses face involve education, workforce, research and strong leadership in order to meet the future needs of people with CKD. On 12 May, International Nurses’ Day, let us reflect on what Florence may have expected of us and what we are doing for the people who need us most. Be proud of our achievements but do not be satisfied … satisfaction may lead to complacency, which we can’t allow given the future challenges nurses face caring for the ever-increasing number of people with CKD.

References

AIHW. (2009b). Outline of the National Centre for Monitoring Chronic Kidney Disease. Cat. no. PHE 108. Canberra: AIHW.

Author details: Ms Yanyan Gong, National Centre for Monitoring Chronic Kidney Disease, Australian Institute of Health and Welfare, ACT, Australia; Bettina Douglas, Nurse Practitioner, Chronic Kidney Disease Clinic, Princess Alexandra Hospital and Conjoint Senior Lecturer School of Nursing & Midwifery University of Queensland, QLD, Australia

Correspondence to: Bettina Douglas, CKD Clinic, Level 1, B2 Burke Street Centre via Princess Alexandra Hospital, Ipswich Road, Woolloongabba, QLD 4102, Australia bettina_douglas@health.qld.gov.au
Palindrome Chronic Haemodialysis Catheter

- Decrease the likelihood of clot formation*
- Minimise fibrin sheath dissemination*

Premium performance for improved patient outcomes