

Review Article

Exploring role of independent nurse practitioners in prevention and management of NCDs in India

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Non communicable disease (NCD) are a major clinical and public health challenge for India. The existing health care system finds it difficult to cope with the rapidly rising burden of NCD. One third of India's health care workforce is composed of nurses. Similarities between nursing and NCD care include the emphasis on behavioural change, lifestyle modification and self-management. Diabetes and NCD nursing exist as a separate specialty in many parts of the world. This article calls for the utilization of nursing professionals in the management of NCD. Through JIMA, the authors call for the establishment of NCD nursing as a separate specialization, and suggest the outlines of a curriculum. Such a move will help improve the quality of NCD care in India. [J Indian Med Assoc 2018; 116: 54-6]

Key words : Biopsychosocial, diabetes, diabetes nursing, health care delivery, NCD.

Non-communicable disease (NCD) have become endemic to India, and show no sign of abating in the near or distant future. As the prevalence of these non-infectious diseases is in constant rise, the Government of India has taken proactive steps to tackle the situation¹. The National Programme for Diabetes, Cardiovascular Disease and Stroke (NPCDCS) had been approved in 2010, with aim to prevent risk factors of NCDs. This is aimed to be achieved through behavior change communication, early diagnosis and treatment, capacity building of human resources, surveillance, monitoring and evaluation². State level efforts have complemented the work being done by NPCDCS. The first state to begin an NCD control programme is Kerala, which has emphasized prevention, diagnosis and management at primary, secondary and tertiary levels of health care³. Tamil Nadu⁴, Madhya Pradesh, Goa, Gujarat and Pondicherry are some other states with active NCD and diabetes control programmes.

The Burden :

The burden of NCD, however, is heavy. India is home to large populations of persons living with diabetes, cardiovascular disease, hypertension and stroke. The National Family Health Survey (NFHS) 4 reveals the high burden of obesity, high blood pressure and 'high blood sugar' in India⁵.

Such a huge patient load cannot be handled by doctors

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- Diabetes and NCD nursing exist as a separate specialty in many parts of the world.
- NCD nursing can fight NCD epidemic and improve the quality of NCD care in India.

alone. Statistics⁶ reveal that the ratio of all allopathic doctors is 61.5 per 100,000 population. Only 42.7% of all 'allopathic doctors' in India have a medical qualification, leave alone qualification in NCD training. Just 18.2% of allopathic doctors have a post graduate degree. Information from professional organizations of cardiologists, endocrinologists, neurologists and internists shows that there are very few physicians who are qualified in managing NCD.

The Challenge :

While the medical profession works hard to control NCD, its efforts are not enough. The Diabetes Attitudes Wishes and Needs (DAWN)², has provided evidence that diabetes care professionals are not always able to meet the expectations of their patients⁷. It is also well accepted that management of diabetes (or any other metabolic illness, for that matter) should not occur in isolation.

The Role of Nursing :

A comprehensive approach to preventing, identifying and managing NCD must be followed, while ensuring inter disciplinary and inter professional teamwork. One significant health care professions is nursing. Nursing plays an integral role in acute, chronic and palliative care, as

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well as public health. The ratio of 'all nurses and midwives' is 61.3/100000 population in India. Nurses account for 30.5% of the total health workforce of India. In states such as Kerala, this proportion goes up to 47.0%. Seventeen states have more nurses than doctors, with Odisha reporting a doctor nurse ratio of 0.4.

When nurses and midwives are analyzed, only 23.7% have a graduate qualification or more. Just 1.5% of all nurses and midwives have a post graduate degree.

Spectrum of Nursing :

The nursing profession in India is governed by the Indian Nursing Act, 1947. This act has been modified to keep pace with changing times. Just as medical science has expanded, so has nursing. Conventional nursing education includes five specialties: Medical-Surgical Nursing, Pediatric Nursing, Psychiatric Nursing, Community Health Nursing and Obstetric and Gynecological Nursing. A recent amendment has increased the number of nursing specialties. Newer subjects include Critical Care Nursing, Cardiothoracic Nursing, Oncological Nursing, Neurosciences Nursing, Orthopedics and Rehabilitation Nursing, Nephro-urological Nursing and Gastroenterological Nursing. These divisions are meant to foster quality in nursing care and research. The increasing burden of NCD in India, however, calls for the institution of a dedicated cadre of NCD nurses.

Unique Features of NCD Nursing :

NCD management is different from that of acute or communicable disease. NCD are lifestyle disorders that share a common group of risk factors, including unhealthy eating, physical inactivity, stress, and tobacco use. Thus behavior change becomes an integral part of NCD care. NCD management is based upon an understanding of the biopsychosocial construct of health, and is best offered through the chronic disease model, rather than the acute illness model. NCD care involves greater communication between patient and provider, and calls for internalization of the concept of responsible patient centered care. These unique features of NCD suggest that NCD nursing is best carried out by specialized personnel.

Global Situation :

While endocrine and diabetes nursing is a globally well established specialty, with high profile professional organizations such as Foundation of European Nurses in Diabetes (FEND), NCD nursing is still in its infancy. The state of Tamil Nadu has sanctioned posts of NCD nursing officers

in health centers⁸, but there is no specific educational qualification mandated for this corps. The tiny country of Tonga in the Pacific Ocean, has created a new class of qualified NCD nurses, who have been trained to handle these conditions. Nurses in most of the developing countries has seriously taken up the role as preventive, early diagnosis, referral, educative and treatment management role.

NCD Nursing Curriculum :

To handle India's NCD load a specified post graduate degree or certificate course in NCD nursing is required. Such a course should have a comprehensive curriculum, including diabetes, cardiovascular disease, stroke chronic lung disease and chronic kidney disease. Training should focus on prevention early detection, and management of these conditions. Both hard skills and soft skills, including communication and motivational theories, must be taught. NCD nursing will have a strong component of community nursing as chronic disease mitigation needs active support from family and society. NCD nursing will also overlap with medical nursing. An NCD nurse practitioner must be aware of the complexities of medical management of diabetes, hypertension, dyslipidemia, heart failure, sleep apnea and chronic obstructive pulmonary disease, amongst other conditions.

Potential Unlimited :

NCD nursing once established, has the potential to arrest the burgeoning metabolic disease epidemic in the country. NCD nurse practitioners will be able to offer life style and non pharmacological intervention, medication counseling and insulin technique counseling. The logical next step will be to allow nurse practitioners to initiate and titrate insulin regimes and doses, while assessing glycemic and metabolic status of patients. NCD nursing will also improve the quality of secondary and tertiary care in heart failure and lung disease, by monitoring prescribed therapy and suggesting modifications. Thus, creating a corps of independent NCD nurse practitioners will contribute to prevention and management of the NCD epidemic faced by India.

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