

## Nurse Practitioners: An Untapped Resource on the Overburdened Health System

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## Dear editor,

Health care systems globally are facing challenges of meeting the growing demand for primary care services due to a shortage of primary care physicians. Policy makers and administrators are searching for solutions to increase the primary care capacity. While people of all ages receive emergency and critical care services across the world, the elderly population continues to exhaust a greater proportion of these services. The aging population and high prevalence of chronic illness have led to an increase in the demand for primary care that the current supply of primary health care providers may be unable to meet. With the impending rise in demand for health services, an effective utilization of the workforce is paramount to ensure high-quality yet costeffective health service delivery. Efforts are underway for measures to enhance productivity through increasing the capacity of the workforce.

The effective utilization of nurse practitioners (NPs) has been proposed as a solution. The global annual growth of the NP workforce has been estimated to be between three to nine times greater compared with physicians. The nomenclature varies internationally. The "NP" title is used in Australia, Belgium, Canada, Sweden, the United Kingdom, and the United States, whereas the advanced practice nurses "APN" title is used in Switzerland, Singapore, and South Korea.<sup>2</sup> Nonetheless, NPs and APNs (NP/APNs) are registered nurses (RNs) "who acquired the expert knowledge base, complex decision-making skills, and clinical competencies for expanded practice" and enter the workforce with a master's degree.<sup>3</sup> The transition from RN to NP is a significant career role transition. It is often difficult and can be stressful across various settings. During this time, there is a shift from an experienced, often expert status in the RN role to an inexperienced, novice status in the NP role. During NP role transition, there are different personal and environmental factors that are thought to promote the transition, and two of these factors include experience and receiving a formal orientation. Experience is believed to be important for skill acquisition and developing competency in nursing practice. Prior RN experience is reported to provide a foundation and help facilitate the transition to the NP role, and NPs with less RN experience are thought to require more time to transition into the new role. Alternatively, the relationship between prior RN experience and NP role transition may not be solely explained by the amount of RN experience but also the type of RN experience gained.

This advanced practice role was first introduced in the 1960s as a solution to the lack of primary care physicians, to meet the primary care needs of the rural and underserved populations. Primary care has first contact with patients and, subsequently, provides continuity of care within the health care system through the coordination of care according to patients' needs. To fulfill primary care needs, NP/APNs in this setting are trained generalists who have a breadth of knowledge to render a wide scope of care.

NP role has extended to other health care settings such as the acute care. Emergency and primary care advanced nursing practice do share similarities in that they serve as firstcontact access to health care, but the acuity of the patient manifestations delineates the two. Unlike in primary care

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Thieme Medical and Scientific Publishers Pvt. Ltd., A-12, 2nd Floor, Sector 2, Noida-201301 UP, India NP/APNs, emergency NP/APNs are trained to manage patients with acute life- or limb-threatening conditions.<sup>1</sup> This expanded practice allows nurses to assume some medical tasks typically performed by physicians, aiming at not only increasing the access to health care and service efficiency but also eventually mitigating the cost of health services.

Although NP services in the emergency setting did reduce waiting time and provide care comparable to that of a midgrade physician, the cost of NP services is at times higher than that of resident physicians. On the other hand, the use of NPs has shown to reduce the cost of emergency and intensive care services. Consequently, the cost-effectiveness of advanced nursing practice in the emergency and critical care settings has remained inconclusive.

The history of Japanese NPs started in the year 2010, when the Government decided to create the NP system. In 2012, the training system was started with masters course, with majors in health sciences. Since 2014, the main law for NP system was changed, which came into effect from the following year.

Japanese NPs work under directions of physicians, prescribe medicines under directions, should have more than 5 years' experience as a RN, and its role is still expanding. In contrast, the western NPs have an independent relation with the physician depending on the state of work, can prescribe medicines, and have a wide range of work involved.

If NP/APNs can indeed provide competent and safe care in adverse settings, greater access to emergency and critical care services will be available, thereby strengthening the workforce to fulfill the escalating health care demands not only in developed nations, but also in places where there is a huge shortage of qualified doctors.

## References

- 1 Hirshon JM, Risko N, Calvello EJ, et al; Acute Care Research Collaborative at the University of Maryland Global Health Initiative. Health systems and services: the role of acute care. Bull World Health Organ 2013;91(05):386–388
- 2 Pulcini J, Jelic M, Gul R, Loke AY. An international survey on advanced practice nursing education, practice, and regulation. J Nurs Scholarsh 2010;42(01):31–39
- 3 Schober M, Affara FA. International Council of Nurses: Advanced Nursing Practice. Oxford: Blackwell Pub; 2006