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COMMENTARY

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Team-based care for hypertensive patients is essential in low- and middle-income countries

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In 2017, the World Hypertension League announced a new resource to support the development of hypertension training programmes for healthcare professionals.[1] Three key elements are assessed with the tool: knowledge, attitudes, and practice such that the tool has been referred to as a KAP survey. The survey is a useful instrument to identify where gaps in KAP lie and in which healthcare professionals. For example, in addition to testing knowledge and practice for prescribing antihypertensive drug therapy, the survey assesses confidence to prescribe and attitudes of healthcare professionals toward task sharing or shifting for such functions. As a result, the survey can also be used to examine practice against national and international guidelines and inform implementation of revised guidelines and practice if necessary.

The article by Myanganbayar et al presents the results of a KAP survey conducted in over 800 Mongolian healthcare professionals, including general practitioners, family doctors, internal medicine specialists, and nurses. One of the main aims in conducting the survey was to compare results from physicians with those of nurses. Pharmacists were not included. The survey did generate critical information to inform training requirements, for example, to increase clinicians' confidence in prescribing more than two antihypertensive medications.

Importantly, the survey also found that nurses were open to more task sharing for hypertension management, including measuring blood pressure, assessing cardiovascular risk, counseling about lifestyle interventions, and prescribing or changing antihypertensive drugs according to a physician-approved pathway or algorithm (Myanganbayar et al Suppl. Table 4). In contrast, physicians were much less supportive of nurses' task sharing medication prescription especially, possibly reflecting the low confidence of physicians themselves to prescribe more complex treatment plans. However, half of the nurses failed to respond to these questions on task sharing and very few responded to more specific questions around knowledge and confidence for medication prescription (Myanganbayar et al Suppl. Table 8), possibly as this was not seen as within their current scope of practice. Indeed, the authors state that current regulations within Mongolia preclude nurses from prescribing.

The debate around non-medical prescribing (NMP) has been ongoing for many years. In 1991, the United States introduced prescribing by pharmacists under collaborative drug therapy agreements with authorized practitioners.[2] In 2003, the United Kingdom introduced a similar practice of supplementary prescribing for pharmacists and nurses, expanding this in 2005 to enable training for independent prescribing by pharmacists, nurses, and other allied health professionals.[3]

In 2016, a Cochrane systematic review compared NMP by nurses and pharmacists to usual care.[4] Of the 46 randomized controlled trials included 42 were conducted in high-income countries; of which 12 assessed the impact on hypertension, concluding NMP resulted in significantly lower mean systolic blood pressure at 12 months. None of the four studies from low- to middle-income countries (LMICs; Thailand, South Africa, Uganda, Colombia) presented data on hypertension. However, this approach has proven to be successful in South Africa where, without the input of physicians, health workers achieved control in 68% of patients with hypertension.[5] In Cameroon, another LMIC, a nurse-led protocol resulted in mean systolic and diastolic blood pressure reductions of 11.7/7.8 mm Hg in 454 patients over 25 months.[6]

While population BP levels are decreasing in high-income countries, in LMICs population BP is increasing[7] as is the burden of stroke.[8] In East Asia and other regions, hypertension reduction

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offers the largest benefit for reducing premature cardiovascular disease mortality.[9] South Africa is one example of an LMIC that has enabled nurses, nurse practitioners, and clinical associates (mid-level health workers) through task sharing, support, and supervision to prescribe blood pressure and other medications.

In LMICs, task sharing generally between clinicians, nurses, community health workers and lay counselors for communicable disease can generate cost savings and improve efficiency in health services.[10] Furthermore, the findings of Myanganbayar et al, that nurses rated medication affordability and patients' agreement with the treatment plan higher on average than physicians, potentially align with the Cochrane Review findings that NMP is likely to improve patient adherence.[4]

Previous work in both high- and low- to middle-income countries provides useful frameworks for implementing NMP and informs potential facilitators and barriers to implementation.[5,6,11] The study from Myanganbayar et al suggests that many nurses are willing to take on NMP with training and support. Due to the low clinician to patient ratio in many LMICs, the World Health Organization's HEARTS package encourages and empowers Health Ministries to implement team-based care.[12] With more countries implementing this approach, hypertensive patients in low-resource settings may have a much better prognosis.

CONFLICT OF INTEREST

AES contributed to the WHO Hearts package in her capacity as the President of the International Society of Hypertension. The authors have no further conflict of interest to disclose.

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