Malaysian Family Physician
Official Journal of the Academy of Family Physicians of Malaysia
and Family Medicine Specialist Association of Malaysia

LETTER TO EDITOR

Mixed messages and the disparity between various levels of care in chronic kidney disease management

Jazlan Jamaluddin, Mohd Yusaini Mohd Yusri

Jamaluddin J, Mohd-Yusri MY. Mixed messages and the disparity between various levels of care in chronic kidney disease management. *Malays Fam Physician.* 2021;17(2):121-122. https://doi.org/10.51866/lte.171

Keywords:
Chronic renal insufficiency, Primary healthcare, Malaysia

Authors:

Jazlan Jamaluddin
(Corresponding author)
MD (Moscow), MMed (Family Medicine) (UiTM)
Klinik Kesihatan Kuala Lumpur, Jalan Temerloh, Titiwangsa, Kuala Lumpur, Malaysia
Email: jazlanjamaluddin@gmail.com

Mohd Yusaini Mohd Yusri
MBBS (Monash), MMed (Family Medicine) (UiTM)
Klinik Kesihatan Seremban, Jalan Rasah, Seremban, Malaysia

Dear Editor-in-Chief,

We have read the review article by Cheo SW et al.[1] (the authors) with great interest. The authors have concisely summarised a practical approach to the management of chronic kidney disease (CKD) in primary care. Patients with CKD are most often managed in primary care; therefore, primary care doctors play a significant role in the management of CKD. Local national guidelines have recently been updated to reflect the most recent trends in management of CKD at the time of development and further guide clinical management, especially in primary care. However, we found several recommendations in the review article that did not coincide with the most recent Malaysian clinical practice guidelines (CPGs) on the management of CKD in adults.[2]

First, the authors recommend that all patients with CKD should undergo an ultrasound (USG). In contrast, the CPGs recommend that USG should be performed only if indicated, namely in patients with rapid deterioration of renal function, presence of haematuria, symptoms or history of urinary tract obstruction, family history of polycystic kidney disease and age over 20 years, or when a renal biopsy is indicated. This is based on the first edition of the CPGs, which reference the older national CKD guidelines from the United Kingdom (UK) Royal College of Physicians from 2008. The guidelines have been superseded by two newer editions of the national guidelines. In the latest guidelines published late last year, only one additional indication was added: if a patient's glomerular filtration rate (GFR) is less than 30 ml/min/1.73 m^2 (GFR category G4 or G5).[3] Considering that a renal USG generally does not change the management of CKD and its scarcity in primary care due to various limitations, we tend to agree with the recommendations of the CPGs.

Second, the authors' recommended blood pressure (BP) target for patients with diabetes or those without diabetes and with proteinuria >1 g/day was <130/80 mmHg, while the CPGs recommend a BP target of ≤130/80 mmHg (SBP 120–130 mmHg). For patients without diabetes and with proteinuria <1 g/day, the target BP recommended by the authors was <140/90 mmHg, as compared to the ≤140/90 mmHg (SBP 120–140 mmHg) recommended in the CPGs. Although these two recommendations differ only in their mathematical symbols, it is important to understand how these targets were determined based on various studies. More importantly, these targets should be tailored not only to patients' comorbidities, but also to various biopsychosocial aspects of a patient, considering the potential adverse effects of a strict BP target.

Third, the authors recommended treatment with lipid-lowering therapy only if patients fulfil certain criteria. This recommendation was based on an American guideline for primary care developed by internists and nephrologists, in addition to the KDIGO guideline published in 2013. Meanwhile, the authors acknowledged the association between cardiovascular (CV) morbidity and mortality and CKD. Similarly, the CPGs recognise the high CV risk in patients with CKD. Therefore, the CPGs recommend the use of statins in patients with CKD for primary and secondary prevention of CV events. This recommendation is echoed in the 2019 European guidelines for the management of dyslipidaemias, which has also been adopted by the latest CPGs on the management of type 2 diabetes.[4,5] Comprehensive management of patients with CKD, including optimisation of their overall CV risk, is paramount in reducing overall morbidity and mortality.

LETTER TO EDITOR

Fourth, the authors suggest routine measurement of serum parathyroid hormone (PTH) or even bicarbonate for patients with CKD stage G3 and above. However, neither test has been recommended for routine measurement in the CPGs. Nevertheless, the CPGs recommend the measurement of serum calcium, phosphate, and alkaline phosphatase (ALP) for monitoring of CKD-associated mineral and bone disorder (MBD). Similarly, the UK and KDIGO guidelines recommend repeating PTH measurement only in advanced CKD or CKD progression.[3,6] Because the principle of treatment for CKD-MBD is to reduce the phosphate level to a normal level, routine measurement of PTH in primary care is not cost effective. Although evidence to support the measurement of sodium bicarbonate in CKD is emerging, the guidelines that the authors referenced only recommend the measurement of sodium bicarbonate in patients with hyperkalaemia and metabolic acidosis. However, the authors and CPGs already recommend that these patients, specifically those with persistent serum potassium abnormalities, be referred to nephrology. Furthermore, the serum bicarbonate test is sensitive to temperature and is not widely available in primary care. Therefore, understandably, the CPGs have not recommended these tests be performed in primary care.

Finally, mixed and conflicting recommendations, even those from various local guidelines, are often encountered, especially because medicine is evolving so rapidly. Ideally, any deviation from major guidelines or new updates should always be explained to readers. We applaud the developmental group of our national guidelines for including practitioners from various levels of care, including primary care doctors and family medicine specialists, in the development of the CPGs. Practical approaches are important to manage patients in primary care who already face various challenges, including limited availability of more effective medications, such as single-pill combination antihypertensives, sodium-glucose co-transporter 2 inhibitors, lipid-lowering therapy, monitoring equipment, and investigation facilities. To combat the CKD epidemic, it is time to increase emphasis on preventive care, especially in primary care, which has proven to be more cost-effective. This would include better allocation of treatment options and investigation facilities. Furthermore, shared decision-making and close collaboration between different levels of healthcare should be strengthened to successfully manage CKD.

References

1. Cheo SW, Low QJ, Lim TH, Mak WW, Alexander C, Yip K. A practical approach to chronic kidney disease in primary care. *Malays Fam Physician*. 2022;17(1):10-19. Published 2022 Mar 2. doi:10.51866/rv1186

2. Ministry of Health Malaysia. *Clinical Practice Guidelines: Management of Chronic Kidney Disease (2nd Edition)*. 2nd ed. Malaysian Health Technology Assessment Section (MaHTAS); 2018.

3. National Institute for Health and Care Excellence. *Chronic Kidney Disease: Assessment and Management (NICE Guideline 203)*; 2021.

4. Mach F, Baigent C, Catapano AL, et al. 2019 ESC/EAS Guidelines for the management of dyslipidaemias: Lipid modification to reduce cardiovascular risk. *Eur Heart J*. 2020;41(1):111-188. doi:10.1093/eurheartj/ehz455

5. Ministry of Health Malaysia. *Clinical Practice Guidelines: Management of Type 2 Diabetes Mellitus (6th Edition)*. 6th ed. Malaysian Health Technology Assessment Section (MaHTAS); 2020.

6. Kidney Disease: Improving Global Outcomes (KDIGO) CKD-MBD Update Work. KDIGO 2017 Clinical Practice Guideline Update for the Diagnosis, Evaluation, Prevention, and Treatment of Chronic Kidney Disease–Mineral and Bone Disorder (CKD-MBD). *Kidney Int Suppl*. 2017;7(1):1-59. doi:10.1016/j.kisu.2017.04.001