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## **Effectiveness of Multidisciplinary Care in CKD Patients**

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Chronic kidney disease (CKD) has been recognized as a chronic disease that causes public health problem worldwide, including Thailand. The global prevalence of CKD is about 13.4% and up to 17.5% in Thailand. Progression of disease to end-stage kidney disease (ESKD) leading to initiation of kidney replacement therapy (KRT) cause more burden to patient and caregiver. The treatment goal of these patients is to reduce risks of kidney disease progression and cardiovascular disease.

Multidisciplinary care is a group of healthcare workers from different professions (e.g., nephrologist, nurse, dietitian, pharmacist, etc.), each providing specific services to the patient. Previously, effectiveness of multidisciplinary care in CKD patients has been inconclusive. Meta-analysis was conducted and found that MDC associated with lower risk of all-cause mortality, starting dialysis, lower risk of temporal catheterization for dialysis, decreased hospitalization rates and slow declined of estimated Glomerular filtration rate (eGFR).<sup>(1)</sup>

There have been studies on MDC have been published in Thailand. One study showed integrated CKD care can delay CKD progression in resource-limited setting in rural communities compared with standard care.<sup>(2)</sup> Another study in primary care setting also showed the benefit of MDC.<sup>(3)</sup> Bhumibol Adulyadej hospital (BAH) is a tertiary care hospital in the capital of Thailand. MDC in this institute is one of the initiators for MDC projects in Thailand since 2009. Therefore, we conducted MAKE CKD study to compare effectiveness of care in patients with CKD stage G3b to 4 between MDC and usual outpatient care (UOC) by nephrologists or nephrology fellows in our hospital.

After 1:1 propensity score matching, 822 patients were included. During the mean follow up of 3.3 years, rate of the primary end point (composite of cardiovascular or renal mortality, 40% eGFR decline and initiation of long-term kidney replacement therapy) was lower in MDC group than UOC group (24.1% vs. 38.9%; hazard ratio [HR], 0.66; 95% confidence interval [CI], 0.52 to 0.86;  $P=0.002$ ). According to subgroup analysis, diabetic patients will benefit the most from MDC.

In conclusion, multidisciplinary CKD care showed benefits over usual outpatient care on major adverse kidney events in patients with CKD especially in diabetes.

## **References**

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