

KSN 2016 Abstract Submission

CKD & associated complications

The Community-based Network in Management of Chronic Kidney Disease: Phathumtani Model

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Background: Chronic kidney disease (CKD) is a major problem in healthcare system because its prevalence is increasing worldwide and it can progress to end stage renal disease (ESRD). The well-designed program in systematic management from the collaboration between policy makers, healthcare personnels (HCPs) working in service-based hospitals and in academic-based hospitals is a strategy to lower the number of ESRD patients.

To present a model caring CKD patients from diabetes (DM) and hypertension (HT) in the network of Phathumtani province and outcomes.

Methods: The network of CKD care was prepared step by step and started in 2014. We set up the local guideline of CKD care to be used by HCPs in primary cared level which were composed of primary care clinic (PCUs) and community hospitals. The referral system of CKD patients was designed and agreed among HCPs working in PCUs, community hospitals, and Phathumtani hospital which was a service-based tertiary care hospital. The HRH Princess Maha Chakri Sirindhorn Medical Center (MSMC), Srinakharinwirot University provided training in CKD care, visiting CKD clinics, and giving suggestion to solve problems. The Phathumtani Public Health office collected and monitored data. The National Health Security Office Region 4 (Saraburi) provided budget for training and educational tools.

Results: There were 116 PCUs (99 PCUs belonged to the government and 17 PCUs belonged to the private sector) and 7 community hospitals joining in this network. Data was collected from January 2014 to April 2016. The number of patients with DM with or without HT, and HT were 82,187, 57,425, 72,830 cases, respectively. The number of patients screened and diagnosed CKD were 15,298 (24.45%) cases in 2014, 20,683 (28.21%) cases in 2015, and 24,690 (13.60%) cases in 4 months of 2016. The percentage of CKD patients with slow progression defined by the rate of decline estimated GFR less than 4 ml/min/1.73m²/year in 2014, 2015, and 4 months in 2016 were 72%, 56% and 63%, respectively. The incidence of unplanned dialysis at Phathumtani hospital was reduced from 3.4% in 2014 to 1.56% in 2015.

Conclusion: The percentage of screening and diagnosed CKD patients is increased after the initiation of community-based network of CKD care, Phathumtani model. The percentage of CKD patients with slow progression has trend to improve. This network has benefit to lower incidence of unplanned dialysis in tertiary care hospital.