

The changing patterns of access overtime to the renal replacement therapy programme in Thailand

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Accepted on 6 September 2019

Abstract

Based on projected numbers, approximately only 50% of those requiring renal replacement therapy (RRT) receive it. Many patients who require RRT live in low- and middle-income countries. The objective of this study was to examine the changing pattern over time of entry into the RRT programme in Thailand following RRT's inclusion in the Universal Coverage Scheme. This study was an ecological study using the age-period-cohort analysis to look at dialysis registration and kidney transplant trends during RRT programme implementation. Data from 2008 to 2016 of patients diagnosed with end-stage renal disease (ESRD) were obtained from the National Health Security Office. The study found that the numbers of new patients with ESRD, aged 20–69, registered with the dialysis programme increased over time. For patients aged 20–40 years, the dialysis programme took up to 400 new patients for every 1000 new ESRD diagnoses. For kidney transplant, the rates increased slowly. The kidney transplant programme could at best treat only around 50 cases for every 1000 new ESRD diagnoses in patients aged 20–30 years. Findings of this study highlighted the importance of promoting strategies to reduce the increasing number of patients with kidney disease, to consider conservative therapy for older/frail patients, and to improve access to kidney transplantation and live-donation.

Keywords: Renal replacement therapy, dialysis, kidney transplant, universal health coverage, age-period-cohort analysis

Introduction

Chronic kidney disease has been increasingly recognized as a global public health problem, not only because of the rising prevalence across the world but also because of widening inequities in accessing renal replacement therapy (RRT) when kidney function has failed completely (Grassmann *et al.*, 2005; White *et al.*, 2008; Coresh and Jafar, 2015; Liyanage *et al.*, 2015). It is estimated that, worldwide, only a half of those needing RRT receive it. Of those receiving RRT, only 9% reside in low- and middle-income countries; yet, these people make up at least 38% of those who need

the treatment (Liyanage *et al.*, 2015). In these countries, the low percentage of people accessing treatment is a consequence of the unaffordable cost of dialysis (Jah, 2013), arrangements of RRT service provision (Odubanjo *et al.*, 2011) and variation in universal public reimbursement for services (Sakhuja and Kohli, 2006; Pecoits-Filho *et al.*, 2009).

The Thai government launched the Universal Coverage Scheme (UCS) in 2001 to cover previously uninsured citizens outside the other two public schemes, namely, the Civil Servant Medical Benefit Scheme and the Social Security Scheme. To date, the UCS covers 48