



#### FROM THE EDITORIAL OFFICE

In this issue, we are delighted to have Dr. Konstadina Griva from Singapore to discuss the quality of life in PD patients. In addition, Dr. Siribha Changsirikulchai from Thailand will share the experience of PD first policy in her country, while Dr. Jackson Tan from Brunei will describe the practice of PD Preference Policy there.

The ISPD Asia-Pacific Chapter meeting 2015 is coming this September. We look forward to seeing you at Daegu, Korea!

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The concept of Health Related Quality of Life (HRQOL) encompasses the domains of physical, psychological, and social well-being. Patients with End Stage Renal Disease on dialysis demonstrate HRQOL scores that are significantly reduced compared to the general population [1] especially in relation to physical well-being indicators [2]. HRQOL is an important predictor of clinical outcomes for ESRD patients. Several large studies have demonstrated that poor HRQOL independently predict death and hospitalization of dialysis patients [3,4], and therefore HRQOL has been suggested to be used as a valuable supplement to clinical outcome measures [5]. In USA it is even mandated to include HRQOL assessments as part of routine care [6]. There has been an explosion in HRQOL research in context of dialysis with hundreds of studies published in the last 20 years [7].

Home based dialysis predominantly Peritoneal Dialysis (PD) regimes remain underutilized in most settings relative to hemodialysis, yet they have recently seen a renewed interest and popularity. The home-first approach has been successfully implemented in many settings [8,9]. This is driven by economic and financial considerations as well as evidence related to psychological and QOL benefits. Patients value the flexibility, convenience and independence afforded by PD regimes [10]. PD has become especially attractive with the option of overnight cyclers and the use of home helpers/caregivers. Automated Peritoneal Dialysis is often favored as it involves only one overnight session that allows patients more time for work, family and social activities and is hence perceived as less disruptive compared to CAPD [11,12]. Studies have also highlighted HRQOL advantages in terms of lower symptomatic burden and effects of disease for APD [13,14] reflecting the lower abdominal discomfort due to intra-peritoneal pressure [15].

Most notably, increasing evidence suggest that HRQOL benefits of PD are not borne solely by the ambulatory, healthier or younger patients. Undoubtedly, the debate on suitability of PD for older people is not new or entirely resolved. Older patients are less likely to start on PD even in countries with high PD use despite the documented clinical benefits of PD in older patients and evidence of good technique survival and low peritonitis rates [16]. Singapore presents a unique setting to evaluate outcomes in older patients as contrary to other countries, there is little variation in PD use rates across different age groups. Our data based on observational studies indicate a QOL advantage for older patients on PD (>65 years of age) [13,14]. Despite their worse clinical profile, our older patients voiced higher overall quality of life, fewer effects of kidney disease on their life and greater satisfaction with care than younger patients.

#### Higher Risk of Hip Fracture Among Patients on Hemodialysis Than on Peritoneal Dialysis: Taiwan National Cohort Study

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Assisted peritoneal dialysis (PD) involving predominantly family members or home-care nurses is an emerging trend among ESRD patients and may become a big part of the global renal replacement therapy landscape in the near future. Assisted PD can dramatically expand the range of candidates for PD as it enables patients with greater comorbid burden and poor physical and/or cognitive functioning to enjoy dialysis in comfort of home. In our recent study comparing assisted and self-care PD we have noted HRQOL differences in favor of self-care PD only for physical dimensions. Global QOL, emotional dimensions of HRQOL and symptoms of anxiety and depression were comparable between assisted and self-care PD [17].

The caregiver reported outcomes were equally promising. Despite concerns and concerns or apprehension about caregiver burden [10], our data indicate that levels of burden reported by caregivers of assisted PD and family members of self-care PD were equivalent. Although the caregivers of assisted PD reported greater involvement in practical caregiving tasks (e.g. personal hygiene), they did not report greater strain or burden than members of household in self-care PD (unpublished data). Mean levels of burden for both assisted PD and self-care PD caregivers or family members were in moderate range [17] – lower than those reported by caregivers of other patient groups. This may reflect the relatively lower intensity of caregiving demands for PD – in terms of types or frequency of tasks or caregiving situation relative to conditions with a progressive downward trajectory (e.g. dementia) or an unpredictable course that may require more intense surveillance and monitoring of care recipient. Cultural norms and expectations on a cohesive family unit and filial piety among Asian cultures may also explain the moderate levels of burden.

From this selective overview, it can be concluded that research on HRQOL has expanded. The sheer number of studies on HRQOL outcomes plus the depth and breadth of coverage is striking. There are still however important avenues for future work. One of key issues is the longitudinal course of HRQOL for PD patients and caregivers alike. The literature is dominated by cross-sectional studies. There are only few prospective studies investigating the course of QOL over time but evidence is conflicting. Studies on incident PD patients in Brazil, USA, or Netherlands reported no change [18], improvements [19], or declines in physical but not mental health-related HRQOL over 12 months [20]. Studies on prevalent PD patients reported either no

*(to be continued on page 3)*



# APCM-ISPDP 2015

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### General Registration

Category		Early Bird - Extended (Before July 24, 2015)	Regular (July 25, 2015 - August 15, 2015)	On-site Registration
MD	ISPD Member	USD 450	USD 500	USD 550
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### Pre-congress (Sept. 17) Only

Category	Early Bird - Extended (Before July 24, 2015)	Regular (July 25, 2015 - August 15, 2015)	On-site Registration
ISPD Member (MD)	USD 80	USD 100	USD 130
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Dialysis Technologist, Nurse, Trainee	USD 50	USD 60	USD 70

## Important Dates

Early Bird Registration Due Date	July 24, 2015
Regular Registration Due Date	August 15, 2015

(continue from page 1)

changes [21], or steady declines in both physical, mental HRQOL, as well as in the disease-specific QOL in terms of symptoms and burden of kidney disease and patient satisfaction over 2 years [22]. The reduced care satisfaction over time contrasts with the cross-sectional data from the CHOICE study in which incident PD patients were 50% more likely than HD patients to rate their care as excellent [23]. It may be that, over time, with patients becoming long established on PD, the content of front care and consultations may either change toward a format that is no longer as well aligned with, or not swiftly adapting to, the expectations and needs of PD survivors (e.g., care remaining too static or becoming more routinized). More work is needed to explore the interpersonal aspects of care over time in various PD populations. To this end, it is of note that there are no longitudinal studies in Asian PD patients as yet, despite suggestions that Indo-Asian immigrants score lower on QOL measures than their Caucasian counterparts [24]. Lastly, another important issue is the clinical translation of HRQOL findings. More emphasis is needed in bridging the gap between practice and research so that renal teams can clinically use the data to guide and personalize care.

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## Peritoneal Dialysis Preference Policy in Brunei Darussalam

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Brunei Darussalam has a high incidence and prevalence of End Stage Renal Disease (ESRD), with Diabetes Mellitus (57%) and Hypertension (21%) as the two most common incident causes of ESRD [1]. Intermittent Peritoneal Dialysis (IPD) has been used in Brunei since the commencement of dialysis services in 1968 [2]. However, this therapy was deemed as second choice therapy because of high technical difficulties and infection rates, and was used mainly as short term therapy for acute patients who were not able to tolerate haemodialysis (HD) for various reasons [3]. Continuous Ambulatory Peritoneal Dialysis (CAPD) and Automated Peritoneal Dialysis (APD) were introduced into the country in 1993 [4] and 2008 [5] respectively. Both were started as alternatives to HD and marketed as the therapy for young and independent patients. Since its inception, CAPD reached its peak popularity in the early 2000s when it accounted for almost 20% of all renal replacement therapy (RRT) patients. However, there has been a stagnation in interest and progressive decline in uptake of this modality in the last ten years. This could be related to negative mindset by patients and caregivers in thinking that it is safer to have supervised treatment in healthcare facilities and the lack of perceived technical support for PD. Since all citizens and permanent residents of the country are entitled to free medical treatment borne out by the Government, patients have a freedom in choosing the most appropriate therapy to suit their lifestyle.

Unpublished data from the 2nd Brunei Dialysis and Transplant Registry revealed a national ESRD prevalence of 1685 per million population (pmp) and incidence of 281 pmp. There were 70 patients on PD at the end of 2013, which accounted for 10% of all RRT patients. APD has gained popularity over the years and accounted for 74% of all patients on PD. The local peritonitis rate was 24 patient-month/ episode with *Staphylococcus Aureus*, Coagulase negative staphylococcus and *Pseudomonas Aeoginosa* being the three most common incriminating pathogens. 78% of all PD patients were able to achieve Kt/v of 1.7 and the annual PD death rate was 16%. The median age of PD patients was 45 years and there was a male preponderance for PD with a sex ratio of 1.6 (compared with the overall RRT ratio of 1:1). A recent quality of life survey also showed that PD patients had superior physical health, social relationships and psychological well-being compared to HD patients [6].

In recognizing the benefits of home therapy and short term survival advantages, the Ministry of Health has introduced a PD preference policy in 2014. This means that priority and emphasis are given to PD counselling ahead of HD. There are regular PD-oriented workshops, symposiums and health promotion activities to promote and galvanise interest amongst patients, caregivers and healthcare providers. Additionally, nephrologists are trained to insert peritoneal dialysis catheters under a laparoscopic approach to shorten waiting time and reduce dependence on surgeons. In keeping with this policy, doctors

and nurses' training needs are prioritized and they are frequently given opportunities to train and learn abroad. The department is also engaging the help of foreign medical and nursing experts to generate brainstorming ideas and to overcome teething problems in the implementation of the policy. Furthermore, the government is also working on incentives for ESRD patients to encourage uptake of PD in the future. We are still at the infancy stage of this new mandate but are optimistic that we can achieve our goals through a collaborative effort with our local stakeholders and international advisors. The short term goal is to change prevailing patients' and caregivers' mindset about home therapy and self-care. The long term ambition is to increase PD penetration and to establish this as the dominant form of RRT in the country.

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### Current Picture of the PD First Policy in Thailand

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PD First policy has been used as the first therapeutic option for patients with end stage renal disease (ESRD) under the universal health coverage scheme (UCS) since 2008 and has been run by the National Health Security Office (NHSO). Per the policy, peritoneal dialysis (PD) has been offered to the patients who have no contraindications to PD. The patients who are not suitable for PD may choose hemodialysis (HD). There are 2 main reasons for running PD First policy in Thailand, for the patients and for the nation. First, this policy has provided the patients equal accessibility to renal replacement therapy (RRT) and to prevent from becoming bankrupt, particularly those who are poor and reside in rural areas. Second, it requires less manpower than hemodialysis. In addition, PD can be more affordable in comparison to the other choice [1].

This policy has been prepared and implemented, step by step, to fulfill all objectives. The prepared processes included feasibility study, cost utility analysis, and budget projection. The pilot model of PD care was set up in 3 hospitals and then expanded to 23 hospitals throughout Thailand. To lower the price of PD solutions, NHSO cooperated with the Government Pharmaceutical Organization ran an auction for the first million PD bags. The major processes to make the policy possible for all poor patients has been setting up a logistical system for sending PD solutions to the patients' houses, using an electronic reimbursement program, and preparing a budget for training medical personnel especially PD nurses during the early phase of this policy.

## News from the ISPD

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### Asia-Pacific Chapter Scholarship

This is a scholarship to support up to 3 months training in clinical PD for doctors and nurses from Asia-Pacific region. Deadline for application for each round: twice a year at 30 June or 31 December. **The next deadline is 30 December 2015.** Details and application procedures can be found under the Regional Chapters – Asia-Pacific Chapter, at the ISPD website.

### Upcoming Meetings

#### 7th Asia Pacific Chapter meeting of the International Society for Peritoneal Dialysis

17-19 September 2015

Daegu, Korea

Website: <http://apcm-ispd2015.org/>

Deadline of regular registration: 15 August 2015

#### 12th European Peritoneal Dialysis (EuroPD) Meeting

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ICE Krakow Congress Centre, Poland

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#### 16th Congress of International Society for Peritoneal Dialysis

27 February – 1 March 2016

Melbourne Convention and Exhibition Centre, Australia

Website: <http://www.ispdmelbourne2016.com/>

Deadlines

Abstract submission: 25 September 2015

Early birth registration: 4 December 2015

In the early years of the policy, gaps preventing the success were the rapidly growing numbers of patients requiring PD (Fig.1), insufficient numbers of nephrologists with expertise in PD, inadequate numbers of PD nurses experienced in PD care, and the work overload of medical personnel, especially in tertiary care hospitals. These factors would have adverse effects to the policy. Therefore, NHSO has selected 4 hospitals in different regions, stated as PD Technology and Training Centers (PD-TTCs), to strengthen the policy during the first 5 years of Thai PD First policy (2008-2012). These centers were KhonKaen University, Chiang Mai University, Banpaew-Prommitr hospital, and Srinakharinwirot University. Their roles were to support PD units in each region of the country. They set activities to support medical personnel in PD units to help solve any problems in PD care by providing knowledge and the sharing of experience in PD practice. They have also encouraged setting regional networks of PD care among tertiary, secondary and primary care hospitals in each region to close the gaps in insufficient manpower and the work overload. The

workload on PD care was spread properly to each level of hospitals such as that home visits were taken care of by primary care hospitals. At the end of 2012, there were PD units at every tertiary care hospital in every province and more than 40 PD units in district hospitals.

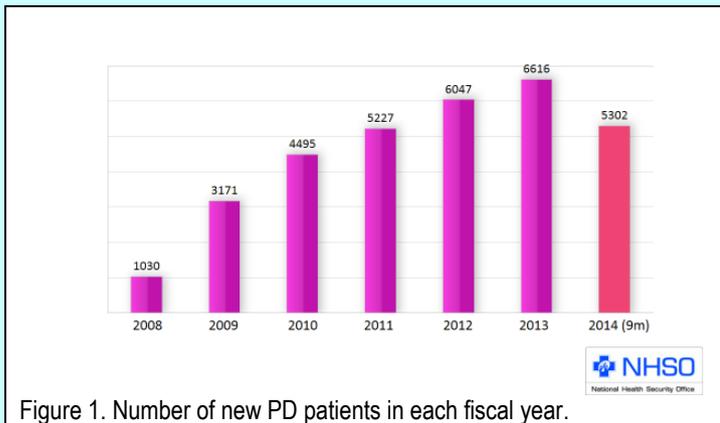


Figure 1. Number of new PD patients in each fiscal year.

The NHSO has continued PD First policy during 2013-2017. In order to sustain the policy, all activities have focused on quality of care, preventing patients from PD secondary failure, and strengthening the networks. Preferring HD to PD is still the major obstacle as self-care on PD is of patients' concern and the workload and the benefits are medical personnel's concern [2]. However, adjusting the policy from PD First to PD Prefer is not suitable in Thailand at this time due to the

insufficiency of major factors such as the amount of HD services, medical personnel especially dialysis nurses. In this period of time, the Regional RRT Technology and Training Centers (RRRT-TTCs) have been set up to organize the systems for quality of care on all branches of treatment in patients with chronic kidney disease (CKD) including CKD clinics, PD, HD and kidney transplantation. They also act as the problem-solving centers for corresponding PD centers in their regions. At present, RRRT-TTCs are KhonKaen University for the northeast region, Srinakharinwirot University for the central region, and Banpaew-Prommitr hospital for Bangkok.

Thai PD First policy has been in implementation for 7 years. Currently there are more than 30,000 cases on RRT services. The overall outcomes are satisfactory, the average rate of accessibility to RRT for ESRD patients with UCS was 85.02% for the fiscal year of 2014. The keys for success of the policy include professionalism and devotion of medical personnel, supports from NHSO in projects of PD-TTCs, and collaboration from the communities. Achievement of targets on the quality of care is the most challenging goal of Thai PD First policy for the next 5 years. The RRRT-TTCs in all regions are proposed to be a major mechanism in reaching the goal.

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