Saving Young Lives
IN AFRICA AND ASIA

A partnership to deliver care for acute kidney injury in the developing world
The Compelling need for Saving Young Lives

Children and young adults continue to die in large numbers in low-resource regions of the world as a direct result of acute kidney injury (AKI), which in many cases is a preventable and treatable condition.

The socio-economic burden of kidney disease in the world continues to grow steadily. In particular, there are many challenges to fight kidney diseases in low-resource regions of the world, including the lack of prevention, awareness and absence of treatment for acute kidney problems.

AKI can often be prevented by simple treatments like fluid administration and/or prompt treatment of infection in the home or in a local healthcare facility. Some people will, however, still require specialist care in hospital, which may include dialysis treatment. With such treatments, mortality is low and full recovery is expected in the majority of patients.

The ideal type of dialysis in this setting is peritoneal dialysis (PD) because of its technical simplicity. PD, as compared to hemodialysis, has the ability to deliver dialysis without the need for additional equipment beyond consumable supplies, thus limiting cost and complexity when used in an acute low-resource setting.

The development of a treatment program using peritoneal dialysis for AKI can be viewed as a short-term and relatively affordable service that is urgently required for the more severely affected people, focusing particularly on children and young adults.

“The course has given me the confidence to insert PD catheters. About 10 hours after arrival back home after the course, I inserted my first catheter, and it was very rewarding. The first one is the icebreaker. I do not think there could have been a more hands-on experience anywhere else.”

Victoria May Adabayeri, from the Korle Bu hospital in Accra, Ghana
Participant in the Cape Town course in 2012

SYL Activities

Developing a sustainable program for prevention and treatment of acute kidney injury in Africa and Asia.

The ISN (International Society of Nephrology), IPNA (International Pediatric Nephrology Association), ISPD (International Society for Peritoneal Dialysis) and SKCF (Sustainable Kidney Care Foundation) in partnership have initiated a sustainable program for the prevention and treatment of acute kidney injury in sub-Saharan Africa and South East Asia.

This collaborative program is developing specialized hospital centers with peritoneal dialysis facilities in both regions. At present, five years of funding has been secured. Programs have started in Benin, Ghana and Tanzania; and are about to
start in Ethiopia, Uganda, Cameroon and Cambodia. Other sites currently under review and negotiation. Building on its success, this project is expected to develop additional centers in these regions.

SYL Leadership

The leadership of the SYL project is purposefully small to ensure quick and efficient decision-making and yet rely on on-the-ground experiences.

The SYL is currently represented by the Steering Committee with one representative for each of the four partners and an administrator from the ISN Secretariat. The four partners all have proven track records for organizing humanitarian programs. The Steering Committee is meeting once a month via conference calls and physical meetings to provide a strategic direction and site selection for the project and to monitor its progress. The SYL Steering Committee also works closely with a larger Advisory Committee, which includes leading pediatric and adult nephrologists with on-the-ground experience in Africa and Asia.

Please help support us

The SYL project is seeking support from anyone willing to invest in hospital development and health education and training. The SYL partnership accepts contributions of any size from individuals, departments, and corporations. You can donate to the partnership as such or choose a specific country that you would like to invest in.

SYL Operations

The project has been divided into two main operations: Hospital development activities and training and education activities.

Hospital Development Operations is led by the SKCF. Programs have already been implemented successfully in Tanzania, Benin, and Ghana, and other sites are being developed. The goal is to establish a self-sustainable PD service in the hospital after 4-5 years. First negotiations start with the hospital to ensure its commitment and a lead person is sought. Once all administrative and logistics issues are solved, supplies and IT equipment needed will be shipped to the site. The external project funding should be entirely replaced by self-sustaining local funding by the end of year four.

Training and education operations are led jointly by ISN, IPNA, and ISPD. Continuing training of physicians and nurses is essential to maintain the program, as inevitably key people may move on. The needs of each site are examined and monitored in detail. Interested physicians with no practical experience in peritoneal catheter insertion or care are trained in other countries, for example Brazil, South Africa and India. Nurses are sent for training in PD facilities in other countries, and experts may join on-site for two to four weeks to provide hands-on training for the local staff.

Awareness activities are then organized in the hospital catchment area to ensure that patients with AKI are detected early enough and effectively referred to the newly created PD center. This is the main development which extends the practice from current hospitals to local villages which make up a large part of the population. The challenge is to move beyond discovery of what is actually present in the local villages to provide consistent education resulting in the prevention and diagnosis of renal failure and providing dialysis treatment.
“The level of readiness and enthusiasm among participants was great, and that made the program worthwhile. In the center, a pediatric physician travelled 3 hours to be at the training course because she wanted to gain the skills to provide emergency care for children who may show up at the clinic with Acute Kidney Injury (AKI).”

Seth Johnson, trainer from the Renal Research Institute who went to Ghana for two weeks testifies

**SYL Achievements**

Since its inception, the SYL partnership has achieved a number of key milestones: Children are now treated in four sites in Africa, one site is close to becoming self-sustainable and training programs have already been organized.

- SYL is building on the success of the first pilot center developed in the town of Moshi in Tanzania at the Kilimanjaro Christian Medical Center (KCMC). Progress at KCMC has been excellent and it is now close to being a free-standing sustainable service. Over the next few years, the project team will continue to provide support for KCMC to maintain the success of the program.

- In addition, six other sites have already been selected and are underway. Patients are now effectively treated in Benin, Ghana and Cameroon. In Uganda, Ethiopia and Cambodia, the programs are expected to start very soon.

- Starting in November 2012, SYL has funded nephrologists, surgeons, and nurses from various sub-Saharan countries to attend an annual ‘hands-on’ PD workshop in Cape Town, South Africa. This successful workshop will be funded again in 2013.

- Nurses from various sites have been sent for training programs in Ghana (February 2012) and Ivory Coast (September 2013) to learn PD catheter insertion techniques.

- An expert from the Renal Research Institute travelled in July 2013 to Ghana for two weeks to train physicians, surgeons, nurses and other hospital staff.

- The impact of the activities of the SYL program will be measured through monitoring of the patients treated with acute PD using a web-based data collection tool that is being developed. Each case will be carefully reported and documented.
The Partnership

The Saving Young Lives in Africa & Asia project is a partnership between the following organisations:

**ISN – International Society of Nephrology**

The International Society of Nephrology (ISN) is a global not-for-profit society dedicated to improving kidney care and reducing the incidence and impact of kidney disease worldwide. Through its global network and programs, ISN brings together the developing and developed worlds in a collaborative effort to fight and treat kidney disease worldwide.

[www.theisn.org](http://www.theisn.org)

John Feehally DM, FRCP is Professor of Renal Medicine at University of Leicester, UK. He is Programs Chair and Immediate Past-President of the International Society of Nephrology.

**IPNA – International Pediatric Nephrology Association**

The International Pediatric Nephrology Association (IPNA) is a medical society comprised of roughly 1500 pediatric nephrologists and allied professionals representing 89 countries around the world. IPNA works to disseminate knowledge about kidney disease in children in the areas where care is needed most.

[www.ipna-online.org](http://www.ipna-online.org)

William E. Smoyer MD is Professor of Pediatrics at the Ohio State University, USA, and is member of the IPNA council. He is also co-founder and steering committee member of the Midwest Pediatric Nephrology Consortium.

**ISPD – International Society for Peritoneal Dialysis**

The ISPD is a medical society that aims to advance knowledge of peritoneal dialysis and to promote advancement of such knowledge through international scientific meetings and scientific publications. The Society is organized exclusively for educational and scientific purposes.

[www.ispd.org](http://www.ispd.org)

Fredric Finkelstein MD, is Clinical Professor of Medicine at Yale University, New Haven, CT, USA and is Chair of the International Liaison Committee of the ISPD. He has worked extensively in the developing world both teaching and developing kidney disease treatment programs.

**SKCF – Sustainable Kidney Care Foundation**

The Sustainable Kidney Care Foundation (SKCF) provides affordable and sustainable treatment options for kidney failure where none exists. The Foundation emphasizes the diagnosis and management of reversible acute kidney failure in women and children. The Foundation supports training in care and research for those involved in the delivery of care in parts of the world where little or no local treatment is available.

[www.skcf.net](http://www.skcf.net)

Mary Carter PhD, MBA is founder and director of the Sustainable Kidney Care Foundation based in New York, USA.